Cotswold Archaeology

Iver Substation
Uxbridge Moor
Buckinghamshire

Written Scheme of Investigation for an Archaeological Evaluation

for:
National Grid

CA Project: MK1106
CA Site Code: ISU24
Accession Number: TBC

July 2024

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CONTENTS

FIGURES

1. INTRODUCTION

1.1. This document is a Written Scheme of Investigation (WSI) by Cotswold Archaeology (CA) for an archaeological evaluation of land at Uxbridge Moor, Iver, Buckinghamshire (centred at NGR: 503980 184184, see Fig. 1; hereafter 'the Site'). This WSI has been prepared for National Grid.

1.2. The evaluation results will inform a planning application for *Erection of 132kV and 400kV GIS substations including six 460 MegaVolt Ampere (MVA) super grid transformers, gantries, office block, contractor compound, diesel generator, internal access roads, parking, drainage, lighting and cctv, permanent access road, bridge crossing, landscaping and biodiversity enhancement, and fencing*, which has been made to Buckinghamshire Council (planning ref: PL/24/0449/FA). Two of the required access routes will pass through the existing Denham Quarry site to the north. The northern route is proposed to be used for construction and permanent operational access, and the southern route will be a secondary access providing a link between the existing Iver Substation and the new Uxbridge Moor substations. A third access, going through the Mansfield farmstead and the Iver Environment Centre to the south, may be used temporarily, for initial access only, if agreed with the farmer.

1.3. The scope of this evaluation was defined in discussions between CA and the Senior Archaeological Officer at Buckinghamshire Council (SAOBC; Phil Markham). This WSI was prepared on the basis of these discussions and a *Generic brief for an archaeological evaluation (trial trenching)* issued by Buckinghamshire Council (the Brief - BC 2024). This WSI will be submitted to the SAOBC for review and approval prior to the commencement of any fieldwork.

1.4. This WSI has been guided in its composition by:

- the Brief (BC 2024)
- *Standard for archaeological field evaluation* (CIfA 2023);
- *Universal guidance for archaeological field evaluation* (CIfA 2023);
- *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015); and
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015).

The Site

1.5. The proposed development Site is a large, irregular plot of predominantly agricultural land measuring 21.5ha in extent, with 18.5ha being subject to evaluation, and is located c. 900 m west of Uxbridge. It is bounded to the immediate north, north-east and east by agricultural land and both former and extant areas of mineral extraction around New Denham; to the south-east by Iver Substation; to the south by Mansfield Farm; and, the M25 motorway to the west. The ground levels within the Site slope from west to east, between 49m to 34m above Ordnance Datum (aOD).

1.6. The Site lies within the Thames Valley National Character Area; a mainly low-lying area through which the River Thames flows towards central London. The underlying bedrock geology is mapped as clay, silt and gravel of the London Clay Formation, formed between and 47.8 and 56 million years ago during the Palaeogene period (BGS 2024). An archaeological field evaluation was carried by Wessex Archaeology within a field to the north-east of the Site, on the north bank of river Alder Bourne (WA 2007). Here the natural substrate comprised a mix of grey-brown silty-clay and flint gravel and was encountered approximately 0.5m - 0.9m below ground level (bgl). This was generally overlaid by yellow-brown silty-clay subsoil, which was in turn sealed by grey-brown topsoil. Peat and alluvial deposits were also encountered across the site overlying the natural substrate, in the areas bounding the River Alder Bourne.

2. ARCHAEOLOGICAL BACKGROUND

2.1. The archaeological background of the Site and surrounding area has previously been presented in detail as part of a Heritage Appraisal (CA 2022) and subsequent Heritage Assessment (CA 2024). A programme of geophysical survey has also recently been carried out across the Site (SUMO 2024). The following text represents a summary of these sources, supplemented by an up-to-date search of records held by the Buckinghamshire Historic Environment Record (HER ref. number: 1403).

Previous archaeological work

2.2. A considerable amount of archaeological fieldwork has previously been carried out within the Site and wider area.

2.3. A collection of worked prehistoric flint was gathered within the Site during a field evaluation and a watching brief undertaken along the route of the Iver to Arkley pipeline in 1994 (RPS and Farley 1994). (Buckinghamshire HER, EBC16315).

Early prehistoric

2.4. Several archaeological investigations were undertaken by Wessex Archaeology (WA) in the former Denham quarry, which lies to the north and north-east of the Site, on the north side of River Alder Bourne. These investigations were associated with the southern extension of the quarry, including an auger survey and two archaeological evaluations (WA 2003, 2005a and 2007 respectively), (Buckinghamshire HER, EBC16789 - 16792,) Additionally, in the north of the quarry, a gradiometer survey and three archaeological evaluations were undertaken (WA 2015, 2016, 2017a and 2017b respectively), (Buckinghamshire HER, EBC18431-18434) Recorded archaeological remains dated to the prehistoric, Roman, medieval and post-medieval periods and are discussed within the relevant sections below.

2.5. A project undertaken in association with gravel extraction was carried out just to the south-east of the Site, within the site of the existing Iver Substation (Lacaille 1963). Archaeological remains were recovered which dated to the early Mesolithic period.

2.6. Extensive archaeological investigations were also carried out c.500m to the south of the Site, in advance of the construction of the M25 (Allen 1981). These investigations also recorded remains dated to the Mesolithic period.

2.7. An archaeological excavation was carried out as part of the Iver to Slough cable route project, in Chandlers Hill, to the south-west of the Site. Several areas were excavated, the most important proving to be areas 2 and 4, where archaeological remains dating to the late prehistoric period, the Roman period, early medieval and medieval periods were recorded (Foundation Archaeology 2018, Hood & Blinkhorn 2020). (Buckinghamshire HER, EBC18029) Further early prehistoric evidence was recorded in 1989 by the West London Archaeological Field Group in an area located c.650m to the south-east of the Site, along the south bank of river Colne (GLHER, 2023: rec. No. 17317).

2.8. On the basis of the data recovered from the widespread archaeological investigations within the area, Buckinghamshire County Council has defined a number of Archaeological Notification Areas (see CA 2024, Fig. 2).

2.9. The Palaeolithic and Mesolithic periods are well represented within the area to the north-east of the Site. During the process of mineral extraction work at the Denham quarry Area 4 extension, two buried gravel islands were identified along the ancient courses of the Rusholt Brook and Colne River, which are believed to be foci of early

human activity. This was confirmed with the discovery of eight flint scatters, associated with faunal remains. The artefacts dated between the late Upper Palaeolithic and the Mesolithic and are understood to represent short-lived episodes of activity undertaken around the Rusholt Brook and Colne Rivers' gravel islands (WA 2015, 2016, 2017a and 2017b).

2.10. Further early evidence of human activity was discovered between c.350m and 650m to the south-east of the Site, in Sandstone. Two flint scatters were found along the southern bank of river Colne. The artefacts lay at the interface of two geological deposits; a Pleistocene gravel formation and an overlaying peaty deposit, which formed during the Holocene. For this reason, the lithic assemblage is thought to date to the early Mesolithic period.

2.11. Another similar archaeological horizon was identified c.350m to the south-east of the Site. Here an early Mesolithic flint scatter was found lying at the geological interface between a gravel deposit and an overlying peaty deposit (Lacaille 1963).

2.12. A further early prehistoric lithic assemblage, recovered c.450m to the south of the Site, was found in advance of work for the construction of the M25. This also comprised evidence of a Mesolithic occupation layer and was associated with similar geological deposits to those above (Allen 1981).

2.13. An important lithic assemblage was recorded within the Site itself during a field evaluation, which comprised a total of 584 flint flakes, 106 blades, 33 cores, and ten tools dating between the early Mesolithic and late Neolithic periods. A further 64 flakes, three blades, three cores and seven tools were recovered during a watching brief undertaken whilst topsoil was removed. This assemblage indicates that the area, including much of the Site, was a focus of quite intensive tool production over a long period (RPS Clouston 1998).

Late prehistoric and Roman

2.14. As mentioned above, an important lithic assemblage was found within the Site, during a field evaluation. Here, a total of 733 flints were recovered, including 10 foci of tool production (RPS Clouston 1998). Another assemblage of 77 flints was recovered during the topsoil clearance. The assemblage dated from the Mesolithic to the late Neolithic period and appears to reflect a notable area of tool production.

2.15. In Denham quarry several features, comprising ditches, pits and a hearth dating to the Late Bronze Age were discovered cutting into the natural brickearth deposits (WA 2015, 2016, 2017a and 2017b). Some linear features ran both parallel and perpendicular to the nearby Rusholt Brook, suggesting the presence of a possible field system. Other remains, also found in this area (WA 2003, 2005a), dated to the Iron Age and the Roman period.

2.16. During a magnetometer survey of site a circular feature, approximately 4.7m in diameter, which is indicative of a ring ditch, along with a further circular trend and possible rectilinear enclosure were recorded and could form part of Late Bronze age remains (SUMO 2024).

2.17. Cotswold Archaeology carried out and excavation to the north of site, where late Bronze age field boundaries and a possible barrow and a number of Romano-British field systems were identified and associated late Roman bustum burial cemetery of 22 burials, these remains were recorded cutting into the alluvium which is likely to have been formed within the Neolithic period. (CA 2015).

2.18. A north/south aligned ditch containing a single sherd of Late Bronze Age/Early Iron Age pottery and a small quantity of worked and burnt flint was recovered from within the north section of Denham Quarry, c.840m north-east of the Site (WA 2016).

2.19. Within the area, Roman remains indicate limited activity in the region during this period, particularly in the Denham area. Here, c.500m the north-east of the Site, unstratified sherds of Roman pottery were found, with no evidence of any association with other archaeological evidence (WA 2003, 2005a 2007).

2.20. Other Roman period remains, including a field system and a cluster of postholes, are recorded to the south-west of the Site as noted above.

Early medieval and medieval

2.21. A possible Sunken Featured Building, or *Grubenhaus*, was identified during the Chandlers Hill project (Foundation Archaeology 2018, Hood & Blinkhorn 2020), c.500m south-west of the Site. A cluster of 12th and 13th centuries pits/postholes and linear features were also encountered during these works.

2.22. Only Denham is mentioned in the Domesday Survey of 1086, the historic centre of which lies outside the study area to the north of the Site. It is described as a small

village with a population of 18, owned by Westminster Abbey (Powell-Smith, accessed online March 2023). The Domesday survey suggests that the majority of the area was sparsely populated during this period.

2.23. Possible medieval remains were recovered in the south of Denham quarry, where field evaluations exposed several linear features, which probably represent the remains of part of a field system (WA 2007). These linear features could also be of more recent origin and date to the post-medieval period.

2.24. Archaeological excavation at Iver, for the Iver to Slough power line revealed a possible ditch, medieval and post - medieval ditches. (Foundations Archaeology. 2012). (Buckinghamshire HER, EBC18547).

2.25. Within the Site itself, cropmarks have been identified on aerial photographs, which indicate the presence of a broad ring in the centre of a roughly rectangular area of disturbance (historic quarrying?) that is oriented north-west/south-east. This lies within an area recorded as evidence of possible medieval or post-medieval quarrying (Buckinghamshire HER, MBC12549). The LiDAR imagery also depicts this broad ring toward the centre of the roughly rectangular area of apparent disturbance, as noted, evidence of possible medieval or post-medieval quarrying (see CA 2024). Other possible evidence depicted in the LiDAR data may correspond to a former field boundary, aligned north-west/south-east, which is not evident on historical maps (see CA 2024).

Post-medieval and modern

2.26. The remains of part of a field system, recorded at Denham quarry and also noted above, may be of post-medieval origin, rather than of medieval origin (WA 2007). At Southlands Manor, c.500m north of the Site and c.150m west of the proposed access route, a 17th century barn survives (Grade II Listed, NHLE: 1162285), (Buckinghamshire HER: DBC1648), associated with the main building. Immediately to the south of the Site, an 18th century rebuilt farmhouse, 17th century barn and 18th century dovecote comprise the extant group of buildings at Mansfield Farm. Each of these is Grade II Listed (NHLE: 1164747, 1124378 and 1164749 respectively). (Buckinghamshire HER : DBC1307)

2.27. During a geophysical survey, moderate strength linears could be seen at he northmost area of site, these could correspond to former field boundaries that are visible on historic Ordnance Survey maps dating from 1937-1961. Parallel linear

anomalies were mapped across site associated with modern ploughing (SUMO 2024).

2.28. The most evident development activity within the study area during the modern period comprises the construction of the M25; the existing Iver substation, both established during the late 20th century, and the Denham Quarry which is first depicted on the October 2008 Google Earth aerial imagery.

2.29. In the later post-medieval, and modern period, the agricultural landscape witnessed much amalgamation of previously smaller, irregular post-medieval fields. A study of historic mapping carried out as part of the Heritage Statement (CA 2024) shows that similar amalgamation occurred within the Site in the 19th century.

3. AIMS AND OBJECTIVES

3.1. The general objective of the evaluation is to provide further information on the likely archaeological resource within the Site, including its presence/absence, character, extent, date and state of preservation. This information will enable the SAOBC to identify and assess the particular significance of any archaeological heritage assets within the site, consider the impact of the proposed development upon that significance and, if appropriate, develop strategies to avoid or minimise conflict between heritage asset conservation and the development proposal. This process is in line with the *National Planning Policy Framework* (DLUHC 2023).

3.2. A further objective of the project is to compile a stable, ordered, accessible project archive (see Section 5).

3.3. The specific objective of the evaluation is to investigate the potential features recorded by the geophysical survey (SUMO 2024), test apparently blank areas, and to record the geological sequence within the Site.

3.4. If significant archaeological remains are identified, the evaluation report will make reference to the Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas (Hey and Hind 2014) so that the remains can, if possible, be placed within their local and regional contexts.

4. METHODOLOGY

4.1. The evaluation will comprise the excavation of 66no. 50m x 2m trenches; as well as 39no. 1m x 1m test pits, arranged on a 100m by 50m grid. There will be 10% contingency to the trial trenching and test pitting. This will be used on SAOBC request to help clarify features or finds.

4.2. The trenches have been located to test geophysical anomalies and to provide a representative sample of the remainder of the Site. The test pits have been located to record transects to aid in creating geological deposit models, and to confirm whether any in-situ flint scatters may survive within the Site.

4.3. Trenches and test pits will be set out on OS National Grid co-ordinates using Leica GPS and scanned for live services by trained CA staff using CAT and genny equipment, in accordance with the *CA Safe System of Work for avoiding underground services*. The positions of the trenches/test pits may be adjusted on site to account for services or other constraints, with the approval of the SAOBC.

4.4. Overburden will be stripped from the trenches by a mechanical excavator fitted with a toothless grading bucket. All machining will be conducted under archaeological supervision and will cease when the first significant archaeological horizon or natural substrate is revealed (whichever is encountered first). The test pits will be machine-excavated to sufficient depth, but no deeper than 1.5m below the ground surface. This depth should be sufficient to record the geology of the Site and produce geoarchaeological transects. Pits of this depth will not be accessed by personnel. The first 1 m of each test pit will be excavated in *c*. 0.2m spits, and 50% of material from each spit being dry sieved on site in order to maximise finds recovery. Topsoil and subsoil will be stored separately adjacent to each trench/test pit.

4.5. Following machining, any archaeological features present will be investigated, planned and recorded in accordance with *CA Technical Manual 1: Fieldwork Recording Manual*. Each context will be recorded by written and measured description. Records will be entered directly into the CA Digital Recording System (DRS) and/or onto pro-forma site recording sheets. Hand-drawn sections of excavated archaeological features will be prepared (scale 1:10 or 1:20, as appropriate). Each test pit will similarly be recorded by drawings, photographs and written descriptions. Features/deposits will be recorded in plan using Leica RTK GPS

or Total Station (as appropriate), in accordance with *CA Technical Manual 4: Survey Manual*. Photographs (digital colour) will be taken as appropriate.

4.6. Sample excavation of archaeological deposits will be sufficient to achieve the aims and objectives identified in Section 3 (above). At the evaluation stage, there is no requirement to sample all archaeological features encountered. A representative sample of discrete features such as pits and postholes will be half-sectioned. Excavated slots through linear features will be 1 m long as a minimum. If complex features such as kilns or structural remains are encountered these will be cleaned and recorded in plan, subject to the agreement of the SAOBC. Excavation (where undertaken) will not compromise the integrity of the archaeological record and will be carried out in such a way as to allow for the subsequent protection of remains, either for conservation or to allow more detailed investigations to be conducted at a later date.

4.7. Upon completion of the evaluation, all trenches will be backfilled by a mechanical excavator. No trenches will be backfilled without prior approval from the SAOBC.

Artefacts

4.8. Artefacts will be recovered and retained for processing and analysis in accordance with *CA Technical Manual 3: Treatment of Finds Immediately after Excavation*. Artefacts will be collected and bagged by context. Artefacts from topsoil, subsoil and unstratified contexts will normally be noted but not retained unless they are of intrinsic interest. All artefacts from stratified excavated contexts will be collected, except for large assemblages of post-medieval or modern material. Such material may be noted and not retained or, if appropriate, a representative sample may be collected and retained.

Environmental remains

4.9. The selection, collection and processing of environmental samples will follow the guidelines outlined in *Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011) and *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites*.

4.10. Due care will be taken to identify deposits which may have environmental potential and, where appropriate, a programme of environmental sampling will be initiated. The sampling strategy will be adapted for the specific circumstances of the site, in close

consultation with the CA Environmental Officer and the SAOBC, but will follow the general selection parameters set out in the following paragraphs. Provision will be made for the recovery of monolith, bulk, and pollen samples from suitable deposits identified within the test pits.

4.11. Secure, phased deposits, especially those related to settlement activity and/or structures, will be considered for sampling for the recovery of charred plant remains, charcoal and mineralised remains. Any cremation-related deposits (where excavated; see *Human remains*, below) will be sampled appropriately for the recovery of cremated human bone and charred remains. If any evidence of *in situ* metal working is found, suitable samples will be taken for the recovery of slag and hammerscale.

4.12. Where sealed waterlogged deposits are encountered, samples will be considered for the recovery of waterlogged remains (including insects, molluscs and pollen) and any charred remains. The taking of sequences of samples for the recovery of molluscs and/or waterlogged remains will be considered through any suitable deposits, such as deep enclosure ditches, barrow ditches, palaeochannels, or buried soils. Monolith samples may also be taken from suitable deposits as appropriate to allow soil and sediment description/interpretation, as well as sub-sampling for pollen and other micro/macrofossils such as diatoms, foraminifera and ostracods.

4.13. The need for more specialist samples (such as OSL, archaeomagnetic dating and dendrochronology) will be evaluated on site. If required, any such samples will be taken in consultation with the relevant specialists.

4.14. Sample processing will be carried out in conjunction with the relevant specialists. Flotation or wet sieve samples will be processed to 0.25mm. More specialist samples, such as those for pollen, will be prepared by the relevant specialists.

Treasure

4.15. Upon discovery of treasure, CA will notify the Client, SAOBC and Buckinghamshire Finds Liaison Officer (FLO) for the Portable Antiquities Scheme immediately. Findings will be reported to the coroner within 14 days of discovery, in accordance with procedures relating to the Treasure Act 1996 (and the 2003 amendment to the Act to include prehistoric objects such as Bronze Age metalworking hoards and other non-precious metal items). All finds of gold and silver will be moved to a safe place. Where removal cannot be undertaken immediately suitable security measures will be

taken to protect the artefacts from theft or damage. CA will comply fully with the provisions of the Treasure Act 1996 and the Code of Practice referred to therein , as well as with the Treasure (Designation) (Amendment) Order 2023.

Human remains

4.16. In the event that human remains are encountered, the Client and SAOBC will be notified immediately. Any human remains (skeletal or cremated) will be treated with due decency and respect at all times.

4.17. Small slots will be hand-excavated across any suspected burial features (inhumations or cremated bone deposits) in order to confirm the presence and condition of any human bone. Once confirmed as human, the buried remains will not normally be disturbed through any further investigation at the evaluation stage, and will be left *in situ* where possible.

4.18. Where further disturbance is unavoidable, or where full exhumation of the remains is deemed necessary, exhumation will be conducted following the provisions of the Coroner's Unit in the Ministry of Justice. All excavation of human remains and associated post-excavation processes will be in accordance with the standards set out in *Updated Guidelines to the Standards for Recording Human Remains* (CIfA 2017), *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (Historic England 2018) and *Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England* (Advisory Panel on the Archaeology of Burials in England 2017).

5. POST-EXCAVATION, REPORTING AND ARCHIVING

Reporting

5.1. An illustrated typescript report will be compiled on the evaluation results and will be supplied to the SAOBC within 12 months of this field work being completed, unless otherwise agreed. This report will include:

- an abstract preceding the main body of the report, containing the essential elements of the results;
- a summary of the project's background;
- a description and illustration of the site location;
- a methodology of the works undertaken;

- integration of, or cross-reference to, appropriate cartographic and documentary evidence and the results of other research undertaken, where relevant to the interpretation of the evaluation results;
- a description of the evaluation results;
- an interpretation of the evaluation results, including a consideration of the results within their wider local/regional context;
- a site location plan at an appropriate scale on an Ordnance Survey (or equivalent) base-map;
- a plan showing the locations of the trenches and test pits in relation to the site boundaries;
- plans of each trench/test pit, or part of trench/test pit, in which archaeological features were recorded. These plans will be at an appropriate scale to allow the nature of the features to be shown and understood. Plans will show the orientation of trenches in relation to north. Section drawing locations will also be shown on these plans. Archaeologically sterile areas will not normally be illustrated;
- appropriate section drawings of trenches, archaeological features, and test pits, including geoarchaeological modelling/transects. These drawings will include OD heights and will be at scales appropriate to the stratigraphic detail being represented. Drawings will show orientation in relation to north/south/east/west;
- photographs showing significant archaeological features and deposits that are referred to in the text, as well as sections of test pits. All photographs will contain appropriate scales, the size of which will be noted in the photograph captions;
- summary tables of the recorded contexts and recovered artefacts;
- a summary of the contents of the project archive and details of its location;
- specialist assessment or analysis reports (where undertaken). Specialist artefact and palaeoenvironmental assessments will take into account the wider local/regional contexts and will include:
    - specialist aims and objectives;
    - processing methodologies (where relevant);
    - any known biases in recovery, or problems of contamination/residuality;

- quantities of material; types of material present; distribution of material;
- for environmental material, a statement on abundance, diversity and preservation;
- a summary and discussion of the results, to include significance in a local and regional context.

5.2. The draft evaluation report will be distributed to the client and SAOBC for review prior to finalisation. Copies of the report (draft and final) will be issued in pdf format, with a paper copy also to be provided to the HER if required.

Academic and public dissemination

5.3. It is anticipated that a short note on the evaluation results will be produced for inclusion within an appropriate local archaeological journal.

5.4. Subject to any contractual constraints, a summary of information from the project will be entered onto the OASIS online database of archaeological projects in Britain. This will include a digital (pdf) copy of the final report, a copy of which will also be issued to the Buckinghamshire Historic Environment Record, and appear on the Archaeology Data Service (ADS) website once the OASIS record has been verified.

5.5. A digital (pdf) copy of the final report will also be made available for public viewing via CA's *Archaeological Reports Online* web page (http://reports.cotswoldarchaeology.co.uk).

Archive deposition

5.6. CA will make arrangements with Discover Bucks Museum for the deposition of the site archive (accession number: TBC) and, subject to agreement with the legal landowner(s), the artefact collection.

5.7. All artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with CA technical manuals and the Discover Bucks Museum guidelines (BCM 2013).

5.8. An ordered, indexed, and internally consistent site archive will be prepared in accordance with the relevant recipient museum guidelines. The archive will also be prepared in accordance with:

- *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA 2014; updated October 2020);
- *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Archaeological Archives Forum 2011);
- *Standard and Guide to Best Practice for Archaeological Archiving in Europe: EAC Guidelines 1* (Europae Archaeologia Consilium 2019); and
- *Toolkit for Selecting Archaeological Archives* (CIfA/Historic England 2019; updated March 2022).

5.9. Depending on the nature and scope of any subsequent programme of archaeological works at the site (if required), the evaluation archive may be combined with that for any subsequent works and deposited as a single archive. Confirmation of this will be included in any forthcoming WSI.

Selection strategy

5.10. As noted above, artefacts from topsoil, subsoil and unstratified contexts will normally be noted but not retained unless they are of intrinsic interest. All artefacts from stratified excavated contexts will be collected, except for large assemblages of post-medieval or modern material. Such material may be noted and not retained or, if appropriate, a representative sample may be collected and retained.

5.11. The site-selected material archive returned to the CA offices will be reviewed following analysis. Stakeholders will make selection decisions based on CA Finds Manager/Officer reports and selection recommendations. The selection will take place during archive compilation. After discussion with the relevant museum Curator and the CA Finds Managers/Officers, it is possible that no material post-dating AD 1800 will be retained for inclusion in the preserved archive.

Digital archive

5.12. A digital archive will be deposited with the Archaeology Data Service (ADS). This archive will be compiled in accordance with the *ADS Guidelines for Depositors*.

Data management

5.13. All born-digital and digitally-transferred project data created during fieldwork and post-excavation (other than duplicated files) will be stored by CA. Upon project completion and deposition, the data will be transferred to a secure external server. Data will be selected for inclusion in the final digital archive, as detailed below. It is proposed that data selection will occur following completion of post-excavation work.

5.14. Selected digital files will be transferred to the ADS, in line with the relevant guidance and standards. In adherence to CA's *Guidelines for essential archive tasks and the preparation of archives*, it is proposed that the selected files will include final versions only. Digital photographs will be selected for inclusion in the archive in line with CA's *Guidelines for essential archive tasks and the preparation of archives* and *Digital Image Capture and File Storage: Guidelines for Best Practice* (Historic England 2015). Data produced by external specialists or sub-contractors will be granted under license to CA to allow inclusion in the digital archive as required.

6. PROGRAMME

6.1. It is anticipated that the project fieldwork will require approximately six weeks to complete including backfilling. Subsequent analysis of the results and reporting will take up to a further six weeks.

7. PROJECT STAFF

7.1. This project will be under the management of Antoni Nowark, ACIfA, Project Manager, CA. The Project Manager will direct the overall conduct of the evaluation during the period of fieldwork. Day-to-day responsibility will, however, rest with the Project Leader, who will be on-site throughout the project.

7.2. The field team will consist of a maximum of 12 staff (1 Project Officer, 2 Project Supervisor and 9 Archaeologists).

7.3. Specialists who may be invited to advise and report on specific aspects of the project as necessary are:

- **Ceramics:** Ed McSloy BA (Hons) MCIfA (CA), Peter Banks LLB LLM PCIfA (CA) and Laura Pearson BA MA PCIfA (CA)
- **Metalwork:** Ed McSloy MCIfA (CA)
- **Flint:** Jacky Sommerville PCIfA (CA)
- **Animal bone:** Andy Clarke BA ACIfA (Hons) MA (CA) and Matilda Holmes PhD BSc MSc ACIfA (freelance)
- **Human bone:** Sharon Clough BA MSc MCIfA (CA)
- **Environmental remains:** Sarah Wyles MCIfA (CA)
- **Conservation:** Pieta Greeves BSc MSc ACR (Drakon Heritage and Conservation)

- **Geoarchaeology:** Holly Rogers BA (Hons) MSc (CA) and Keith Wilkinson PhD (ARCA)

7.4. Depending on the nature of the deposits and artefacts encountered, it may be necessary to consult other specialists not listed here. A full list of specialists currently used by CA is given as Appendix A.

8. HEALTH, SAFETY AND ENVIRONMENT

8.1. CA will conduct all works in accordance with the Health and Safety at Work Act 1974 and all subsequent health and safety legislation, as well as the CA Health and Safety and Environmental policies and the CA Safety, Health and Environmental Management System (SHE). Any client/developer/Principal Contractor policies and/or procedures will also be followed. A site-specific Construction Phase Plan (form SHE 017) will be formulated prior to commencement of fieldwork.

9. INSURANCES

9.1. CA holds Public Liability Insurance to a limit of £15,000,000 and Professional Indemnity Insurance to a limit of £10,000,000.

10. MONITORING

10.1. Notification of the start of site works will be made to the SAOB at least one week in advance, so that there will be opportunities to visit the evaluation and check on the quality and progress of the work. No trenches will be backfilled without prior approval from the SAOBC.

11. QUALITY ASSURANCE

11.1. CA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (RO Ref. No. 8). As a RO, CA endorses the Code of Conduct (CIfA 2019) and the *Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment* (CIfA 2014; updated October 2020).

11.2. CA operates an internal quality assurance system as follows: projects are overseen by a Project Manager, who is responsible for the quality of the project. The Project Manager reports to the Chief Executive, who bears ultimate responsibility for the conduct of all CA operations. Matters of policy and corporate strategy are determined

by the Board of Directors and, in cases of dispute, recourse may be made to the Chairman of the Board.

12. PUBLIC ENGAGEMENT, PARTICIPATION AND BENEFIT

12.1. It is not anticipated that this evaluation will afford opportunities for public engagement or participation during the course of the fieldwork. However, the evaluation results will be made publicly available on the ADS and CA websites, as set out in Section 5.

13. STAFF TRAINING AND CPD

13.1. CA has a fully documented mandatory performance management system for all staff. This system reviews personal performance, identifies areas for improvement, sets targets and ensures the provision of appropriate training within CA's adopted training policy. In addition, CA has developed an award-winning career development programme for its staff. This ensures a consistent and high-quality approach to the development of appropriate skills.

13.2. As part of CA's requirement for continuing professional development, all members of staff are required to maintain a personal development plan and an associated log; these are reviewed within the performance management system.

14. REFERENCES

AAF (Archaeological Archives Forum) 2011 *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*

ADS (Archaeology Data Service) 2021 *Guidelines for depositors*

APABE (Advisory Panel on the Archaeology of Burials in England) 2017 *Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England*

BC (Buckinghamshire Council) 2023 *Generic brief for an archaeological evaluation (trial trenching).* Available at Generic brief for an archaeological evaluation (trial trenching) | Buckinghamshire Council Accessed 05 June 2024

BCM (Buckinghamshire County Museum) 2013 *Procedures for Notifying and Transferring Archaeological Archives*

BGS (British Geological Survey) 2024 *BGS Geology https://geologyviewer.bgs.ac.uk/?_ga=2.85880985.1050205140.1659354252-1913367769.1659354252* Accessed 05 June 2024

CA (Cotswold Archaeology), *2015, Uxbridge Business Park, Plot 5 (Former Sandersons Factory) Archaeological Evaluation*

CA (Cotswold Archaeology) 2022 *National Grid FEED New Iver Substation Buckinghamshire Heritage Appraisal* CA report MK0659_1

CA (Cotswold Archaeology) 2024 *Uxbridge Moor 400kV and 132kV Substations Heritage Statement* CA report MK0880_1

CIfA (Chartered Institute for Archaeologists) 2014b *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (updated 2020)

CIfA (Chartered institute for Archaeologists) 2014c *Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment* (updated 2020)

CIfA (Chartered Institute for Archaeologists) 2017 *Technical Paper No 7 Updated Guidelines to the Standards for recording Human Remains*.

CIfA (Chartered Institute for Archaeologists) 2019 *Code of Conduct*

CIfA (Chartered Institute for Archaeologists) 2023a *Standard for archaeological field evaluation*

CIfA (Chartered Institute for Archaeologists) 2023b *Universal guidance for archaeological field evaluation*

DLUHC (Department for Levelling up, Housing and Communities) 2023 *National Planning Policy Framework*

EAC (Europae Archaeologia Consilium) 2019 *Standard and Guide to Best Practice for Archaeological Archiving in Europe. EAC Guidelines 1*

EH (English Heritage) 2010 *Waterlogged wood. Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood* (third edition)

EH (English Heritage) 2011 *Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*

HE (Historic England) 2015a *Management of Research Projects in the Historic Environment (MORPHE): Project Planning Note 3: Excavation*

HE (Historic England) 2015b *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*

HE (Historic England) 2015c *Digital Image Capture and File Storage: Guidelines for Best Practice*

HE (Historic England) 2018 *The Role of the Human Osteologist in an Archaeological Fieldwork Project*

Hey, G. and Hind, J. 2014 *Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas*

SMA (Society of Museum Archaeologists) 1993 *Selection, Retention and Dispersal of Archaeological Collections*

SUMO (SUMO Services) 2024, *Geophysical survey report*

APPENDIX A: COTSWOLD ARCHAEOLOGY SPECIALISTS

Ceramics

Neolithic/Bronze Age	Ed McSloy BA MCIfA (CA) Alistair Barclay BSc PhD FSA MCIfA (CA) Grace Jones BA MA PhD MCIfA (CA) Jacky Sommerville BSc MA PCIfA (CA) Elaine Morris BA PhD FSA MCIfA (University of Southampton) Anna Doherty MA (Archaeology South-East) Sarah Percival MA MCIfA (freelance) Steve Benfield BA (CA) Ciar Boyle Gifford BA, MA (CA), Apprentice: Archaeological Specialist Level 7
Iron Age/Roman	Ed McSloy BA MCIfA (CA) Alistair Barclay BSc PhD FSA MCIfA (CA) Grace Jones BA MA Phd MCIfA (CA) Peter Banks LLB LLM PCIfA (CA) Jacky Sommerville BSc MA PCIfA (CA) Kayt Marter Brown BA MSc MCIfA (freelance) Steve Benfield BA (CA) Claire Collier Jones BA MA (CA) Ciar Boyle Gifford BA, MA (CA), Apprentice: Archaeological Specialist Level 7 Laura Pearson BA, MA, PCIfA (CA), Apprentice: Archaeological Specialist Level 7
(Samian)	Gwladys Montell MA PhD (freelance) Steve Benfield BA (CA)
(Amphorae stamps)	David Williams PhD FSA (freelance)
Anglo-Saxon	Alejandra Gutierrez BA (Hons) PHd MCIfA Alistair Barclay BSc PhD FSA MCIfA (CA) Grace Jones BA MA PhD MCIfA (CA) Jacky Sommerville BSc MA PCIfA (CA) Paul Blinkhorn BTech (freelance) Jane Timby BA PhD FSA MCIfA (freelance) Sue Anderson, M Phil, MCIfA, FSA (freelance) Richenda Goffin BA MCIfA (freelance)
Medieval/post-medieval	Alejandra Gutierrez BA (Hons) PhD MCIfA Ed McSloy BA MCIfA (CA) Alistair Barclay BSc PhD FSA MCIfA (CA) Grace Jones BA MA PhD MCIfA (CA) Jacky Sommerville BSc MA PCIfA (CA) Stephanie Ratkai BA (freelance) Paul Blinkhorn BTech (freelance) John Allan BA MPhil FSA (freelance) Richenda Goffin BA MCIfA (freelance) Sue Anderson M Phil, MCIfA, FSA (freelance)
South-West	Henrietta Quinnell BA FSA MCIfA (University of Exeter)
Clay tobacco pipe	Marek Lewcun (freelance) Kieron Heard (freelance) Richenda Goffin BA MCIfA (freelance)
Ceramic building material	Ed McSloy MCIfA (CA) Grace Jones BA MA PhD MCIfA (CA) Peter Banks LLB LLM PCIfA (CA) Claire Collier Jones BA MA (CA) Laura Pearson BA, MA, PCIfA (CA), Apprentice: Archaeological Specialist Level 7 Ciar Boyle Gifford BA, MA (CA), Apprentice: Archaeological Specialist Level 7 Richenda Goffin (Roman painted wall plaster) CBM, BA MCIfA (freelance) Steve Benfield BA (CA) Peter Warry PhD (freelance) Sue Anderson M Phil, MCIfA, FSA (freelance)

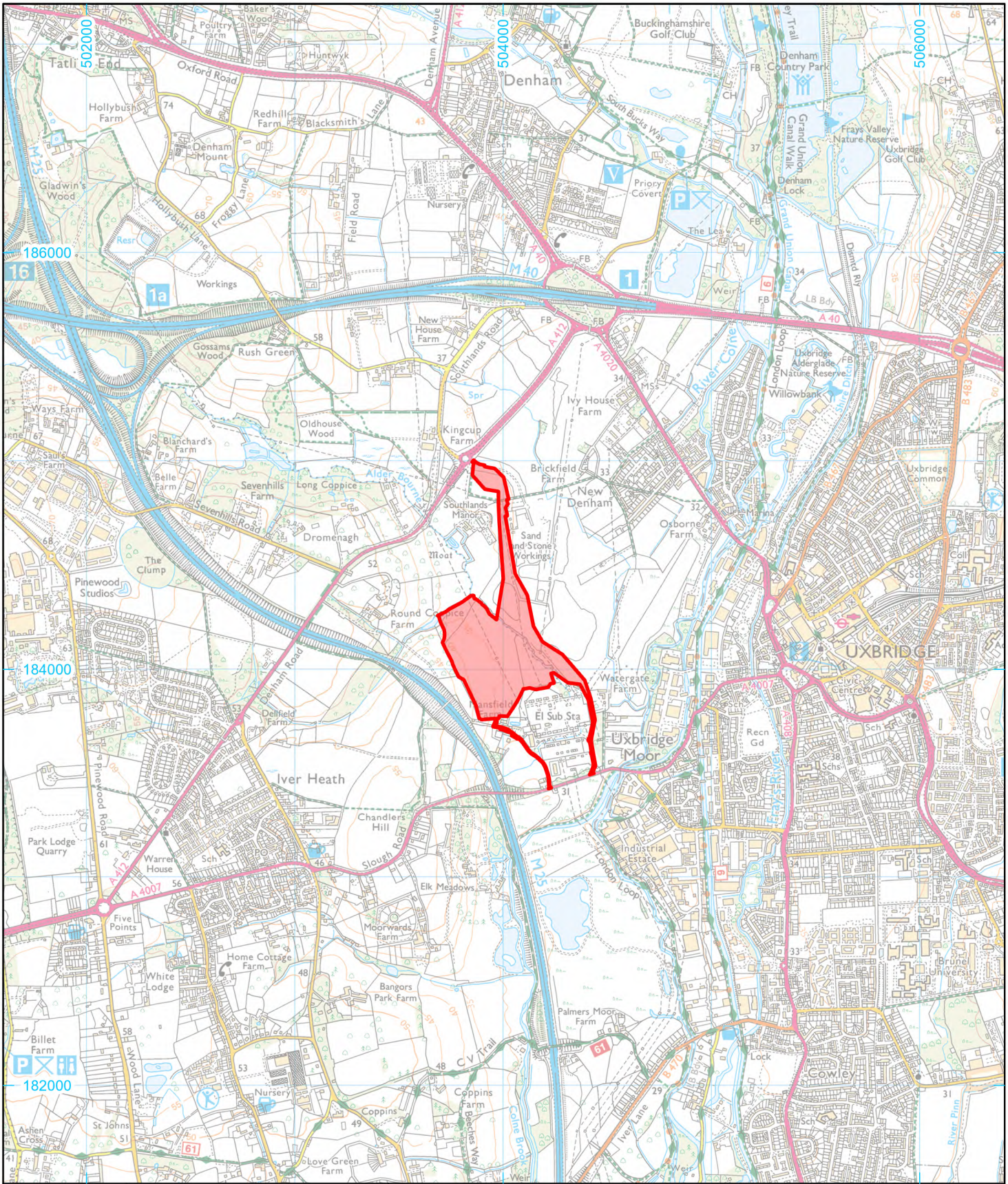
Other finds

Small finds	Ed McSloy BA MCIfA (freelance) Grace Jones BA MA PhD MCIfA (CA) Claire Collier Jones BA MA (CA) Richenda Goffin, (non-metalwork) BA MCIfA (CA) Steve Benfield CA I Riddler PhD (freelance) Alison Sheridan PhD (National Museum of Scotland)
Metal artefacts	Ed McSloy BA MCIfA (CA) Grace Jones BA MA PhD MCIfA (CA) Alex Bliss BA, AIfA (CA) Claire Collier Jones BA MA (CA) Jörn Schuster MA DPhil FSA MCIfA (freelance) Hilary Cool BA PhD FSA (freelance) I Riddler PhD (freelance)
Lithics	Ed McSloy BA MCIfA (CA) Jacky Sommerville BSc MA PCIfA (CA) Pippa Bradley BA MPhil Dip Post-Ex MCIfA (CA) Michael Green (CA) Sarah Bates BA (freelance)
(Palaeolithic)	Francis Wenban-Smith BA MA PhD (University of Southampton)
Worked stone	Ruth Shaffrey BA PhD MCIfA (freelance) Kevin Hayward FSA BSc MSc PhD PCIfA (freelance)
Inscriptions	Roger Tomlin MA DPhil, FSA (Oxford)
Glass	Ed McSloy MCIfA (CA) Hilary Cool BA PhD FSA (freelance) David Dungworth BA PhD (freelance) Sarah Paynter PhD (Historic England) Rachel Tyson PhD (freelance) Hugh Wilmott PhD (University of Sheffield)
Coins	Ed McSloy BA MCIfA (CA) Alex Bliss (CA) Peter Guest BA PhD FSA (Cardiff University) Richard Reece BSc PhD FSA (freelance) Jude Plouviez (freelance) Andrew Brown PhD (British Museum) Richard Kelleher PhD (Fitzwilliam Museum) Philip de Jersey PhD (Ashmolean Museum)
Leather	Quita Mould MA FSA (freelance)
Textiles	Penelope Walton Rogers FSA Dip Acc. (freelance) Sue Harrington PhD (freelance)
Iron slag/metal technology	Tim Young MA PhD (Cardiff University) David Dungworth BA PhD (freelance) David Starley BSc PhD Lynne Keys (freelance)
Worked wood	Michael Bamforth BSc MCIfA (freelance)

Biological remains

Animal bone	Clare Randall MCIfA (CA) Matilda Holmes BSc MSc PhD ACIfA (freelance) Andrew Clarke ACIfA CA Julie Curl (freelance)
Human bone	Sharon Clough BA MSc MCIfA (CA) Frankie Wildmun (CA) Sue Anderson M Phil, MCIfA, FSA (freelance)

Environmental sampling	Sarah Wyles BA MCIfA (CA) Sarah Cobain BSc MSc ACIfA (CA) Anna West BSc (CA) Keith Wilkinson BSc PhD MCIfA (ARCA)
Pollen	Michael Grant BSc MSc PhD (University of Southampton) Rob Batchelor BSc MSc PhD MCIfA (QUEST, University of Reading)
Diatoms	Tom Hill BSc PhD CPLHE (Natural History Museum) Nigel Cameron BSc MSc PhD (University College London)
Charred plant remains	Sarah Wyles BA MCIfA (CA) Sarah Cobain BSc MSc ACIfA (CA) Anna West BSc (CA)
Wood/charcoal	Sarah Cobain BSc MSc ACIfA(CA) Dana Challinor MA (freelance) Sheils Bordman (freelance)
Insects	Enid Allison BSc D.Phil (Canterbury Archaeological Trust)
Mollusca	Sarah Wyles BA MCIfA (CA) Keith Wilkinson BSc PhD MCIfA (ARCA)
Ostracods and Foraminifera	John Whittaker BSc PhD (freelance)
Geoarchaeology	Holly Rogers BA (Hons) MSc (CA) Keith Wilkinson BSc PhD MCIfA (ARCA)
Soil micromorphology	Richard Macphail BSc MSc PhD (University College London)
Scientific dating	
Dendrochronology	Robert Howard BA (NTRDL Nottingham)
Radiocarbon dating	Alistair Barclay BSc PhD FSA MCIfA (CA) SUERC (East Kilbride, Scotland) Beta Analytic (Florida, USA)
Bayesian chronological modelling	Derek Hamilton PhD (SUERC) Frances Healey PhD (freelance) Professor John Hines (Cardiff University)
Archaeomagnetic dating	Cathy Batt BSc PhD (University of Bradford)
TL/OSL Dating	Phil Toms BSc PhD (University of Gloucestershire)
Conservation	Karen Barker BSc (freelance) Pieta Greaves BSc MSc ACR (Drakon Heritage and Conservation) Julia Park-Newman (Conservation Services, freelance)



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PROJECT TITLE

Iver Substation, Uxbridge Moor, Buckinghamshire

FIGURE TITLE

Site location plan

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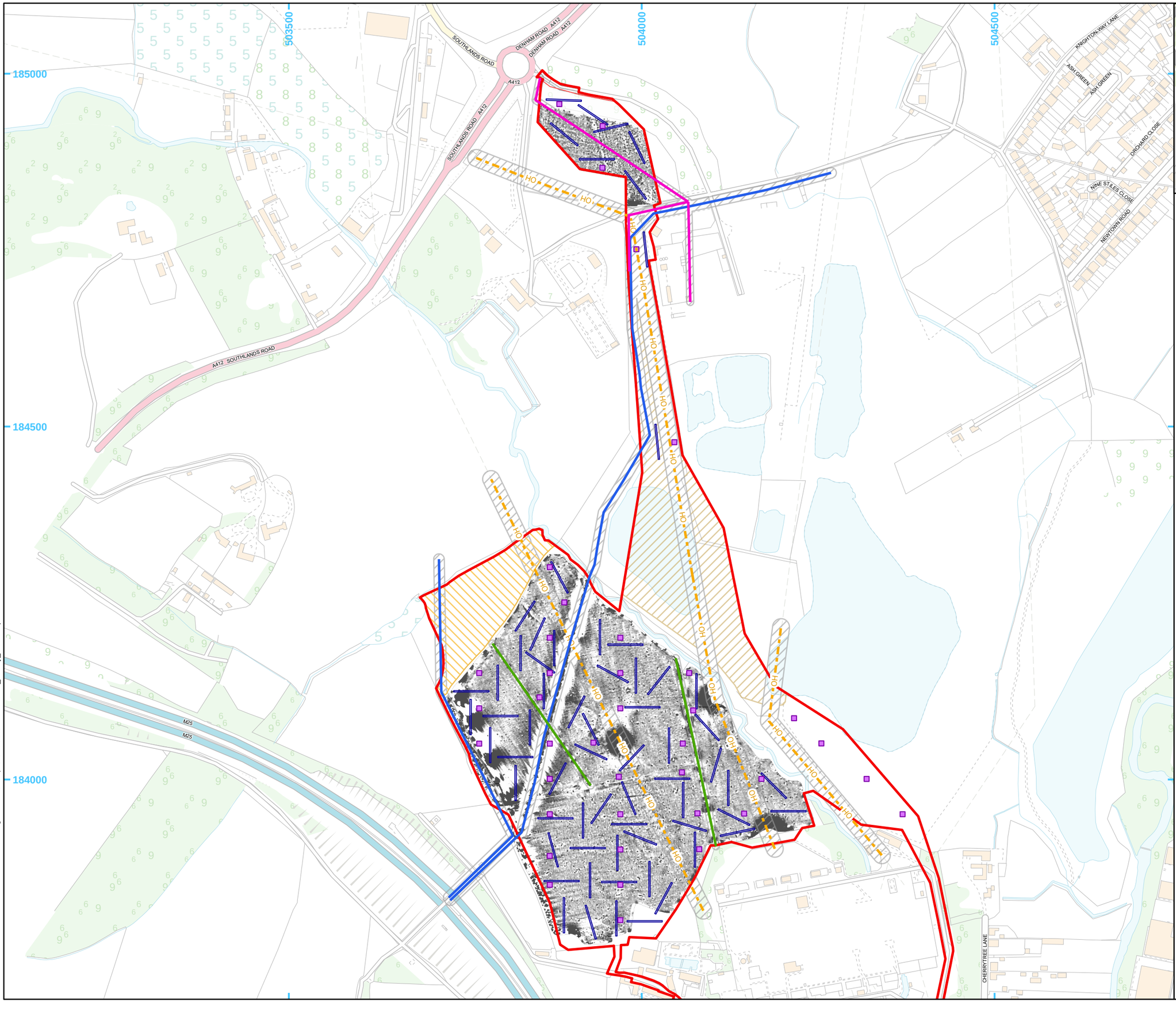
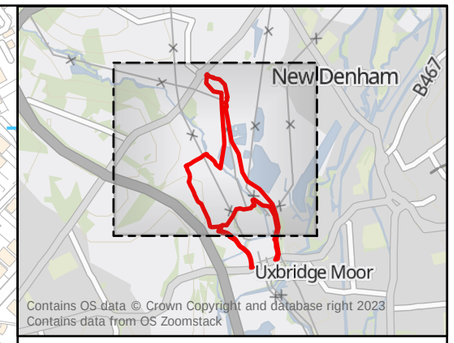
CHECKED BY	MP	DATE	07/06/2024	1
APPROVED BY	AN	SCALE @ A4	1:25,000	





Legend

N

- Site Boundary
- Proposed Evaluation Trench
- Test Pit (1m by 1m)

Constraints

- OH electricity
- Affinity Water
- BT
- Possible services (geophysics)
- Service Buffer
- Excluded from Project
- Impacted by Quarrying

0 250m

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PROJECT TITLE

Iver Substation, Uxbridge Moor, Buckinghamshire

FIGURE TITLE

Proposed trench layout and test-pit distribution overlying geophysical greyscale (Sumo 2024)

DRAWN BY	**DL**	*PROJECT NO*	**MK1106**	*FIGURE NO.*
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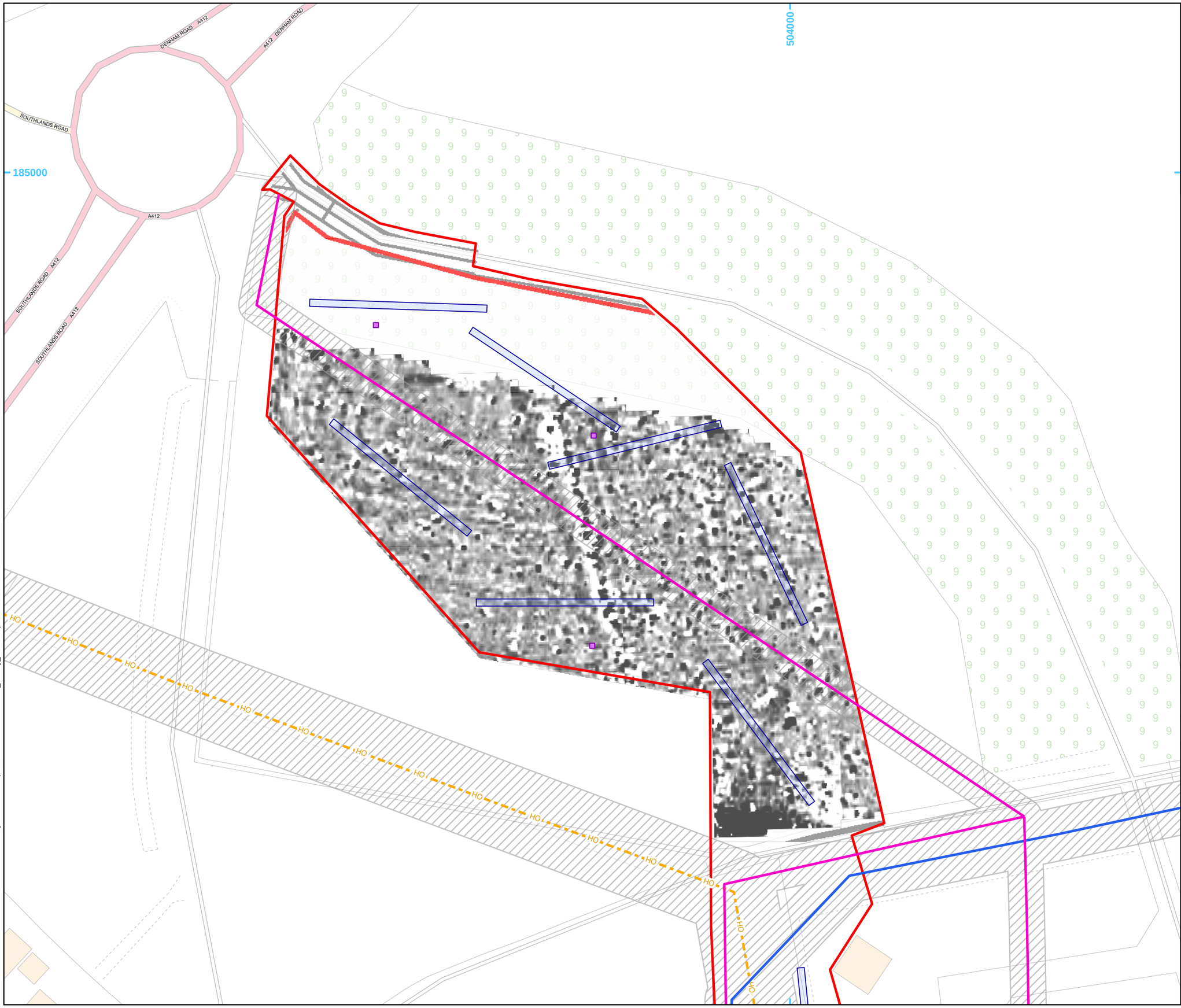

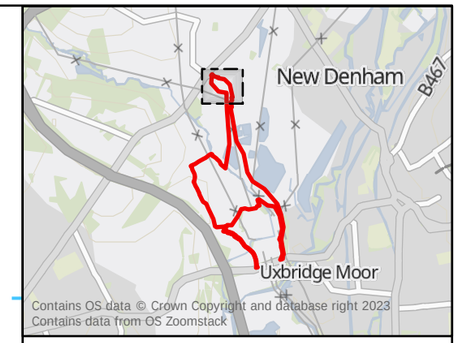

Legend

- Site Boundary
- Proposed Evaluation Trench
- Test Pit (1m by 1m)

Constraints

- OH electricity
- Affinity Water
- BT
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- Impacted by Quarrying

N

0 50m

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PROJECT TITLE

Iver Substation, Uxbridge Moor, Buckinghamshire

FIGURE TITLE

Proposed trench layout and test-pit distribution overlying geophysical greyscale (Sumo 2024)

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APPROVED BY	**AN**	*SCALE@A3*	**1:1,000**	

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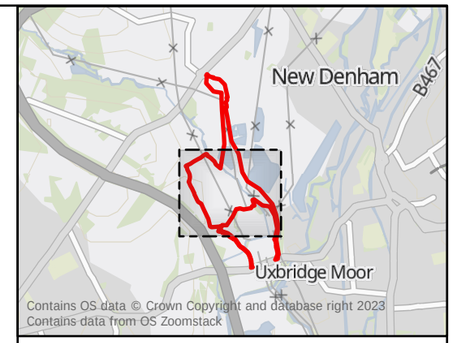

Legend

N

- Site Boundary
- Proposed Evaluation Trench
- Test Pit (1m by 1m)

Constraints

- OH electricity
- Affinity Water
- Possible services (geophysics)
- Service Buffer
- Excluded from Project
- Impacted by Quarrying

0 130m

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PROJECT TITLE

Iver Substation, Uxbridge Moor, Buckinghamshire

FIGURE TITLE

Proposed trench layout and test-pit distribution overlying geophysical greyscale (Sumo 2024)

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