



**Land to the rear of Caelian,
Chester Road, Oakenholt,
Flintshire CH6 5SE (060501).**

July 2021 v1.0



Archaeological Evaluation

Project Code: A0311.1

Report no. 0299

Planning Ref: 060501

Event PRN: 171678



æon archaeology

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Archaeological Evaluation

**Aeon Archaeology
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Project Code: A0311.1

Date: 07/07/2021

Client: Mr. Haydn Gamblin

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Land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE (060501).

July 2021 v1.0

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1.0 NON-TECHNICAL SUMMARY

Comisiynwyd Aeon Archaeology gan Mr. Haydn Gamblin i gynnal arfarniad archeolegol ar dir y tu ôl i ty Caelian, Chester Road, Oakenholt, Sir y Fflint.

Roedd y arfarniad yn mynnu bod pedair ffos yn cael eu cloddio ac a oedd wedi'u lleoli ar draws olion traed arfaethedig tair annedd newydd a mynediad cysylltiedig.

Roedd ffos linellol arall o darddiad Rhufeinig yn olrhain ffos 1, ac a oedd yn rhedeg i'r de-orllewin-gogledd-ddwyrain. Roedd y ffos hon wedi llenwi'n rhannol â silt, ar ôl iddi gael ei defnyddio, cyn cael ei ôl-lenwi'n fwriadol. Cynhyrchodd ddarn o'r ymyl i gwpan neu bicer, y sylfaen i bicer neu jar troed bedastal, a darn o gorff o amffora.

Yn ogystal, cynhyrchodd blaendal dymchwel o fewn ffos 1 deunydd adeiladu cerameg (CBM) Rhufeinig gan gynnwys teils to a theils blwch.

Ni chynhyrchodd ffosydd 2, 3 a 4 unrhyw nodweddion archeolegol nac arteffactau ac roedd yn ymddangos eu bod wedi cael eu haflonyddu yn y cyfnod modern, yn fwyaf tebygol wrth dirlunio wrth adeiladu Caelian.

Aeon Archaeology was commissioned by Mr. Haydn Gamblin to carry out an archaeological evaluation on land to the rear of Caelian, Chester Road, Oakenholt, Flintshire.

The evaluation involved the excavation of four trenches located across the proposed footprints of three new dwellings and associated access.

A shallow linear ditch of Roman origin was found running southwest-northeast within trench 1. This ditch had partially silted up once it had gone out of use, before being intentionally backfilled. It produced a sherd from the rim to a beaker, the base to a pedestal-footed beaker or jar, and a body sherd from an amphora, all of which dated to the 2nd century AD.

In addition a demolition deposit within trench 1 produced Roman construction building material (CBM) including roof tile and box tile.

Trenches 2, 3 and 4 did not produce any archaeological features or artefacts and appeared to have been disturbed in modern times, most likely during landscaping upon construction of Caelian.

2.0 INTRODUCTION

Aeon Archaeology was commissioned by Mr. Haydn Gamblin, hereafter ‘the Client’, to carry out an archaeological evaluation on land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE, hereafter ‘the Site’ (centred on **NGR SJ 25397 72383**) as part of a planning application for the erection of 3 new dwellings (figures 1-3).

A development proposal (**060501**) was submitted by the Client on the 19th September 2019 and is awaiting determination.

Discussions were held between Aeon Archaeology and the DMA at CPAT, and it was agreed that the most appropriate way to evaluate the Site was by the excavation of 4 x evaluation trenches.

The location of the evaluation trenches are shown on Figure 04.

A written scheme of investigation (WSI) (appendix I) was produced by Aeon Archaeology in June 2021 and outlined the aims and objectives of the archaeological evaluation, as well as the methods by which they would be met.

The work adhered to the guidelines specified in *Standard and Guidance for Archaeological Evaluation* (Chartered Institute for Archaeologists, 2020).

The archaeological evaluation was undertaken using event Primary Reference Number (PRN): **171678**.

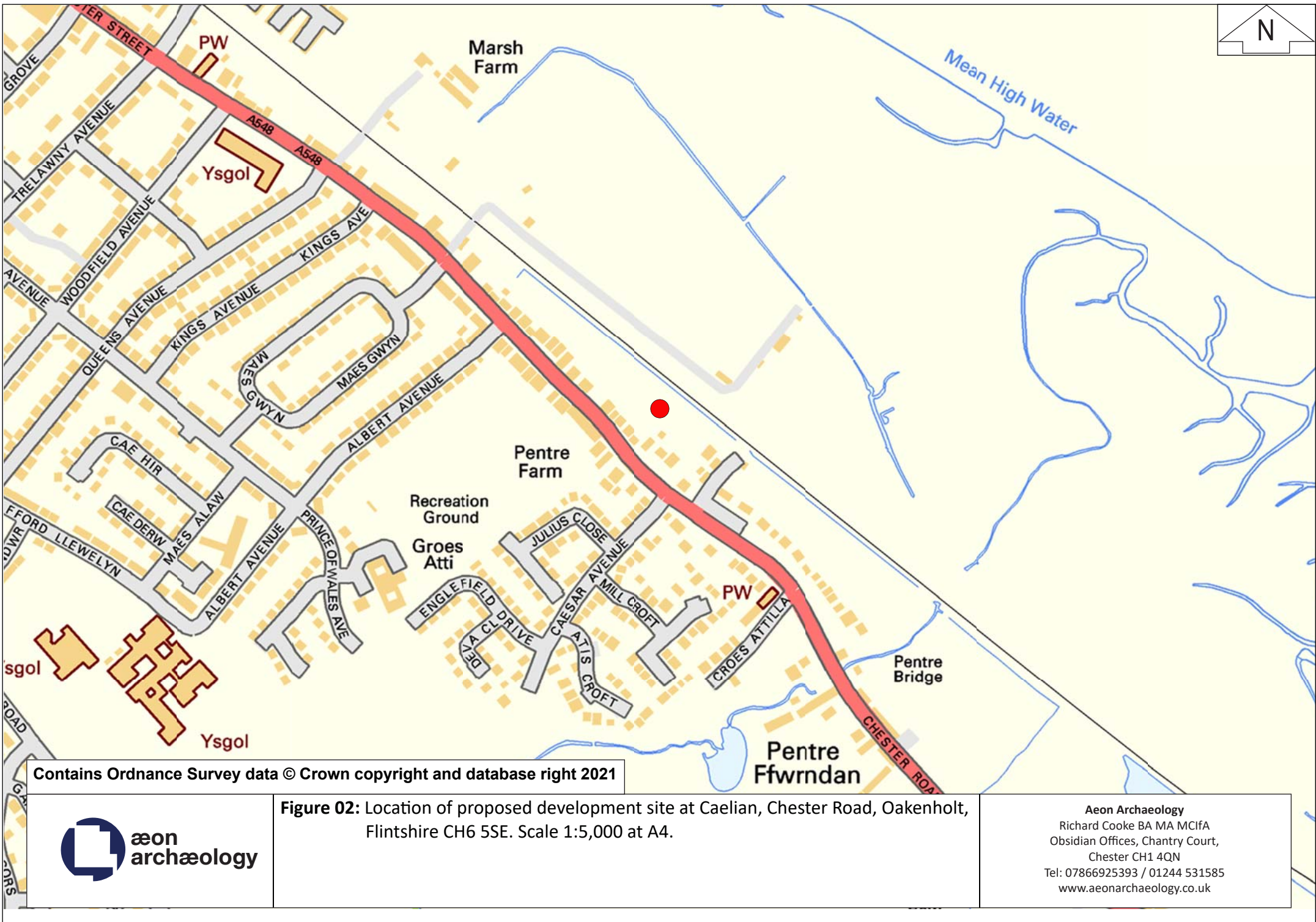


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Figure 01: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:20,000 at A4.

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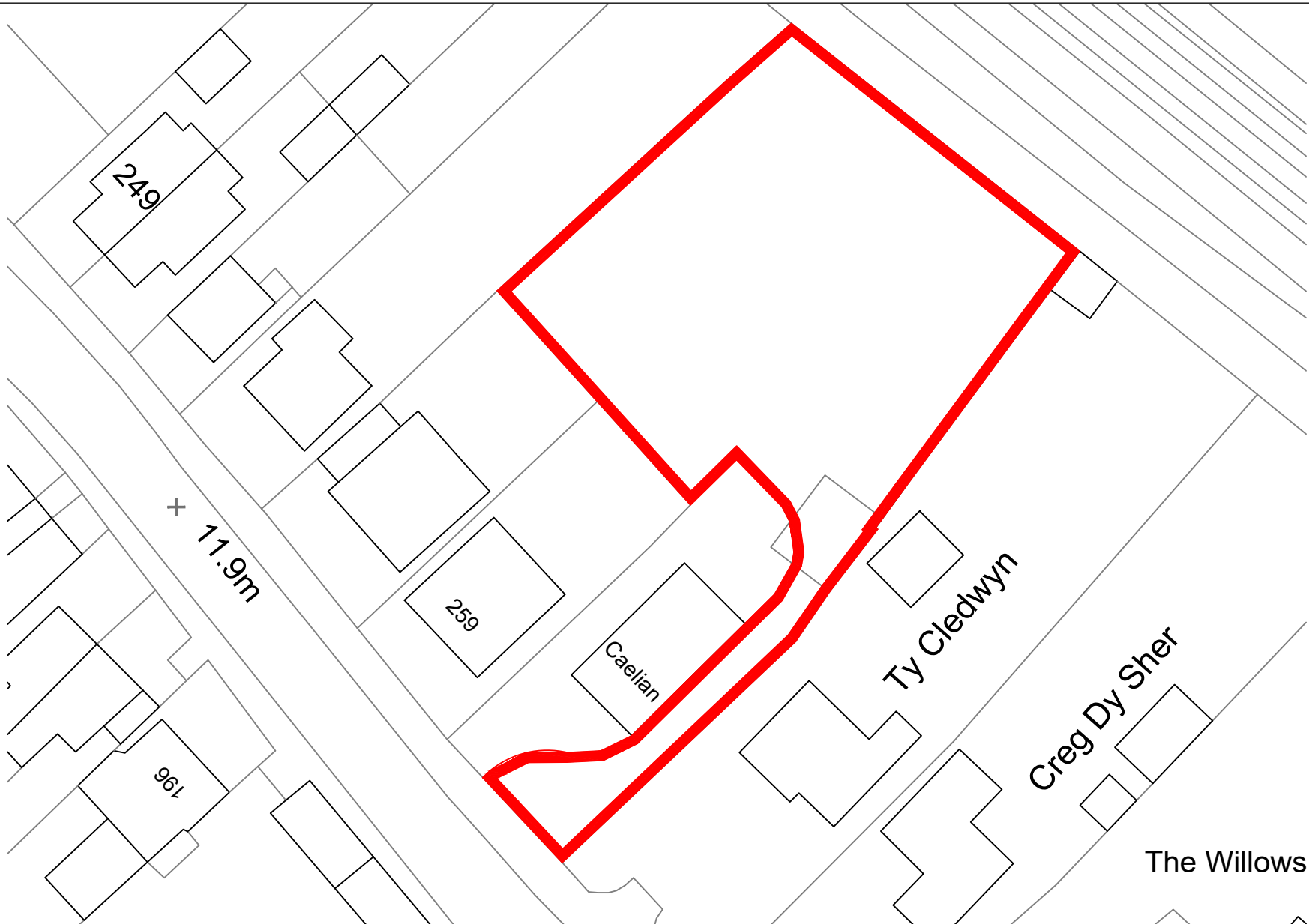


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Figure 02: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:5,000 at A4.

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Figure 03: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:500 at A4.

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Plate 01: Pre-excitation photograph of the garden to the rear of Caelian, from the south.

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 Country 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 policies 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 SITE LOCATION AND HISTORIC BACKGROUND

The site is located in the settlement of Pentre Ffwrndan, Oakenholt a village in Flintshire, northeast Wales. It is located approximately one and a half miles southeast of Flint town on Deeside . The A548 runs through the village and is crossed by the North Wales Coast Railway but the village has no station

The Site is roughly rectangular in shape measuring 35m in length by 30m in width, orientated northeast-southwest. It is currently in use as a rear garden to the property Caelian. It is bounded to the north by the North Wales Coast Railway, to the east and west by neighbouring properties and their rear gardens, and to the south by the property of Caelian and the A548. The Site is level and lies at 19m OD.

The following consultee comments concerning archaeology were made by the Development Management Archaeologist (DMA) at the Clwyd-Powys Archaeological Trust (CPAT):

Information retained within the Regional Historic Environment Record indicates that this application falls in an area of high archaeological sensitivity.

The plot lies within the archaeologically sensitive area of the Pentre Ffwrndan Roman Settlement. The plot lies immediately north of the 2nd - 3rd century AD Roman villa site which was partly excavated in the 1970's- 1980's. This building is associated with the nearby lead processing complex to the south east at Crees Atti and the principal Roman road route is considered to pass to the south of the plot roughly on the line of the modern A548. Roman period burials and the foundations of additional timber buildings were found beyond the villa building and associated Roman features are very likely to extend into the proposed development area.

The proposed development will disturb any such remains surviving here, but from present knowledge it is impossible to estimate how damaging this might be, and thus to frame an appropriate archaeological response.

The planning authority appears to have insufficient information about this archaeological resource, or the applicant's intended treatment of it, to make a balanced decision. As archaeology is a material consideration here I would advise that this application is not determined until this resource has been properly evaluated.

5.0 PROJECT AIMS

Before evaluation commenced an agreed programme of excavation timing, siting, duration, surface reinstatement and health and safety protection measures were agreed with the Client and the DMA at CPAT.

The size, location and orientation of the evaluation trenches were agreed in advance so as to best target areas that may contain archaeological features within the proposed development footprint – however the intention was to excavate 4 x evaluation trenches of the following dimensions (figure 04):

- Test Trench 1: measuring 20m by 1.8m and located over the proposed new access driveway.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 1.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 2.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 3.

The broad aims of the archaeological evaluation were:

- 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 evaluation were:

- 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 Flintshire.

6.0 METHODOLOGY – ARCHAEOLOGICAL EVALUATION

6.1 Evaluation

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

Contingency provision was to 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 were 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 were to be accurately located on a site plan prepared at the most appropriate and largest scale.

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

Any subsurface remains were to be recorded photographically, with detailed notations, measured drawings, and a measured survey. The photographic record was 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 were also used.

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

The excavation area and spoil heaps were routinely investigated through the use of a metal detector and any finds/artefacts collected and processed as below.

All excavations were backfilled with the material excavated and upon departure Aeon Archaeology left the site in a safe and tidy condition. Aeon Archaeology were not requested to re-lay turf/lawn surface.

6.2 Data Collection from Site Records

A database of the site photographs was produced to enable active long-term curation of the photographs and easy searching. The site records were checked and cross-referenced and photographs were cross-referenced to contexts. These records were used to write the site narrative and the field drawings and survey data were used to produce an outline plan of the site.

All paper field records were scanned to provide a backup digital copy. The photographs were organised and precisely cross-referenced to the digital photographic record so that the CPAT Historic Environment Record (HER) can curate them in their active digital storage facility.

6.3 Artefact Methodology

All artefacts were to be collected and processed including those found within spoil tips. They would be bagged and labelled as well any preliminary identification taking place on site. After processing, all artefacts would be cleaned and examined in-house at Aeon Archaeology. If required, artefacts would be sent to a relevant specialist for conservation and analysis.

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

6.4 Environmental Samples Methodology

The sampling strategy and requirement for bulk soil samples was related to the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant features would be sampled. The aim of the sampling strategy was to recover carbonised macroscopic plant remains, small artefacts particularly knapping debris and evidence for metalworking.

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 would be obtained from Oxford Archaeology if required.

6.5 Report and dissemination

A full archive including plans, photographs, written material and any other material resulting from the project was prepared. All plans, photographs and descriptions were labelled, and cross-referenced, and will be lodged within a suitable repository to be agreed with the archaeological curator within six months of the completion of the project.

A draft copy of the report has been sent to the Client and upon written approval from them paper and digital copies of the report will be sent to the regional HER, the DMA at CPAT, and will be lodged with the RCAHMW. Copies of all notes, plans, and photographs arising from the evaluation will be stored at Aeon Archaeology under the project code **A0311.1** with the originals being lodged with the RCAHMW.

7.0 DIGITAL DATA MANAGEMENT PLAN

7.1 Type of study

Archaeological evaluation on land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE, hereafter the Site (centred on NGR SJ 25397 72383).

7.2 Types of data

- Photographs (RAW)
- Context sheets (paper)
- Photographic register (paper)
- Drawings (drafting film)
- Misc registers (paper)
- Compiled report

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*).

Compiled report (including figures and plates) as *.PDF* files.

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 proforma 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 RCAHMW; 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 directly 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.

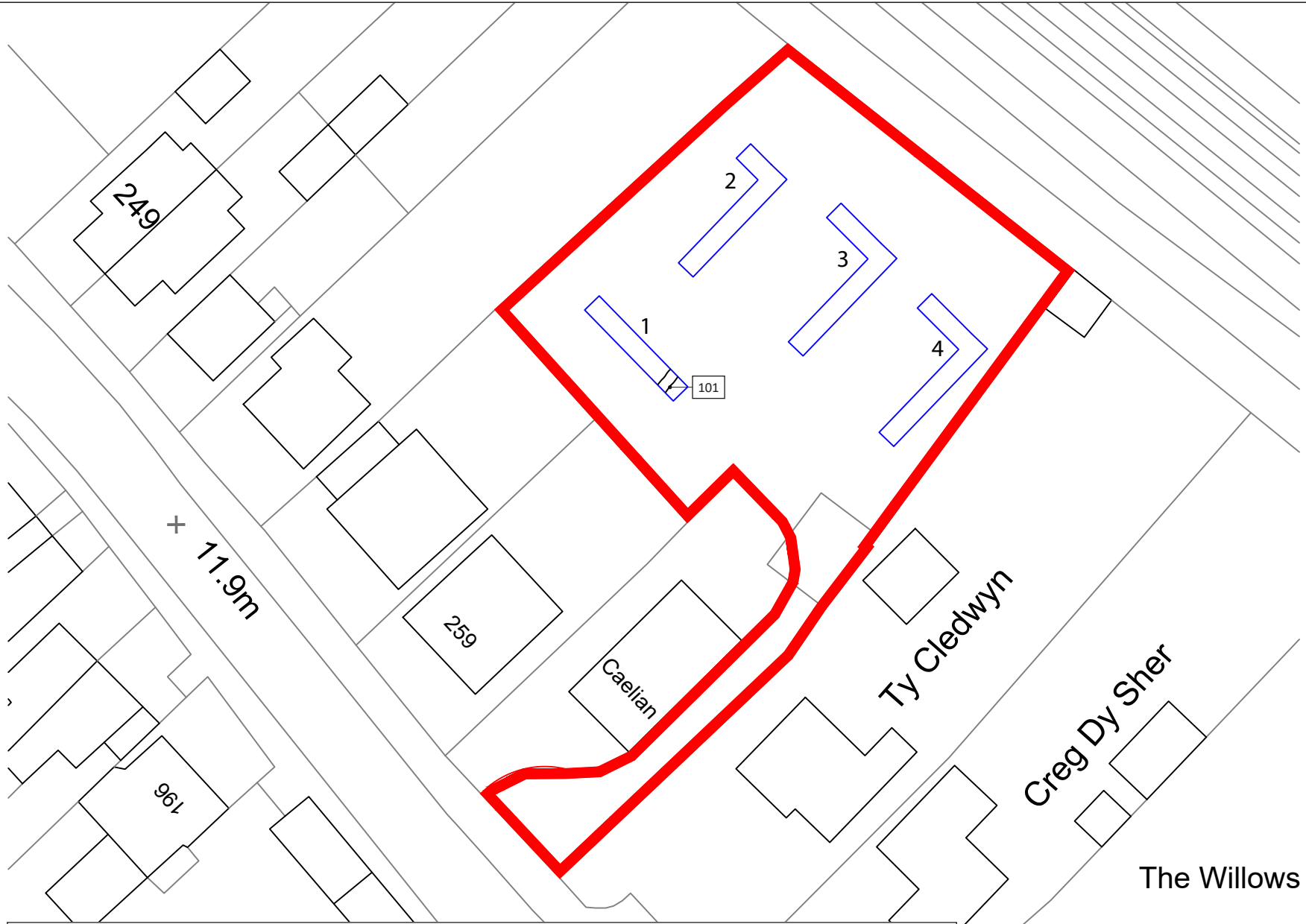
7.15 Responsibilities

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



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Figure 04: Location of evaluation trenches at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:500 at A4.

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8.0 QUANTIFICATION OF RESULTS

8.1 The Documentary Archive

The following documentary records were created during the archaeological evaluation:

Trench Sheets	4
Digital photographs	48
Context Sheets	8
Measured Drawings	2 on 1 sheet

8.2 Environmental Samples

No environmental samples were taken as part of the archaeological evaluation.

8.3 Artefacts

Introduction

A small finds assemblage totalling eight sherds and fragments of pottery and ceramic building materials (CBM), all dating to the Roman period, was recovered from two contexts. Recovery of the assemblage was through hand collection and all finds were collected and retained.

The assemblage is in very fragmentary condition and with much rounding and wear evident to the surfaces and edges of the objects recovered. The lack of large, freshly broken sherds indicates a high level of residual material across the ceramic assemblage.

The assemblage is summarised and quantified according to object type and context in the table below (Table 1). The following sections of this report summarise in detail the objects recovered according to type.

<i>Context</i>	<i>Object type</i>	<i>Number of sherds/fragments</i>	<i>Weight (g)</i>
(103)	Roman pottery	3	205
(103)	Roman CBM	1	9
(106)	Roman CBM	4	508
	<i>Total</i>	8	722

Table 1: Quantification of finds assemblage by number of objects and weight according to object types

Roman Pottery

The three sherds of pottery recovered from context (103) consisted of a sherd from the rim to a beaker, the base to a pedestal-footed beaker or jar, and a body sherd from an amphora. Roman pottery fabric codes shown in brackets (e.g. WIL OX) relate to Tomber and Dore 1998:

1. Beaker in light orange-brown Cheshire Plain fabric, probably Wilderspool (WIL OX). The rim has parallels with the rough-cast and rouletted beakers from the kilns at Wilderspool, Cheshire (Hartley & Webster 1973: Figs. 4 and 5) and can be dated to the early to mid/late 2nd century.
2. Pedestal-footed beaker or jar in thickly potted red fabric, probably a Cheshire Plain fabric. The foot has been slightly embellished with a single groove. Inverted, this sherd may have formed the handle to a lid. Probably late 1st to 2nd century.
3. Body sherd in Baetican (Spanish) fabric (BAT AM 2), almost certainly from a Peacock and Williams Class 25 (Dressel 20 type) amphora. In Britain it is the most common amphora from the late 1st century AD to the early 3rd century (Peacock & Williams 1986: 137).

Roman Ceramic Building Materials

The assemblage of Roman-period CBM from context (106) consisted of a single fragment of tegulae (flanged roof tile), two fragments from box-flue tiles (tubuli) and an indeterminate fragment. A small indeterminate fragment of CBM was recovered from context (103) also. The red fabrics are typical of those of the legionary kilns at Holt, situated 12 km south of Chester. The kilns were established by the Twentieth Legion, which was based at Chester from the early AD 90s, and are known to have been producing ceramic building material and pottery for the legionary fortress from c. AD 90/100, with the production of CBM continuing into the 3rd century.

Of the five fragments of Roman CBM, two are worthy of further note. These fragments, both from the walls of box-flue, or half box-flue, tiles – basically a square form of pipe fixed into the walls of buildings in order to transfer heat – both bear marks to their surface in order to provide a key for the plaster and rendering that would have covered the tiles when they had been set into the wall. One of these tiles had been combed with a comb of at least eight teeth, leaving a track at least 45mm wide, the second tile had been scored with a knife or stick leaving a diamond-shaped pattern. According to Brodrigg (1987: 109), scoring is much less common than combing.

Discussion

The pottery from context (103) can be dated to the 2nd century and consisted of sherds from locally produced wares in the Cheshire Plain tradition, a trend noted across Roman pottery assemblages from excavations within the Pentre Ffwrndan/Oakenholt area (Webster 2020: 152–155), along with a single sherd from an imported amphora.

The building materials were manufactured locally, at Holt, under the control of the Twentieth Legion. The box-flue tiles imply the presence of a nearby building equipped with heated rooms. Indeed, these tiles may have derived from the nearby building complex at Pentre Farm. Equipped with heated rooms and a bath-house, this complex was excavated between 1976 and 1981 (O’Leary 1989) and has been interpreted as a Roman official building, perhaps associated with local lead mining, with a strong military connection (Jones 2020: 147). The circumstance that led to the presence of the box-flue tiles at the current site can only be guessed at.



box-flue tiles (tubuli) (c. AD 90/100 to 3rd century)

Fragment of Roman CBM

tegulae (flanged roof tile)
(c. AD 90/100 to 3rd century)

Artefact Image B: Artefacts recovered from context (106).



Artefact Image A: Artefacts recovered from context (103).

9.0 RESULTS OF THE ARCHAEOLOGICAL EVALUATION

9.1 Overview

The archaeological evaluation was undertaken by Richard Cooke BA MA MCifA and Josh Dean BA, archaeological contractors and consultants at Aeon Archaeology between the 28th and 29th June 2021. The weather conditions were ideal for the evaluation, being both bright and clear.

Trench 1 (plates 2-8) (figure 4-7)

SJ 25380.20/72378.83 – SJ 25391.03/72367.89 – SJ 25389.72/72366.60 – SJ 25378.78/72377.45

Description

It was originally intended that trench 1 would measure 20m in length by 1.8m in width, however upon attending Site it became clear that the trench would require shortening due to a mature hedgerow at the north-western end and an existing elevated garden at the south-eastern end. As such the trench measured 11.3m in length by 1.8m in width, orientated northwest-southeast, and was excavated to a maximum depth of 0.86m. It was positioned over the proposed footprint of a new access driveway located at the southwest end of the Site.

The trench was excavated through a 0.24m deep soft mid brown-grey sand-clay topsoil (108); a 0.1m deep soft mid red-brown silt-clay subsoil (107); and a >0.56m deep fairly firm, light brown and mottled yellow-grey clay natural glacial substrata (103).

At the south-eastern end of the trench a linear ditch [101] was found running northwest-southeast and measuring >1.83m in length by 1.4m in width by 0.36m in depth. The ditch was centred on NGR SJ 25387.36 / 72369.83 with its base gently sloping from 19.09m OD in the southeast to 19.03m in the northwest. The ditch had concaved sides, steeper to the east, and an undulating base. It cut through the natural glacial clay (103) and was partially infilled at the base by a soft, mid / light brown-grey clay-silt with frequent charcoal flecks and occasional small pebble inclusions (102). The ditch [1010] was then entirely infilled by a soft, mid / dark black-grey silt-clay with occasional charcoal flecks and occasional small sub-rounded cobble inclusions (103). This fill also produced 3 sherds of Roman ceramic and 1 fragment of Roman CBM.

Fill (103) was sealed by a 0.2m deep soft / moderate mid red-brown silt-clay deposit with occasional small pebble inclusions (105). At the south-eastern end of the trench this deposit was partially overlaid by a 0.21m deep fairly soft, dark black-grey silt-clay deposit with fairly frequent small and medium sized sub-rounded cobbles, and occasional charcoal fleck inclusions (106). This deposit also produced 4 fragments of Roman CBM. Deposit (106) was overlain by subsoil deposit (107).

No other archaeological features were uncovered within the trench limits and no further artefacts recovered.

Discussion

The linear ditch uncovered within trench 1 is of Roman origin and the artefacts recovered from its secondary fill (103) would suggest a 2nd century AD date. This fits with the 2nd - 3rd century AD

Roman villa site which was partly excavated in the 1970's- 1980's and lies immediately to the south of the Site.

The ditch, although fairly wide at 1.4m, was of shallow depth 0.36m and therefore may have been vertically truncated, perhaps by ploughing or later disturbance. The inclusion of occasional pebbles and stones within the two ditch fills and the undulating base would suggest that the ditch carried water, possibly for drainage. Indeed the ditch slopes gently to the northwest, away from the villa site in the south, and the silt content of the primary fill (102) would suggest that this built up due to water action while the ditch was still open and in use. The recovered Roman ceramic from the secondary fill (103) would suggest that the ditch went out of use in the 2nd century AD, most likely around the same time that the villa site was abandoned, and the ditch appears to have been intentionally infilled.

Once the ditch [101] had gone out of use and had been infilled, a silt-clay deposit (105) formed across the ditch. This deposit is likely a relict soil surface that accumulated over several decades or even centuries. This deposit was then partially overlaid by a dark black-grey deposit (106) which produced Roman CBM. This deposit appears to be a demolition spread, most likely from the final levelling of the Roman villa. This deposit laid beneath the subsoil (107) and it is unclear whether this demolition deposit formed in antiquity or is associated with more modern site levelling during the construction of the existing housing stock in the late 20th century.



Plate 02: Trench 1, from the southeast. Scale 1.0m.



Plate 03: Trench 1, from the northwest. Scale 1.0m.



Plate 04: Trench 1 generic section, from the northeast. Scale 1.0m.



Plate 05: Trench 1 ditch [101], from the southwest. Scale 0.5m.



Plate 06: Trench 1 ditch [101], from the west. Scale 0.5m.



Plate 07: Trench 1 ditch [101], from the northwest. Scale 1.0m.



Plate 08: Trench 1 southwest facing section of ditch [101], from the southwest. Scale 0.5m.

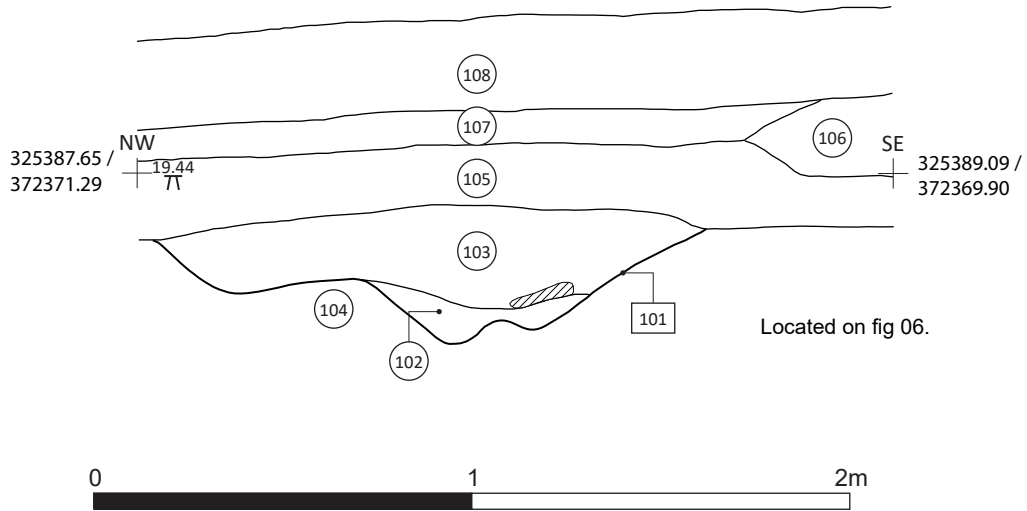
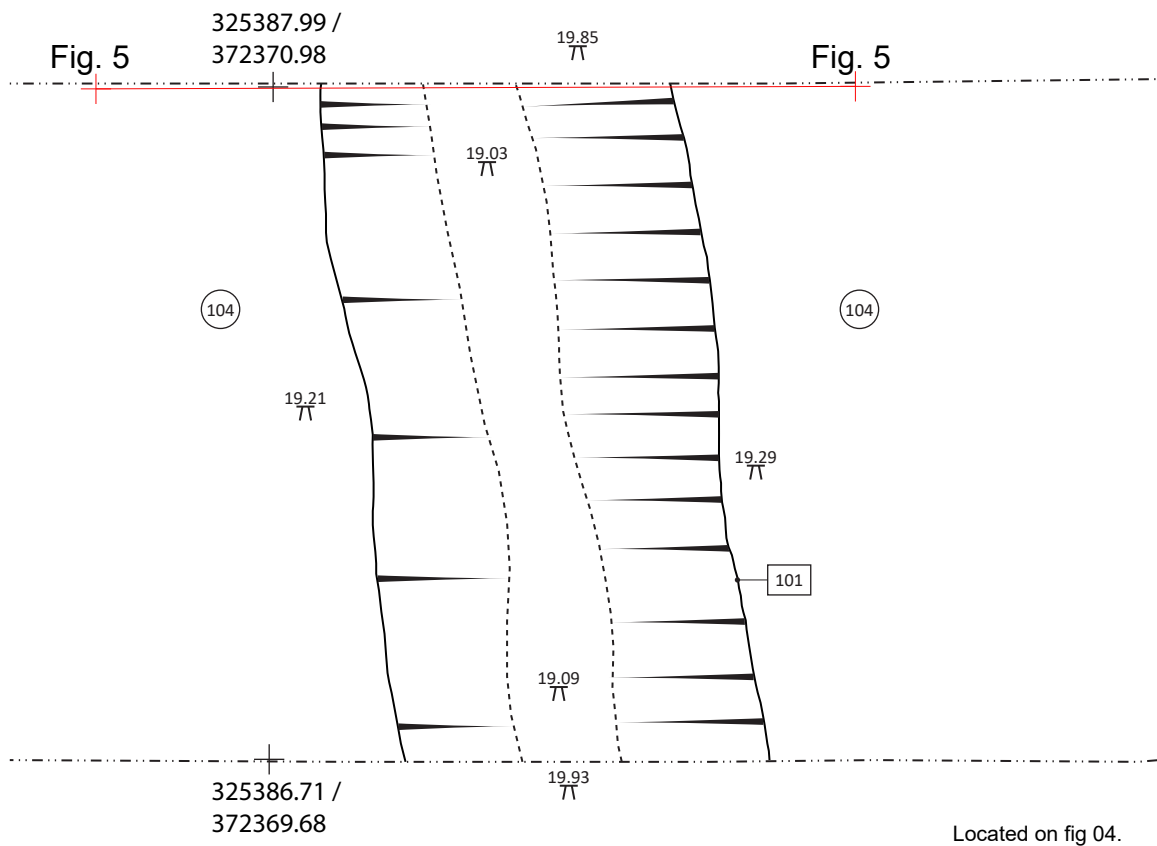


Figure 06: Plan of ditch [101]. Scale 1:20 at A4.



Located on fig 04.

Trench 2 (plates 9-13) (figure 4 and 7)

SJ 25393.82/ 72392.17 – SJ 25397.05/ 72389.11 – SJ 25388.59/ 72380.50 – SJ 25387.19/ 72381.72
-SJ 25394.26/ 72389.07 – SJ 25392.59/ 72390.89

Description

It was originally intended that trench 2 would measure 12m by 1.8m and 7m by 1.8m, however upon attending Site it became clear that the trench would require shortening due to a mature hedgerow at the north-western end of the Site. As such the trench measured 12m by 1.8m and 4.5m by 1.8m, and was excavated to a maximum depth of 0.95m. It was positioned over the proposed footprint of dwelling 1 towards the northwest end of the Site.

The trench was excavated through a 0.3m deep firm mid brown-grey silt-clay topsoil; a 0.25m deep soft, mid red-brown silt-clay subsoil with occasional small sub-rounded pebble inclusions; and a >0.4m deep moderately firm, clay-gravel natural glacial substrata with lenses of mid / dark brown-grey gravel-clay which formed from glacial rivulets.

No archaeological features were uncovered within the trench limits and no artefacts recovered.

Discussion

The natural glacial substrata appeared to be modified, suggesting that it had either been vertically truncated and/or previously exposed. This suggests that the area may have been previously stripped. Moreover, the lack of any post-medieval ceramic within the topsoil and subsoil layers suggests that the soil may have been imported. This would suggest that the area had been previously landscaped and benched into, most likely during the construction of the property of Caelian. It is likely that this activity would have removed any archaeological features associated with the Roman activity observed in trench 1 and further to the south in the 1970s / 80s.



Plate 09: Trench 2 southern arm, from the southwest. Scale 1.0m.



Plate 10: Trench 2 southern arm, from the northeast. Scale 1.0m.



Plate 11: Trench 2 northern arm, from the southeast. Scale 1.0m.



Plate 12: Trench 2 northern arm, from the northwest. Scale 1.0m.



Plate 13: Trench 2 generic section, from the southeast. Scale 1.0m.

Trench 3 (plates 14-18) (figure 4 and 7)

SJ 25401.77/72387.17 – SJ 25406.79/72382.40 – SJ 25398.24/72373.69 – SJ 25396.86/72375.03 – SJ 25403.97/72382.30 – SJ 25400.51/72,385.92

Description

Trench 3 was L-shaped in plan and measured 12m by 1.8m and 7m by 1.8m, and was excavated to a maximum depth of 0.95m. It was positioned over the proposed footprint of dwelling 2 towards the centre of the Site.

The trench was excavated through a 0.25m deep soft dark brown-grey clay-silt topsoil; a 0.25m deep soft, mid red-brown silt-clay subsoil with occasional small sub-rounded pebble inclusions; and a >0.4m deep moderately firm, mid/light yellow-brown clay-gravel natural glacial substrata with lenses of mid / dark brown-grey gravel-clay which formed from glacial rivulets.

No archaeological features were uncovered within the trench limits and no artefacts recovered.

Discussion

The natural glacial substrata appeared to be modified, suggesting that it had either been vertically truncated and/or previously exposed. This suggests that the area may have been previously stripped. Moreover, the lack of any post-medieval ceramic within the topsoil and subsoil layers suggests that the soil may have been imported. This would suggest that the area had been previously landscaped and benched into, most likely during the construction of the property of Caelian. It is likely that this activity would have removed any archaeological features associated with the Roman activity observed in trench 1 and further to the south in the 1970s / 80s.



Plate 14: Trench 3 southern arm, from the southwest. Scale 1.0m.



Plate 15: Trench 3 southern arm, from the northeast. Scale 1.0m.



Plate 16: Trench 3 northern arm, from the southeast. Scale 1.0m.



Plate 17: Trench 3 northern arm, from the northwest. Scale 1.0m.



Plate 18: Trench 3 generic section, from the southeast. Scale 1.0m.

Trench 4 (plates 19-23) (figure 4 and 7)

SJ 25409.78/72379.46 – SJ 25414.71/72374.68 – SJ 25406.21/72366.06 – SJ 25404.85/72367.28 – SJ 25411.98/72374.58 – SJ 25408.46/72378.14

Description

Trench 4 was L-shaped in plan and measured 12m by 1.8m and 7m by 1.8m, and was excavated to a maximum depth of 1.8m. It was positioned over the proposed footprint of dwelling 3 towards the northeast end of the Site.

The trench was excavated through a 0.12m deep firm mid grey-brown silt-clay topsoil with abundant small pebble inclusions. In the southwest corner of the southern trench arm this overlay a 0.26m deep firm, dark black-grey silt-clay subsoil which contained fragments of red brick, sandstone, plastic roots. Cut into this deposit was a modern ditch / gully which when investigated produced modern iron and rubber from within a dark black silt-clay fill.

The majority of the trench was cut through a 1.05m deep soft / friable, dark black-grey clay-silt which contained an abundance of modern material including metal, plastic, brick, rubber tyres, a bed mattress, a car door etc.

No archaeological features were uncovered within the trench limits and no artefacts recovered.

Discussion

Trench 4 was located immediately over the position of a modern former coy carp pond. This had been excavated into the natural glacial substrata thus removing any potential for the preservation of archaeological features.



Plate 19: Trench 4 southern arm, from the southwest. Scale 1.0m.



Plate 20: Trench 4 southern arm, from the northeast. Scale 1.0m.



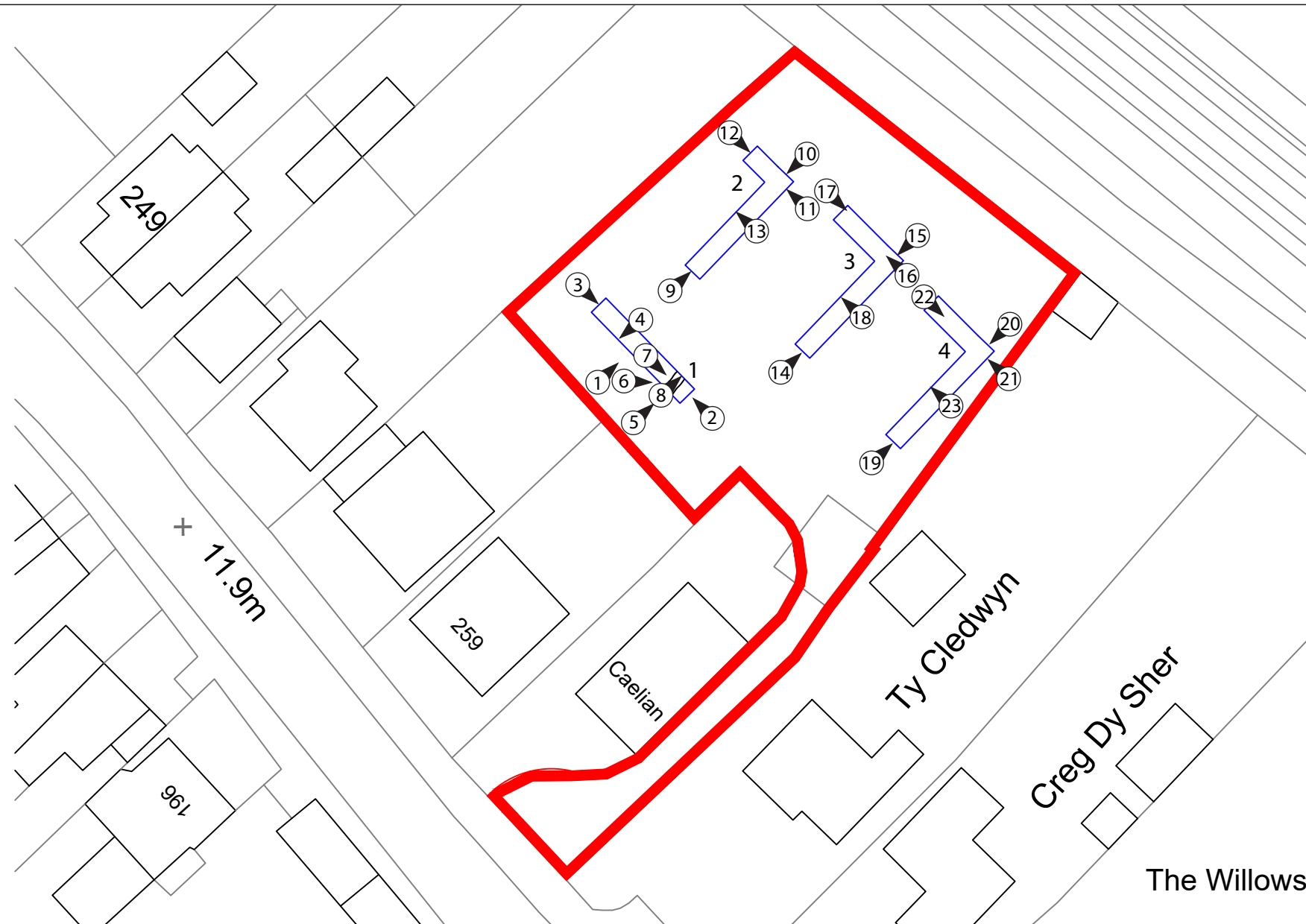
Plate 21: Trench 4 northern arm, from the southeast. Scale 1.0m.



Plate 22: Trench 4 northern arm, from the northwest. Scale 1.0m.



Plate 23: Trench 4 generic section, from the southwest. Scale 1.0m.



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Figure 07: Location and orientation of photographic plates. Scale 1:500 at A4.

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10.0 CONCLUSION AND RECOMMENDATIONS

The evaluation involved the excavation of four trenches located across the proposed footprints of three new dwellings and associated access.

A shallow linear ditch of Roman origin was found running southwest-northeast within trench 1. This ditch had partially silted up once it had gone out of use, before being intentionally backfilled. It produced a sherd from the rim to a beaker, the base to a pedestal-footed beaker or jar, and a body sherd from an amphora, all of which dated to the 2nd century AD.

In addition a demolition deposit within trench 1 produced Roman construction building material (CBM) including roof tile and box tile.

Trenches 2, 3 and 4 did not produce any archaeological features or artefacts and appeared to have been disturbed in modern times, most likely during landscaping upon construction of Caelian and the excavation of a modern coy-carp pond at the location of trench 4.

The archaeological recommendation was applied in advance of planning determination due to the perceived potential for archaeological remains, particularly of the Roman era. The evaluation has shown that Roman features are present within the proposed development area but that these are limited to the southern corner of the Site, with no potential being present north of this due to modern disturbance.

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APPENDIX I: WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF



æon archaeology

**Land to the rear of Caelian,
Chester Road, Oakenholt,
Flintshire CH6 5SE (060501).**

**Written Scheme of Investigation (WSI)
for Archaeological Evaluation**

June 2021 v1.0



Project Code: A0311.1
Planning Ref. 060501
Event PRN. 171678



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Land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE (060501).

June 2021 v1.0

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1.0 INTRODUCTION

Aeon Archaeology has been commissioned by Mr. Haydn Gamblin, hereafter the Client, to produce a written scheme of investigation (WSI) for carrying out an archaeological evaluation on land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE, hereafter the Site (centred on **NGR SJ 25397 72383**) as part of a planning application for the erection of 4 new dwellings (figures 1-3).

A development proposal (**060501**) was submitted by the Client on the 19th September 2019 and is awaiting determination. The following consultee comments concerning archaeology were made by the Development Management Archaeologist (DMA) at the Clwyd-Powys Archaeological Trust (CPAT):

Information retained within the Regional Historic Environment RecOr-d indicates that this application falls in an area of high archaeological sensitivity.

The plot lies within the archaeologically sensitive area of the Pentre Ffwrndan Roman Settlement. The plot lies immediately north of the 2nd - 3rd century AD Roman villa site which was partly excavated in the 1970's- 1980's. This building is associated with the nearby lead processing complex to the south east at Crees Atti and the principal Roman road route is considered to pass to the south of the plot roughly on the line of the modern A548. Roman period burials and the foundations of additional timber buildings were found beyond the villa building and associated Roman features are very likely to extend into the proposed development area.

The proposed development will disturb any such remains surviving here, but from present knowledge it is impossible to estimate how damaging this might be, and thus to frame an appropriate archaeological response.

The planning authority appears to have insufficient information about this archaeological resource, or the applicant's intended treatment of it, to make a balanced decision. As archaeology is a material consideration here I would advise that this application is not determined until this resource has been properly evaluated.

Discussions were held between Aeon Archaeology and the DMA at CPAT, and it was agreed that the most appropriate way to evaluate the Site was by the excavation of 4 x evaluation trenches.

The location of the evaluation trenches are shown on Figure 04.

This WSI states the aims and objectives for implementing the archaeological evaluation and the methods by which they will be met in order to meet the spirit and intent of the archaeological consultee comments of planning application 060501.

Reference will be made to the guidelines specified in *Standard and Guidance for Archaeological Evaluation* (Chartered Institute for Archaeologists, 2020).

The archaeological evaluation will be undertaken as new event Primary Reference Number (PRN) **171678**.

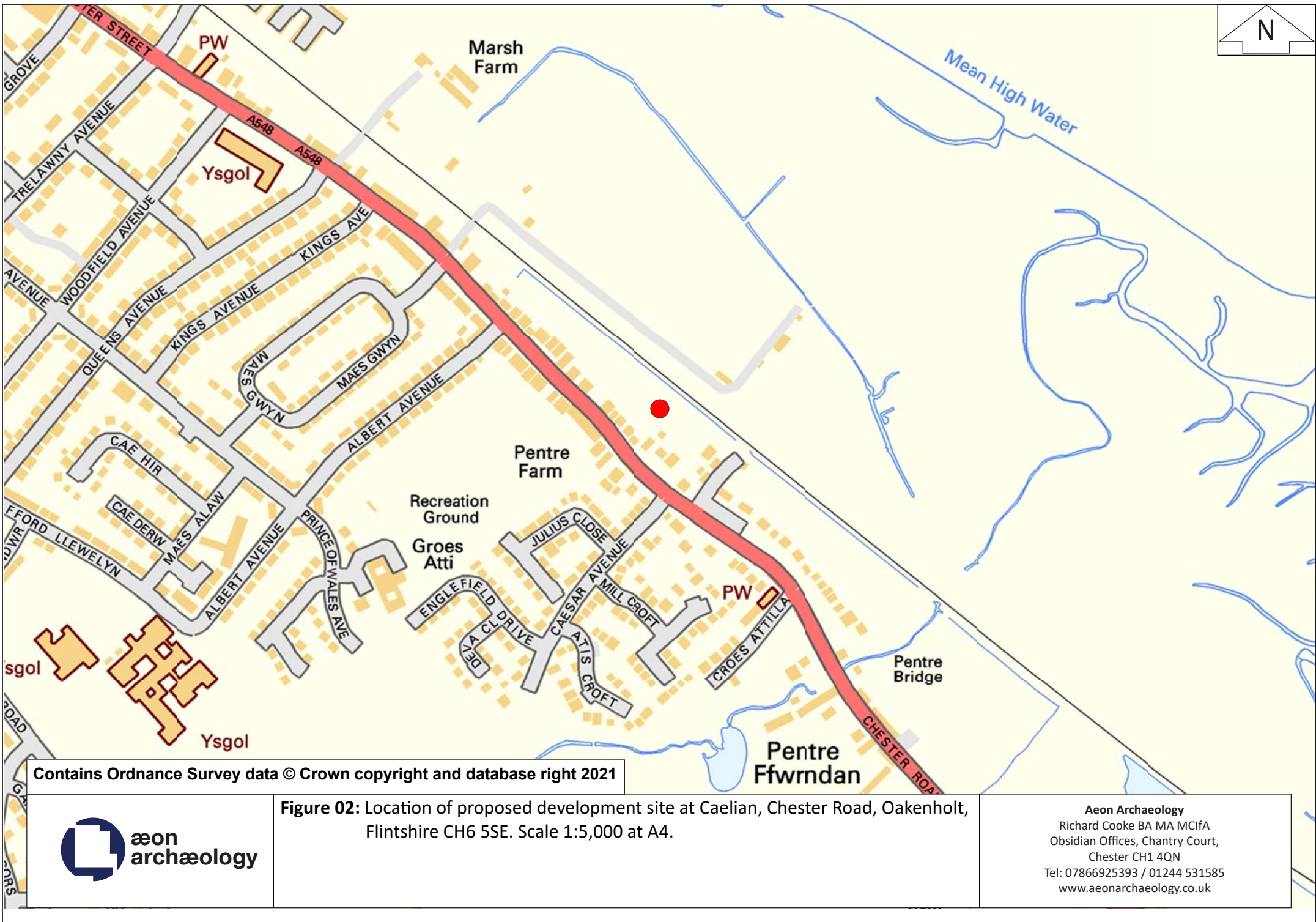


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Figure 01: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:20,000 at A4.

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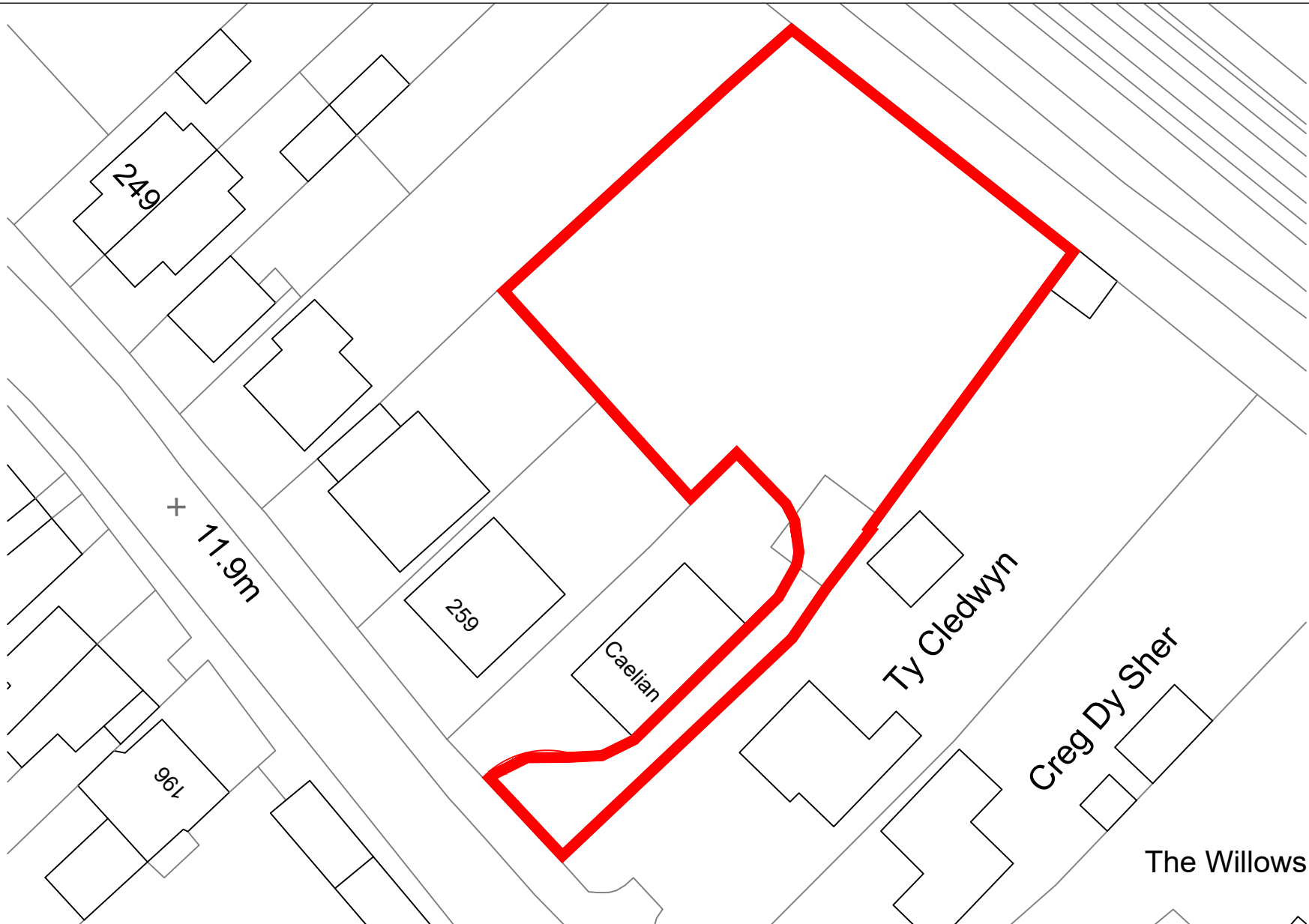


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Figure 02: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:5,000 at A4.

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Figure 03: Location of proposed development site at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:500 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 Country 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 policies 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 reinstatement and health and safety protection measures will be agreed with the Client and the DMA at CPAT.

The size, location and orientation of the evaluation trenches 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 4 x evaluation trenches of the following dimensions (figure 04):

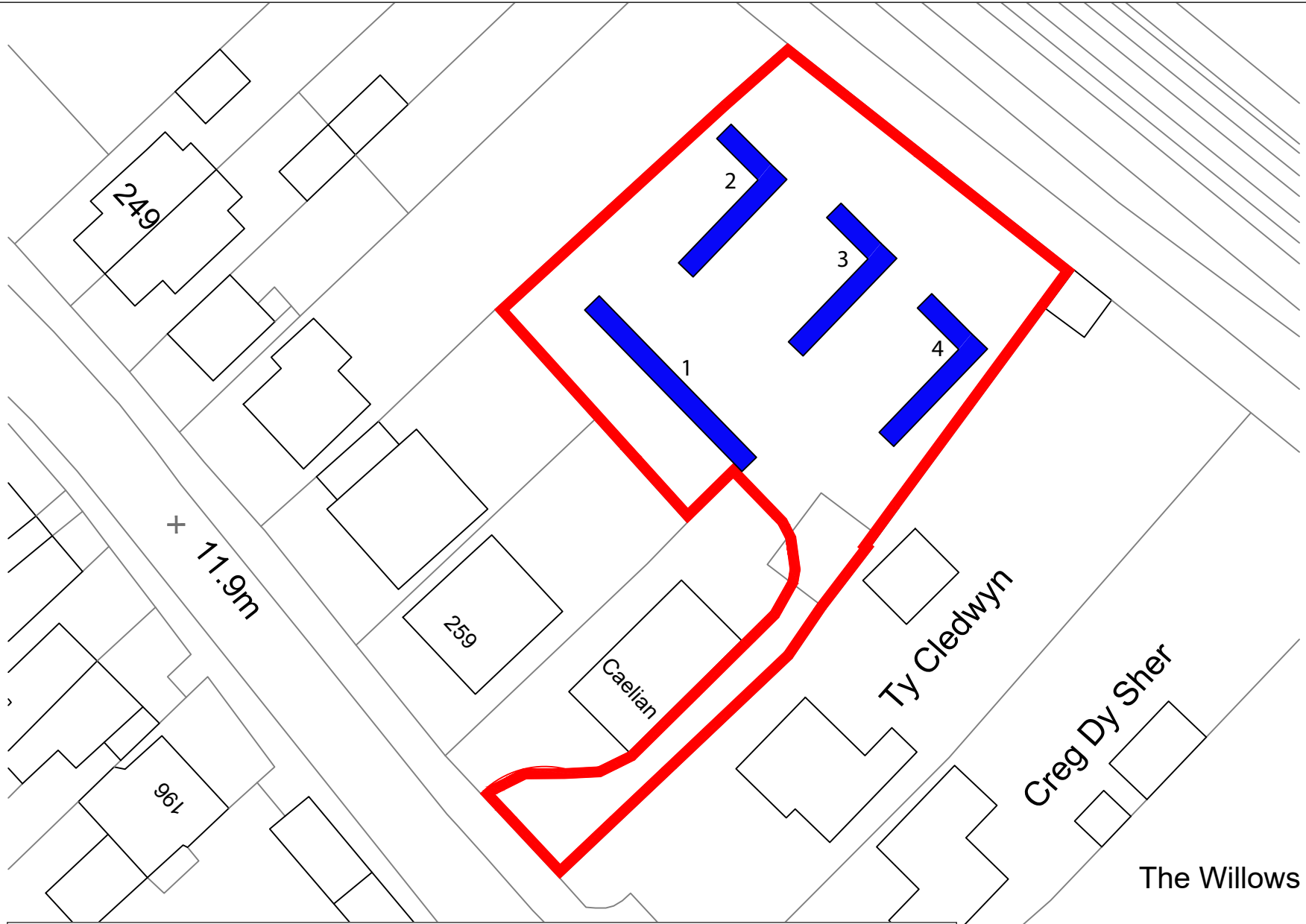
- Test Trench 1: measuring 20m by 1.8m and located over the proposed new access driveway.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 1.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 2.
- Test Trench 2: L-shaped trench measuring 12m by 1.8m and 7m by 1.8m, located over dwelling number 3.

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 evaluation 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 Flintshire.



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Figure 04: Location of proposed evaluation trenches at Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE. Scale 1:500 at A4.

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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 10.0.

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-evaluation 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); *Submission of Data to the Welsh Historic Environment Records (HERs)* (2018 v1.0); and in the Chartered Institute for Archaeologists *Standard and Guidance for an archaeological evaluation* (2020) 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.

5.2 Post-evaluation 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 evaluation 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.
- 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.
- A bibliography of sources consulted.

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.

6.0 DIGITAL DATA MANAGEMENT PLAN

6.1 Type of study

Archaeological evaluation on land to the rear of Caelian, Chester Road, Oakenholt, Flintshire CH6 5SE, hereafter the Site (centred on NGR SJ 25397 72383).

6.2 Types of data

- Photographs (RAW)
- Context sheets (paper)
- Photographic register (paper)
- Drawings (drafting film)
- Misc registers (paper)
- Compiled report

6.3 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*).

Compiled report (including figures and plates) as *.PDF* files.

6.4 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

6.5 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.

6.6 Managing, storing and curating data.

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

6.7 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.

6.8 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 Oasis 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.

6.9 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.

6.10 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 Oasis websites. Requests can also be made for data through the regional HER's and directly to Aeon Archaeology (info@aeonarchaeology.co.uk).

6.11 Governance of access

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

6.12 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.

6.13 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.

6.14 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.

6.15 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.

6.16 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

7.0 FURTHER ARCHAEOLOGICAL WORKS

If archaeological features are encountered that cannot satisfactorily be characterised within the limits of the evaluation then further archaeological works may be required. This may involve the excavation of additional test pits or the extension of the limits of existing test pits. This will require the submission of new cost estimates to the Client and may be subject to a separate WSI, to be agreed with the DMA at CPAT prior to implementation.

8.0 ENVIRONMENTAL SAMPLES

If necessary, 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 linear 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)

9.0 HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the DMA at CPAT 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.

10.0 SMALL FINDS

The vast majority of finds recovered from archaeological excavations comprise pottery fragments, bone, environmental and charcoal samples, and non-valuable metal items such as nails. Often many of these finds become unstable (i.e. they begin to disintegrate) when removed from the ground. All finds are the property of the landowner; however, it is recommended that all finds are donated to an appropriate museum where they can receive specialist treatment and study. Access to finds must be granted to Aeon Archaeology for a reasonable period to allow for analysis and for 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 fieldwork phase. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the DMA at CPAT. There will be a presumption against the disposal of archaeological finds with the exception of unstratified items dating to the twentieth or twenty-first centuries AD which will be recorded by material, type, form, identification and weight, and discarded.

All finds will be collected and processed including those found within spoil tips. Their location will be recorded; 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 finds 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.

11.0 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.

12.0 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 two months of the completion of the fieldwork and sent to the Client and the DMA at CPAT 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 DMA at CPAT and to 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 project report and archive will adhere to the Welsh Trusts' and Cadw's *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018) including the translation of a non-technical summary into the medium of Welsh.

13.0 STAFF & TIMETABLE

13.1 Staff

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

13.2 Timetable

The archaeological evaluation can currently be undertaken from June 2021, although the Client is encouraged to give as much notice as possible to Aeon Archaeology as project commitments are currently high.

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

- 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): £100,000

The current period expires 07/09/21

Professional Indemnity Insurance

- Limit of Indemnity £500,000 any one claim

The current period expires 07/09/21

16.0 GENERAL

All project staff will adhere to the *Code of Conduct of the Chartered Institute for Archaeologists*.

The project will follow the requirements set down in the *Standard and Guidance for Archaeological Evaluation* prepared by the Chartered Institute for Archaeologists.

A Method Statement and Risk Assessment will be prepared prior to the commencement of fieldwork and circulated to all staff concerned.

Please note the following:

Aeon Archaeology will not be held responsible for any delays to the work programme resulting from the discovery of archaeological sites or finds.

17.0 SPECIALISTS

Specialist advice required will be sought from the following list if required:

- 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: Oxford Archaeology
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Waterlogged environmental: Dr Mike Allen, Allen Environmental Archaeology.
- Environmental samples: Oxford Archaeology
- Numismatics: Peter Guest, Barbican Research Associates.
- Pottery (all periods): Oxford Archaeology
- Clay pipe: Oxford Archaeology

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)

