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Proposed Rear Extension, Dovedale, Wrexham Road, Hope, Flintshire LL12 9NB.

August 2020 V 1.0

Archaeological Watching Brief
Project Code: A0256.2
Report no. 0259
Event PRN: 166759

REGISTERED ORGANISATION CIfA

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Archaeological Watching Brief

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Project Code: A0256.2
Date: 03/08/2020
Client: Mr. Stuart Alcock
info@aeonarchaeology.co.uk

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1.0 NON-TECHNICAL SUMMARY

Comisiynwyd Aeon Archaeology gan Mr Stuart Alcock i gynnal briff gwylio archeolegol fel rhan o'r gwaith arfaethedig o adeiladu estyniad cefn newydd at y Tŷ - Dovedale, Wrexham Road, Ŷr Hob, Sir y Fflint.

Roedd y brîff gwylio yn cynnwys gwylio dwy ffos sylfaen (y ddau yn mesur 5.80m o hyd a 1.5m o led) a gloddiwyd fel rhan o ôl troed yr adeilad estyniad newydd. Cynhaliwyd y brîff gwylio archeolegol yn dilyn cyfnod o werthuso archeolegol - a ddatgelodd ffos gwrthglawdd Canoloesol Cynnar Clawdd Wat. Ni ddarganfuwyd unrhyw arteffactau yn llenwad y ffos yn ystod y gweithiau hyn.

Aeon Archaeology was commissioned by Mr Stuart Alcock to maintain an archaeological watching brief as part of the proposed construction of a new rear extension at Dovedale, Wrexham Road, Hope, Flintshire.

The watching brief involved the monitoring of two foundation trenches (both measuring 5.80m in length by 1.5m in width) which were excavated as part of the footprint for the new extension building. The archaeological watching brief was implemented following a phase of archaeological evaluation which revealed the ditch of the Early Medieval earthwork of Wat's Dyke. During the watching brief the ditch of Wat's Dyke was once more revealed although it had been truncated in several places by modern services. The revealed section of the monument was fully excavated and recorded however; no artefacts were recovered from the ditch fill during either phase of works. Also as part of the works a bulk environmental sample was taken from the primary fill of the dyke with the intention of securing a Carbon 14 date however; upon flotation an insufficient quantity of charcoal was recovered to facilitate a Carbon 14 date.

2.0 INTRODUCTION

Aeon Archaeology was commissioned by Mr Stuart Alcock, (hereafter the Client), to carry out an archaeological watching brief as part of the proposed construction of a new rear extension at Dovedale, Wrexham Road, Hope, Flintshire LL12 9NB, (hereafter the Site), (**NGR SJ 30971 58588**) (figures 01 and 02).

An archaeological evaluation was undertaken on 1st June 2020 which revealed the presence of part of Wat's Dyke in the vicinity of the property Dovedale. Following the discovery it was recommended by the Development Management Archaeologist (DMA) at the Clwyd-Powys Archaeological Trust (CPAT) that a watching brief be maintained during the excavation of the foundation trenches comprising of the footprint for the new rear extension. The watching brief was maintained on 2nd June 2020. Full planning permission was secured by the Client on 18th December 2018 (**Application Ref: 059170**) with the following condition concerning archaeology being applied to the consent:

Condition 3.

No development shall take place within the application area until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, which has been submitted by the applicant and approved in writing by the local Planning Authority. The approved scheme shall be submitted in full thereafter.

The archaeological programme of work will be undertaken and completed in accordance with the relevant Standards and Guidance laid down by the Chartered institute for Archaeologists. A copy of the resulting report should be submitted to the Local Planning Authority and the Development Control Archaeologist, Clwyd-Powys Archaeological Trust (41 Broad Street, Welshpool, Powys, SY21 7RR 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 all archaeological remains which will be impacted by the development and so accord with policy HE6 of the Adopted Flintshire Unitary Development Plan.

The DMA at CPAT recommended that the planning condition be imposed upon the development as it was located in an area of high archaeological potential related to the former alignment of Wats Dyke. The trench was designed to cut across the north-south predicted alignment of Wat's Dyke in this plot so that the archaeology might be revealed within a vertical profile and recorded – which was successful. Initially the true alignment of the dyke within the plot was not known and this was a form of prospection based on the known alignments of the Dyke further north and south of the village where earthworks survive at ground level. It was anticipated that the Wat's Dyke alignment may well extend further into the footprint of the extension and this was confirmed by the evaluation trench which was placed along the line of the northern most foundation trench.

The work adhered to the guidelines specified in the *Standard and Guidance for Archaeological Watching Brief* (Chartered Institute for Archaeologists, 2014).

This work was undertaken using new event Primary Reference Number (PRN 166759).

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Figure 01: Location of proposed development site at Dovedale, Wrexham Road, Hope, Flintshire, LL12 9NB. Scale 1:20,000 at A4.

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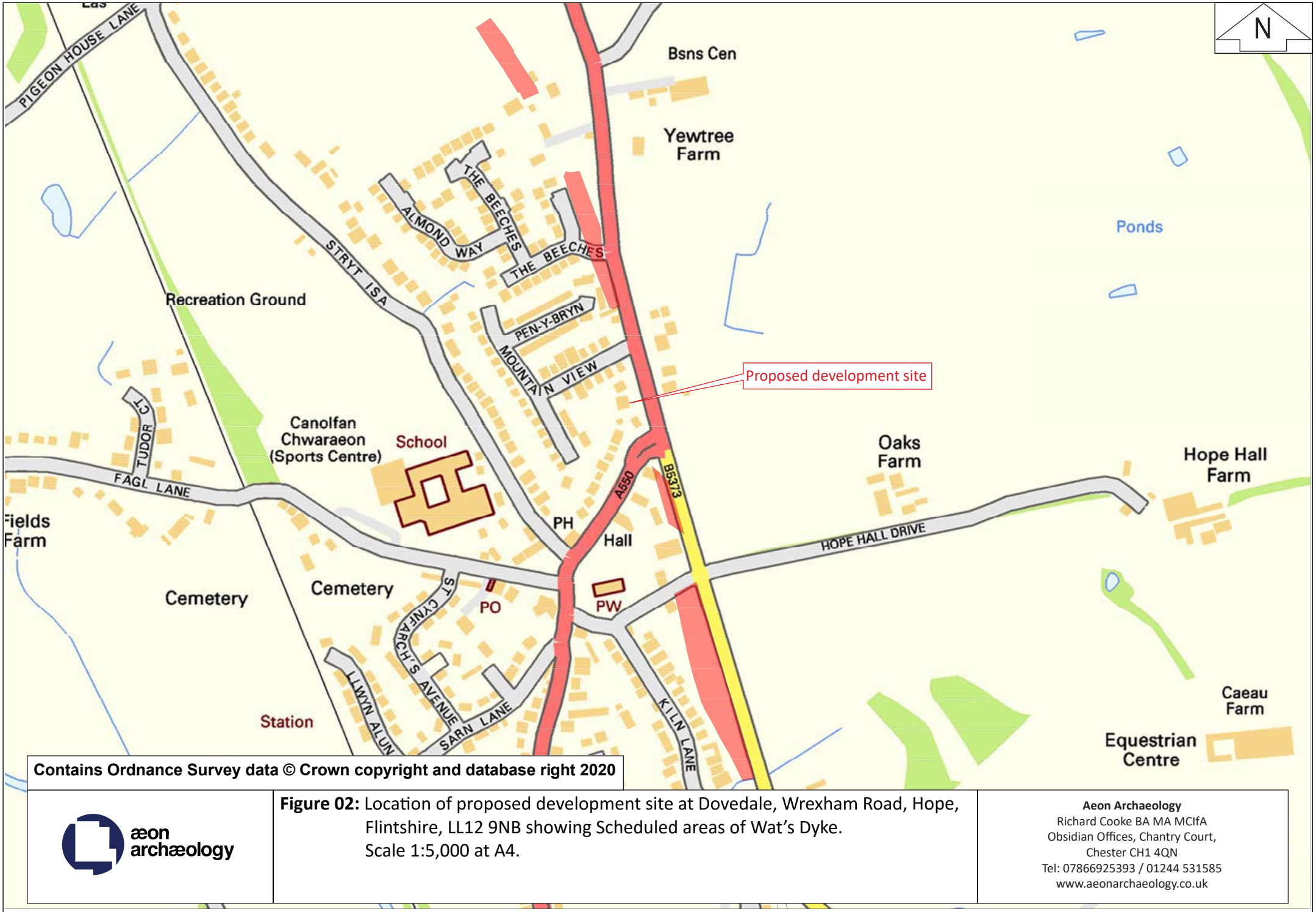

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Figure 02: Location of proposed development site at Dovedale, Wrexham Road, Hope, Flintshire, LL12 9NB showing Scheduled areas of Wat's Dyke.
Scale 1:5,000 at A4.

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3.0 POLICY CONTEXT

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO Convention Concerning the Protection of World Cultural and Natural Heritage and the European Convention on the Protection of the Archaeological Heritage , commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and County Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation — the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

With respect to the cultural heritage of the built environment the Planning (Conservation Areas and Listed Buildings) Act 1990 applies. The Act sets out the legislative framework within which works and development affecting listed buildings and conservation areas must be considered. This states that:-

"In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses" (s66(1))

Other known sites of cultural heritage/archaeological significance can be entered onto county-based Historic Environment Records under the Town and Country Planning 1995.

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

Various principles and polices related to cultural heritage and archaeology are set out in the Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.1.5 concerns planning applications:

The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales

4.0 HISTORICAL BACKGROUND

The development site lies to the north and south of Scheduled sections of Wat's Dyke. To the north the Dyke survives as a low but distinct bank approximately 1.3m high and 2.5m wide, which follows the line of a ridge. The eastern side of the dyke at this point does not survive, having been removed presumably at the time of the construction of the roadway which is shown on the Tithe Map of 1851, and which is now the A550. At the proposed development site location however the dyke is not currently visible and its course through the landscape is postulated via the known route to the north and south.

Wat's Dyke is a discontinuous linear earthwork which extends from Holywell in the north to Maesbury in Shropshire in the south, a distance of approximately 70 miles. Its historic origin has been contentious and it has been previously suggested that it was a post-Roman earthwork preceding Offa's Dyke, with both earthworks representing the westernmost extent of the territory of Mercia at different times (Fox 1955). However a focused archaeological excavation by Giffords in 2006 (Malim and Hayes) of Wat's Dyke at Gobowen provided the opportunity to date the earthen bank and ditch infills via Optically-Stimulated Luminescence (OSL) and C14 dating. The OSL dates provided a range of between 792-852AD for the primary and secondary fill episodes.

A limited excavation was carried out by CPAT in 1989 on a section of Wat's Dyke and its associated ditch some 150m to the north of the proposed development site, during the course of the construction of an access roadway and the excavation of sewer pipe-trench associated with the development of the housing estate by Bellway Homes Lld (Jones & Brassil 1990). At that point, the dyke survived to a maximum height of only 0.8m. It was seen to consist of a basal layer of large stones above which was an eroded earthen bank. The ditch, which was on the western side of the Dyke, had been dug into boulder clay and its layers of fill consisted of gleyed clays with strong orange and yellow mottles above which was a stony layer which was interpreted as basal material supporting part of a well-constructed but undated road surface above it.

5.0 PROJECT AIMS

Before the watching brief commenced an agreed programme of excavation timing, siting, duration, surface re-instatement and health and safety protection measures were agreed with the Client and the DMA at CPAT.

The archaeological watching brief was to be maintained:

- During the excavation of the eastern foundation trench: measuring 7m by 0.60m - located over the footprint of the proposed extension.

- During the excavation of the southern foundation trench: measuring 5.8m by 0.60m - located over the footprint of the proposed extension.

The CIfA maintains a standard for archaeological watching brief which states that:

An archaeological watching brief will record the archaeological resource during development within a specified area using appropriate methods and practices. These will satisfy the stated aims of the project, and comply with the Code of conduct and other relevant by-laws of CIfA.

An archaeological watching brief is defined by the CIfA as a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (CIfA 2014). The watching brief will take place within a specified area within the Site where there is a possibility that archaeological deposits may be disturbed or destroyed.

The CIfA further identifies the purpose of a watching brief as allowing, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established in advance of development or other potentially disruptive works.

It is also important to note that a watching brief provides an opportunity, if needed, for a signal to be made to all interested parties, before the destruction of the archaeological materials, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.

A watching brief is, therefore, not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

The aims of the watching brief were:

- To allow, within the resources available, the opportunity to gain information about and record the presence/absence, nature and date of archaeological remains on the Site affected by excavations and groundworks, the presence and nature of which could not be established with sufficient confidence in advance of works which may disturb them.

- To provide the facility to signal to the relevant authorities, before irreversible impact to remains that an archaeological and/or historic find has been made for which the resources allocated to the watching brief itself are inadequate to support their treatment to an adequate and satisfactory standard.

The specific objectives of the watching brief were:

- To observe and recover any artefacts of archaeological significance.

- To record the location, dimensions and nature of any deposits, features, structures or artefacts of archaeological significance.

- To recover samples of any deposits considered to have potential for analysis for palaeoenvironmental data should the opportunity arise.

- To recover and record any disarticulated human remains prior to reburial on site.

- To clean, record and remove any articulated human remains situated within the works area and to oversee their reburial on site.

- To ensure minimal disturbance to any buried features via the careful re-routing of the foul drainage trench over or around in-situ buried remains where possible. If fallen grave markers are encountered these will be recorded and then carefully lifted to facilitate the works.

6.0 METHODOLOGY – ARCHAEOLOGICAL WATCHING BRIEF

6.1 Archaeological Watching Brief

The methodology for the watching brief was prepared with reference to the CIfA's document *Standards and Guidance for Archaeological Watching Brief (2014)* and was kept under constant review during the project, in order to see how far it was meeting the terms of the aims and objectives, and in order to adopt any new questions should they arise.

Curatorial monitoring of the archaeological work was carried out by The Development Management Archaeologist at the Clwyd-Powys Archaeological Trust. To facilitate the curatorial monitoring, the officer was to be provided with a minimum of two weeks' notice of the start of the archaeological work.

A suitably qualified and experienced archaeologist(s) from Aeon Archaeology was commissioned for the maintenance of the watching brief. On arrival on site, the archaeologist(s) reported to the site manager and conformed to the arrangements for notification of entering and leaving site. The archaeologist(s) kept a record of the date, time and duration of all attendances at site, the names and numbers of archaeologists deployed and any actions taken. The archaeologist was provided with a Health & Safety Induction by the construction contractor and was to wear a safety helmet, safety footwear and high visibility jacket/vest at all times.

When deposits and or artefacts were exposed during excavations for the development which required recording and recovery, it may have been necessary to delay works whilst the proper investigation and recording took place. Watching brief recording can often be undertaken without delay to groundworks, depending upon the specific circumstances and flexibility of all the staff on site.

Within the constraints of the terms of the watching brief work, the archaeologist was not to cause unreasonable disruption to the maintenance of the work schedules of other contractors on site. In the event of archaeological discoveries the treatment of which (either arising from the volume/quantity of material and/or the complexity/importance of the material) is beyond the resources deployed the Client was to be notified and a site meeting/telephone consultation arranged with the DMA at CPAT. The aim of the meeting would be to confirm that an archaeological find has been made for which the resources allocated to the watching brief itself were not sufficient to support treatment to a satisfactory and proper standard and identify measures which were sufficient to support treatment to a satisfactory and proper standard prior to destruction of the material in question.

Any archaeological deposits, features and structures identified which were be investigated and recorded under the terms of the watching brief were to be excavated manually in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project – subject to the limitations on site access.

It may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures were to be investigated sufficient to address the aims and objectives of the project and the complete stratigraphic sequence to geologically lain deposits were to be investigated where practicable.

The method of recording followed the normal principles of stratigraphic excavation and the stratigraphy was to be recorded in written descriptions even where no archaeological deposits have been identified. The archaeologist recorded archaeological deposits using proformae recording forms and locate them on a large-scale site plan related to the Ordnance Survey National Grid and Datum references.

The groundworks excavations were undertaken by hand as well as using a mechanical excavator fitted with a toothless ditching bucket.

The drawn record was to comprise of plans at scale 1:20 and sections at scale 1:10; propriety electronic hardware and software to prepare site drawings may be used as appropriate.

The photographic record was maintained throughout using a digital SLR camera (Canon 600D) set to maximum resolution (72 dpi) and all archaeological features were recorded photographically with photographs taken in RAW format and later converted to TIFF format for long-term storage and JPEG format for presentation and inclusion in the archive. The standards for the digital archive will adhere to those set out in '*Guidelines for Digital Archaeological Archives'* (RCAHMW, 2015).

The archive produced will be held at Aeon Archaeology under the project code **A0256.2**.

6.2 Watching brief report

6.2.1 Post-excavation Assessment

A report on the results of the watching brief, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (2014) was required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

6.2.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.

Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.

A bibliography of sources consulted.

Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.

In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the DMA at CPAT and to the Client for comment and approval prior to production of the final report.

7.0 DIGITAL DATA MANAGEMENT PLAN

7.1 Type of study

Archaeological Watching Brief of as part of the proposed construction of a new rear extension at Dovedale, Wrexham Road, Hope, Flintshire LL12 9NB.

7.2 Type of study

Photographs, digital text, annotated plans.

7.3 Format and scale of the data

Photographs taken in *RAW* format and later converted to *TIF* format for long term archiving and *JPEG* format for use in the digital report, converted using *Adobe Photoshop*. All photographs renamed using *AF5* freeware with the prefix (*project code_frame number*) and a photographic metadata created using Microsoft Excel (*.xlsx*) or Access (*.accdb*).

Written descriptions taken in digital *.txt* format and sent via email to ensure a digital backup copy at time of record.

Annotated plans scanned as *.PDF* files.

As part of the recording work the following data was created:

- 25 digital photographs (TIF file)
- 1 photographic metadata file (.accdb file)
- 1 PDF report (PDF file)
- 1 Photographic Register (scanned as PDF file)
- 1 Day sheet Record (scanned as PDF file)

7.4 Methodologies for data collection / generation

Digital data will be collected / generated in line with recommendations made in the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2014. Rev 2020). Sections 3.3.1 and 3.3.3 are relevant:

> *3.3.1 Project specifications, research designs or similar documents should include a project specific Selection Strategy and a Data Management Plan.*
>
> *3.3.3 Project designs or schedules of works etc should outline the methodology used in recording all information, in order to demonstrate that all aspects of archive creation will ensure consistency; for instance in terminologies and the application of codes in digital data sets, highlighting relevant data standards where appropriate*

7.5 Data quality and standards

Consistency and quality of data collection / generation shall be controlled and documented through the use of standardised procedure as outlined in the WSI. This will include the use of standardised

data capture file formats, digital proformas, data entry validation, peer review, and use of controlled vocabularies.

7.6 Managing, storing and curating data.

All digital data will be organised into Aeon Archaeology proformae project file systems and backed up to the cloud using *Digital River's Crashplan* with additional copies made to external physical hard drive.

7.7 Metadata standards and data documentation

Digital metadata created using Microsoft Excel (*.xlsx*) or Access (*.accdb*) of all photographic plates. Paper metadata created from Aeon Archaeology proformas for contexts, artefacts, environmental samples, watching brief day sheets, trench sheets, and basic record sheets and then scanned to create digital .PDF copies.

7.8 Data preservation strategy and standards

Long term data storage will be through the submission of digital (.PDF) reports to the regional Historic Environment Record (HER); submission of digital (.PDF) reports and a project completion form to the Royal Commission on the Ancient and Historic Monuments in Wales RCAHMW database; submission of the scanned (.PDF) archive, photographic plates (.TIF), and metadata (*.xlsx*) (*.accdb)* to the Archaeology Data Service (ADS); and retention of copies of all digital files at Aeon Archaeology on physical external hard drive and uploaded to the cloud.

7.9 Suitability for sharing

All digital data will be placed within the public realm (through the channels in 6.8) except for where project confidentiality restricts the sharing of data. All data sets will be selected / discriminated by the Senior Archaeologist at Aeon Archaeology and written permission will be sought from all project specific Clients prior to the sharing of data.

7.10 Discovery by potential users of the research data

Potential users of the generated digital data (outside of the organisation) will be able to source the data and identify whether it could be suitable for their research purposes through access granted via the ADS and RCAHMW websites. Requests can also be made for data through the regional HER's and directy to Aeon Archaeology (info@aeonarchaeology.co.uk).

7.11 Governance of access

The decision to supply research data to potential new users will be via the associated website request (ADS, RCAHMW, HER) or via the Senior Archaeologist when made directly to Aeon Archaeology.

7.12 The study team's exclusive use of the data

Aeon Archaeology's requirement is for timely data sharing, with the understanding that a limited, defined period of exclusive use of data for primary research is reasonable according to the nature and value of the data, and that this restriction on sharing should be based on simple, clear principles. This

time period is expected to be six months from completion of the project however Aeon Archaeology reserves the right to extend this period without notice if primary data research dictates.

7.13 Restrictions or delays to sharing, with planned actions to limit such restrictions

Restriction to data sharing may be due to participant confidentiality or consent agreements. Strategies to limit restrictions will include data being anonymised or aggregated; gaining participant consent for data sharing; and gaining copyright permissions. For prospective studies, consent procedures will include provision for data sharing to maximise the value of the data for wider research use, while providing adequate safeguards for participants.

7.14 Regulation of responsibilities of users

External users of the data will be bound by data sharing agreements provided by the relevant organisation or directly through Aeon Archaeology.

7.15 Responsibilities

Responsibility for study-wide data management, metadata creation, data security and quality assurance of data will be through the Senior Archaeologist (Richard Cooke BA MA MCIfA) at Aeon Archaeology when concerning data generation and early/mid-term storage. Upon deposition with digital depositories the study-wide data management, metadata creation, data security and quality assurance of data will be the responsibility of the specific organisations' themselves.

7.16 Organisational policies on data sharing and data security

The following Aeon Archaeology policies are relevant:

- Aeon Archaeology Archive Deposition Policy 2019
- Aeon Archaeology Quality Assurance Policy 2019
- Aeon Archaeology Conflict of Interest Policy 2019
- Aeon Archaeology Outreach Policy 2019
- Aeon Archaeology Digital Management Plan 2020

8.0 QUANTIFICATION OF RESULTS

8.1 The Documentary Archive

The following documentary records were created during the archaeological watching brief:

Trench Sheets	1
Digital photographs	25

8.2 Environmental Samples

One bulk sample taken from context (102) and was sent for processing via flotation however less than 1g charcoal was produced and as such did not produce a viable quantity of charcoal for radiocarbon dating.

Project A0256.1
Result from Sample

Introduction
One bulk sample was received from Aeon Archaeology (Project Code A0256.1). The purpose of the sample was to identify any organic material (charcoal) which could be used for dating, and for the recovery of artefactual material. The results are listed in table form below.

Methodology
The sample was broken down in a floatation tank and then run through four sieves 1.5cm, 0.7cm, 0.3cm and flot (fine mesh). The residue was dried and hand sorted. The 0.5cm, 0.2cm and residues were tested with a magnet.

Results
Sample 01 Context (102)
Weight before Processing 1564.3g

Sieve Size	Weight	Description
1.5cm	280g	Rounded angular medium and small stones, hard chunks of natural clay
0.7cm	332.3g	Rounded and angular small gravels
0.3cm	748.6g	Rounded and angular small gravels
Mesh	20.7g	Charcoal flakes fine sand and very small gravels
Charcoal (recovered from mesh)	0.7g	Tiny flakes

Total Weight after processing 1382.3g

Finds Retrieved
A single piece of white flint debitage was recovered during sieving. Presumably residual

Conclusion
A small amount of charcoal 0.7g was identified in this context. The smallest suggested recommended sample weight for radiocarbon dating for charcoal is 10mg but this is dependent on the quality of the sample. It is very unlikely that this size and quality of sample will yield a date.

8.3 Artefacts

No artefacts were recovered during the archaeological watching brief.

9.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

9.1 Overview

The archaeological watching brief was maintained by Josh Dean BA, an archaeological contractor at Aeon Archaeology on the 2nd June 2020. The weather conditions were very wet and windy.

9.2 The southern foundation trench at Dovedale, Hope.

The southern foundation trench measured 7m in length by 0.60m in width, orientated east-northeast to west-southwest and was excavated to an average depth of 0.85m. It was excavated through a 0.14m deep firm white-grey gravely substrate (109), which constituted the current surface hardstanding, and through a 0.12m deep quite soft dark grey-brown silt-clay topsoil (108) with frequent charcoal flecks, occasional roots, and occasional red brick fragments. This lay above a very firm light yellow-brown natural clay substrata (110) with frequent small sub-angular and sub-rounded pebble and cobble inclusions.
The shallow depth of topsoil horizon (108) and the inclusion of charcoal flecks and red brick fragments indicated that the area had been previously stripped on to the natural substrata (110), most likely either during the construction of Dovedale or the A550 road to the east. This was also observed during the excavation of the evaluation trench to the north.

At the eastern end of the foundation trench a large linear ditch [101] associated with Wat's Dyke was uncovered much as it had been during the evaluation works; this trench was orientated north-south and cut into the natural glacial substrata (110). The ditch measured >1.5m in length by >2.8m in width by 1.58m in depth (94.07m OD) and continued into the eastern and southern limits of excavation. The exposed western side had, where the break of slope was observed during evaluation, been truncated by a modern water pipe and the profile was somewhat obscured by the modern service cut. Further to the north the dyke had also been truncated by a modern service cut. Where the Dyke was preserved it displayed the same steep, smooth 45 degree western slope as observed during the evaluation phase. Moreover, The lower break of slope was fairly sharp with a flat to mildly concaved base much again as seen as it had been during the evaluation.

The ditch [101] was observed with four fills (102), (103), (105) and (106) the last of which was sealed by the topsoil deposit (108).

The primary fill (102) measured >0.60m in width by 0.16m in depth and consisted of a very firm dark blue-grey, with orange mottling, silt-clay with abundant small sub-angular cobbles, occasional large sub-angular cobbles, and broken sandstone fragment inclusions. This fill most likely accumulated via natural silting while the ditch was in use, with the blue-grey and orange mottling colour indicative of anaerobic conditions and iron-panning caused by waterlogging. The high stone content however could be indicative of a deliberate attempt at drainage.

The secondary fill (103) measured >0.60m by 0.36m in depth and consisted of a firm dark orange-brown sandy silt-clay with infrequent small sub-angular cobble inclusions. This fill most likely accumulated through an initial backfilling or possibly slumping event once the ditch had gone out of use.

The tertiary fill (105) measured >0.60m in width by 0.40m in depth and consisted of a quite soft mid orange-brown sand-clay. This fill may have accumulated naturally over time and would have resulted in the ditch being half infilled and only visible on the surface as a much shallower earthwork to its original form.

Fill (106) measured >1.36m in width by 0.48m in depth and consisted of a firm mid orange-brown sand-clay with infrequent small sub-rounded pebbles, frequent root activity, and occasional charcoal fleck inclusions. The clay content of this fill may indicate an initial phase of slumping/collapse from an associated mound/bank into the partially infilled ditch.

9.3 The eastern foundation trench at Dovedale, Hope.

The eastern trench measured 5.80m in length by 0.60m in width, orientated west-northwest to east-southeast and was excavated to an average depth of 1.55 m. It was excavated through the same 0.14m deep of firm white-grey gravely substrate (109) and 0.12m deep deposit of quite soft dark grey-brown silt-clay topsoil (108) with frequent charcoal flecks, occasional roots, and occasional red brick fragments. And through the four fills; (106): the bank/mound collapse (secondary), (105): the bank/mound collapse (primary), (103): closedown/deliberate backfill and (102): Alluvial material. (see above section '*The southern foundation trench at Dovedale, Hope'* for descriptions)

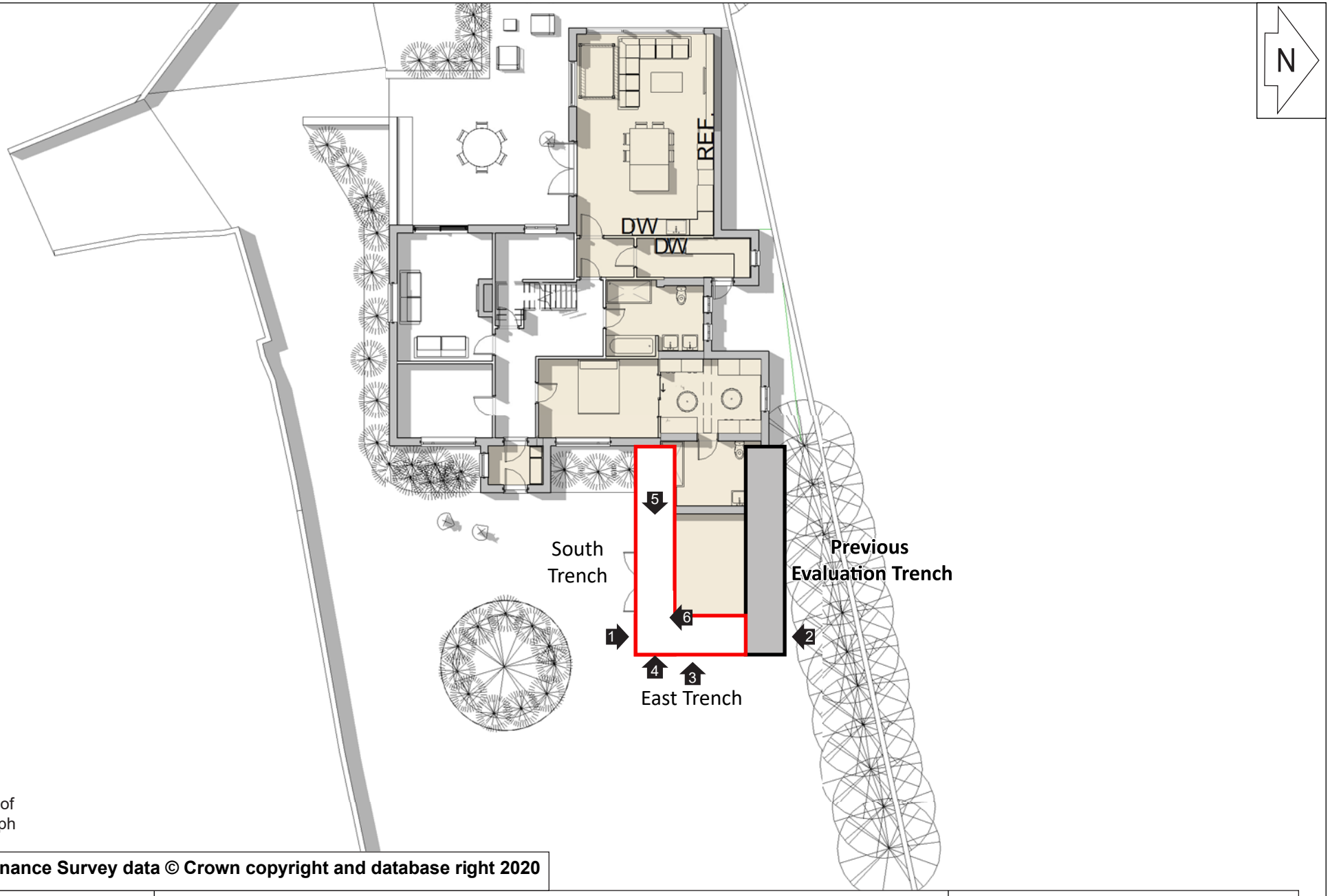

Figure 03: Location of trenches subject to watching brief, 1:200 @ A4.

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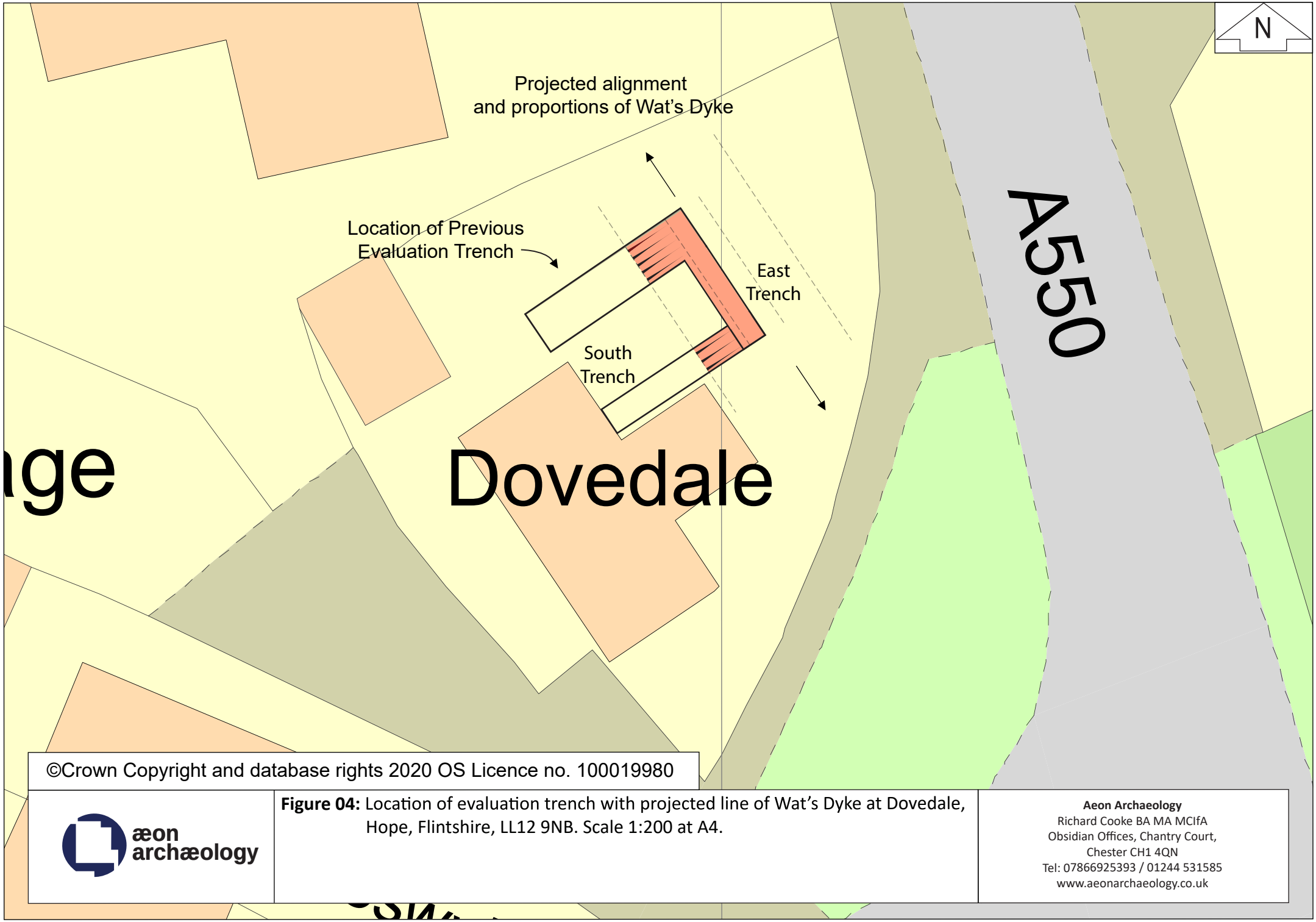

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Figure 04: Location of evaluation trench with projected line of Wat's Dyke at Dovedale, Hope, Flintshire, LL12 9NB. Scale 1:200 at A4.

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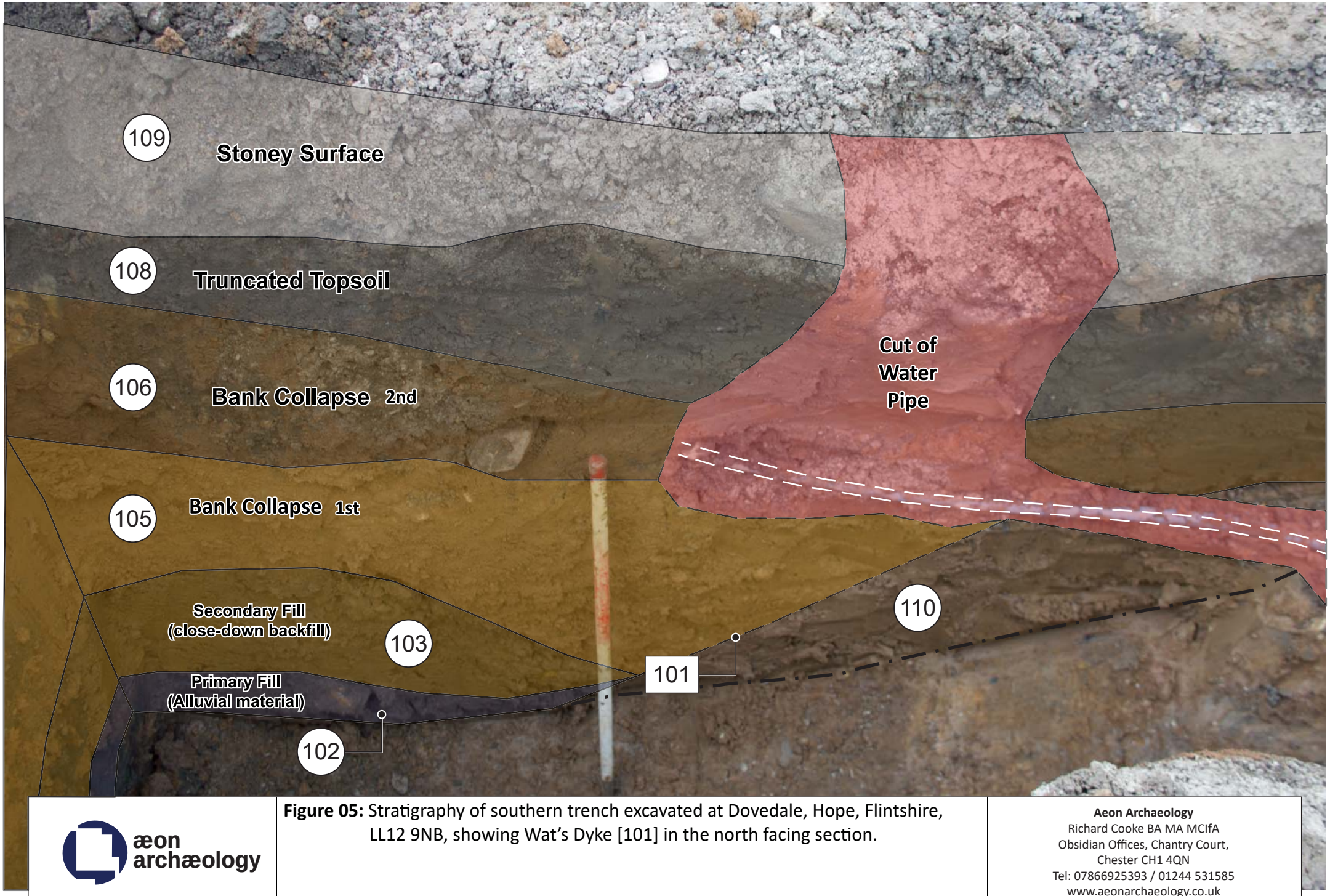

Figure 05: Stratigraphy of southern trench excavated at Dovedale, Hope, Flintshire, LL12 9NB, showing Wat's Dyke [101] in the north facing section.

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Plate 01: Post excavation shot of eastern trench at Dovedale, Hope - from the south - scale 1m

Plate 02: Post excavation shot of eastern trench at Dovedale, Hope - from the north - scale 1m

Plate 03: Section of eastern trench at Dovedale, Hope - from the east - scale 1m

Plate 04: Post excavation shot of southern trench at Dovedale, Hope - from the east - scale 1m

Plate 05: Post excavation shot of southern trench at Dovedale, Hope - from the west - scale 1m

Plate 06: Section of southern trench (Wat's Dyke) a Dovedale, Hope - from the north- scale 1m

10.0 CONCLUSION AND RECOMMENDATIONS

Prior to the monitoring of the house foundations by watching brief, an archaeological evaluation (conducted by *Aeon Archaeology, report number #0247*) to the rear of Dovedale, Hope revealed a substantial linear ditch, orientated north-south and situated at the eastern end of the archaeological evaluation trench. This ditch continued into the eastern limit of excavation but was exposed to 3.0m in width by 1.58m in depth. The base of the ditch was encountered and it is likely that approximately half of the ditch was revealed in profile, indicating that its width could be as much as 5.0m or 6.0m across at surface level.

The subsequent archaeological watching brief confirmed that alignment of and the deposits associated with the same ditch observed during evaluation persisted approx. 6.00m to the southeast of the initial discovery. The southern trench demonstrated that the profile of the ditch was visible in its north facing section, although the top of the break of slope of the ditch had been previously damaged by the installation of a modern water pipe.

The revealed section of the monument was fully excavated and recorded however; no artefacts were recovered from the ditch fill during this phase of works. Also as part of the works a bulk environmental sample was taken from the primary fill of the dyke with the intention of securing a Carbon 14 date however; upon flotation an insufficient quantity of charcoal was recovered to facilitate a Carbon 14 date.

The archaeological condition was applied to the planning consent due to the high potential for uncovering remains of the postulated route of the Early Medieval Wat's Dyke, and it is almost certain that the linear ditch uncovered during both the evaluation and observed during the watching brief is that of this monument.

To both the north and south of the Site Wat's Dyke has been Scheduled by Cadw (SAM F171) (SAM Fl118), however its route between the A550 heading west into Hope and north of Bryn Estyn was not attested. It was however assumed that its route must lie either within the proposed development footprint or possibly further to the east or west. The archaeological evaluation had confirmed its route within this part of the village and the watching brief established that it survives in a good condition further to the southeast at least to the west of the A550 within the vicinity of Dovedale.

The exposed section across the dyke showed that it had not been deliberately infilled but rather had infilled naturally over time, with as many as six separate fills and slumping events visible in the northern section. However, only four distinct fills were visible in the southern section – this may be because the cut of the modern waterpipe had disrupted the stratigraphic sequence sufficiently to obscure the slumping events that were visible in the north. These deposits fell into the ditch once it had gone out of use. The initial / primary fill suggests some waterlogging in the dyke, which would be expected given the underlying clay substrata, and possibly the use of some pebbles and cobbles within the base – perhaps to aid drainage.

As with the archaeological evaluation trench, the watching brief did not cover an area that extended far enough to the east to reveal the eastern edge of the dyke or to confirm the presence or absence of an opposing earthen bank. However, the trench stratigraphy did show that the Site had been previously stripped for the construction of either Dovedale or the A550 road, and it therefore seems likely that this event would have removed any surviving remains of the bank at this point.

11.0 SOURCES

Aeon Archaeology (2020). *Proposed Rear Extension, Dovedale, Wrexham Road, Hope, Flintshire, LL12 9NB.* Job no: A0256.1, Report no. 0247, Event PRN:164341.

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APPENDIX I: WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF

Proposed Rear Extension, Dovedale, Wrexham Road, Hope, Flintshire LL12 9NB.

Written Scheme of Investigation (WSI) for Archaeological Evaluation.

May 2020 V 2.0

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REGISTERED ORGANISATION CIfA

Project Code: A0256.1

Planning Ref. 059170

Proposed Rear Extension, Dovedale, Hope, Flintshire LL12 9NB.

May 2020 v2.0

Project Code: A0256.1
Date: 07/05/2020
Client: Mr Stuart Alcock
info@aeonarchaeology.co.uk

1.0 INTRODUCTION

Aeon Archaeology has been commissioned by Mr Stuart Alcock, hereafter the Client, to provide a written scheme of investigation (WSI) for carrying out an archaeological evaluation as part of the proposed construction of a new rear extension at Dovedale, Wrexham Road, Hope, Flintshire LL12 9NB (**NGR SJ 30971 58588**) (figure 01 and 02).

Full planning permission was secured by the Client on 18th December 2018 (**Application Ref: 059170**) with the following condition concerning archaeology being applied to the consent:

Condition 3.

No development shall take place within the application area until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, which has been submitted by the applicant and approved in writing by the local Planning Authority. The approved scheme shall be submitted in full thereafter.

The archaeological programme of work will be undertaken and completed in accordance with the relevant Standards and Guidance laid down by the Chartered institute for Archaeologists. A copy of the resulting report should be submitted to the Local Planning Authority and the Development Control Archaeologist, Clwyd-Powys Archaeological Trust (41 Broad Street, Welshpool,Powys,SY21 7RR 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 all archaeological remains which will be impacted by the development and so accord with policy HE6 of the Adopted Flintshire Unitary Development Plan.

Relevant UK legislation on heritage includes the Welsh Government's Planning Policy Wales Technical Advice Note 24 (TAN24), and the Historic Environment Act (Wales) 2016.

The work will adhere to the guidelines specified in Standard and Guidance for Archaeological Evaluation (Chartered Institute for Archaeologists, 2014); and Standard and Guidance for Archaeological Watching Brief (Chartered Institute for Archaeologists, 2014).

The Development Management Archaeologist (DMA) at the Clwyd-Powys Archaeological Trust (CPAT) recommended that a planning condition be imposed upon the proposed development as it is located in an area of high archaeological potential related to the former alignment of Wats Dyke. The trench is designed to cut across the north-south predicted alignment of Wat's Dyke in this plot so that the archaeology can be revealed within a vertical profile and recorded. The true alignment of the dyke within the plot is not known and is a best guess based on known alignments further north and south in the village where earthworks survive at the surface. The Wats Dyke alignment may extend further into the footprint of the extension or it may lie entirely east of it, but the only way to confirm this is with an exploratory trench along the line of the foundation trench.

The scheduled ancient monument of Wat's Dyke is considered to represent a boundary of early medieval origin, separating the Anglo-Saxon kingdoms to the east from the British (Welsh) to the west. Because of its condition the surviving section has been scheduled by CADW: Welsh Historic Monuments as a monument of national importance (SAM F171) (SAM Fl118).

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Figure 01: Location of proposed development site at Dovedale, Wrexham Road, Hope, Flintshire, LL12 9NB. Scale 1:20,000 at A4.

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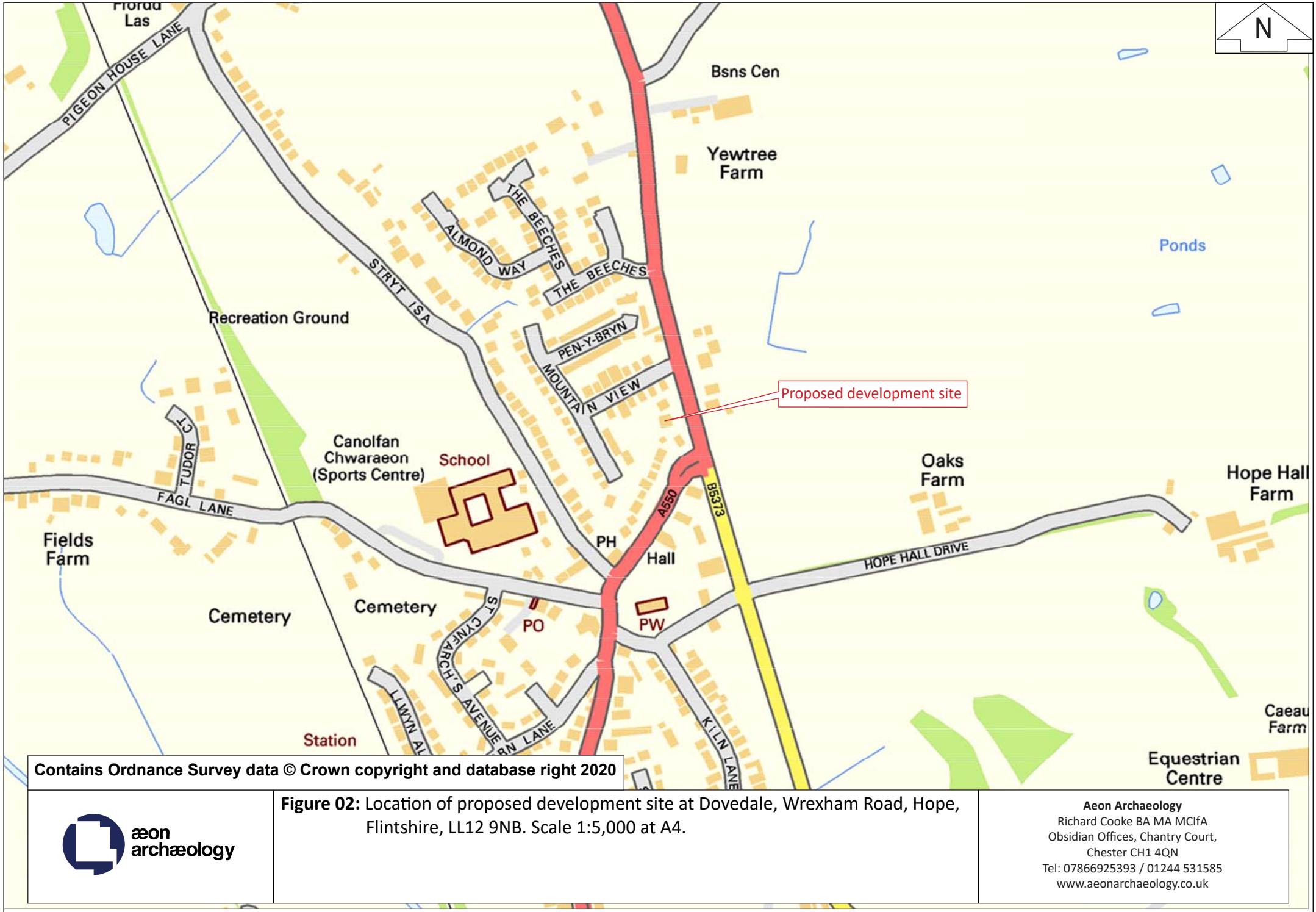

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Figure 02: Location of proposed development site at Dovedale, Wrexham Road, Hope, Flintshire, LL12 9NB. Scale 1:5,000 at A4.

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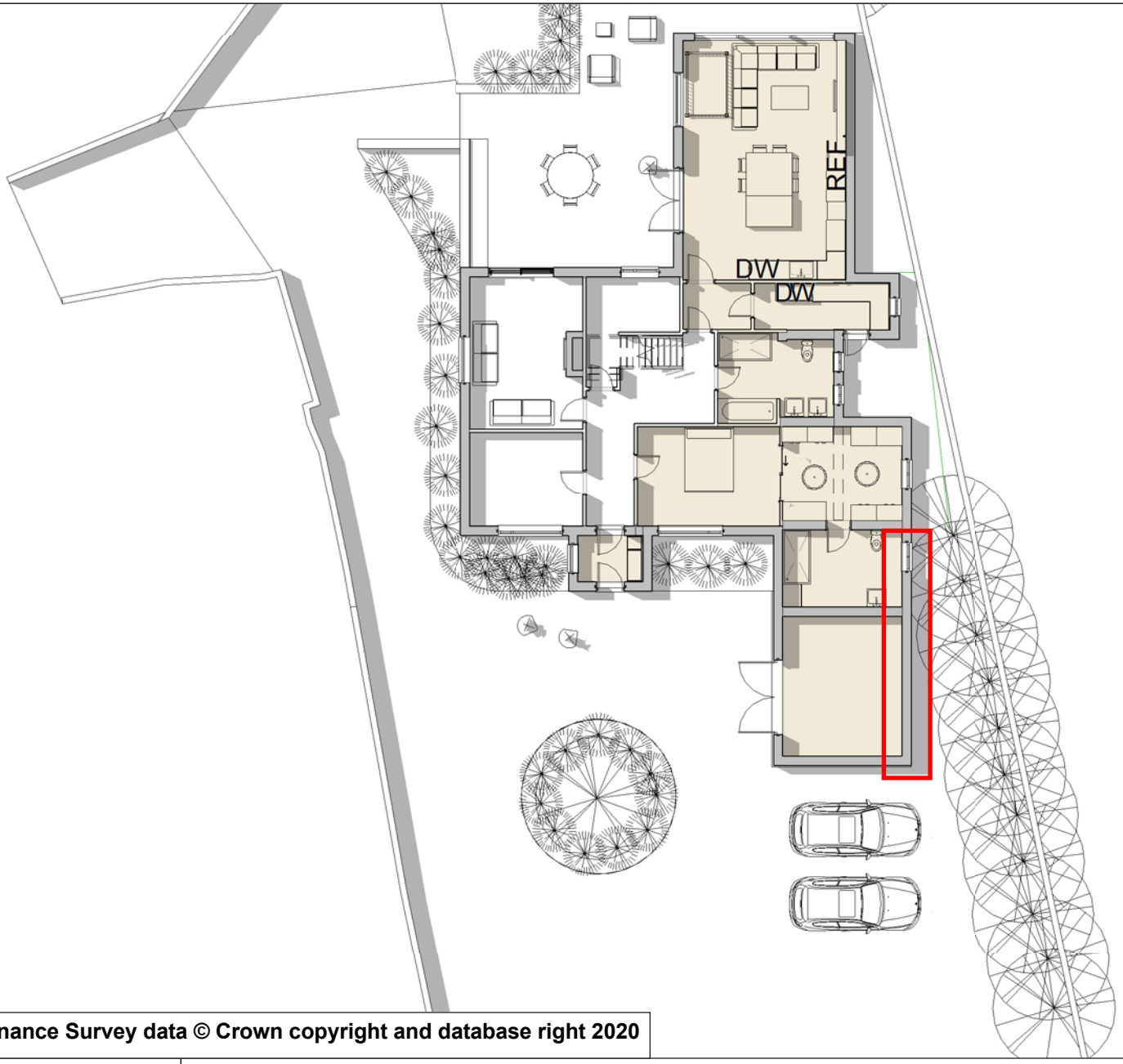

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Figure 03: Location of proposed evaluation trench. Scale 1:200 at A4.

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2.0 POLICY CONTEXT

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO Convention Concerning the Protection of World Cultural and Natural Heritage and the European Convention on the Protection of the Archaeological Heritage , commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and County Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation — the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

With respect to the cultural heritage of the built environment the Planning (Conservation Areas and Listed Buildings) Act 1990 applies. The Act sets out the legislative framework within which works and development affecting listed buildings and conservation areas must be considered. This states that:-

“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses” (s66(1))

Other known sites of cultural heritage/archaeological significance can be entered onto county-based Historic Environment Records under the Town and Country Planning 1995.

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

Various principles and polices related to cultural heritage and archaeology are set out in the Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.1.5 concerns planning applications:

The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales

3.0 ARCHAEOLOGICAL EVALUATION AIMS

Before evaluation commences an agreed programme of excavation timing, siting, duration, surface re-instatement and health and safety protection measures will be agreed with the Client and the Development Management Archaeologist (DMA) at the Clwyd-Powys Archaeological Trust (CPAT).

The size, location and orientation of the evaluation areas will be agreed in advance so as to best target areas that may contain archaeological features within the proposed development footprint – however the intention is to excavate 1 x test trenches of the following dimension (figure 03):

- Test Trench 1: measuring 8m by 1.5m and located over the footprint of the proposed extension.

The broad aims of the archaeological evaluation are:

- To determine, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains within the proposed development area, the integrity of which may be threatened by development at the site.

- To establish the nature and extent of existing disturbance and intrusion to sub-surface deposits and, where the data allows, assess the degree of archaeological survival of buried deposits of archaeological significance.

- To enable the Client to establish a schedule for archaeological risks.

- To allow the DMA at CPAT to make an informed decision on the need for and scope of further evaluative and/or mitigatory archaeological works at the site.

The detailed objectives of the archaeological excavation are:

- Insofar as possible within methodological constraints, to explain any temporal, spatial or functional relationships between the structures/remains identified, and any relationships between these and the archaeological and historic elements of the wider landscape.

- Where the data allows, identify the research implications of the site with reference to the regional research agenda and recent work in North Wales.

4.0 METHOD STATEMENT – ARCHAEOLOGICAL EVALUATION

If archaeological deposits are identified they will be manually cleaned, excavated and recorded to determine extent, function, date and relationship to adjacent features.

Contingency provision will be made for the following:

- Additional excavation of up to 100% of any given feature should the excavated sample prove to be insufficient to provide information on the character and date of the feature.

- Expansion of excavation trench limits, to clarify the extent of features equivalent to an additional 20% of the core trench area.

The archaeological works will be surveyed with respect to the nearest Ordnance Survey datum point and with reference to the Ordnance Survey National Grid. The excavation area, deposits, features and structures within them will be accurately located on a site plan prepared at most appropriate and largest scale.

A written record of the trench content and all identified features will be completed via Aeon Archaeology pro-formas.

Any subsurface remains will be recorded photographically, with detailed notations, measured drawings, and a measured survey. The photographic record will be maintained using a digital SLR camera (Canon 600D) set to maximum resolution (72dpi) with photographs taken in RAW format and later converted to TIFF format for long-term storage and JPEG format for presentation and inclusion in the archive. Photographic identification boards will also be used.

The excavation area will be opened with a mechanical excavator fitted with a toothless ditching bucket.

The excavation area and spoil heaps will be routinely investigated through the use of a metal detector and any finds/artefacts collected and processed as outlined in section 9.0.

All excavations, where required, will be backfilled with the material excavated and upon departure Aeon Archaeology will leave the site in a safe and tidy condition. Aeon Archaeology has not been requested to re-lay turf/lawn surface.

5.0 EVALUATION REPORT

5.1 Post-excavation Assessment

A report on the results of the evaluation, in accordance with the recommendations in *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006; 2015), and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological evaluation* (2014) will be required to be produced upon conclusion of the archaeological fieldwork. The report will be completed within a maximum of two months of completion of work on site and may include examination and quantification leading to the identification of function, form, date, method of manufacture, material/fabric type, source, parallels, attributes and condition of artefacts; of the exploitation of wild or domesticated resources; the reconstruction of environments; and the nature of human populations.

Full analysis of the results of the project, including: dating and interpretation of excavated features; pottery and other finds analysis; analysis of industrial residues by an appropriate specialist or specialists; analysis of samples for environmental data (including pollen, plant macrofossils and beetles) by an appropriate specialist or specialists; radiocarbon dating; discussion of the results in their local, regional and national context, including relating the excavated features and palaeoenvironmental data to evidence from nearby sites, and discussion of the results in their local, regional and national context may be required.

The scope of post-excavation assessment will subject to a specification for approval by the CPAT DMA upon the conclusion of the fieldwork project and preliminary report.

5.2 Post-excavation Report

Following completion of the stages outlined above, a report will be produced that will include:

- A non-technical summary.
- A table of contents.
- An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site.
- A statement of the project aims.
- An account of the project methodology undertaken, with an assessment of the same to include a statement on preservation bias and the means of data collection and sampling strategies.
- A factual summary of the history, development and use of the site.
- A statement setting out the nature, quantity and condition of the material archive (artefacts and ecofacts) including commentary on any bias observed due to collection and sampling strategies and commentary on long-term storage requirements.
- A statement setting out the nature and quantity of the documentary archive (notes, photographs, drawings, digital data).
- A general site plan indicating the position and size of the areas subject to watching brief and the locations of archaeological deposits identified and recorded during the works.
- Plans and sections at appropriate scales, augmented with appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid.
- Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate.
- Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits and finds identified during the project.
- A discussion of any research implications arising from the archaeological work.

- Notes on consultations with conservators and the nominated archive repository related to the immediate and long-term conservation and storage requirements for the data held in the site archive and recommendations of retention/discard of artefacts and ecofacts.
- A bibliography of sources consulted.
- Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive and a statement on its location/proposed repository.
- In addition the post-excavation report will summarise and draw together the findings of all of the phases of work.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the CPAT DMA and to the Client for comment and approval prior to production of the final report.

6.0 FURTHER ARCHAEOLOGICAL WORKS DESIGNS (FAWDs)

The discovery of substantial archaeological remains and/or features during the archaeological works may result in the requirement for an extended programme of archaeological mitigation. This may require the submission of revised quotes to the client as well as a new specification which will be required to be approved by the CPAT DMA prior to implementation.

7.0 ENVIRONMENTAL SAMPLES

Relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs will be obtained from Oxford Archaeology.

For guidance purposes the following volume criteria represent the minimum feature sampling requirements:

- 50% of each discrete feature (e.g. pits and postholes)
- 25% of the exposed areas of each liner feature and all terminals/intersections
- 50% of structural features (e.g. beamslots, ring-ditches)
- 50%-100% of domestic/industrial working features (e.g. hearths and ovens)

8.0 HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the CPAT DMA informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section *25* of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

9.0 ARTEFACTS

All artefacts and ecofacts will be retrieved for identification and recording and will be treated in accordance with CIfA Guidelines for the collection, documentation, conservation and research of archaeological materials (Chartered Institute for Archaeologists, 2014).

All artefacts are the property of the landowner but it is recommended that finds are deposited with the rest of the project archive within an appropriate museum. Furthermore, the client agrees to granting access to all artefacts recovered by Aeon Archaeology for analysis, study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the archaeological works. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the CPAT DMA. There will be a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

All finds will be collected and processed including those found within spoil tips. Their location and height will be plotted; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.

After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All artefacts will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)

Depending upon the material of the remains the following experts will be consulted regarding the conservation and analysis of artefacts:

- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: George Smith, Gwynedd Archaeological Trust, Bangor.
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.

- Leather: Quita Mould, Barbican Research Associates.
- Environmental Material: Dr Mike Allen, Allen Environmental Archaeology.
- Numismatics: Peter Guest, Barbican Research Associates.
- Ceramics: Leigh Dodd
- Military artefacts: Maj (Retd) Andy Hawkins

10.0 UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.

- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.

- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.

- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.

- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.

- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown.

The British Museum will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

11.0 ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged with the National Monument Record, RCAHMW within six months of the completion of the project.

A draft copy of the report will be produced within six months of the completion of the fieldwork and sent to the Client and the CPAT DMA for comment prior to finalisation of the report and dissemination. Bound copies of the report and an archive CD will be sent to the regional HER, the CPAT archaeologist and to National Monument Record, of the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) for long term archiving. Furthermore, a summary of the project will be sent to *Archaeology in Wales* for publication. Copies of all digital files (inc. photos, report as PDF and Word, spreadsheets, databases, survey data etc) to be presented to each of above on optical disc (ie DVD).

The archive will conform to the Guidance for the *Submission of Data to the Welsh Historic Environment Records (HERs)* (2018 v1.0).

12.0 PERSONNEL

The work will be managed by Richard Cooke BA MA MCIfA, Archaeological Contractor and Consultant at Aeon Archaeology.

13.0 MONITORING AND LIAISON

Regular liaison and site monitoring meetings will take place during all stages of work. The CPAT DMA will be informed of the start date and of discreet subsequent stages.

14.0 HEALTH AND SAFETY

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

15.0 INSURANCE

Liability Insurance – Insignia Underwriting Policy 347002

Employers' Liability: Limit of Indemnity £10m in any one occurrence
Public Liability: Limit of Indemnity £2m in any one occurrence
Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 07/09/20

Professional Indemnity Insurance – Insignia Underwriting Policy 347002

Limit of Indemnity £500,000 any one claim

The current period expires 07/09/20


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