Results of Archaeological Evaluation (Evaluation Trenching) at

Tyddyn Fletcher, Ffordd Llanberis, Caernarfon

NGR SH 49268 62780 (Central Point)

Project Number CR247-2024B

CR ARCHAEOLOGY

Compiled by C. Rees and M. Jones

On Behalf of Adra (Tai) Cyfyngedig

Summary

CR Archaeology were instructed by Adra (Tai) Cyfyngedig to conduct an Archaeological Evaluation (Trenching) at the proposed site of a new residential development. The site is located on land adjacent to Ffordd Llanberis (A4086), Caernarfon on the eastern outskirts of the town.

The previous phase of works had provided strong evidence from both the LiDAR data and the geophysical survey that the Roman Road from Canovium to Segontium may have passed through the site. With the exception of the potential stretch of the Roman Road, the geophysical survey uncovered little evidence of archaeological activity.

Nine evaluation trenches were excavated with a well-constructed land drain uncovered in one trench. Areas of stone cobbling were uncovered in 2 trenches with a possible patch of cobbling in a third. Two of these trenches correspond with the proposed location of the Roman Road. Artefactual material recovered from stratified positions within and beneath the cobbled areas was of late Medieval – Post Medieval date. It is therefore likely that the cobbling was built up over time, beginning in the late Medieval period with later maintenance and repair. This activity is believed to be associated with the nearby Cibyn y Mwr (later referred to as Cibyn) farmstead. This structure pre-dates the production of the 1838 Tithe map of the area. The archaeological evidence therefore points to a Medieval or early Post Medieval origin for the feature previously identified as a Roman road. No Roman material was recovered during the excavation.

Crynodeb

Cyfarwyddwyd CR Archaeology gan Adra (Tai) Cyfyngedig i gynnal Gwerthusiad Archaeolegol (Cloddio) ar safle arfaethedig datblygiad preswyl newydd. Mae'r safle wedi ei leoli ar dir gerllaw Ffordd Llanberis (A4086), Caernarfon ar gyrion dwyreiniol y dref.

Roedd cam blaenorol y gwaith wedi darparu tystiolaeth gref o ddata LiDAR a'r arolwg geoffisegol y gallai'r Ffordd Rufeinig o Canovium i Segontium fod wedi mynd drwy'r safle. Ac eithrio'r darn posibl o'r Ffordd Rufeinig, ychydig o dystiolaeth a ddatgelodd yr arolwg geoffisegol o weithgarwch archaeolegol.

Cloddiwyd naw ffos werthuso a dadorchuddiwyd draen tir wedi'i adeiladu'n dda mewn un ffos. Datgelwyd ardaloedd o gerrig cobl mewn 2 ffos gyda darn posibl o goblau mewn traean ohonynt. Mae dwy o'r ffosydd hyn yn cyfateb i leoliad arfaethedig y Ffordd Rufeinig. Roedd deunydd arteffactaidd a adferwyd o safleoedd haenedig o fewn ac o dan yr ardaloedd coblog yn dyddio o ddiwedd y cyfnod Canoloesol – Ôl-ganoloesol. Mae'n debygol felly fod y coblau wedi cronni dros amser, gan ddechrau yn y cyfnod Canoloesol hwyr gyda gwaith cynnal a chadw ac atgyweirio diweddarach. Credir bod y gweithgarwch hwn yn gysylltiedig â fferm Cibyn y Mwr gerllaw (a alwyd yn ddiweddarach fel Cibyn). Mae'r strwythur hwn yn rhagddyddio cynhyrchu map Degwm 1838 o'r ardal. Mae'r dystiolaeth archaeolegol felly'n pwyntio at darddiad Canoloesol neu Ôl-ganoloesol cynnar i'r nodwedd a adnabuwyd yn flaenorol fel ffordd Rufeinig. Ni ddaethpwyd o hyd i unrhyw ddeunydd Rhufeinig yn ystod y cloddiad.

Results of Archaeological Evaluation (Evaluation Trenching) at Tyddyn Fletcher, Ffordd Llanberis, Caernarfon

Planning Application Number:	Pre-Application (Enquiry Number Y23/0562)
National Grid Reference:	SH 49268 62780 (Central Point)
Client:	Adra (Tai) Cyfyngedig
Report Author:	Catherine Rees and Matthew Jones
Report Number:	CR247-2025
Date:	03/02/2025

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1.0 Introduction

CR Archaeology were instructed by Adra (Tai) Cyfyngedig to conduct an Archaeological Evaluation (Trenching) at the proposed site of a new residential development (Appendix A).

The site is located on land adjacent to Ffordd Llanberis (A4086), Caernarfon on the eastern outskirts of the town (Figure 1). The proposed development area is currently in agricultural use.

The site is approximately 650m from Segontium Roman Fort (PRN 3089, Scheduled Monument CN006), and it was suggested that a stretch of the Roman road between Segontium and Canovium (PRN 17856/ PRN 36425) may cross the site. The site is also located approximately 400m from the extensive area of Roman and Early Medieval activity excavated at Ysgol yr Hendre (Kenney and Parry 2012 & 2013, Event PRN 44569, 44349). It was noted that a Bronze Age burial urn was discovered in 1946 during the construction of the adjacent housing estate (PRN 3101).

This document has been prepared to supply the client and statutory bodies including the Local Planning Authority Archaeologist with information as to the archaeological potential, impact and constraints on the aforementioned scheme. It documents the results of the second phase of works following the completion of a Desk Based Assessment, Walkover Survey and Geophysical Survey (document CR247-2024). The previous works examined the historic context and archaeological potential of the proposed development area. The Desk Based Assessment showed that as an undeveloped site within an area of known archaeological activity there is a high potential that archaeological remains may be encountered. The site does however lie outside of the immediate environs of the Segontium Roman Fort and the Early Medieval cemetery at Ysgol yr Hendre.

Geophysical survey identified a linear anomaly in the approximate proposed location of Roman Road PRN 17856. No other features of likely archaeological origin were identified through the survey, although magnetic susceptibility samples showed a concentration of high value samples in the western side of the larger field, away from the line of the Roman road which was interpreted as possibly indicative of undetected archaeological activity. Nine evaluation trenches were excavated during this phase of work, eight which targeted anomalies identified through geophysical survey, and one which was located in an area with no features identified. Archaeological remains of Late Medieval and Post Medieval date were uncovered in four of the nine trenches.

Despite the circumstantial evidence that the route of the Segontium - Canovium Roman road (overall PRN 3842, elements PRN 17856, PRN 36425) passed through the proposed development site, the possible feature identified through the LiDAR/geophysical survey was found to be an area of cobbling which was picked up in at least 1 of the trenches (Trench 4). Although outside the area covered by the possible linear feature, an area of hardstanding was also uncovered in Trench 6. It is possible that a small quantity of cobbled stone within Trench 5 topsoil was also related to this spread.

Artefactual material recovered from stratified positions within and beneath the cobbled areas was of late Medieval – Post Medieval date. It is likely that the cobbling was built up over time, beginning in the late Medieval period with later maintenance and repair. This activity is believed to be associated with the nearby Cibyn y Mwr (later referred to as Cibyn) farmstead. This structure pre-dates the production of the 1838 Tithe map of the area. The archaeological evidence therefore points to a Medieval or early Post Medieval origin for the feature previously identified as a Roman road. No Roman material was recovered during the excavation.

2.0 Project Aims & Objectives

The aim of this programme of works was to undertake Archaeological Evaluation Trenching at the proposed development site. Eight evaluation trenches targeted anomalies identified through geophysical survey. A ninth trench was located in an area with no features identified to examine the potential for unidentified features to survive at the site.

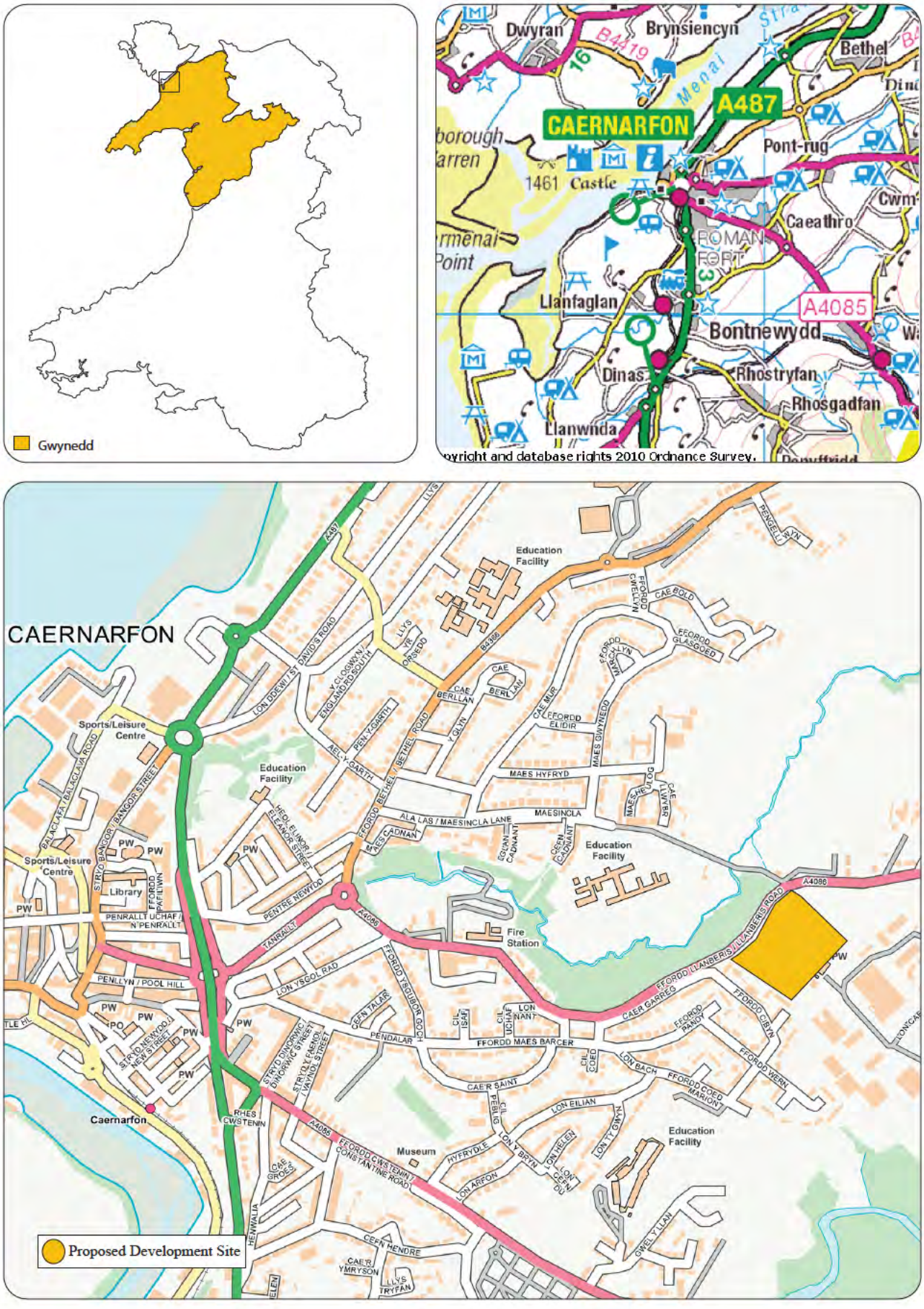

Figure 1. Site Location Map

(Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2018)

It aimed to examine the potential archaeological resource surviving at the site and to provide information which will be utilised to determine an appropriate methodology for any further archaeological mitigation which may be required at the site.

The programme of archaeological works also aims to assess the survival, character and date of any archaeological remains uncovered and to excavate, record and analyse all archaeological remains uncovered within the trenches.

This project aims to fulfil the criteria for undertaking an Archaeological Field Evaluation as specified in the CIfA Standard and Guidance documents (2023 updates - https://www.archaeologists.net /codes/cifa).

It is intended that this document be utilised to inform further archaeological planning decisions and conditions at the site.

The objectives of this programme of works were:

- To make full and effective use of the resulting information to establish the archaeological significance of the site
- To assess the presence, survival, character and date of any archaeological remains
- To excavate/record any archaeological remains uncovered.
- To help inform future decision making, design solutions, further evaluation & mitigation strategies.

3.0 Scheme of Works - Methodology

The work undertaken at the site was an Archaeological Evaluation (Evaluation Trenches) and the following section details the methodology for the research, site work, post excavation and archiving associated with the project.

3.1 Desk Based Research

A complete and coherent history of the site was compiled during the previous phase of works. This has been utilised in the interpretation of the results of the trenching works. Additional research was undertaken as necessary following the positive trenching result.

The works were carried out accordance with the CIfA Standards and Guidance.

This material forms the historical background for this archaeological report and was utilised to aid the interpretation of the results of the evaluation trenching.

3.2 Methodology for Archaeological Evaluation Trenching

Nine evaluation trenches measuring 1.8m x 30m were excavated within the proposed development site using a mechanical excavator fitted with a toothless bucket. The trenches were predominantly targeted on features identified during the geophysical survey, with one trench located in an area with no obvious archaeological features. The trench array is shown in figure 2.

All machine excavation was supervised by an archaeologist from CR Archaeology. The trenches were excavated until an archaeological horizon or the bedrock/natural was reached.

All archaeological features, structures or remains identified in the course of the evaluation were trowel cleaned by hand. Investigation of features, structures and deposits was sufficient to determine their character, date, significance and quality.

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No features yielded suitable material for dating/environmental processing.

A basic photographic record of the site was made prior to the commencement of works, which will be used for reference and to aid with the interpretation of the site.

Due to challenging weather conditions including heavy rain it was necessary to machine excavate soakaways and drainage channels in order to excavate trenches 4, 5, and 6. This was done under archaeological supervision and the positions of these channels recorded.

The works were carried out in accordance with the CIfA Standard and Guidance documents for Archaeological Field Evaluation and Excavation (2023 revision).

3.2.1 Recording

The record forms at CR Archaeology are based on the Historic England system and full written, graphic and photographic records were made in accordance with the Historic England *Field Recording Manual*. The written record comprises completed *pro-forma* record sheets.

Plans, sections and elevations were produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections were prepared as appropriate showing the sequence and depths of deposits. All drawings were numbered and listed in a drawing register, with drawing numbers cross-referenced to written site records. A 'Harris matrix' diagram was constructed for the excavated area.

A high-resolution 20 mega-pixel Sony Alpha digital camera was used to create a photographic record of the site. This is comprised of photographs of archaeological features and appropriate groups of features and structures. General photographs were also be taken in the event of a negative result.

All photographic records were indexed and cross-referenced to written site records. Details concerning subject and direction of view were maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

3.2.2 Additional Mitigation/Contingency Measures

No additional mitigation or contingency measures were required during these works.

3.2.3 Recovery, Processing and Curation of Artefactual Material

All recovered artefactual material was retained, cleaned, labelled and stored according to *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (Updated 2020) and First Aid for Finds (Watkinson & Neal* 2001). The aim will be to create a stable, ordered, well-documented, accessible material archive forming a resource for current and future research (CIfA 2008, revised 2014, updated 2020).

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds. Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval and medieval material was produced by Matthew Jones.

Following analysis, it is proposed that archaeological material recovered, and the paper/digital archive will be deposited in the local museum. A copy of the digital archive will be deposited with the RCAHMW.

Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition. The works will be carried out in accordance with The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Field Evaluation* (2023).

3.2.3.1 Material Selection Strategy
The material selected for retention will be determined in accordance with the National Panel for Archaeological Archives in Wales Archaeological Archives: Selection, Retention and Disposal Guidelines for Wales (http://www.welshmuseumsfederation.org/uploads/online%20resources/National%20Archaeology%20standards%20wales%202017/natstandardsfinal2019.pdf).

3.2.3.2 Archive Compilation
All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected, including records and other specialist materials. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report* (*P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive* (*P3)* will be checked and ordered according to *MoRPHE* criteria. It is hoped that any archive/artefactual material created/discovered during this archaeological project will be deposited at the county museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition. In the event that no artefactual material is recovered or that the material is retained by the landowner the paper/digital archive will be deposited at the RCAHMW.

A copy of the digital archive will be deposited with the Heneb (GAT)HER and with the RCAHMW. RCAHMW will be notified in advance of the deposition of any archive created by this archaeological project and archive material will be deposited in accordance with the organisation's terms and conditions for archive deposition.

3.2.3.3 Data Management Policy
A site-specific Data Management Plan has been created based upon the Historic England Archaeological Digital Archiving Protocol (ADAPt) Digital Preservation Policy (www.historicengland.org.uk/content/docs/research/adapt-digital-preservation-policy/). The format is based upon the Historic England pro forma document (www.historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt -toolkit/). The preliminary document is included as Appendix B.

3.3 Timetable for Proposed Works
The site works commenced on 6th January 2025 and were undertaken over a week. Further time was allotted for research, report compilation and site archiving.

3.4 Staffing
The project was managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork will be conducted by Matthew Jones and Dr Ian Brooks.

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

3.5 Monitoring
The project was subject to monitoring Heneb (Gwynedd) Archaeological Planning Services who were kept informed of site progress and the results of the works.

3.6 Health and Safety
A risk assessment was conducted prior to the commencement of works and site staff were familiarised with its contents. A first aid kit was located in the site vehicle.

All staff were issued with appropriate Personal Protective Equipment (PPE) for the site work.

- Hi-visibility vests (EN471)
- Mobile Telephone
- Steel toe capped boots
- Hard Hat

3.7 The Report
The report clearly, and accurately incorporates information gained from the programme of archaeological works. It presents the documentary evidence gathered in such a way as to create a clear and coherent record. The report contains a site plan showing the locations of photographs taken.

The final report includes:

- A bilingual summary
- A copy of the agreed Written Scheme of Investigation
- A location plan
- A plan showing the locations of the evaluation trenches
- All identified features and significant finds plotted on an appropriately scaled plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted.

A copy of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A PDF digital copy of the reports will be submitted to Heneb as part of the formal submission. A digital Adobe PDF version of the final report and will be lodged with the Historic Environment Record within six months of completion of post excavation works. The 2018 Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

A short article will be submitted to the Archaeology in Wales Journal.

3.7.1 Copyright
CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project.

4.0 Geological Context
4.1 Topography
The site is located on land adjacent to Ffordd Llanberis (A4086), Caernarfon on the eastern outskirts of the town (Figure 1). The proposed development area is currently in agricultural use.

4.2 Geology
The bedrock geology at the site is recorded as "*Nant Ffrancon Subgroup - Siltstone. Sedimentary bedrock formed between 477.7 and 449 million years ago during the Ordovician period*" (https://geologyviewer.bgs.ac.uk/).

The site superficial geology is recorded as "*Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period*" (https://geologyviewer.bgs.ac.uk/).

5.0 Historical Background

The following section was compiled as an element of CR247-2024. Relevant sections have been duplicated below given the relevance of this research to the results of the archaeological trenching works.

In order to identify the character of archaeological remains in the vicinity of the site a search of the Gwynedd HER was conducted examining an area within a 500m radius of the proposed works (the grid reference for the search is taken as the centre point of the development area). This was expanded to 1000m to examine general trends, but this data has not been discussed in detail.

There were 39 HER entries for sites within a 500m search radius of the centre of the proposed development area - 1 entry of Prehistoric date, 16 entries of Roman date, 5 entries of Early Medieval date, 3 entries of Medieval date, 5 entries of Post Medieval date, and 9 entries of Unknown date. The majority of the results (31 entries) were assigned to features identified during the archaeological works associated with the construction of Ysgol yr Hendre to the south-west of the proposed development site.
When the search area was extended to a 1000m radius the HER returned 157 entries - 10 entries of Prehistoric date, 63 entries of Roman date, 11 entries of Early Medieval date, 5 entries of Medieval date, 32 entries of Post Medieval date, 18 entries of Modern date, 16 entries of Unknown date and 2 entries of mixed date. This increase is due to the search now encompassing a larger portion of the historic town of Caernarfon, including the Roman Fort of Segontium and surrounding environs.

Roman/Romano-British
There are 16 records of Roman date recorded within the 500m search radius. The site is located approximately 780m to the north-east of Segontium Roman Fort (PRN 3089), and approximately 400m from the area of Roman and Early Medieval activity excavated at Ysgol yr Hendre (Kenney and Parry 2012 & 2013, Event PRN 44569, 44349). Within the 500m search radius 3 of the HER records were related to the proposed routes of Roman Roads, with the remaining 13 records recording pit oven features uncovered during the aforementioned Ysgol yr Hendre excavations.

The Gwynedd Archaeological Trust '*Roman Roads in North-West Wales*' project identified 4 entries for possible roads crossing the proposed development site:

PRN 17561 - "*On leaving the NE gate of Segontium the road must have run almost for some 2 ¾ miles along the summit of the ridge of land which at first divides the Cadnant Valley from the course of the Seiont and further on forms the NW boundary of the Cegin Valley. Projected line only*".

PRN 17829 - "*Waddelove (1999, 237-45) proposes a slightly more N route along the north Wales coast than RR67c and suggests that the road leads to a fort at Penrhyn. The siting of a fort here has some topographical merit but no evidence has so far been uncovered. The route itself follows modern features and is based on topological arguments. If the recent cropmark evidence along RR67c proves to be significant this route can probably be largely discounted*".

PRN 17856 - "*Presumed alignment of road from portion on aerial photograph SNP 2/10/86 5186149 to Segontium, nothing visible on the ground, mostly built over*". A geophysical anomaly was identified in this location which appears to confirm the location of the road.

PRN 36425 - Possible stretch visible on Lidar included in Roman Roads dataset but PRN location not recorded in HER. Segment of PRN 17856.

None of these stretches of road are confirmed, and it was considered a strong likelihood that the Segontium - Canovium road (overall PRN 3842, elements PRN 17856, PRN 36425) passed through the proposed development site. This hypothesis was initially supported by the results of LiDAR and a possible anomaly noted on the geophysical survey. Excavation of a section of the feature was conducted within this phase of works and although it was confirmed that there was a linear cobbled surface, the

archaeological evidence points to a medieval or early post medieval origin for the feature (see section 6).

Cartographic Sources
The earliest cartographic source which could be sourced showing the proposed development plot was the 1838 Tithe Map. This document shows the plot largely as it currently appears with the single difference being the linking of the south-western field to the Cibyn y Mwr farmstead (later referred to as Cibyn). The fields are numbered 1560 and 1561 - Cae Mawr and Cae Main[1] with Cae Mawr occupied by Robert Jones and Cae Main by Isaac Williams. Both were in use as pasture. The owner of the plots is listed as John Millington "*the Receiver appointed in the suit William Thomas and Others V Henry Rumsey Williams and Others*". Interestingly, although the fields appear to link to Cibyn y Mwr they are not in the same ownership as the farm was in the ownership of the Caernarvon Corporation.

The First Edition Ordnance Survey map of the area (published 1888) shows that although the field outlines remain unchanged, field 1 has been subdivided into 3 smaller plots, and a small structure has been built against the south-western field boundary. A feature corresponding with the position of the boundary crossing the approximated centre of the field on a south-west - north-east axis appears on the LiDAR of the site. The subdivision of field 1 was a relatively short lived change and by the revision of the Ordnance Survey data in 1899 (published 1901) it has been removed, and the field outlines are shown as they appear now. There are no further changes shown on the later historic Ordnance Survey maps with the structure surviving until at least the publication of the 1949 edition.

6.0 Results of Archaeological Works

Nine evaluation trenches measuring 1.8m x 30m were excavated within the proposed development site using a mechanical excavator fitted with a toothless bucket. The trenches were predominantly targeted on features identified during the geophysical survey, with one trench located in an area with no obvious archaeological features.

6.1.0 Trench 1. (Plate 1, Figure 2).

Trench 1 was orientated on an approximately NE - SW axis and located to examine an area of ferromagnetic response identified during through geophysical survey.

The trench was machine excavated to a maximum depth of 0.55 m. Two deposits were identified in the trench - (101) was a mid-brown silty clay topsoil which varied between 0.5 - 0.53m in depth and (102) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

No archaeological finds or features were uncovered in this trench. It is presumed therefore that the ferromagnetic response was due to variations in the underlying natural including iron panning.

6.1.1 Trench 2. (Plates 2 - 6, Figure 2).

Trench 2 was orientated on an approximately NW - SE axis. It was located to examine linear features identified through the geophysical survey. The trench was repositioned slightly to allow for the movement of trench 3 away from overhead cables.

The trench was excavated to a maximum depth of 0.55 m. Two deposits were identified in the trench - (201) was a mid-brown silty clay topsoil which varied between 0.42 - 0.50m in depth and (202) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

The linear feature identified through geophysical survey was a notably well-constructed land drain. The drain crossed the trench on an approximately E - W axis and was cut into the underlying natural. The cut

[1] The field names roughly translate as Big Field and Slim Field.

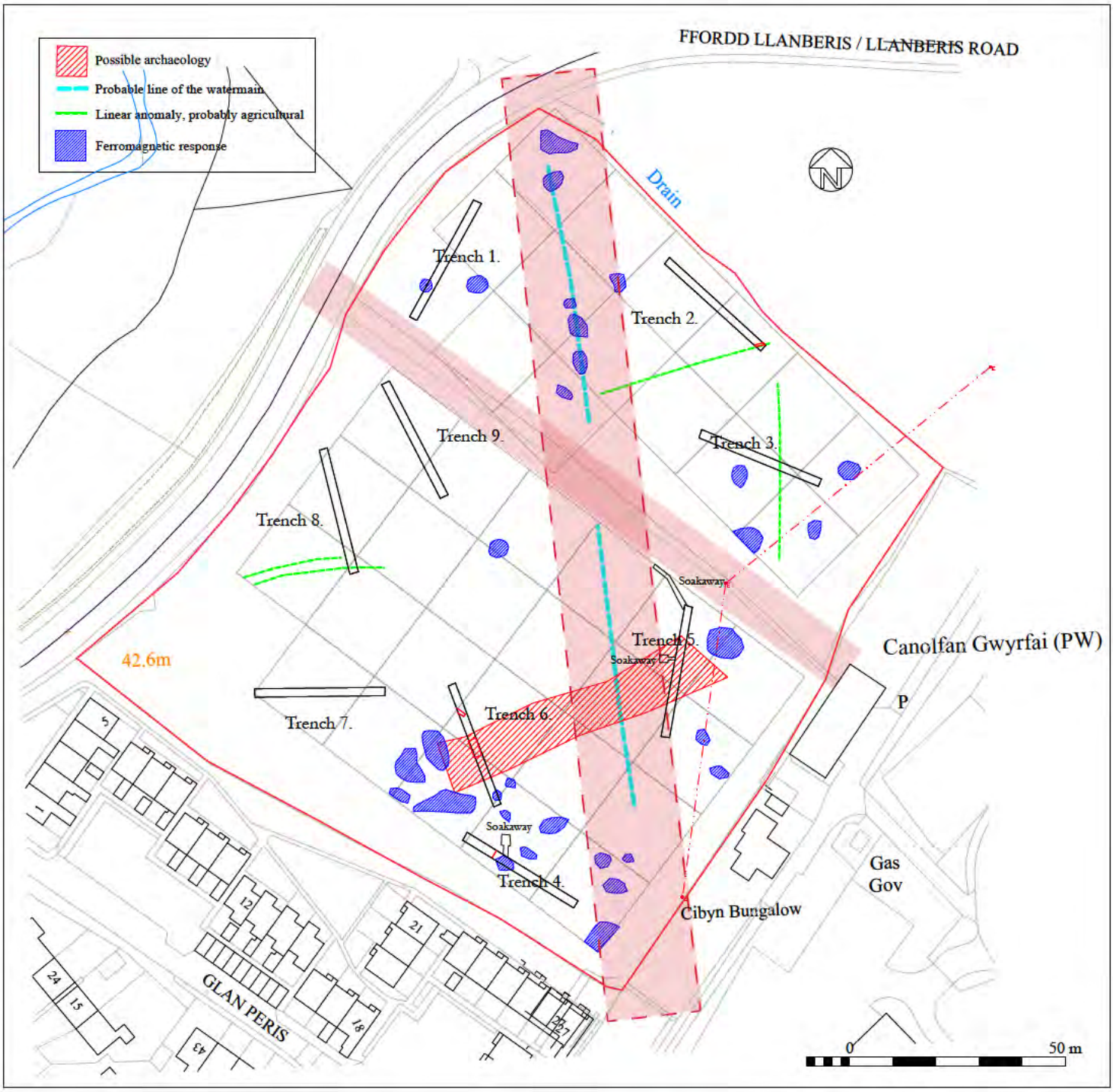

Figure 2. Trench Location Plan Overlain on Geophysical Survey Results

Plate 1. Tyddyn Fletcher Trench 1

Plate 2. Tyddyn Fletcher Trench 2

Plate 3. Trench 2 Land Drain Pre-Excavation

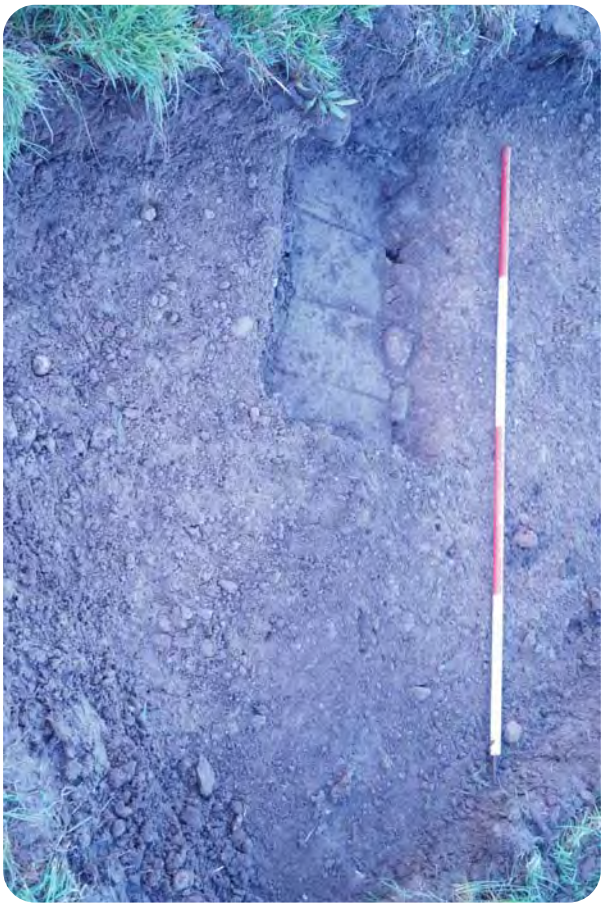

Plate 4. Trench 2 Land Drain Slate Capping Slabs

Plate 5. Trench 2 - Land Drain Slate Capping Slabs and Stone Sides

Plate 6. Trench 2 - Land Drain Slate Capping Slabs and Stone Sides

Plate 7. Tyddyn Fletcher Trench 3

Plate 8. Trench 4 - Cobbled Surface During Cleaning

[203] was 0.50m in width, with a sharp the break of slope, straight sides and a flat base.

The base of the drain was lined with broken slate and small stones. The sides of the drain were of stone construction (204) with rounded stone and broken slate used as infill in the gaps. The drain was capped with broken slate slabs, some of which were observed to have machine (hunter saw) cut edges. This would date the slate capping as being post-1850 in date. The area between the capping and top of cut was filled with context (205) - a mid-brown clay silt with frequent inclusions of small angular stone and slate fragments. The drain was still in use with running water visible, and therefore the capstones were replaced, and care was taken to ensure no material was blocking the drain before the trench was backfilled.

Artifacts recovered from context (205) were all of 19th century date. They included Buckley pottery, Blue and White ware, and clay tobacco pipe stems.

6.1.2 Trench 3 (Plate 7, Figure 2).
Trench 3 was orientated on an approximately NW - SE axis and located to examine an area of ferromagnetic response and a linear feature identified during through geophysical survey. The trench was repositioned to move the trench from beneath overhead cables.

It was excavated to a maximum depth of 0.45 m. Two deposits were identified in the trench - (301) was a mid-brown silty clay topsoil and (302) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

No archaeological finds or features were uncovered in this trench. It is presumed therefore that the ferromagnetic response was due to variations in the underlying natural including iron panning. The linear feature was presumably not excavated below the depth of the topsoil and of modern origin.

6.1.3 Trench 4 (Plates 8 - 11, Figures 2 - 3).
Trench 4 was orientated on an approximately NW - SE axis and was located to examine an area of ferromagnetic response identified during through geophysical survey. Four deposits were identified in the trench- (401) was a mid-brown silty clay topsoil which varied in depth between 0.24 - 0.42 m and (402) which was the underlying natural. This deposit was a yellow clay with gravel with occasional patches of iron pan.

A single feature was identified in the northwestern end of the trench. Context (403) was a rough surface constructed of small and medium rounded cobbles. The soil matrix between the cobbles in context (403) contained pottery of 18th and 19th century date.

Layer (403) appears to be a secondary or patching layer overlying a previous cobbled surface and upon removal a lower level of cobbles, layer (404) was uncovered. This layer was of the same construction, and within context (404) a rough line of larger stones was uncovered which protrude in layer (403). Layer (403) was constructed to create a flat surface with the height of these stones.

The cobbled area was approximately 9 m in length and 2 m wide within the trench and survived to a depth total 0.23m. 17th - 19th century pottery were recovered between these cobbles. There was also a 17th century trade token of unknown origin within the soil matrix of context (404).

A soak away had to be added to this trench due to the heavy rain and this area was noted as particularly susceptible to becoming waterlogged. This and the proximity to the Cibyn farmstead/additional structure noted on the historic Ordnance Survey mapping would indicate a surface associated with agricultural use.

Figure 3. Trench 4 - Trench Plan Showing Cobbled Surface

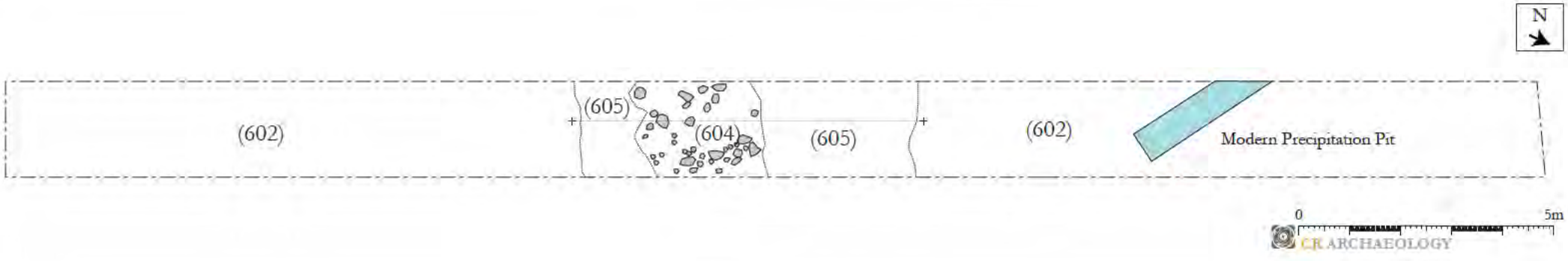

Figure 4. Trench 6 - Trench Plan Showing Cobbled Surface

Plate 9. Trench 4 - Section Trough Cobbled Surface Following Cleaning

Plate 10. Trench 4 - Section Trough Cobbled Surface Following Cleaning

Plate 11. Trench 4 - Post Excavation Photograph of Cobbled Surface Following Cleaning

Plate 12. Tyddyn Fletcher Trench 5 Following Cleaning

Plate 13. Trench 5 Following Cleaning Showing Small Area of Cobbles

Plate 14. Tyddyn Fletcher Trench 5 Following Cleaning

Plate 15. Tyddyn Fletcher Trench 6 Following Cleaning

Plate 16. Trench 6 - Cobbled Surface (604) Following Cleaning

Plate 17. Trench 6 - Section Through Cobbled Surface (604)

Plate 18. Trench 6 - Section Through Cobbled Surface (604)

Plate 19. Tyddyn Fletcher Trench 6 Following Cleaning

Plate 20. Tyddyn Fletcher Trench 7

Plate 21. Tyddyn Fletcher Trench 8

Plate 22. Tyddyn Fletcher Trench 9

6.1.4 Trench 5 (Plates 12 - 14, Figure 2)

Trench 5 was orientated on an approximately N- S axis and was located to examine an area of possible archaeology identified during through geophysical survey. Two deposits were identified in the trench- (501) was a mid-brown silty clay topsoil which varied in depth between 0.20 - 0.48 m and (502) which was the underlying natural. This deposit was a yellow clay with gravel with occasional patches of iron pan. A band of gravel and small stones was identified in the middle of the trench although this proved to be a change in the natural. Some rare medium size cobbles were noted towards the northern end of the trench, but it was unclear if they represented a feature.

Two small Buckley type fragments and an abraded fragment of pipe stem of 19th century date were recovered from the topsoil.

A soak away had to be added to this trench due to the heavy rain and this area was noted as particularly susceptible to becoming waterlogged.

6.1.5 Trench 6 (Plates 15 - 18, Figures 2 and 4)

Trench 6 was orientated on an approximately NW- SE axis and was located to examine an area of possible archaeology identified during through geophysical survey. Five contexts were identified within the trench- (601) was a mid-brown silty clay topsoil which varied in depth between 0.32 - 0.50 m and (602) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

Roughly in the centre of the trench a loose spread of cobbles was uncovered. The stones (604) lacked the coherence as a surface as was found in Trench 4 and were more widely spaced. The stones were within a mid-brown clay-silt soil matrix similar to the topsoil and there was a compacted layer of clay silt above the cobbles (603) which was removed as a cleaning/interface layer. A heavily abraded sherd of medieval pottery was recovered from deposit (603) together with late 18th and 19th century artifacts.

The stone spread (604) was approximately 5m in width and continued the full width of the trench. It was 0.24m in depth. A single heavily abraded sherd of medieval pottery together with late 18th and 19th century artifacts were recovered from this context.

Context (605) is the interface between the stone layer and the natural and was recorded separately as (605) to distinguish which artefacts were above or below the cobbling. A sherd of medieval pottery of the same type/fabric as recovered from (604), and a 16th - 17th century clay pipe tobacco bowl was recovered together with late 18th and 19th century artifacts.

6.1.6 Trench 7 (Plate 19).

Trench 7 was orientated on an E-W axis. It was excavated to a maximum depth of 0.40 m. Two deposits were identified in the trench - (701) was a mid-brown silty clay topsoil which varied in depth between 0.24 - 0.38 m and (702) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

No archaeological finds or features were uncovered in this trench.

6.1.7 Trench 8 (Plate 20).

Trench 8 was orientated on an NW-SE axis. It was excavated to a maximum depth of 0.50 m. Two deposits were identified in the trench - (801) was a mid-brown silty clay topsoil which varied in depth between 0.32 -0.48 m and (802) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

Two sherds of 19th to 20th century ceramic were recovered from the topsoil in this trench.

6.1.8 Trench 9 (Plate 21).

Trench 9 was orientated on an NW-SE axis. It was excavated to a maximum depth of 0.60 m. Two deposits were identified in the trench - (901) was a mid-brown silty clay topsoil which varied in depth between 0.50 - 0.56 m and (702) which was the underlying natural. This deposit was an orange-brown clay gravel with occasional patches of iron pan, and areas of yellow clay.

No archaeological finds or features were uncovered in this trench.

6.2 Artefactual Material

Artefactual material was predominantly Post Medieval in date with a single presumably prehistoric hammer stone and two sherds of late Medieval pottery. The Post Medieval assemblage was primarily comprised of pottery and clay tobacco pipe, with a lead token and iron nail also recovered.

6.2.1 Unstratified - From Backfill of Previous Soakaway Pit

Prehistoric

Stone

Hammer stone - A small grey ovel shaped granite cobble 111 cm long, 6 cm wide and 4 cm thick. One end was flattened by use as a hammer.

6.2.2 Trench 2

Context (205)

All artefactual material from this trench was of Post Medieval date.

Pottery

Coarse Ware - Buckley Ware (8 sherds)

- Eight body sherds with no distinguishing features. Orange fabric Buckley ware with a black iridescent internal glaze.

Blue and White Ware (5 sherds)

- Five body sherds, flat with decoration on one side. Possibly part of a plate or platter. None of the sherds connected. 19th century date.

Ceramic Tobacco Pipes (2 pieces)

- Pipe stem 2mm long with a 5 mm diameter and a 1.5 mm bore. 19th century date.

6.2.3 Trench 4

All artefactual material from this trench was of Post Medieval date.

Context (403)

Pottery

Coarse Ware - Buckley Ware (2 sherds)

- A single body sherd of orange fabric Buckley ware with a dark black iridescent glaze internally and banded ribbing inside and out. 19th century date.
- A single body sherd of orange fabric Buckley ware with a dark black, brown iridescent glaze externally and internally. 19th century date.

Ceramic Tobacco Pipes (4 pieces)

- Pipe stem 32 mm long with a 5 mm diameter and a 1 mm bore. 19th century date.
- Pipe stem 29 mm long with a 7 mm diameter and a 3 mm bore. 19th century date.
- Pipe stem 20 mm long with a 7 mm diameter and a 3 mm bore. 19th century date.
- Pipe stem 15 mm long with a 5 mm diameter and a 2 mm bore. 19th century date.

Context (404)

Pottery

Coarse Ware (2 sherds)

- Two sherds of cream fabric with a mottled brown (wood effect) internal and external glaze .0.2cm thick. 17th - 18th century date.

Slip Ware (1 sherd)

- A single sherd of pink fabric with frequent small grit inclusions. Decorated with brown slashed lines internally on a tan glaze which appears not to reach the top of the vessel. 17th - 18th century date.

Cistercian Ware (1 sherd)

- A small sherd with pink-grey fabric. Dark black iridescent external and internal glaze. 17th - 18th century date.

Metal (1 item)

Lead Trade Token (Figure 5)

- A circular lead trade token. 20 mm in diameter. 2mm thick. Weight 4 grams.

Figure 5. Lead Trade Token

The token is stamped slightly off-centre with a circular stamp with double banded edge. The stamp doesn't mark the whole face. Within the circle are the capital letters N G with a star above the central gap between the letters. The reverse is split into four sections by a raised cross, the top left section has a capital N with the top right section has the partial circular letter which could be the G.

Boon (1973) states that there appears to have been few trade tokens in use in Wales in the 17th century, with none conclusively identified as having been issued in Wales. The stamp on the token is similar to stamps used by 17th century clay tobacco pipe makers. Discussion with the clay pipe society failed to identify a comparable pipe maker's stamp although it was agreed that the design is characteristically 17th century.

An image search of trade tokens recorded by the Portable Antiquity Scheme database failed to identify a similar stamped decoration.

6.2.4 Trench 5

All material recovered from this trench was of 19th century date.

Context (501)

Pottery

Coarse Ware (2 sherds)

- Pink fabric with a black internal and external glaze, possibly Buckley ware. Form not distinguishable. 19th century date.
- Cream fabric with a mottled brown glaze with dark brown stripes. 19th century date.

Ceramic Tobacco Pipes (1 piece)

- Pipe stem 20 mm long with a 6 mm diameter and a 2 mm bore. 19th century date.

6.2.5 Trench 6

Material recovered from this trench was of 15th - 19th century date.

Context (603)

Pottery

Medieval (1 sherd)

- A chunky sherd with a dark grey fabric with occasional quartz grit inclusions. The exterior is oxidised orangey red with one large grit piece visible. The interior has a very worn yellow brown glaze. 15th - 17th century date.

Post Medieval

Coarse Ware

- A single sherd of orange fabric Buckley ware. Black iridescent internal and external glaze. Banded ribbing inside and out. 19th century date.
- Brown Glazed Ware. Partial flat base of a ceramic mug or tankard. Mottled brown (wood effect) internal and external glaze. The fabric is a cream colour with rare grit and quartz grit inclusions. 18th - 19th century date.
- Indistinct body sherd. Cream fabric with black iridescent external and internal glaze. 2mm thick. 19th century date.
- Indistinct body sherd. Cream fabric with a mottled brown (wood effect) internal and external glaze. 20mm thick. 18th - 19th century date.

White Ware (2 sherds)

- One indistinct body sherd. White internal and external glaze with an off-white fabric. 3mm thick. Likely 19th century date.
- A heavily damaged fragment of a hooped handle. White internal and external glaze with an off-white fabric. 19th century date.

Decorated White Ware (1 sherd)

- Plate sherd. White internal and external glaze with an off-white fabric. Fine black transfer decoration of a repeating pattern. 19th century date.

Blue and White Ware (1 sherd)

- The rim of a small plate or flared bowl. White internal and external glaze with an off-white fabric. Scalloped rim with a blue glaze. 19th century date.

Ceramic Tobacco Pipes (7 pieces)

- Fragment of a pipe bowl with a cut rim. 19th century date.
- Pipe stem 37 mm long with a 6 mm diameter and a 1cm bore. 19th century date.
- Pipe stem 34 mm long with a 6 mm diameter and a 1 mm bore. 19th century date.
- Pipe stem 34 mm long with a 9 mm diameter and a 1 mm bore. 19th century date.
- Pipe stem 31 mm long with a 4 mm diameter and a 2 mm bore. 19th century date.
- Pipe stem 27 mm long with a 6 mm diameter and a 2 mm bore. 19th century date.
- Pipe stem 14 mm long with a 7 mm diameter and a 2 mm bore. 19th century date.
- Pipe stem 12 mm long with a 5 mm diameter and a 2 mm bore. 19th century date.

Glass (1 sherd)

- A sherd of 15mm thick black bottle glass. Slightly concave. There are air bubbles within the glass fabric indicative of an 18th - 19th century date.

Metal *(1 item)*

- A heavily corroded iron nail. Hand made with a flat head. 18th - 19th century date.

Context (604)

Pottery

Medieval (1 sherd)

- An abraded sherd of green glaze pottery. Light pink fabric with frequent grey and quartz grit inclusions.

Post Medieval

White Ware (3 sherds)

- Two indistinct body sherds. White internal and external glaze. Off-white fabric. 3 mm in thickness.
- The base of a cup or bowl with a triangular tipped circular pedestal base 19th - early 20th century date.

Decorated White Ware (1 sherd)

- Plate sherd. Off-white fabric with a white internal and external glaze. Fine black transfer decoration of a repeating pattern.

Blue and White Ware (1 sherd)

- The rim of a small plate or flared bowl. White internal and external glaze. Off-white fabric. Scalloped rim with a blue glaze.

Coarse Ware (4 sherds)

- A single sherd of orange fabric Buckley ware. Black iridescent internal and external glaze. Banded ribbing inside and out. 19th century date.
- Brown Glazed Ware. Partial flat base of a ceramic mug or tankard. Mottled brown (wood effect) internal and external glaze. The fabric is a cream colour with rare grit and quartz grit inclusions. 18th - 19th century date.
- Indistinct body sherd. Cream coloured fabric with dark black iridescent external and internal glaze. 2 mm thick.
- Indistinct body sherd. Cream coloured fabric with a mottled brown (wood effect) external and internal glaze. 2 mm thick.

Ceramic Tobacco Pipes (8 pieces)

- Plain pipe bowl with partial attached stem and short flat spur. Bowl mouth diameter 20 mm. Pipe stem 20 mm long with an 8 mm diameter and a 1 mm bore. Dating range 1700 to 1770.
- Pipe stem 56 mm long with a 6 mm diameter and a 2 mm bore. 18th - 19th century date.
- Pipe stem 52 mm long with a 7 mm diameter and a 3 mm bore. 18th - 19th century date.
- Pipe stem 37 mm long with a 6 mm diameter and a 1 mm bore. 18th - 19th century date.
- Pipe stem 26 mm long with a 5 mm diameter and a 1 mm bore. 18th - 19th century date.
- Pipe stem 25 mm long with a 5 mm diameter and a 1 mm bore. 18th - 19th century date.
- Pipe stem 15 mm long with a 5 mm diameter and a 2 mm bore. 18th - 19th century date.
- Pipe stem 14 mm long with a 7 mm diameter and a 3 mm bore. 18th - 19th century date.
- Pipe stem 10 mm long with a 3 mm diameter and a 1 mm bore. 18th - 19th century date.

Context (605)

Ceramic

Medieval (1 sherd)

- An abraded sherd of green glaze pottery. Light pink fabric with frequent grey and quartz grit inclusions.

Coarse Ware (2 sherd)

- Sherd of orange fabric Buckley ware. Black iridescent external and internal glaze. Partial hooped handle is attached. Possible jug or brewing jar. 18th century date.
- A small sherd of Buckley fine ware. Form could not be identified. 18th - 19th century date.

Ceramic Tobacco Pipes (1 piece)

- Brown pipe bowl with a flat base. Bowl mouth diameter 10 mm. Milling around the rim. Date range 1610 to 1640.

6.2.6 Trench 8

Material recovered from this trench was of 19th - early 20th century date.

Context (801)

White Ware (2 sherds)

- Pedestal base with a white fabric and glaze. Base diameter 60 mm. Sherd height 20 mm. 19th - early 20th century date.
- Rim sherd of a plate with a white fabric and glaze. 19th - early 20th century date.

6.2.7 Discussion of Artefactual Material

With the exception of a hammer stone found as an unstratified item, the artificial material recovered from this evaluation date from the late Medieval period onwards. The majority of finds are of Post Medieval date.

Three sherds of late Medieval pottery were recovered from Trench 6 within a loose spread of cobbling. The contexts from which this material was recovered also contained Post Medieval material which would indicate that this material was residual, representing activity of this date in the area but not necessarily directly related to the surface itself. The other possibility is that the Medieval pottery is contemporary with the creation of the surface, and the later Post Medieval pottery represents. Trench 4 showed a similar pattern of a mixture of dated artifacts found within the patching or relaying of the cobbled area.

7.0 Conclusion

Despite circumstantial evidence that the route of the Segontium - Canovium Roman road (overall PRN 3842, elements PRN 17856, PRN 36425) passed through the proposed development site, the feature identified through the LiDAR/ geophysical survey was found to be an area of cobbling which was picked up in trenches 4 and 6. The surface was more coherent in Trench 4, as an area of hardstanding – possibly a yard associated with the structure identified on the historic Ordnance Survey mapping, whilst the spread was much looser in Trench 6. It is possible that a small quantity of cobbled stone within Trench 5 was also related to this spread. Soak aways had to be added to these trenches 4 and 5 due to the heavy rain and this area was noted as particularly susceptible to becoming waterlogged.

Artefactual material recovered from stratified positions within and beneath the cobbled areas was of late Medieval – Post Medieval date. It is likely that the cobbling was built up over time, beginning in the late Medieval period with later maintenance and repair. This activity is believed to be associated with the nearby Cibyn y Mwr (later referred to as Cibyn) farmstead. This structure pre-dates the production of the 1838 Tithe map of the area.

The archaeological evidence therefore points to a Medieval or early Post Medieval origin for the feature previously identified as a Roman road. No Roman material was recovered during the excavation.

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Appendix A.

Agreed Specification for Archaeological Works

Written Scheme of Investigation -

Archaeological Evaluation (Evaluation Trenching) at

Tyddyn Fletcher, Ffordd Llanberis, Caernarfon

NGR SH 49268 62780 (Central Point)

Project Number CR247-2024B

CR ARCHAEOLOGY
Compiled by C. Rees and M. Jones
On Behalf of Adra (Tai) Cyfyngedig

Written Scheme of Investigation Archaeological Evaluation (Evaluation Trenching) at Tyddyn Fletcher, Ffordd Llanberis, Caernarfon

Planning Application Number:	Pre-Application (Enquiry Number Y23/0562)
National Grid Reference:	SH 49268 62780 (Central Point)
Client:	Adra (Tai) Cyfyngedig
Report Author:	Catherine Rees and Matthew Jones
Report Number:	CR247-2024B
Date:	09/12/2024

Contents

1.0 Introduction

CR Archaeology have been instructed by Adra (Tai) Cyfyngedig to conduct a programme of archaeological works at the at the proposed site of a new residential development (Appendix A).

The site is located on land adjacent to Ffordd Llanberis (A4086), Caernarfon on the eastern outskirts of the town (Figure 1). The proposed development area is currently in agricultural use.

The site is approximately 650m from Segontium Roman Fort (PRN 3089, Scheduled Monument CN006), and a stretch of the Roman road between Segontium and Canovium (PRN 17856/ PRN 36425) may cross the site. It is also located approximately 400m from the extensive area of Roman and Early Medieval activity excavated at Ysgol yr Hendre (Kenney and Parry 2012 & 2013, Event PRN 44569, 44349). It was also noted that a Bronze Age burial urn was discovered in 1946 during the construction of the adjacent housing estate (PRN 3101).

This document has been prepared to supply the client and statutory bodies including the Local Planning Authority Archaeologist with information as to the archaeological potential, impact and constraints on the aforementioned scheme. It outlines the methodology for the second phase of works following the completion of a Desk Based Assessment, Walkover Survey and Geophysical Survey (document CR247-2024). The Desk Based Assessment, Walkover Survey and Geophysical Survey examined the historic context and archaeological potential of the proposed development area. The Desk Based Assessment showed that as an undeveloped site within an area of known archaeological activity there is a high potential that archaeological remains may be encountered. The site does however lie outside of the immediate environs of the Segontium Roman Fort and the Early Medieval cemetery at Ysgol yr Hendre.

Geophysical survey identified a linear anomaly in the approximate proposed location of Roman Road PRN 17856, and it is likely that the road survives within the proposed development area. No other features of likely archaeological origin were identified through the survey, although magnetic susceptibility samples showed a concentration of high value samples in the western side of the larger field, away from the line of the Roman road which may indicate undetected archaeological activity.

This Written Scheme of Investigation details a programme for an Archaeological Evaluation (trenching) at the site. Eight evaluation trenches will target the anomalies identified through geophysical survey. A ninth trench will be located in an area with no features identified to examine the potential for unidentified features to survive at the site.

2.0 Project Aims & Objectives

The aim of this programme of works is to undertake Archaeological Evaluation Trenching at the proposed development site. Eight evaluation trenches will target the anomalies identified through geophysical survey. A ninth trench will be located in an area with no features identified to examine the potential for unidentified features to survive at the site.

It aims to examine the potential archaeological resource surviving at the site and to provide information which will be utilised to determine an appropriate methodology for any further archaeological mitigation which may be required at the site.

The programme of archaeological works also aims to assess the survival, character and date of any archaeological remains uncovered and to excavate, record and analyse all archaeological remains uncovered within the trenches.

This project aims to fulfil the criteria for undertaking an Archaeological Field Evaluation as specified in the CIfA Standard and Guidance documents (2023 updates - https://www.archaeologists.net /codes/cifa).

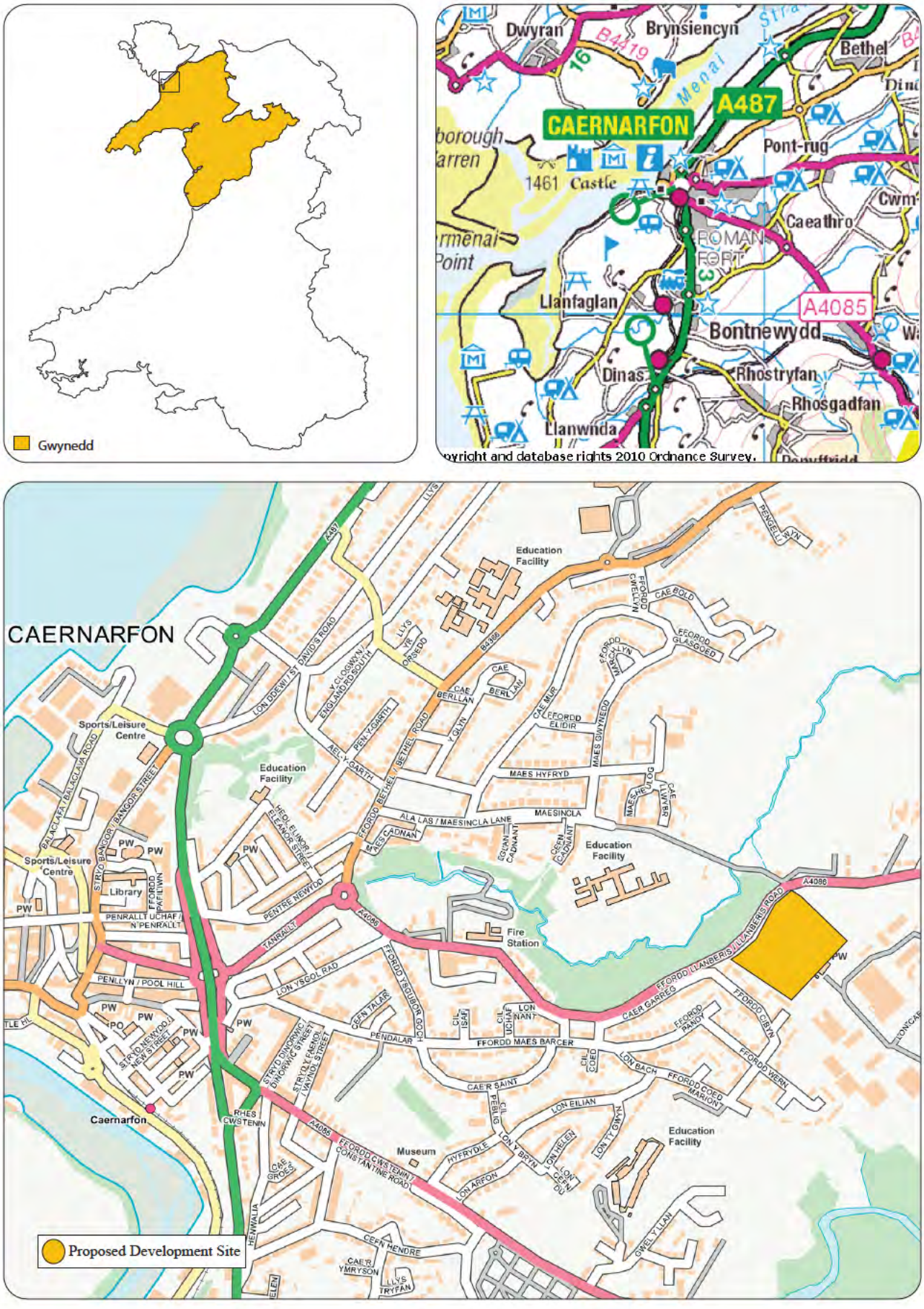


Figure 1. Site Location Map

(Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2018)

It is intended that this document be utilised to inform further archaeological planning decisions and conditions at the site.

The objectives of this programme of works are:

- To make full and effective use of the resulting information to establish the archaeological significance of the site
- To assess the presence, survival, character and date of any archaeological remains
- To excavate/record any archaeological remains uncovered.
- To help inform future decision making, design solutions, further evaluation & mitigation strategies.

3.0 Brief Historical Background

The following section is brief and is intended to merely place the site in context. A more detailed history of the site is included in full in report CR247-2024.

In order to identify the character of archaeological remains in the vicinity of the site a search of the Gwynedd HER was conducted examining an area within a 500m radius of the proposed works (the grid reference for the search is taken as the centre point of the development area). This was expanded to 1000m to examine general trends.

There were 39 HER entries for sites within a 500m search radius of the centre of the proposed development area - 1 entry of Prehistoric date, 16 entries of Roman date, 5 entries of Early Medieval date, 3 entries of Medieval date, 5 entries of Post Medieval date, and 9 entries of Unknown date. The majority of the results (31 entries) were assigned to features identified during the archaeological works associated with the construction of Ysgol yr Hendre to the south-west of the proposed development site.

When the search area was extended to a 1000m radius the HER returned 157 entries – 10 entries of Prehistoric date, 63 entries of Roman date, 11 entries of Early Medieval date, 5 entries of Medieval date, 32 entries of Post Medieval date, 18 entries of Modern date, 16 entries of Unknown date and 2 entries of mixed date. This increase is due to the search now encompassing a larger portion of the historic town of Caernarfon, including the Roman Fort of Segontium and surrounding environs.

The Gwynedd Archaeological Trust '*Roman Roads in North-West Wales*' project identified 4 entries for possible roads crossing the proposed development site:

PRN 17561 – "*On leaving the NE gate of Segontium the road must have run almost for some 2 ¾ miles along the summit of the ridge of land which at first divides the Cadnant Valley from the course of the Seiont and further on forms the NW boundary of the Cegin Valley. Projected line only*".

PRN 17829 – "*Waddelove (1999, 237-45) proposes a slightly more N route along the north Wales coast than RR67c and suggests that the road leads to a fort at Penrhyn. The siting of a fort here has some topographical merit but no evidence has so far been uncovered. The route itself follows modern features and is based on topological arguments. If the recent cropmark evidence along RR67c proves to be significant this route can probably be largely discounted*".

PRN 17856 – "*Presumed alignment of road from portion on aerial photograph SNP 2/10/86 5186149 to Segontium, nothing visible on the ground, mostly built over*". A geophysical anomaly was identified in this location which appears to confirm the location of the road.

PRN 36425 – Possible stretch visible on Lidar included in Roman Roads dataset but PRN location not recorded in HER. Segment of PRN 17856.

Although none of these stretches of road are confirmed, there remains the strong likelihood that the Segontium – Canovium road (overall PRN 3842, elements PRN 17856, PRN 36425) passes through the proposed development site. This hypothesis is supported by the results of LiDAR survey and the geophysical survey.

4.0 Geological Context

4.1 Topography

The site is located on land adjacent to Ffordd Llanberis (A4086), Caernarfon on the eastern outskirts of the town (Figure 1). The proposed development area is currently in agricultural use.

4.2 Geology

The bedrock geology at the site is recorded as "*Nant Ffrancon Subgroup - Siltstone. Sedimentary bedrock formed between 477.7 and 449 million years ago during the Ordovician period*" (https://geologyviewer.bgs.ac.uk/).

The site superficial geology is recorded as "*Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period*" (https://geologyviewer.bgs.ac.uk/).

5.0 Scheme of Works – Methodology

The work to be undertaken at the site is an Archaeological Evaluation (Evaluation Trenches) and the following section details the methodology for the research, site work, post excavation and archiving associated with the project.

5.1 Desk Based Research

A complete and coherent history of the site was compiled during the previous phase of works. This will be utilised in the interpretation of the results of the trenching works. Additional research will be undertaken as necessary following a positive trenching result.

The works were/will be carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA Revised 2009 & 2014, 2020 update).

This material will form the historical background for a full archaeological report and will be utilised to aid the interpretation of the results of the evaluation trenching.

5.2 Methodology for Archaeological Evaluation Trenching

Nine evaluation trenches measuring 1.8m x 30m will be excavated within the proposed development site using a mechanical excavator fitted with a toothless bucket. The trenches are predominantly targeted on features identified during the geophysical survey, with one trench located in an area with no obvious archaeological features. The proposed trench array is shown in figure 2.

All machine excavation will be supervised by an archaeologist from CR Archaeology. The trenches will be excavated until an archaeological horizon or the bedrock/natural is reached. When it is felt that the natural has been reached, if possible the machine will be used to excavate a sondage into the deposit to confirm that it has not been redeposited and that the material is the natural.

In the event of modern hard standing being uncovered, a sondage will be machine excavated to determine the depth of this deposit. If safe to do so the modern deposit will be removed to assess the survival of underlying deposits. If the deposit is of a considerable depth it will not be removed and the trench will be excavated to this level to attempt to determine the extent of the modern disturbance.

Any archaeological features, structures or remains identified in the course of the evaluation will be trowel cleaned by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, date, significance and quality. Excavation will generally involve the removal of 50% of pits/posthole fills and 25% of the fills of ditches/large linear features.

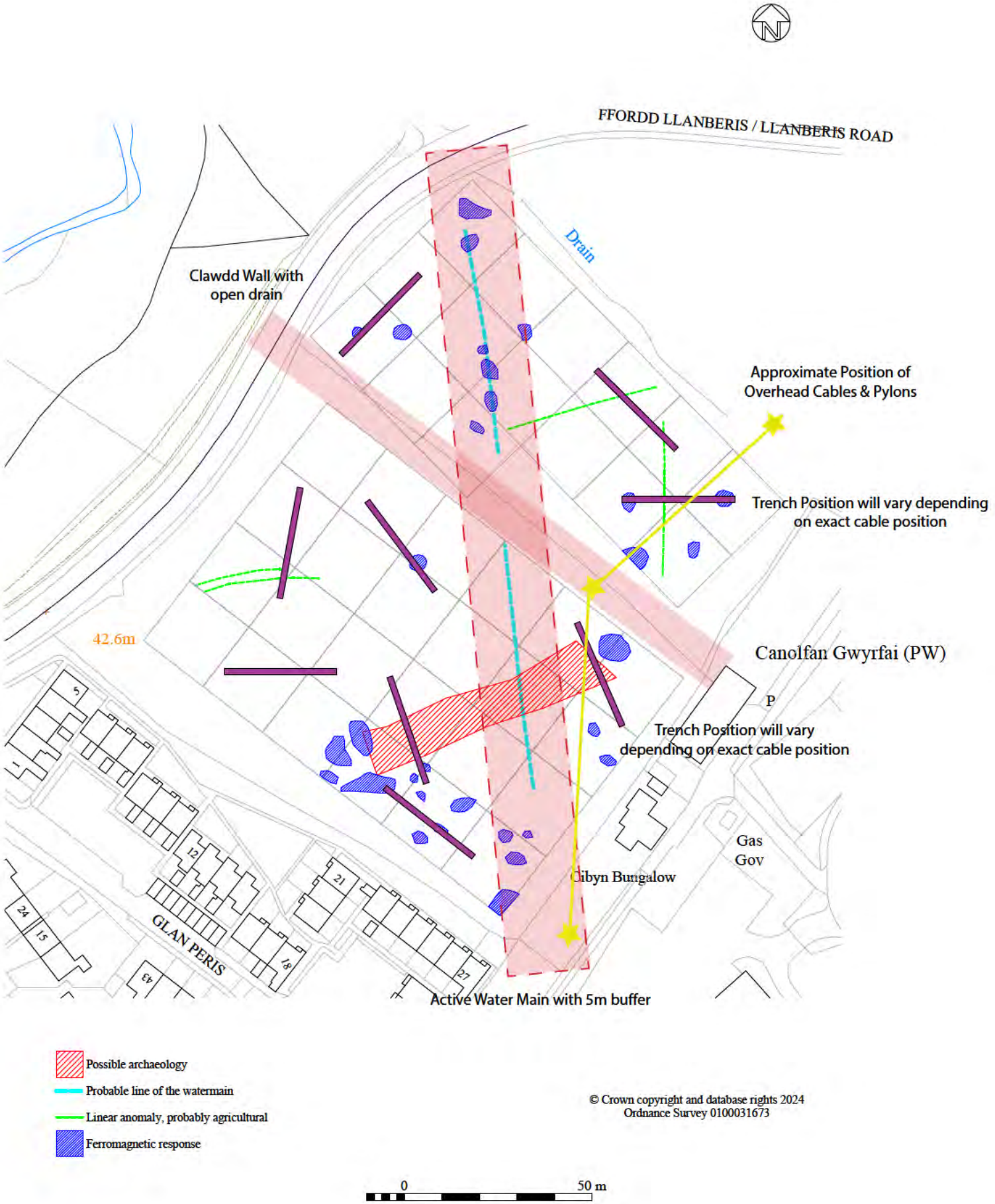


Figure 2. Proposed Trench Layout

If features yield suitable material for dating/environmental processing, then samples will be taken for processing off site. The size of these samples will depend on the size of the feature but for smaller features a sample of up to 95% will be taken. For larger features a sample of up to 40 litres will be taken. In the event of a significant discovery Heneb (Gwynedd) Archaeological Planning Services will be informed of the discovery and a mitigation strategy agreed before works will progress.

Should structural remains be uncovered during the works they will be fully exposed within the trenches and excavated to establish the presence/absence of intact floor levels. If floors are found the floors will be cleaned and recorded but not excavated further at this stage.

The works will be carried out in accordance with the CIfA Standard and Guidance documents for Archaeological Field Evaluation (2023 revision).

A basic photographic record of the site will be made prior to the commencement of works, which will be used for reference and to aid with the interpretation of the site.

In the event of a significant discovery Heneb (Gwynedd) Archaeological Planning Services will be informed of the discovery and an appropriate mitigation strategy agreed before works will progress. Fieldwork is to be conducted and managed by Catherine Rees (MCIfA) & Matthew Jones (MA) of CR Archaeology.

The excavation works will be carried out in accordance with the CIfA Standard and Guidance documents (2014 and will include 2023 updates).

5.2.1 Recording

The record forms at CR Archaeology are based on the Historic England system and full written, graphic and photographic records will be made in accordance with the Historic England *Field Recording Manual*. Sample forms can be provided on request. The written record shall comprise completed *pro-forma* record sheets.

Plans, sections and elevations will be produced on gridded, archive standard stable polyester film at scales of 1:10, 1:20 or 1:50, as appropriate. Representative measured sections will be prepared as appropriate showing the sequence and depths of deposits. All drawings will be numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'Harris matrix' diagram will be constructed for the excavated area.

A high-resolution 20 mega-pixel Sony Alpha digital camera will be used to create a photographic record of the site. This will be comprised of photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale, north arrow and a record board detailing the site name, number and context number. General photographs will also be taken in the event of a negative result.

All photographic records will be indexed and cross-referenced to written site records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number. Images from photography will be stored in a loss-less digital format in this case '*.TIF'.

5.2.2 Additional Mitigation/Contingency Measures

In the event of a significant archaeological discovery being made during the excavation, CR Archaeology will immediately inform both the client and the development control archaeologist. Consultation will take place between CR Archaeology, Heneb (Gwynedd) Archaeological Planning Services and the client with regards to the most suitable course of action.

In the event that human remains are encountered site work will cease with immediate effect. The coroner, client and monitoring body will be informed immediately. The company will abide by the requirements of Section 25 of the Burial Act 1857. Any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner whose instruction/permission will be sought.

All human remains are to be preserved *in situ*, covered and protected. They will only be removed in exceptional circumstances and with the appropriate Ministry of Justice licence, environmental health regulations, Coroner's permission and, if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act, with adequate security provided in such cases. Should this be undertaken a separate specification for works will be prepared detailing the excavation and post-excavation strategies.

Any artefacts recovered that fall within the scope of the Treasure Act 1996 will be reported to the landowner, Heneb (Gwynedd) Archaeological Planning Services and to HM Coroner.

5.2.3 Recovery, Processing and Curation of Artefactual Material
All recovered artefactual material will be retained, cleaned, labelled and stored according to *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (Updated 2020) and First Aid for Finds (Watkinson & Neal* 2001). The aim will be to create a stable, ordered, well-documented, accessible material archive forming a resource for current and future research (CIfA 2008, revised 2014, updated 2020).

All artefactual material will be bagged and labelled with the site code and context number prior to their removal from site. The archive reference number will be clearly marked on all finds. Each assemblage will be examined according to typological or chronological criteria and conservation needs identified. An assessment report of all post-medieval material will be produced by Matthew Jones, prehistoric pottery will be examined by Frances Lynch and lithics by Dr Ian Brooks. A list of further specialists will submitted if necessary and the relevant expertise will be sought. Any specialist conservation necessary will be undertaken by Cardiff Conservation Services, Cardiff University. This will be conducted in accordance with guidelines issued by the Institute for Conservation.

Following analysis, it is proposed that archaeological material recovered and the paper/digital archive will be deposited in the local museum. A copy of the digital archive will be deposited with the RCAHMW.

Processed assemblages will be boxed according to issued guidelines and a register of contents compiled prior to deposition. The works will be carried out in accordance with The Chartered Institute for Archaeologists: *Standard and Guidance for Archaeological Field Evaluation* (2023).

5.2.3.1 Material Selection Strategy
The material selected for retention will be determined in accordance with the National Panel for Archaeological Archives in Wales Archaeological Archives: Selection, Retention and Disposal Guidelines for Wales (http://www.welshmuseumsfederation.org/uploads/online%20resources/National%20Archaeology%20standards%20wales%202017/natstandardsfinal2019.pdf).

5.2.3.2 Archive Compilation
All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (P1)* (EH 2006). The archive will contain all data collected, including records and other specialist materials. It will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository and signposted appropriately to ensure future use in research, as detailed in the English Heritage *Management of Research Projects in the Historic Environment* (MoRPHE) methodology.

The archive will be assembled in accordance with the guidelines published in, *Standards in the museum care of archaeological collections* (Museums & Galleries Commission 1994), *Guidelines for the preparation of excavation archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2007).

All materials contained within the *Primary Site Archive (P1)* that are subsequently identified by the *Assessment Report* (*P2)* as appropriate for analysis will be processed by suitable specialists and the resultant *Research Archive* (*P3)* will be checked and ordered according to *MoRPHE* criteria. It is hoped that any archive/artefactual material created/discovered during this archaeological project will be deposited at the county museum. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition. In the event that no artefactual material is recovered or that the material is retained by the landowner the paper/digital archive will be deposited at the RCAHMW.

A copy of the digital archive will be deposited with the GAT HER and with the RCAHMW. RCAHMW will be notified in advance of the deposition of any archive created by this archaeological project and archive material will be deposited in accordance with the organisation's terms and conditions for archive deposition.

5.2.3.3 Data Management Policy
A site-specific Data Management Plan has been created based upon the Historic England Archaeological Digital Archiving Protocol (ADAPt) Digital Preservation Policy (www.historicengland.org.uk/content/docs/research/adapt-digital-preservation-policy/). The format is based upon the Historic England pro forma document (www.historicengland.org.uk/research/methods/archaeology/archaeological-archives/adapt -toolkit/). The preliminary document is included as Appendix B.

5.3 Timetable for Proposed Works
It is envisaged that the works will commence in February 2025 and up to five weeks have been allotted for the works. Further time has been allotted for research, report compilation and site archiving.

5.4 Staffing
The project will be managed by Catherine Rees (MCIfA, BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology). The fieldwork will be conducted by Matthew Jones and/or Catherine Rees.

All projects are carried out in accordance with CIfA *Standard and Guidance* documents.

5.5 Monitoring
The project will be subject to monitoring Heneb (Gwynedd) Archaeological Planning Services who will be kept informed of site progress and the results of the works. A site visit will be arranged as necessary.

5.6 Health and Safety
A risk assessment will be conducted prior to the commencement of works and site staff will be familiarised with its contents. A first aid kit will be located in the site vehicle.

All staff will be issued with appropriate Personal Protective Equipment (PPE) for the site work. Initially this is anticipated to consist of:

- Hi-visibility vests (EN471)
- Mobile Telephone
- Steel toe capped boots
- Hard Hat

Any further PPE required will be provided by CR Archaeology.

5.7 The Report

The reports will clearly, and accurately incorporate information gained from the programme of archaeological works. It will present the documentary evidence gathered in such a way as to create a clear and coherent record. The report will contain a site plan showing the locations of any photographs taken.

The final report will include:

- A bilingual summary
- A copy of the agreed Written Scheme of Investigation
- A location plan
- A plan showing the locations of the evaluation trenches
- All identified features and significant finds plotted on an appropriately scaled plan
- Full dimensional and descriptive detail of all identified finds and features
- A full bibliography of sources consulted

A copy of the reports in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A PDF digital copy of the reports will be submitted to Heneb as part of the formal submission. A digital Adobe PDF version of the final report and will be lodged with the Historic Environment Record within six months of completion of post excavation works. The 2018 Guidance for the Submission of the Data to the Welsh Historic Environment Records document will be followed.

A short article will be submitted to the Archaeology in Wales Journal and other publications as appropriate.

5.7.1 Copyright

CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project.

6.0 Bibliography

AAF. 2007. ***Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation***

English Heritage. 2006. ***Management of Research Projects in the Historic Environment (MORPHE)***

Rees, C. and Jones, M. 2024. ***Results of Archaeological Works (Desk Based Assessment, Walkover Survey& Geophysical Survey) at Tyddyn Fletcher, Ffordd Llanberis, Caernarfon***. CR Archaeology Report CR247-2024.

The Chartered Institute for Archaeologists. 2014 (Last Revised 2022). ***Code of Conduct: Professional Ethics.***

The Chartered Institute for Archaeologists. 2019 (Revised 2021). ***Regulations for Professional Conduct.***

The Chartered Institute for Archaeologists. 1990 (Revised 2014). ***Code of Approved Practice For the Regulation of Contractual Arrangements in Field Archaeology.***

The Chartered Institute for Archaeologists. 2014 (Last Revised 2020). ***Standard and Guidance for Historic Environment Desk-Based Assessment.***

The Chartered Institute for Archaeologists. (Revised 2014). ***Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.***

The Chartered Institute for Archaeologists. 2014 (Last Revised June 2020). ***Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.***

The Chartered Institute for Archaeologists. 2023. ***Universal Guidance for Archaeological Field Evaluation.***

Walker, K.1990. ***Guidelines for the preparation of excavation archives for long-term storage.*** United Kingdom Institute for Conservation (UKIC) Archaeology Section

Websites – all sites were visited 09/12/2024

https://geologyviewer.bgs.ac.uk/

Appendix A.
Proposed Development Plans

Issues

Drain

EXISTING BUS STOP

APPROX WATER PIPE LOCATION

FUTURE PHASE 2

APPROX POSITION OF OVERHEAD CABLES

6m EASEMENT FOR OVERHEAD CABLES DIVERTED UNDERGROUND?

SWALE

FUTURE ACCESS TO PHASE 2

MATURE OAK TREE TO BE RETAINED?

ATTENUATION BASIN

AMENITY SPACE 1062m2

EQUIPPED PLAY SPACE 166M2

3m ACTIVE TRAVEL PATH

SUDS FEATURE

Caernarfon Pentecostal Church?

Bungalow

Gas Gov

INDICATIVE VISIBILITY SPLAY (4.5 X 90m?)

NEW SITE ENTRANCE

4500

INDICATIVE VISIBILITY SPLAY (4.5 X 90m?)

OPTIONAL BUS STOP

LINK

UNIT KEY

	GIFA	No.
- 2P1B COTTAGE STYLE APARTMENT	@65m²	x10
- 3P2B BUNGALOW	@58m²	x3
- 4P2B HOUSE	@83m²	x11
- 5P3B HOUSE	@93m²	x5
- 5P3B HOUSE DUAL ASPECT	@93m²	x5
- 7P4B HOUSE	@114m²	x2
TOTAL UNITS		36

REV	DESCRIPTION	DATE	BY
A	UPDATES TO ADRA COMMENTS 13.02.24	14/02/24	TA

PROJECT

LLANBERIS ROAD, CAERNARFON
for ADRA

DRAWING TITLE

PROPOSED SITE LAYOUT - PHASE 1 - OPTION C

SCALE	DATE	DRAWN	CHECKED
1 : 500 @A2	09/02/24	TA	SV

DRAWING STATUS: PRELIMINARY

JOB No	DRAWING No	REVISION
C1139	010	A

AINSLEY GOMMON ARCHITECTS
THE OLD POLICE STATION, 15 GLYNNE WAY, HAWARDEN, CH5 3NS
Tel: 01244 537 100 | wales@agarchitects.co.uk | www.agarchitects.co.uk
Ainsley Gommon Architects Ltd. Registered in England & Wales No.4187948
Registered Office: 1 Price Street, Hamilton Square, Birkenhead CH41 6JN

PRINTED: 14/02/2024 09:16:52 A2

0m 10m 20m 30m 40m 50m

VISUAL SCALE 1:500 @ A2

PROPOSED SITE - PH 1 - OPT C

SCALE: 1 : 500

Appendix B.

Data Management Plan

Data Management Plan

Project Outline

Project Manager	Catherine Rees
Project Number	CR247-2024
Project Name	Ffordd_Llanberis_Caernarfon
Author(s)	C. Rees
Origination Date:	17-07-2024
Reviser(s)	
Date of last revision	06-02-2025
Project stages covered	Archaeological Evaluation - Trial Trenching
Version	1.0
Status	Preliminary
Summary of Changes	n/a
File Name/Location	H: CR Archaeology 2024-2025 Projects: CR247-2024_ Ffordd_Llanberis_Caernarfon
Related Policies	CR247-2024_ Ffordd_Llanberis_Caernarfon _Eval_Selection_Strategy

Data Collection/Creation

Data to be Collected/Created	The CR Archaeology standard pro forma recording system used on site. Images will be created according to standards set out in ADAPt Guidance. All file formats created will meet the standards set out in ADAPt. Drawings will be created by hand on polyester drawing film, using 4H/6H Staedtler Mars Lumograph pencils and scanned in at standards set out in ADAPt. The documentary archive will consist of: Text: Various Word Documents; including Project Design, Assessment Reports, Site Archive Completion Report. Databases: Access/Excel databases Images: Hard copy drawings, digital images including x-rays, site photography (JPEG & TIFF), scanned drawings

How Data will be Collected/Created	The data will be created according to the CR Archaeology Recording Manual, and ADAPt
Relations	If the data collection was derived in whole or in part from published or unpublished sources, whether printed or machine-readable, please give references to the original material. Please give details of where the sources are held and how they are identified there (e.g. by accession number). If the collection is derived from other sources please indicate whether the data represent a complete or partial transcription/copy and the methodology used for its computerisation. Clearly state whether the data represents a clear enhancement of this previous dataset

Documentation and Metadata

Metadata	Metadata will be created to the standard set out in ADAPt
Documentation	Describe the types of documentation that will accompany the data to help secondary users to understand and reuse it.

Ethical and Legal Compliance

Data Security Issues	Document if there are any issues such as: Does the data need to be embargoed to protect the site(s)? Is some of the data protected under data protection legislation? Does the dataset contain commercially sensitive data? Detail how any issues are to be dealt with.
Intellectual Property Rights	The data and reports created by any external specialists will be CR Archaeology Copyright; this will be managed through their contracts.

Data Storage

Storage and Backup	Data will be stored on the CR Archaeology Network and during excavation will be managed in line with Project Procedures for backing up data and transfer to network.
Access and Security	Data will be made available to the project team through the CR Archaeology network. There are no security issues.

Selection and Preservation

Preservation Plan	In the event of archaeological material being recovered on site the physical archive, the documentary archive and the digital archive will be deposited with the artefactual material at the local museum/archive.

	The documentary archive will contain any hard copy data reports the repository wish to receive. A copy of the digital archive will be sent to the RCAHMW. In the event of a negative result or no artefactual material being recovered the documentary and digital archives will be deposited with the RCAHMW. Copies of the project report and photographs will be deposited with the appropriate HER.

Data Sharing

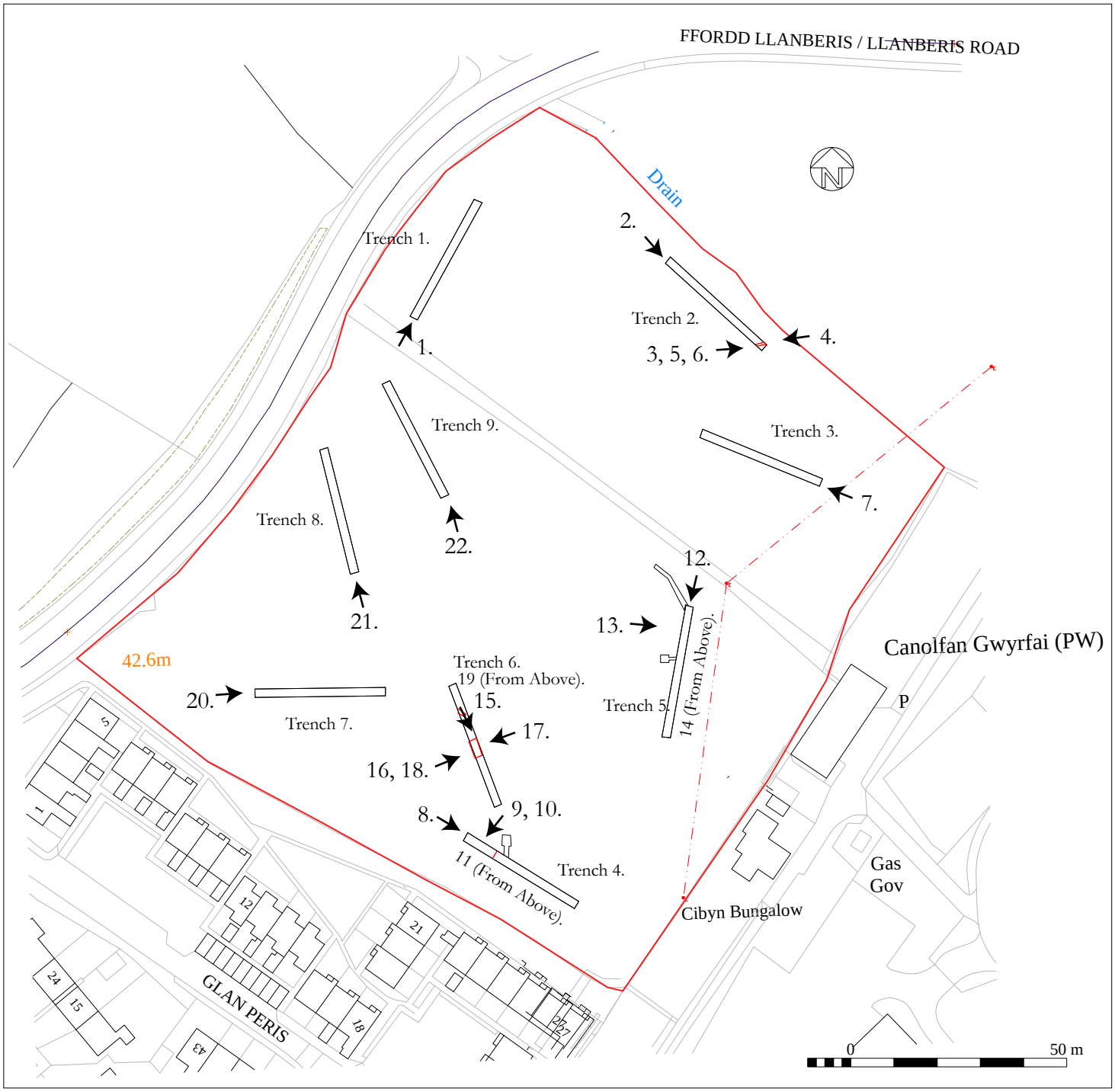
Data Sharing Plan	The data generated from this project will be made publicly available through the digital repositories. Awareness of the work will be raised through publication, and documentation with the HER.
Data Sharing Restrictions	There are no restrictions on the use of this data after project completion.

Responsibilities and Resources

Responsibilities	The Project Manager and Archaeological Archives Curator are responsible for ensuring the data management plan is followed.
Resources	Resources required to deliver this plan are covered by standard CR Archaeology resources and the project design. The costs of deposition of the archive are covered by the client.

Appendix C.

Location and Direction of Photographic Plates



Appendix C. Location and Direction of Photographic Plates