

CPAT Report No. 1877




Borras Quarry, Wrexham

ARCHAEOLOGICAL WATCHING BRIEF 2021



YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS
CLWYD-POWYS ARCHAEOLOGICAL TRUST

Client name: Breedon
 CPAT Project No: 2544
 Project Name: Borras 2021
 Grid Reference: SJ 35955 53400
 County/LPA: Wrexham
 Planning Application: P/2003/0579
 CPAT Report No: 1877
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Cover photo: Excavation area 2021, viewed from the east. Photo CPAT 4932-0002



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 with the Chartered Institute for Archaeologists

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Summary

A watching brief was maintained by the Clwyd-Powys Archaeological Trust in May 2021 during soil stripping operations as part of the continuing expansion of quarrying within the Holt Estate at Borrás, near Wrexham.

No further evidence for significant archaeology was recorded.

Crynodeb

Bu Ymddiriedolaeth Archaeolegol Clwyd-Powys yn cynnal briff gwyllo ym mis Mai 2021 yn ystod gweithrediadau stripio pridd fel rhan o waith parhaus i estyn gwaith chwarela o fewn Ystâd Holt yn Borrás, ger Wrecsam.

Ni chofnodwyd unrhyw dystiolaeth bellach o archaeoleg sylweddol.

1 Introduction

1.1. In May 2021 the Clwyd-Powys Archaeological Trust (CPAT) maintained a watching brief, on behalf of Breedon, during soil stripping operations associated with the continuing expansion of Borras Quarry, Wrexham. The current phase of stripping was located in the northern quadrant of area H5 – Holt Estate (SJ 35955 53400; Fig. 1).

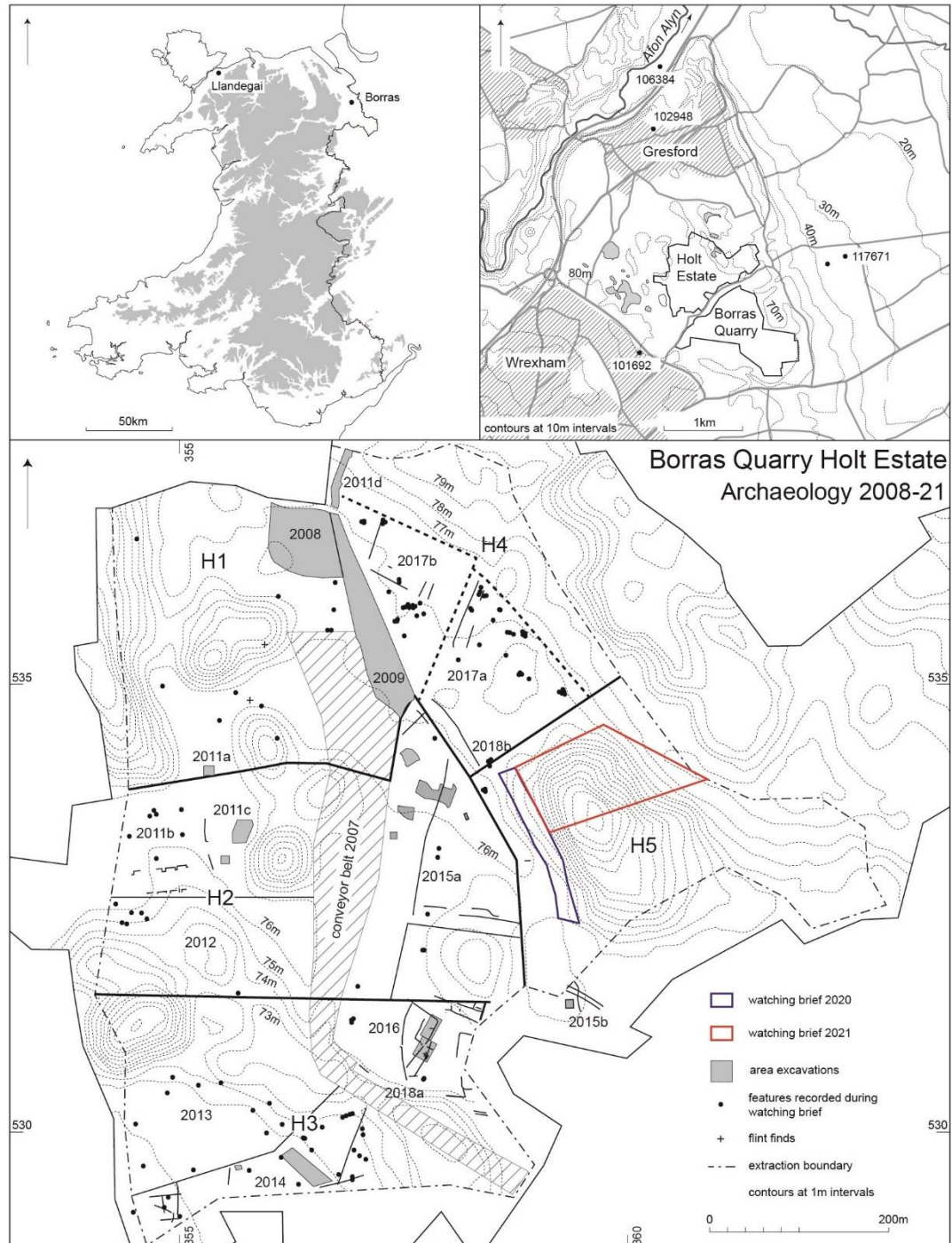


Fig. 1 Borras Quarry, Holt Estate, showing the phases of development and archaeological discoveries. Area of Archaeological Watching Brief 2021 highlighted in red.

- 1.2. Borras Quarry, which provides sand and gravel, lies 13km south of Chester and some 3.5km north-east of the centre of Wrexham and 2.5km south of Gresford in north-east Wales (Fig. 1). The quarry is situated on a plateau, at a height of approximately 75m AOD. Land to the north-west, lying between the quarry and Gresford, is primarily undulating, agricultural land (75-81m AOD), containing a number of depressions, known as 'kettle holes'. Mineral extraction has already taken place nearby at Caia Farm, located to the west of the present quarry boundary. Until recently, the area formed part of Borras Quarry, but this has now been reinstated following the completion of quarrying activity.
- 1.3. The first phase in the extension of Borras Quarry into an area known as the Holt Estate (partitioned into extraction sites H1 – H5) commenced in area H1 in May 2008. Soil-stripping operations were monitored by the Clwyd-Powys Archaeological Trust (CPAT), during which significant evidence of prehistoric occupation was revealed, resulting in a programme of full excavation focused on an area where the concentration of features was at its densest (Grant and Jones 2008). The workings within the Holt Estate have continued to expand in subsequent years with each phase of development involving the archaeological monitoring of soil stripping operations, the results from which have added further to the range, extent and date of the archaeology at Borras. While the majority of features revealed are associated with Neolithic and Bronze Age settlement, there is increasing evidence for later activity in the Iron Age and Romano-British periods. There has also been evidence for early medieval metalworking.
- 1.4. As part of the Environmental Statement submitted in 2005 to the mineral planning authority - Wrexham County Borough Council - in support of the application to extend the quarry, planning consent was granted subject to a number of conditions, one of which was that an archaeological watching brief was to be carried out during all soil stripping operations.
- 1.5. Planning permission (P/2003/0579) was granted with the inclusion of the following condition relating to archaeology:
 3. *The developer shall ensure a suitably qualified archaeological contractor is present during the undertaking of any ground works in the development area so that an archaeological watching brief can be conducted. The archaeological watching brief must meet the standards laid down by the Chartered Institute for Archaeologists Standards and Guidance for archaeological watching briefs. The Local Planning Authority will be informed in writing, at least two weeks prior to the commencement of the development, of the name of the said archaeological contractor. A copy of the resulting report should be submitted to the Local Planning Authority and the Development Control Archaeologist, Clwyd-Powys Archaeological Trust (The Offices, Coed y Dinas, Welshpool, Powys SY21 8RP, Email: mark.walters@cpat.org.uk Tel 01938 553670). After approval by the Local Planning Authority, a copy of the report and resulting archive should also be sent to the Historic Environment Record Officer, Clwyd-Powys Archaeological Trust for inclusion in the regional Historic Environment Record*

Reason: To secure preservation by record of any archaeological remains which may be revealed during ground excavations for the consented development.
- 1.6. The 2021 Watching Brief was to be an extension of the area strip undertaken in 2020 (Grant 2022, CPAT Report No. 1876) and a fresh Written Scheme of Investigation (WSI) was submitted and approved in May 2021 (Appendix 1). Although significant archaeology had been previously recorded in the immediate environs, the results of the 2020 watching brief provided no further evidence for prehistoric or Romano-British activity along the western bounds of

area H5. The area to be excavated in 2021 fell predominantly inside a large kettle hole located in the northern and central quadrant of area H5 (See Fig. 2).



Fig. 2 Kettle hole, pre-excavation 2021, viewed from the east. Photo CPAT 4820-0016

- 1.7. In addition to the prehistoric and Romano British activity previously recorded along the ridge to the west of the kettle hole (Grant 2015; CPAT Report No. 1373 and Grant 2018; CPAT Report No. 1627) there has also been prehistoric activity recorded along the plateau to the north of the kettle hole. Of particular note is a domestic pit group (AJ) located on the southern boundary of area H4 (Jones and Grant 2017).

2 Watching Brief

- 2.1. The watching brief was conducted in May 2021 over a period of eight days in accordance with the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance for an Archaeological Watching Brief* (2014), monitoring soil stripping within an area covering c. 11,150m² centred on NGR SJ 36005 53365 (Fig 1).
- 2.2. The topsoil and, where present, any underlying former plough-soil up to 0.6m in depth was removed by machine under close archaeological supervision to reveal the underlying natural subsoil, which varied from typical glacial sands and gravels to bands of silty marl clay. Within the central area of the kettle hole the underlying deposit consisted of a deep, up to 0.8m in depth, silty marl clay overlying gravel. Any features of potential archaeological significance were to be subsequently excavated by hand.
- 2.3. On this occasion, no features of archaeological significance were recorded.



Fig. 3 Area of excavation viewed from the west. Photo CPAT 4933-0006



Fig. 4 Area of excavation viewed from the south. Photo CPAT 4933-0008

3 Conclusions

- 3.1. Although there has been significant evidence of prehistoric activity previously recorded along the northern and western perimeter of the kettle hole located in the designated area H5 of

the Holt Estate, the continuing expansion of Borras Quarry has on this occasion, provided no additional evidence for significant archaeology.

- 3.2. The results from the 2021 watching brief will be incorporated into an overall publication, to be submitted to *Archaeologia Cambrensis*, summarising the results from all phases of work connected with the expansion of Borras Quarry within the Holt Estate.

4 Acknowledgements

- 4.1. CPAT would like to thank Mr Malcolm Ellis, Martin Davies and Ed Maurice Jones of Breedon, for their support throughout the project. Fieldwork was undertaken by Ian Grant, CPAT.

5 Sources

- Grant, I., 2013. *Borras Quarry, Wrexham: Archaeological Watching Brief 2012*. CPAT Report No. 1161.
- Grant, I., 2014a. *Borras Quarry, Wrexham: Archaeological Watching Brief 2013*. CPAT Report No. 1221.
- Grant, I., 2014b. *Borras Quarry, Wrexham; Archaeological Watching Brief and Excavation 2014*. Unpublished report. CPAT Report No. 1295.
- Grant, I., 2015. *Borras Quarry, Wrexham; Archaeological Watching Brief and Excavation 2015*. Unpublished report. CPAT Report No. 1373
- Grant, I., 2017. *Borras Quarry, Wrexham; Archaeological Watching Brief and Excavation 2016*. Unpublished report. CPAT Report No. 1466
- Grant, I., 2018. *Borras Quarry, Wrexham; Archaeological Watching Brief 2018*. Unpublished report. CPAT Report No. 1597
- Grant, I., 2018. *Borras Quarry, Wrexham; Archaeological Watching Brief 2018*. Unpublished report. CPAT Report No. 1627
- Grant, I., 2022. *Borras Quarry, Wrexham; Archaeological Watching Brief 2020*. Unpublished report. CPAT Report No. 1876
- Grant, I. and Jones, N. W., 2008. *Excavations at Borras Quarry, Wrexham. Interim Report*. CPAT Report No. 971.
- Grant, I. and Jones, N. W., 2009. *Excavations at Borras Quarry, Wrexham, 2009: Interim Report*. CPAT Report No. 1018.
- Grant, I. and Jones, N. W., 2011. *Borras Quarry, Wrexham: Archaeological Watching Brief and excavation 2011*. CPAT Report No. 1117.
- Hankinson, R., 2010. *Borras Quarry, Wrexham: Watching Brief 2010*. CPAT Report No. 1048.
- Jones, N. W. and Grant, I., 2017. *Borras Quarry, Wrexham; Archaeological Watching Brief and Excavation 2017*. CPAT Report No. 1512

6 Archive deposition Statement

- 6.1. The project archive has been prepared according to the CPAT Archive Policy and in line with the CIfA *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives guidance* (2014). The digital archive only will be deposited with the Historic Environment Record, Clwyd-Powys Archaeological Trust and the paper/drawn/digital archive with the National Monuments Record (RCAHMW). The artefacts will be deposited with Wrexham Museum in due course.

Archive summary

CPAT Event PRN: 214616

8 digital photographs; CPAT Film No 4933

1 Watching Brief form

Digital site drawings (Adobe Illustrator and JPEG):

2544_Borras_2021_location

Appendix 1: CPAT WSI 2341

1 Introduction

- 1.1. The Clwyd-Powys Archaeological Trust (CPAT) have been invited by Breedon to prepare a Written Scheme of Investigation (WSI) for undertaking a watching brief during topsoiling operations associated with the continuing expansion of Borras Quarry, Wrexham. Previous archaeological work on the site has already revealed significant evidence for prehistoric and Roman activity over a wide area. There has also been some evidence for early medieval metalworking.
- 1.2. The programme of soil stripping will be undertaken on the eastern side of the Holt Estate within an area designated by Breedon as H5. This is an extension to the work undertaken by CPAT on behalf of Breedon in September 2020 (See Fig.1). The area to be stripped (See Fig.2) is expected to be completed within 2 weeks.
- 1.3. Planning permission was granted with the inclusion of the following condition relating to archaeology:
 3. *The developer shall ensure a suitably qualified archaeological contractor is present during the undertaking of any ground works in the development area so that an archaeological watching brief can be conducted. The archaeological watching brief must meet the standards laid down by the Chartered Institute for Archaeologists Standards and Guidance for archaeological watching briefs. The Local Planning Authority will be informed in writing, at least two weeks prior to the commencement of the development, of the name of the said archaeological contractor. A copy of the resulting report should be submitted to the Local Planning Authority and the Development Control Archaeologist, Clwyd-Powys Archaeological Trust (The Offices, Coed y Dinas, Welshpool, Powys SY21 8RP, Email: mark.walters@cpat.org.uk Tel 01938 553670). After approval by the Local Planning Authority, a copy of the report and resulting archive should also be sent to the Historic Environment Record Officer, Clwyd-Powys Archaeological Trust for inclusion in the regional Historic Environment Record*

Reason: To secure preservation by record of any archaeological remains which may be revealed during ground excavations for the consented development.
- 1.4. Borras Quarry (SJ 357533), which provides sand and gravel, lies 13km south of Chester and, in the more immediate locality, is some 3.5km north-east of the centre of Wrexham and 2.5km south of Gresford in north-east Wales. The quarry is situated on a plateau, at a height of approximately 75m OD. Land to the north-west, lying between the quarry and Gresford, is primarily undulating, agricultural land (75-81m OD), containing a number of depressions, known as 'kettle holes'. Mineral extraction has already taken place nearby at Caia Farm, located to the west of the present quarry boundary. Until recently, the area formed part of Borras Quarry, but this has now been reinstated following the completion of quarrying activity.
- 1.5. The continuing expansion of the quarry from 2007 has led to successive seasons of archaeological watching brief during soil stripping works, the results of which have revealed evidence for Neolithic, Bronze Age, Iron Age, Roman and Early Medieval activity spread across a wide area.

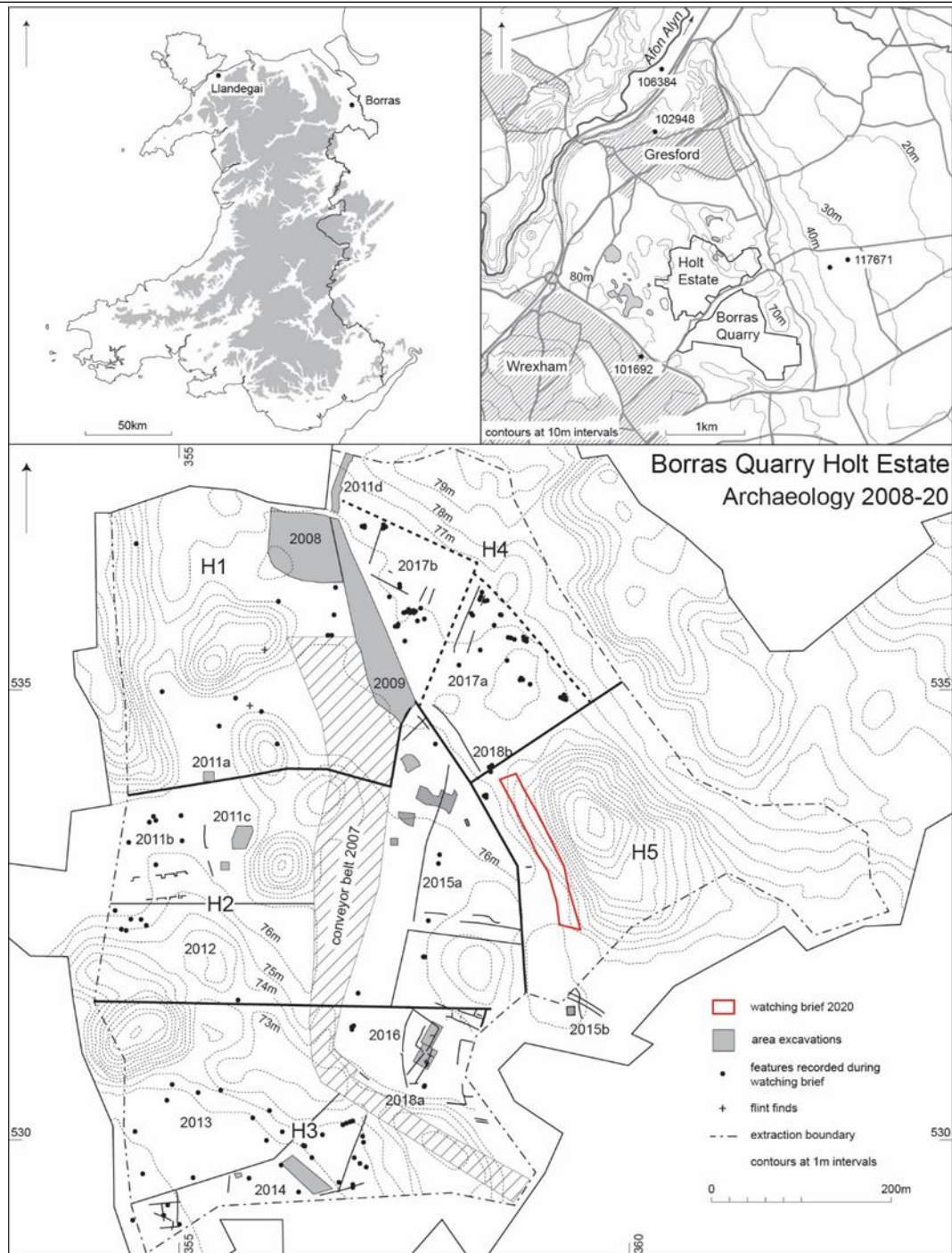


Fig. 1 Plan of Borras Quarry, Holt Estate. Location of 2020 watching brief indicated in red.



Fig. 2 Location of 2021 watching brief indicated in red.

2 Objectives

2.1. The objectives of the watching brief are:

- to monitor groundworks associated with topsoiling operations associated with the continuing expansion of Borras Quarry, Wrexham.
- to investigate and record any archaeological features/deposits/artefacts identified during the watching brief;
- to prepare a report outlining the results of the watching brief and the research potential of the site archive;
- to prepare a final publication of the results in an appropriate regional or national journal, depending on the nature and significance of any archaeology.

3 Methodology

Fieldwork

3.1. The watching brief will be conducted according to the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for an Archaeological Watching Brief (revised 2020). The watching brief will include the archaeological supervision of all relevant groundworks and appropriate archaeological excavation and recording of any significant features or deposits which may be revealed. Stripping of the area will need to be undertaken carefully using a machine with a flat, toothless bucket under the direction of the archaeologist to ensure that the correct level is reached whereby any archaeological features can be identified. Any isolated

features will be recorded as part of the watching brief although should significant concentrations of archaeology be revealed their investigation will form part of a separate phase of excavation which will be the subject of an additional WSI and costing. The excavation of any archaeological features or deposits will be undertaken by hand using the conventional techniques for archaeological excavation:

- The presence or absence of archaeological features encountered during the ground works will be noted.
- Where features of archaeological interest are identified during the ground works they will be systematically investigated by hand with sufficient work being undertaken to determine their date, character and function, using the conventional techniques for archaeological excavation and in accordance with CIfA Standard and Guidance.
- All features will be located as accurately as possible on an overall plan of the development at an appropriate scale, showing boundaries depicted on Ordnance Survey mapping.
- Contexts will be recorded on individual record forms, using a continuous numbering system, and be drawn and photographed as appropriate.
- Plans will be drawn on permatrace to a scale of 1:10, 1:20 or 1:50, as appropriate.
- All photography will be taken using a digital SLR camera with a minimum resolution of 12 mega pixels, including a metric scale in each view, with views logged in a photographic register.
- In the event of human burials being discovered the Ministry of Justice (MoJ) will be informed. The remains will initially be left in situ, and if removal is required, a MoJ licences will be applied for under the Burial Act 1857.
- In the event of finding any artefacts covered by the provisions of the Treasures Act 1996, the appropriate procedures under this legislation will be followed.

Selection Strategy

3.2. Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest. All artefacts will be retained from stratigraphically secure contexts of 18th-century date or earlier. In the case of later or disturbed contexts, all 18th-century or earlier material will be retained, together with a sample of later finds to assist with dating and phasing, unless later deposits/artefacts are deemed to be of high archaeological value.

3.3. CPAT has a retention policy for artefacts which prioritises as follows:

High priority for retention

- Rare finds from stratified and unstratified contexts
- Prehistoric and early medieval assemblages
- Key stratigraphic dating assemblages crucial to the structural development of the site

-
- Assemblages which are not well represented in museum collections

High priority for disposal

- Unstratified material unless intrinsically dateable and unusual/rare
- Artefacts from residual/intrusive contexts unless of key stratigraphic importance to the site
- Assemblages already well represented in museum collections
- Unprocessed environmental/soil samples

Post-excavation and reporting

- 3.4. All artefacts and environmental samples will be treated in a manner appropriate to their composition and a sampling strategy will be developed as appropriate:
- All stratified finds will be collected by context, or where appropriate, individually recorded in three dimensions. Unstratified finds will only be collected where they contribute significantly to the project objectives or are of particular intrinsic interest.
 - All finds and samples will be collected, processed, sorted, quantified, recorded, labelled, packed, stored, marked, assessed, analysed and conserved in a manner appropriate to their composition and in line with appropriate guidance.
 - arrangements to assess and study any artefacts, assemblages and environment samples.
 - Any artefacts recovered during the watching brief will be deposited with an appropriate museum, subject to the permission of the owner.
- 3.5. Following the on-site work an illustrated report will be prepared containing conventional sections to include:
- Non-technical summary
 - Introduction
 - Site location
 - Archaeological Background
 - Watching brief
 - Conclusions
 - References
 - Appropriate appendices on archives and finds
- 3.6. The report summary will be provided in English and Welsh, in accordance with the Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) V1 (July 2018).

Site archive

- 3.7. The overall archive will conform to guidelines described in Management of Research Projects in the Historic Environment (MoRPHE), Historic England 2015, the CIfA (2020) Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives and The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (NPAAW, 2017).
- 3.8. The paper and digital archive will be deposited with the National Monuments Record (NMR), RCAHMW, including a copy of the final report. This archive will include all written, drawn, survey and photographic records relating directly to the investigations undertaken. A copy of the digital archive only will also be lodged with the Historic Environment Record, Clwyd-Powys Archaeological Trust.

Data management plan

- 3.9. The project will be conducted in accordance with CPAT's data management policy. All paper records will be collated, catalogued and labelled with the unique project code. All digital data will follow strict file naming, to include the unique project code, and be sorted into a standard series of sub-folders. The digital data will be catalogued, including a list of file types and relevant software.

4 Resources and programming

- 4.1. The watching brief will be undertaken by a skilled archaeologist under the overall supervision of Tim Malim, a senior member of CPAT's staff who is also a member of the Chartered Institute for Archaeologists (CIfA). CPAT is also a CIfA Registered Organisation and as such agrees to abide by their Code of Conduct (2019).
- 4.2. All report preparation will be completed by or with the assistance of the same field archaeologist(s) who conducted the site work. Copies of the report will be deposited with the client and the regional Historic Environment Record within one month of the completion of on-site works. If appropriate, a short report will be published in Archaeology in Wales.
- 4.3. The client should be aware that in the event that significant archaeological remains are revealed there may be a requirement for more detailed excavation and specialist services. Any further work over and above the original watching brief and report would be the subject of a separate WSI and costing. The following figures provide an indication of the types of additional services and indicative costs which might be required, for which the client is advised to make some provision.

Curatorial monitoring	£150 per visit
Finds conservation etc	£350 per day
Radiocarbon dating	£350 each
Finds specialist	£350 per day

- 4.4. Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5. CPAT is covered by appropriate Public and Employer's Liability insurance, as well as Professional Indemnity insurance.

I Grant

11 May 2021

