

ROWTON PUMPING STATION, WAVERTON, CHESHIRE



Archaeological Strip and Record



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SUMMARY

Following a proposal by United Utilities to install a new underground storage tank within the grounds of their existing pumping station on Moor Lane, Waverton, Cheshire (SJ 4502 6446), the Chester City Archaeologist issued recommendations for a metal detector survey and an archaeological strip and record exercise to be undertaken for all areas of ground disturbance as part of the proposed improvement works. This included a contractor's compound in the field to the east of the pumping station. The site is located within the registered Civil War battlefield of Rowton Heath, fought on 24th September 1645.

This work was undertaken over five days in April and May 2007.

An initial metal detector survey was undertaken prior to work commencing on site, following which the vegetation and some of the topsoil was removed by mechanical excavator. A further metal detector survey was then undertaken over the newly machined area, before the remaining topsoil was machined off to the level of the natural geology. A final metal detector survey was then undertaken, followed by the mapping of the site and sample excavation of the features revealed.

Nine discrete features were revealed, with three of them (**13**, **14** and **19**) identified as modern rubbish pits. Three features (**2**, **4** and **9**) located in the southernmost part of the site, were much smaller than these pits, **2** and **4** suggesting no obvious function, whilst pit **9**, appeared to represent a posthole. All three of these features contained post-medieval pottery. Two linear cuts, **17** and **11**, were revealed, with **17** representing a post-medieval ditch and **11** the cut for the modern sewer pipe running from the pumping station. The final feature, **13**, appeared to represent a tree throw.

The earliest artefacts from this site dated to the late eighteenth century, over a century after the Civil War, and none of the features identified appeared to relate to the 1645 Battle of Rowton Heath.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank ? of United Utilities for commissioning the project.

The excavation was undertaken by Paul Clark, Claire Riley and Liz Murray, with the metal detecting survey undertaken by Colin Sharratt and John Grassby. The finds were examined by Christine Howard-Davis, the illustrations produced by Mark Tidmarsh and the report written by Paul Clark. Alison Plummer edited the report and managed the project.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 United Utilities (hereafter the client) are proposing to install a new underground storage tank within the grounds of their existing pumping station on Moor Lane, Waverton, Cheshire (SJ 4502 6446). A contractor's compound will also be required in the field to the east of the pumping station, potentially impacting upon any surviving archaeological remains. The proposed storage tank and compound are located within the registered Civil War battlefield of Rowton Heath, fought on 24th September 1645.
- 1.1.2 To mitigate the impact of the proposed development, the Chester City Archaeologist issued recommendations for a metal detector survey and an archaeological strip and record exercise to be undertaken for all areas of ground disturbance as part of the proposed improvement works. This work was undertaken over five days in April and May 2007. This report sets out the results of the metal detector survey and strip and record exercise.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The pumping station is located to the south of Moor Lane, Waverton and to the east of the A41, 3 miles south-east of Chester. The proposed development site is in the area immediately to the south and east of the existing pumping station, with the contractor's compound further east.
- 1.2.2 The area of the proposed development was partially covered by concrete and partially under heavy vegetation. The area of the contractor's compound to the east was flat and under long grass and nettles.
- 1.2.3 Waverton lies in the the area of the Shropshire, Cheshire and Staffordshire Plain, as defined by the Countryside Commission (1998, 145-152). The majority of this plain is gently rolling and at a relatively low altitude, with a solid geology of Triassic sandstones and marls overlain by local deposits of silt, peat, sand and gravels (*ibid*). The drift geology revealed by the strip and record exercise comprised reddish brown sands.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 ***The Battle of Rowton Heath:*** this battle took place on 24th September 1645. Following the defeat at the Battle of Naseby in June 1645, King Charles I turned north to attempt to join forces with the Marquis of Montrose in Scotland (Baker 1986, 107). His forces, however, diverted to assist the Royalist garrison at Chester, which was under siege. The Royalists were, however, being pursued by up to 3000 cavalry under the command of General Sydenham Poyntz (<http://www.british-civil-wars.co.uk/military/1645-rowton-heath.htm#rowton>, accessed 21st June 2007). Royalist cavalry, under Sir Marmaduke Langdale, held up the advance of the Parliamentarians on Miller's

Heath, but withdrew to Rowton Heath upon the arrival of reinforcements from the Parliamentarians besieging Chester. The Royalists suffered defeat in the battle that followed (*ibid*).

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 The Project Design (*Appendix 1*) was adhered to fully during the site work. All work undertaken was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 METAL DETECTOR SURVEY

- 2.2.1 Prior to machine excavation on site, a metal detector survey was undertaken by an experienced metal detectorist, under archaeological supervision. Further survey was carried out during the course of the topsoil stripping, which was undertaken in spits, and following the completion of the topsoil strip. All metal finds were individually numbered and located in three dimensions, using a total station.

2.3 STRIP AND RECORD

- 2.3.1 The topsoil and subsoil was removed under archaeological supervision by a mechanical excavator fitted with a toothless ditching bucket. Stripping proceeded until the uppermost horizon of archaeological remains were revealed or, where these were absent, the natural substrate. The stripped areas were cleaned sufficiently to enhance the definition of features.
- 2.3.2 The site was then planned using a Total Station, with the resulting plan tied into the national grid. The principal aim of the initial work was to produce a plan of the revealed features to define and quantify the second stage of formal and detailed excavation.
- 2.3.3 The small number of archaeological features revealed enabled the sampling of all of them, with linear features excavated to the extent that they were characterised and understood. This included 100% of terminals and ditch intersections and sufficient interventions to provide evidence of dating and formation. Discrete features were half-sectioned, which proved sufficient to characterise them.
- 2.3.4 All contexts were recorded using standard recording systems in accordance with the IFA Standards and Guidance for archaeological excavations. All excavation, both by machine and by hand, was undertaken with a view to avoiding damage to any archaeological features or deposits, which appeared to be worthy of preservation *in situ*. All hand excavation respected the stratigraphy of archaeological layers, features, deposits and structures.
- 2.3.5 Complex features and excavated interventions were recorded by individual hand-drawn plans at a scale of 1:20 or 1:10. These detailed plans and the area plan produced in Stage 1 were digitised and combined to produce a post-

excavation plan of the site. Sections were drawn at 1:10 and all features revealed in the excavated area will be planned.

- 2.3.6 A full photographic record comprising black and white negative archivable film and colour slide was made. In addition digital photographs taken with an optical zoom camera of at least 300 dpi were taken.
- 2.3.7 All finds have been processed according to the IFA Guidelines for Finds Work. In all cases, all bags and boxes were marked with the site code and context number and Museum Accession Number.

2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*) and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited at the Cheshire County Record Office and the finds archive will be deposited in the **SOME MUSEUM** on completion of the project.

3. RESULTS

3.1 INTRODUCTION

3.1.1 The topsoil, *I*, across the site comprised a dark brown sandy-silt. It was highly variable in thickness, to a maximum of 0.87m in the northernmost part of the site. The site was stripped in two spits, with the uppermost spit comprising the vegetation across the site and a maximum of 0.2m of the topsoil. The second spit removed the remainder of the topsoil across much of the site, although due to soil storage, the eastern end of the site was not further stripped.

3.1 STRIP AND RECORD

3.1.1 Following the removal of the topsoil, nine discrete features were observed, cutting into the natural. Three of these features, *13*, *14* and *19*, appeared to be rubbish pits, containing modern material, including plastic. Three further features, *2*, *4* and *9*, located in the southernmost part of the site, were much smaller than these pits, and all contained post-medieval pottery. Pits *2* and *4* were very similar in terms of size and shape, with pit *2* measuring 0.82m x 0.26m in plan and pit *4* 0.85m x 0.32m. These features were both broadly rectangular in shape, with no obvious function. Cut *9*, which was rectangular and measured 0.22m x 0.16m in plan, appeared to represent a posthole.

3.1.2 The remaining features comprised two linear cuts, *17* and *11*, and probable tree throw, *13*. Ditch *17* was over 13.5m long, running into the eastern baulk, 0.56m wide and had a maximum depth of 0.16m. It had two interventions, *16* and *20* excavated across it, one (*16*) including its western terminus, with post medieval pottery recovered from both. The cut of the sewer pipe, *11*, running from the pumping station, was the other linear feature revealed. The probable tree throw, *13*, was irregular in plan, measuring a maximum of 1.2m x 0.76m in plan, with irregular sides and base, suggesting it was created by biological action.

3.2 METAL DETECTOR SURVEY

3.2.1 The metal detector survey was undertaken in three phases, with the initial survey undertaken prior to work commencing on site. Further survey was undertaken following the removal of the vegetation and some of the topsoil across the site and the final phase survey was undertaken following the completion of the topsoil strip. The survey revealed a total of 92 metal artefacts, the locations of which were recorded in three dimensions (Fig 3).

3.3 THE FINDS

3.3.1 In all, 125 fragments of artefact were recovered during the investigation, the majority of which were unstratified, being, in the main, recovered by metal-detector survey.

- 3.3.2 Some 38 fragments of pottery were recovered. With the exception of an almost complete grey stoneware 1lb jam jar, the pottery fragments were all unusually small, and the groups represented were all mixed in date, with a general range from the late eighteenth century to the twentieth. Only the earlier material has any relevance to the dating of the site, with small fragments of slip-trailed and decorated flatwares noted within cut *4* and ditch *17*, and manganese-speckled tankard fragments from groups cuts *4* and *8* and ditch *17*. Both wares point to a later eighteenth century date. The size of the fragments, however, suggests considerable disturbance and much of the material presumably reached its present location in the course of agricultural activity. Three larger fragments of dark olive green wine bottle from ditch *17*, a type also typical of the eighteenth century must confirm some activity at this date. Clay tobacco pipe was confined to a few fragments of undiagnostic stem, and a single small spur, and thus add little to dating.
- 3.3.3 Ironwork from the site was not x-rayed. Although corroded it was largely recognisable, comprising a narrow range of nails and nail fragments. A large axe head was recovered (OR 1032) but cannot be dated with any precision. The amount of copper alloy from the site was unusually large, probably reflecting the manner of collection. The small group of buttons are of interest. For the most part they are plain flat round buttons with a single loop to the rear, and cannot be dated with precision, although they are unlikely to be earlier than the nineteenth century. The presence, however, of several similarly-sized copper alloy discs raises the possibility that the waste from making buttons and possibly other small copper alloy objects, was reaching the site, presumably being dumped nearby. Two buttons (OR 1059, OR 1060) are of interest. The former, with a crown above three cannons, pertains to the Royal Artillery, whilst the latter, largely illegible, appears to bear the letters 'GWR' suggesting its origin in a railway context. The single legible coin from the site (OR 1061) is a halfpenny of George V, dated 1928. A single piece of lead shot (OR 1035) was recovered, its size suggesting that it is pistol rather than musket shot.

4. DISCUSSION

4.1 STRIP AND RECORD

4.1.1 Nine features were revealed, one of which, **8**, appeared to be natural. Four, **8**, **11**, **14** and **19**, appeared to be modern in derivation, whilst the remaining four, **2**, **4**, **9** and **17**, dated to the post-medieval period. The post-medieval features revealed were of no great significance, as they represented an isolated posthole, **9**, a ditch. **17**, and two small pits of uncertain function, **2** and **4**.

4.1.2 The strip and record exercise failed to find any evidence of features or structures relating to the 1645 Battle of Rowton Heath, with the earliest artefacts identified dating to the late eighteenth century, over a hundred years after the Civil War.

4.2 METAL DETECTOR SURVEY

4.2.1 The metal detector survey located 92 metal objects, but none of these were considered to provide any evidence for the Civil War battle, with the possible exception of the lead shot, although this appeared to represent pistol rather than the musket shot which might be expected.

5. BIBLIOGRAPHY

Baker A, 1986 *A Battlefield Atlas of the English Civil War*, London

<http://www.british-civil-wars.co.uk/military/1645-rowton-heath.htm#rowton>,
accessed 21st June 2007

English Heritage 1991, *Management of Archaeological Projects*

6. ILLUSTRATIONS

6.1 FIGURES

Figure 1: Site location map

Figure 2: Site plan

Figure 3: Plan of metal detected objects

6.2 PLATES

Plate 1: View of metal detecting survey

Plate 2: East-facing view across northern area of site

Plate 3: South-east-facing view across central area of site

Plate 4: East-facing view of Pit *13*

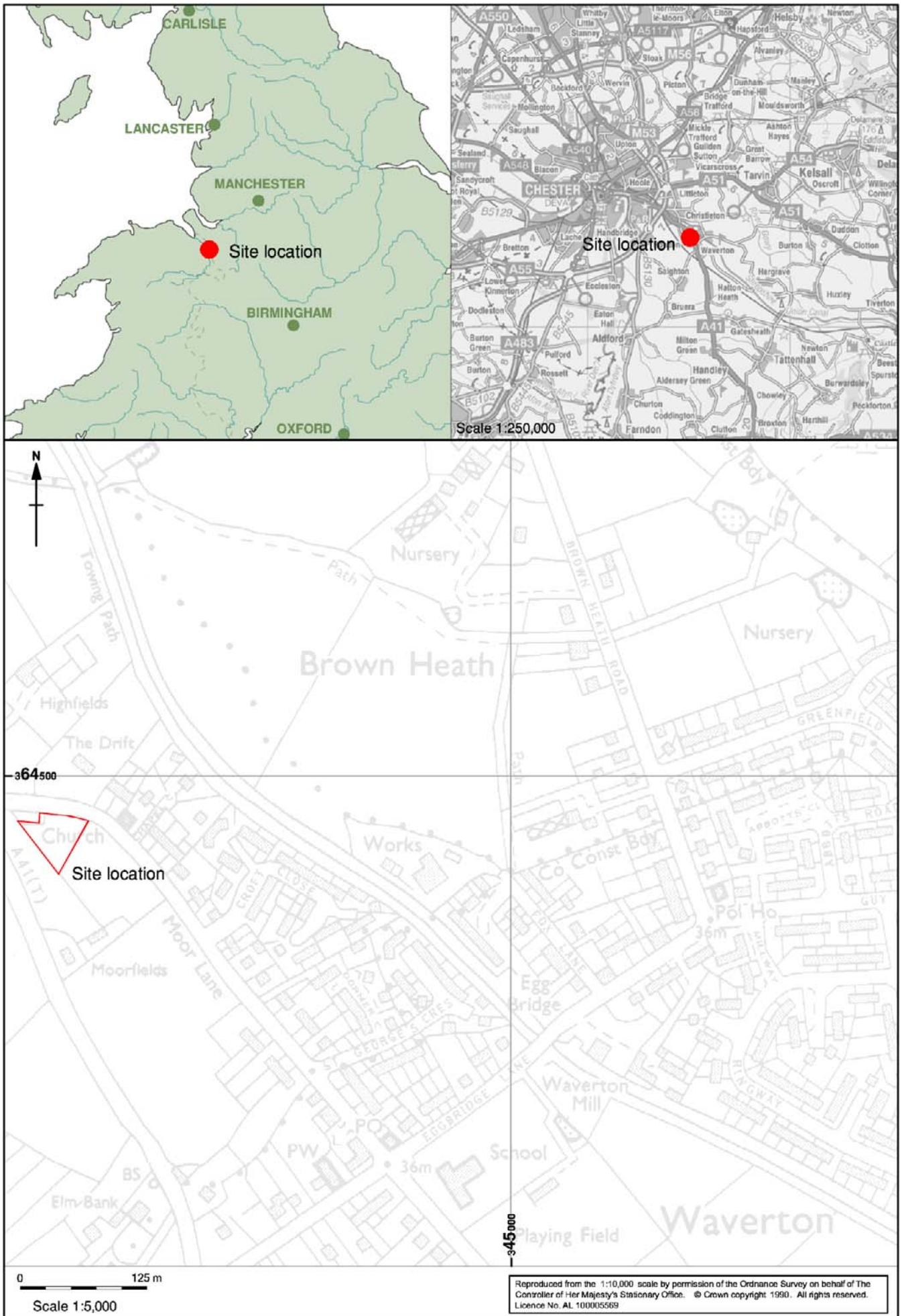
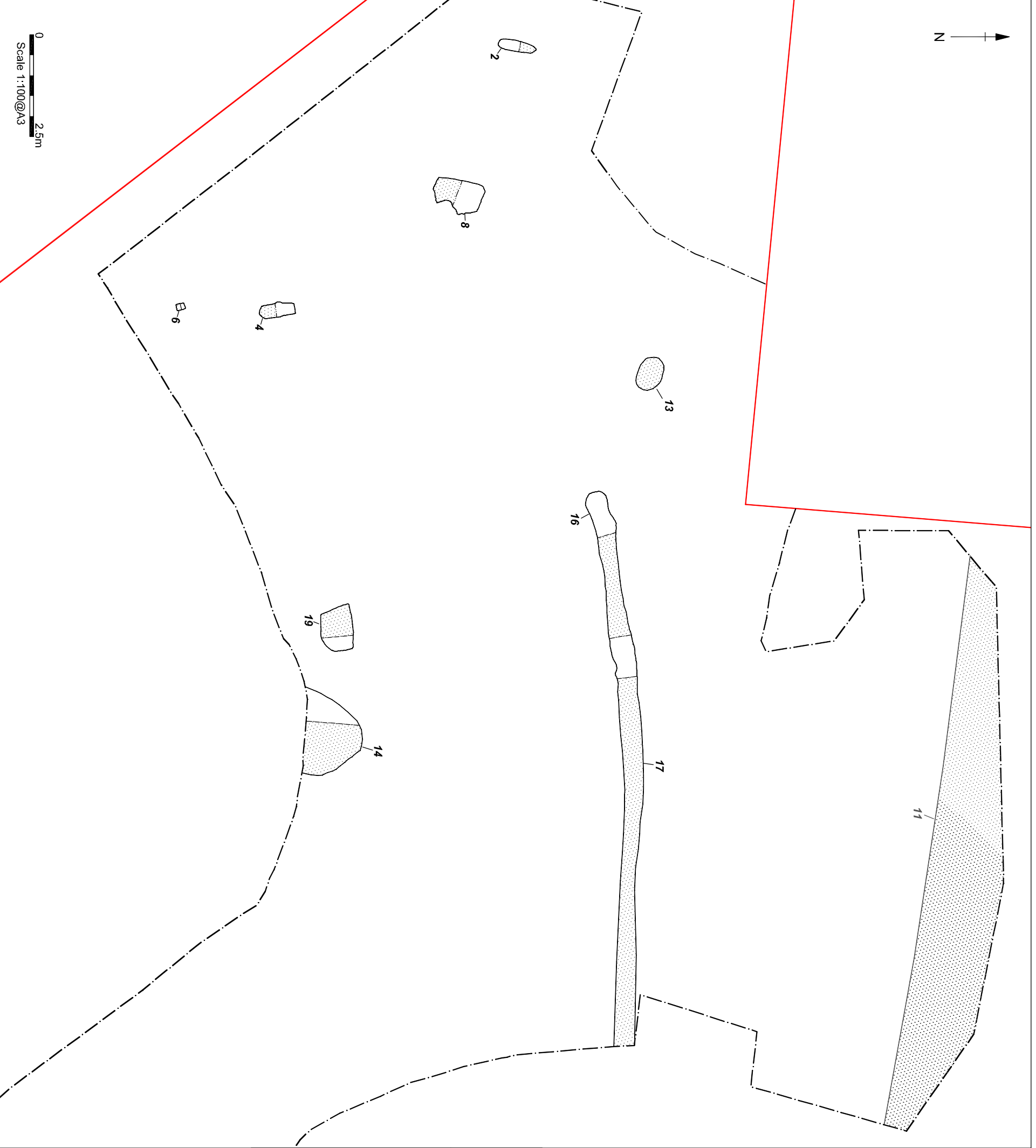


Figure 1: Site Location



Key	
	study area
	section
	edge of excavation
	edge of context
	unexcavated
	context number

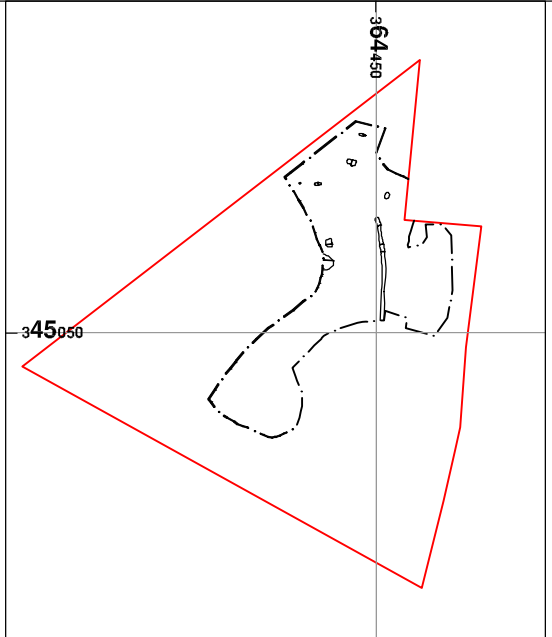
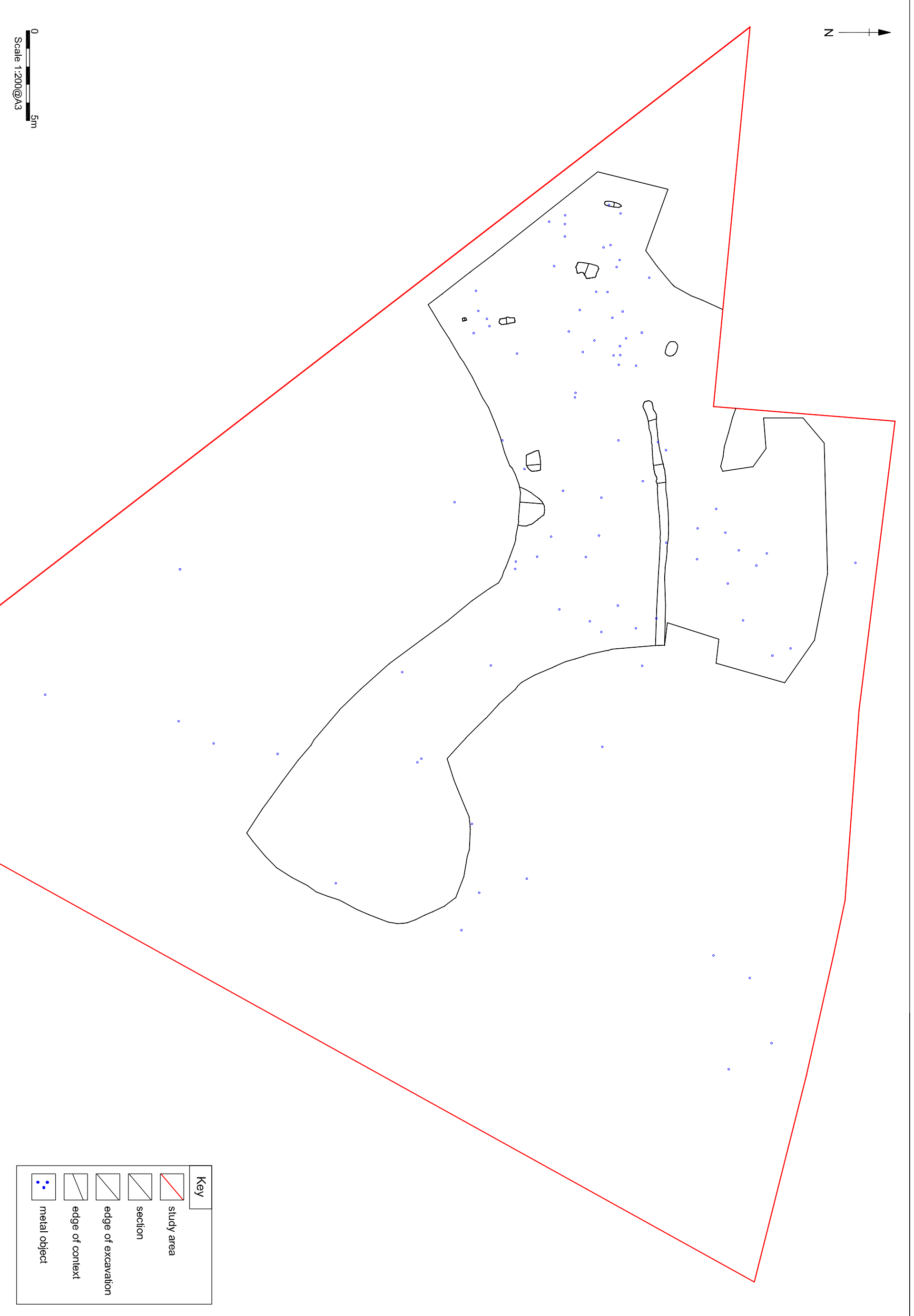


Figure 2: Site plan








Key	
	study area
	section
	edge of excavation
	edge of context
	metal object

Figure 3: Plan of metal detected objects



Plate 1: View of metal detecting survey

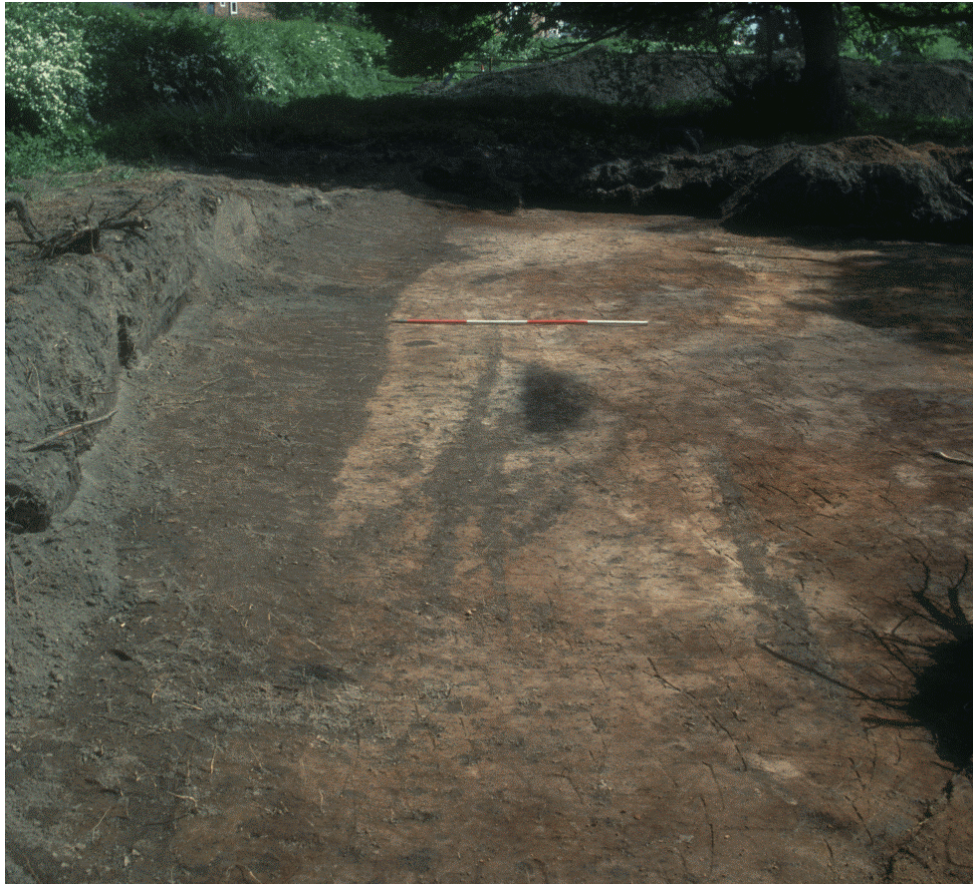


Plate 2: East-facing view across northern area of site

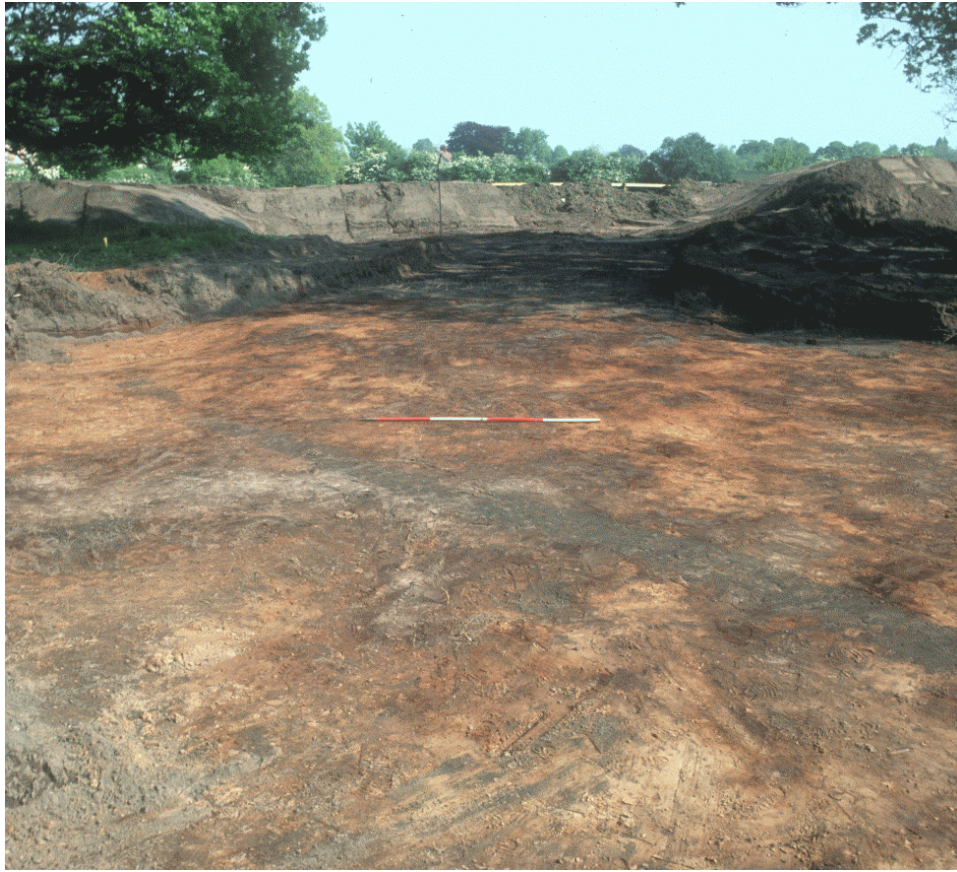


Plate 3: South-east-facing view across central area of site



Plate 4: East-facing view of Pit 13

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

- 1.1 United Utilities (hereafter the client) propose to install a new underground storage tank within the grounds of their existing pumping station on Moor Lane, Waverton, Cheshire (SJ 4502 6446). A contractor's compound will also be required in the field to the east of the pumping station, potentially impacting upon any surviving archaeological remains.
- 1.2 The storage tank and compound are located within the registered Civil War battlefield of Rowton Heath, fought on 24th September 1645. Following the defeat at Naseby in June 1645, King Charles I turned north to attempt to join forces with the Marquis of Montrose in Scotland. His forces, however, diverted to assist the Royalist garrison at Chester, which was under siege. The Royalists were, however, being pursued by up to 3000 cavalry under the command of General Sydenham Poyntz. Royalist cavalry, under Sir Marmaduke Langdale, held up the advance of the Parliamentarians on Miller's Heath, but withdrew to Rowton Heath upon the arrival of reinforcements from the Parliamentarians besieging Chester. The Royalists suffered defeat in the battle that followed.
- 1.3 The Chester City Archaeologist has issued recommendations via email for a metal detecting survey and an archaeological strip and record exercise to be undertaken for all areas of ground disturbance as part of the proposed improvement works. The following document represents a project design for this task.
- 1.4 OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small and large-scale projects during the past 20 years. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.5 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

- 2.1 The following programme has been designed to provide for the identification and recording of any archaeological deposits in the area to be affected by the storage tank and compound area. It should be noted that this includes all of the area of the proposed compound, with the exception of the areas beneath the canopies of three mature oaks present on site. The areas beneath these canopies will be fenced off during the works and will not be impacted upon.
- 2.2 **Metal Detector Survey:** this will be undertaken across all areas to be affected by the development prior to and during topsoil stripping, and will result in the location and collection of metal objects.
- 2.3 **Strip and Record:** the objective of this exercise is to make a full graphic, photographic and written record of the archaeological evidence in a manner whereby the extent, nature, form, date, function and relationships of archaeological features and/or deposits can be established to achieve "preservation by record" in advance of the development;
- 2.4 **Report and Archive:** production of a report following the collation of data during *Sections 2.2 and 2.3* above.

3. METHOD STATEMENT

- 3.1 The excavation methodology would follow the principles and guidelines for archaeological excavation as set down out in the Institute of Field Archaeologists: Standard and Guidance for Archaeological Excavations (IFA 2001).
- 3.2 The programme of archaeological works will take the form of strip and record investigations in two stages: Stage 1 - in the first instance, topsoil and overburden material will be removed to expose the first archaeological horizon. All archaeological features thus exposed will be sufficiently cleaned to allow them to be recorded, and a pre-excavation plan will be produced; Stage 2 - then, following agreement of a strategy with the Chester City Archaeologist, any archaeology revealed in the strip will be sample excavated and recorded. The sample will be appropriate and proportional to the importance, quantity and complexity of the archaeology exposed, as well as its perceived research value.
- 3.3 **Stage 1:** the initial topsoil stripping will be designed to expose the character and nature of the archaeological remains and assess their potential research value. The primary aims will be:
- To expose archaeological remains across the whole archaeological site by the mechanical removal of topsoil and any masking subsoil;
 - To create a pre-excavation plan of exposed deposits;

- To collect datable/activity specific material from the surface of exposed deposits;
 - To confirm the priorities for further archaeological investigation.
- 3.4 **Stage 2:** further archaeological investigations will be designed to recover data sufficient to allow for “preservation by record” and establish the extent, date, character and significance of the archaeological remains. The primary aims will be:
- To characterise the overall nature of the archaeological resource and to understand the process of its formation;
 - To create a detailed plan of all archaeological features;
 - To establish the character of those features in terms of cuts, soil matrices and interfaces;
 - To recover, where appropriate, across the archaeological site representative ecofactual and palaeoenvironmental samples to provide evidence of function and past landuse;
 - To establish in outline a dated sequence of structures and/or deposits and thus to define changes in site organisation over time.
- 3.5 **Stripping:** during the strip and record exercise, the topsoil and subsoil will be removed under archaeological supervision by a mechanical excavator fitted with a toothless ditching bucket. Stripping will proceed until the uppermost horizons of significant archaeological remains have been revealed or, where these are absent, the natural substrate. The topsoil will be stockpiled separately from the subsoil and other deposits. The stripped areas, including the edges if necessary, will be cleaned sufficiently to enhance the definition of features.
- 3.6 The mechanical excavator used to accomplish the topsoil strip will be fitted with a toothless ditching bucket. If appropriate, further machine excavation will be carried out after hand excavation and recording of such deposits has been completed. (Such techniques are only appropriate for the removal of homogenous low-grade deposits, which may give a "window" into underlying levels; or for characterising features where there is no danger of removing important stratigraphic relationships and sufficient stratigraphy will remain to allow the excavation of hand excavated samples). The machine used will be safe, in good working order and powerful enough for the work and to be able to mound spoil and overburden neatly, at a minimum distance of 1m from the trench edges. The topsoil will be stripped in a systematic and logical manner, to ensure that where practicable the excavators and machines used to remove spoil do not rut, compact or otherwise damage buried or exposed archaeological features and deposits by crossing previously stripped areas.
- 3.7 **Mapping:** the strip and record area will be planned using a Total Station and the resulting plan tied into the national grid. The stripping team will pay close attention to achieving a clean stripped surface, using the mechanical plant under close archaeological supervision, to reduce the need for extensive hand cleaning. Limited areas may still require hand cleaning, to clarify complex feature intersections. The principal aim of the initial work will be to produce a plan of the revealed features that can be used to define and quantify the second stage of formal and detailed excavation. Plans will be maintained as stripping progresses and features will be defined on the ground. A general site plan will be produced at an appropriate scale to map the exposed features.
- 3.8 **Sampling:** the research value of the archaeology and the necessity to achieve “preservation by record” in advance of the development will inform the second stage excavation sampling strategies. The exact sampling levels will be determined by the nature of the remains.
- 3.9 Any structures will be excavated to the extent that they are sufficiently characterised and understood, this will involve excavating a representative range of structural elements such as post-holes, construction trenches, hearths etc. Some sufficiently important structures eg hearths, kilns, midden deposits etc may require 100% samples.
- 3.10 Any positive feature, archaeological feature or deposit likely to obscure earlier features will be completely removed in the most appropriate fashion, after being recorded.
- 3.11 Linear features will excavated to the extent that they are characterised and understood. This will include 100% of terminals and ditch intersections and sufficient interventions to provide evidence of dating and formation. As a guide linear features up to 5m in length will be subject to a 20% sample while linear features over 5m long will be subject to 10% (samples to be at least 1m wide);
- 3.12 An appropriate range of discrete/isolated features (pits, postholes etc) and non-linear negative features will be investigated. It should be noted that in most cases such features will be half-sectioned, but where either no dating/functional evidence has been obtained, or where artefacts have been recovered of such a nature that the recovery of additional material of a similar nature is thought to be worthwhile, then further sampling will be undertaken. Where clusters of like features occur, it may prove sufficient to investigate a representative sample.
- 3.13 All contexts will be recorded using standard recording systems in accordance with the IFA Standards and Guidance for archaeological excavations; planning and surveying will be based on a site grid tied into the Ordnance Survey National Grid and ordnance datum levels will be taken where appropriate.

- 3.14 Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation *in situ*. Any hand excavation will respect the stratigraphy of archaeological layers, features, deposits and structures. When required, each context will be excavated in sequence.
- 3.15 Complex features and excavated interventions will be recorded by , individual hand-drawn plans made at a scale of 1:20 or 1:10. These detailed plans and the area plan produced in Stage 1 will be digitised and combined to produce a post-excavation plan of the site. Sections will be drawn at 1:10 or 1:20 unless circumstances dictate otherwise. All features revealed in the excavated area will be planned.
- 3.16 A full photographic record comprising black and white negative archivable film will be made. In addition digital photographs taken with an optical zoom camera of at least 300 dpi will be taken.
- 3.17 All finds will be processed according to the IFA Guidelines for Finds Work. In all cases, all bags and boxes will be marked with the site code and context number and Museum Accession Number.
- 3.18 Consideration should be given to taking environmental samples (30 litres each where possible) from well stratified, datable deposits. This programme will be undertaken to enable the recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material. An environmental specialist will be consulted as to the validity of any sampling strategy employed. If appropriate monolith samples will be taken for pollen etc.
- 3.19 Any finds of human remains will be left *in situ*, covered and protected and the local Coroner informed. If removal is essential it will only take place under appropriate Home Office licence, section 25 of the Burial Act 1857 and local environmental health regulations, and if appropriate in compliance with the Disused Burial Grounds (Amendment) Act 1981.
- 3.20 **Metal Detector Survey:** the metal detector survey will be undertaken by a suitably experienced metal detectorist, under archaeological supervision. All findspots will be located in three dimensions, using a total station.
- 3.21 All finds of gold and silver will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act of 1996. Where removal can not be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

4. GENERAL WORKING PRACTICES AND STANDARDS

- 4.1 The work will be undertaken in accordance with the submitted project design (this document). The work will be undertaken in general accordance with the methods and practices described in the Management of Archaeological Projects (English Heritage, 1991 (revised 1996)).
- 4.2 All OA North staff are appropriately qualified and experienced professionals, and work in compliance with the 'Standard and Guidance for Archaeological Field Evaluation (Institute of Field Archaeologists, 1994 (revised 2001)).
- 4.3 The fieldwork will be undertaken in a manner likely to cause the minimum of disturbance commensurate with achieving its objectives.
- 4.4 **Health and Safety:** OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.

5. ARCHIVE/REPORT

- 5.2.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the CSMR (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the appropriate County Record Office, and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum. Wherever possible, OA North recommends the deposition of such material in a local museum approved by the Museums and Galleries Commission, and would make appropriate arrangements with the designated museum at the outset of the project for the proper labelling, packaging, and accessioning of all material recovered.
- 5.2.2 The Arts and Humanities Data Service (AHDS) online database *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

- 5.2.3 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further two copies submitted to the Cheshire SMR within eight weeks of completion of fieldwork. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered will be assessed with reference to other local material and any particular or unusual features of the assemblage will be highlighted and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived.
- 5.2.4 This report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the identified archaeology within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans. This report will be in the same basic format as this project design; a copy of the report can be provided on CD ROM, if required.
- 5.2.5 Provision will be made for a summary report to be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork, if relevant results are obtained.
- 5.2.6 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

6 PROJECT MONITORING

- 6.1 Monitoring of this project will be undertaken through the auspices of the Chester City Archaeologist, who will be informed of the start and end dates of the work.

7 STAFFING

- 7.1 The project will be under the direct management of **Alison Plummer BSc (Hons)** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 7.2 Present timetabling constraints preclude detailing at this stage exactly who will be undertaking the strip and record, but this element of the project is likely to be supervised by an OA North project officer experienced in these types of project. All OA North project officers are experienced field archaeologists capable of carrying out projects of all sizes.

8 INSURANCE

- 8.1 OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

APPENDIX 2: CONTEXT LIST

Context Number	Description
<i>1</i>	Topsoil
<i>2</i>	Small cut feature
<i>3</i>	Fill of <i>2</i>
<i>4</i>	Small cut feature
<i>5</i>	Fill of <i>4</i>
<i>6</i>	Natural geology
<i>7</i>	Fill of <i>8</i>
<i>8</i>	Small cut feature
<i>9</i>	Small cut feature
<i>10</i>	Fill of <i>9</i>
<i>11</i>	Sewer pipe cut
<i>12</i>	Fill of <i>11</i>
<i>13</i>	Pit cut
<i>14</i>	Pit cut
<i>15</i>	Fill of <i>16</i>
<i>16</i>	Intervention through ditch <i>17</i>
<i>17</i>	Ditch cut
<i>18</i>	Fill of <i>19</i>
<i>19</i>	Pit cut
<i>20</i>	Intervention through ditch <i>17</i>
<i>21</i>	Fill of <i>20</i>

APPENDIX 3: FINDS CATALOGUE

OR	Field record no	Context Number	Material	Category	No frags	Description	Date
1001	N/A	Unstrat	Ceramic	Vessel	17	4 fragments late grey stoneware jars; 2 fragments underglaze transfer-printed blue and white earthenware; 2 fragments brown stoneware; 1 fragment slip-decorated flatware; 3 fragments black-glazed redware with white internal slip; 2 fragments white earthenware; 3 fragments brown-glazed redware.	Late eighteenth-nineteenth century
1002	N/A	5	Ceramic	Vessel	8	3 fragments white-glazed earthenware; 2 fragments slip-decorated flatware; 2 fragments manganese-decorated ware; 1 fragment unglazed.	Late eighteenth-nineteenth century
1003	52	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1004	47	Unstrat	Iron	Knife	1	Corrosion-covered scale-tang knife hilt, with poorly preserved bone scale-plates.	Post-medieval
1005	7	Unstrat	Copper alloy	Tube	4	Large ferrule or tube. One end ridged, the other chamfered, and with a thin band of silvering.	
1006	22	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1007	11	Unstrat	Copper alloy	Lamp?	1	Hemispherical flame spreader from lamp or oil burner	Nineteenth century or later
1008	9	Unstrat	Copper alloy	Lamp?	1	Hemispherical flame spreader from lamp or oil burner.	Nineteenth century or later
1009	N/A	3	Ceramic	Vessel	3	Small, undiagnostic fragments of white-glazed earthenware.	Nineteenth century or later
1010	35	Unstrat	Iron	Object	1	Large corroded object.	
1011		Unstrat	Lead	Kame?	1	Twisted thin lead sheet, probably crushed and twisted H-section kame.	Nineteenth century or later
1012	49	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1013	53	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1014	27	Unstrat	Copper alloy	Frame	1	Cast round frame for lens?	Nineteenth century or later?
1015	N/A	3	Ceramic	Tobacco pipe	1	Stem only.	Post-medieval
1016	56	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1017	50	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1018	48	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1019	Unstrat	Unstrat	Copper alloy	Buckle	2	Plain D-shaped buckle, fitting with loop. with poorly preserved bone scale-plates.	Post-medieval
1020	N/A	5	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1021	Unstrat	Unstrat	Ceramic	Tile	1	Small fragment of black floor tile.	Twentieth century or later
1022	N/A	7	Ceramic	Vessel	10	2 fragments late grey stoneware jars; 1 fragment unglazed; 3 fragments manganese decorated - possibly tankard; 2 fragments underglaze transfer-printed blue and white ware; 1 fragment spalled redware; 1 fragment very thick black-glazed redware.	Late eighteenth-nineteenth century
1023	39	Unstrat	Copper alloy	Hasp	1	Small hasp and plate by which it was pinned to a container.	Nineteenth century or later
1024	N/A	7	Ceramic	Tobacco pipe	1	Small fragment of stem,	Post-medieval
1025	N/A	16	Ceramic	Vessel	18	3 fragments slip-decorated flatware; 1 fragment porcelain; 1 fragment burnt late grey stoneware; 4 fragments manganese ware, probably tankard; 1 fragment burnt white-glazed earthenware; 3 fragments black-glazed redware; 3 fragments under-glaze transfer-printed blue and white earthen ware; 1 fragment thin brown stoneware; 1 fragment brown-glazed redware.	Late eighteenth-nineteenth century
1026	N/A	16	Glass	Vessel	3	Dark olive green wine bottle, undiagnostic fragments.	Eighteenth century?
1027	N/A	7	Stone		1	Burnt shale.	Post-

							medieval
1028	54	Unstrat	Iron	Object	1	Corrosion-covered	Not closely dateable
1029	N/A	Unstrat	Iron	Knife	1	Corrosion-covered scale-tang knife hilt, with bone scale plates.	Post-medieval
1030	N/A	16	Ceramic	Tobacco pipe	2	Two small fragments of stem, one with a short spur.	Late eighteenth century?
1031	N/A	Unstrat	Ceramic	Tobacco pipe	2	Two small fragments of stem	Post-medieval
1032	6	Unstrat	Iron	Axe	1	Large axe-head. Corroded.	Not closely dateable
1033	91	Unstrat	Lead	Sheet	1	Fragment of sheet, hammered.	Not closely dateable
1034	59	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1035	62	Unstrat	Lead	Shot	1	Cast spherical shot.	Post-medieval
1036	74	Unstrat	Copper alloy	Button	1	Flat round button with loop to rear. Upper surface silvered.	Post-medieval
1037	84	Unstrat	Copper alloy	Button	1	Stamped base metal button with four holes.	Post-medieval
1038	63	Unstrat	Copper alloy	Button	1	Flat round button with loop to rear.	Post-medieval
1039	87	Unstrat	Copper alloy	Buckle	1	Small slider/buckle.	Late nineteenth century or later
1040	71	Unstrat	Copper alloy	Strip	1	Heavy milled strip.	Not closely dateable
1041	92	Unstrat	Copper alloy	Disc	1	Plain disc – button blank.	Not closely dateable
1042	76	Unstrat	Copper alloy	Button	1	Flat round button with loop to rear missing	Nineteenth century or later
1043	69	Unstrat	Copper alloy	Object	1	Unidentifiable object.	Not closely dateable
1044	73	Unstrat	Lead	Weight	1	Small pierced weight.	Not closely dateable
1045	70	Unstrat	Copper alloy	Button	1	Flat round button with loop to rear missing	Nineteenth century or later
1046	78	Unstrat	Lead	Drip	1	Solidified drip.	Not closely dateable
1047	70	Unstrat	Copper alloy	Sheet	1	Thin sheet.	Not closely dateable
1048	82	Unstrat	Lead	Sheet	1	Folded lead sheet.	Not closely dateable
1049	75	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1050	57	Unstrat	Lead	Rod	1	Short length of round-sectioned rod.	Not closely dateable
1051	68	Unstrat	Copper alloy	Button	1	Flat round button with loop to rear. Rouletted decoration around edge of upper surface.	Post-medieval
1052	72	Unstrat	Copper alloy	Disc	1	Plain disc – button blank.	Not closely dateable
1053	83	Unstrat	Copper alloy	Foot	1	Small stamped four-toed feline foot with pierced bracket for attachment.	Nineteenth century or later?
1054	66	Unstrat	Copper alloy	Fastener	1	Small catch for clothes fastener.	Late nineteenth century or later
1055	88	Unstrat	Copper alloy	Hinge	2	Small decorative hinge, possible for book clasp. Oval fragment, possibly part-made hasp.	Nineteenth century or later
1056	89	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1057	64	Unstrat	Copper alloy	Washer	1	Oval washer.	Twentieth century or later
1058	77	Unstrat	Lead	Sheet	1	Folded thin sheet.	Not closely dateable
1059	67	Unstrat	Copper alloy	Button	1	Domed button with loop to rear. Embossed with crown over three cannons.	Later eighteenth or nineteenth century
1060	85	Unstrat	Copper alloy	Button	1	Hollow sub spherical button with loop to rear. Embossed design possibly incorporates GIIR	Eighteenth century
1061	65	Unstrat	Copper alloy	Coin	1	Worn halfpenny. Dated 1928, George V.	1928
1062	58	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1063	61	Unstrat	Copper alloy	Disc	1	Plain disc - button	Not closely dateable

1064	86	Unstrat	Iron	Nail	1	Corrosion-covered nail.	Not closely dateable
1065	60	Unstrat	Copper alloy	Disc	1	Plain disc - button	Not closely dateable