Segontium - Former Ysgol Pendalar Caernarfon

Community Excavation









Segontium - Former Ysgol Pendalar Caernarfon

Community excavation

Project No. G2618

Report No. 1538

Prepared for: Cadw

March 2020

Written by: David Hopewell

Illustration by: David Hopewell

Cover photograph: Former Ysgol Pendalar community excavation

Cyhoeddwyd gan Ymddiriedolaeth Achaeolegol Gwynedd Ymddiriedolaeth Archaeolegol Gwynedd Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT

Published by Gwynedd Archaeological Trust Gwynedd Archaeological Trust Craig Beuno, Garth Road, Bangor, Gwynedd, LL57 2RT

Crynodeb

Cynhaliodd Ymddiriedolaeth Archaeolegol Gwynedd raglen asesu gymunedol ar safle Ysgol Pendalar, Caernarfon. Adeiladwyd yr ysgol yn hwyr yn yr 1960au, heb fesurau archaeolegol, ar gaeau agored ger caer Rufeinig Segontium a'r Ffordd sy'n rhedeg o'r giatiau. Cafodd yr adeiladau eu dymchwel yn ystod y blynyddoedd diwethaf, gan adael slabiau concrid ar safle teras. Wrth gloddio, tynnwyd un slab a darn o'r ffordd/maes parcio, ac fe aseswyd yr archaeoleg oedd wedi goroesi oddi tannodd. Roedd y dyddodion Rhufeinig, ar y cyfan, wedi'u gwarchod yn dda o dan adfeilion yr ysgol, a chafodd cyfres o nodweddion eu hadnabod a'u samplo. Roedd hyn yn cynnwys dwy ffynnon, pedair popty clai, nifer o bydewau, a grŵp o dyllau pyst. Cafwyd casgliad sylweddol ac amrywiol o ddarnau o grochenwaith ynghyd ag amrywiaeth o ganfyddiadau bychain. Daw'r olion Rhufeinig o ardal y credir iddi fod yn rhan o bentref vicus gyfochr â'r ffordd o'r gaer. Cadarnhaodd y gwaith cloddio bod archaeoleg Rhufeinig sydd o bwysigrwydd cenedlaethol wedi goroesi o dan adfeilion yr ysgol.

Summary

Gwynedd Archaeological Trust carried out a programme of community-based archeological assessment at the site of Ysgol Pendalar, Caernarfon. The school was built in the late 1960s, without archaeolgical mitigation, in open fields beside Segontium Roman fort and the Road running from its gate. The buildings were demolished in recent years leaving reinforced concrete slabs on a terraced site. The excavation removed one slab and an area of road/carpark and assessed the survival of the archaeology beneath. Roman archaeological deposits were generally well-preserved beneath the remains of the school and a series of features were identified and sampled. These included two wells, four clay ovens, several pits, and a group of post-holes. The site produced a large and varied collection of pottery sherds along with a range of small finds. The Roman features are in an area that is presumed to be at the rear of a vicus settlement alonside the road from the fort. The excavation confirmed that Roman archaeology of national importance survives beneath the remains of the school.

Copyright Statement

The copyright of this report is held by Cadw and Gwynedd Archaeological Trust Ltd. The maps are based on Ordnance Survey mapping provided by the National Assembly for Wales with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 100017916 (2018).

Historic Mapping, reproduced here, is covered under Crown Copyright and Landmark Information Group. All rights reserved. Gwynedd Archaeological Trust Ltd., on behalf of Welsh Government 2018.

Contents

1.	INTRODUCTION	1
2.	ARCHAEOLOGICAL BACKGROUND	2
3.	THE 2019 EXCAVATION	4
	3.1 Introduction	4
	3.2 The remains of the school and associated ground-works	5
	3.3 Roman period and earlier deposits (sondages S1-S4)	8
	3.3.1 Natural substrate	10
	3.3.2 Pre-Roman buried soil	10
	3.3.3 Roman occupation layers	11
	3.4 Roman features	11
	3.4.1 Wells	11
	3.4.2 Ovens/hearths	16
	3.4.3 Pits, post-holes and other cut features	17
	3.4.4 Metalled surfaces	21
	3.4.5 Unexcavated features	21
4.	FINDS AND POST-EXCAVATION ANALYSIS	22
5.	SUMMARY AND PROVISIONAL INTERPRETATION	24
6 <i>A</i>	ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL	24
7.	POST-EXCAVATION	25
8.	ACKNOWLEDGEMENTS	26
9.	REFERENCES	26

FIGURES

Figure 1. Former Ysgol Pendalar showing excavation area, features from Wheeler's excavation	and
pod development	1
Figure 2. Cae Mawr 1887 OS 25" map with modern OS Mastermap	3
Figure 3. Concrete slabs on the upper part of the site during removal	5
Figure 4. Former Ysgol Pendalar - Site plan, 2019 Excavations	7
Figure 5. Orthographic projection of site from 3D model indicating with major features	8
Figure 6. Sample section through the centre of the site (S1)	9
Figure 7. Central part of S1 showing Roman deposits and buried soil	10
Figure 8. Well 006 before excavation	12
Figure 9. Well 006 quarter section	13
Figure 10. Wells 006 and 028 - sections	14
Figure 11. Well 028 before excavation showing remains of metalled surface	15
Figure 12. Well 028 – half-sectioned	15
Figure 13. Ovens 123 and 124	16
Figure 14. Both pairs of ovens from orthographic projection	17
Figure 15. Sections through pits and post-holes	18
Figure 16. Large recut pit (021) - half-section	19
Figure 17. Small pit (024) - half-section	20
Figure 18. Section through possible truncated post-hole also showing depth of mixed grey Rom	an
deposit 007	20
Figure 19. Metalled surface 048 with stony feature 009 in the background	21
Figure 20. A selection of pottery: decorated samian ware, a stamped amphora handle and a sta	ımped
mortarium rim	22
Figure 21. Bronze fibula brooch	23
Figure 22. Iron intaglio ring	23

G2618 SEGONTIUM - FORMER YSGOL PENDALAR, COMMUNITY EXCAVATION

1. INTRODUCTION

An area immediately to the north-west of the northern quadrant of Segontium Roman fort (Figure 01) was excavated in September 2019. This comprised a 25m x 35m area within the grounds of the former Ysgol Pendalar. The site of the school comprises an area of 0.9ha that lies immediately to the north-west of fort and immediately to the north-east of the Roman road running from the fort to Hen Waliau and as such would be expected to have been the site of Roman extra-mural settlement and activity. No archaeological mitigation or recording was carried out when the school was built in c. 1968. The principal aim of the excavation was therefore to investigate the extent and level of survival of the Roman archaeology in a sample of the area.

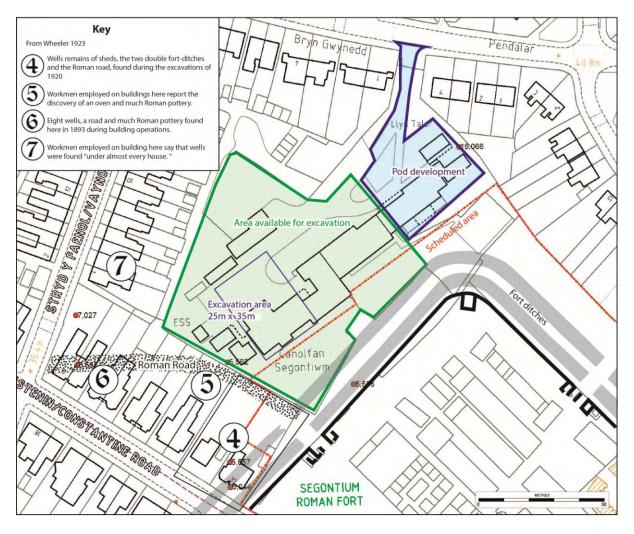


Figure 1. Former Ysgol Pendalar showing excavation area, features from Wheeler's excavation and pod development

A planning application had been submitted by Gwynedd Council's Housing Department to install four low-energy housing pods on the north-eastern third of the site. The rest of the area remains

unoccupied and comprises concrete bases, hard-standing and overgrown areas of former lawns and activity areas. The excavation aimed to assess and record the archaeological remains within the area unaffected by the pod development by carrying out a community based excavation. The excavation examined approximately 14% of the area.

2. ARCHAEOLOGICAL BACKGROUND

The SSW limit of the school site is bounded by the line of the Roman road out of the fort gate. The area was investigated by R. E. Mortimer Wheeler in the 1920s. At this time the space immediately to the outside of the fort walls was occupied by Cae Mawr farm. The farm can be seen on the First to Third Edition Ordnance Survey 25" to 1 mile maps of the area (Sheet XXV.4). The current boundary fence of Segontium archaeological site runs along the boundary of the farm which was built over the fort ditches. The First Edition 25" map shows the project area consisting of 3 fields (Figure 02) with the central one containing an orchard or garden with at least one glasshouse. The line of a road from Cae Mawr farm to Vaynol Street runs through the eastern side of the area of investigation. The boundaries around the area were established by the time of the Third Edition 25" map and shows the current houses along Vaynol Street and Constantine Road as completed houses. The fort itself was placed under the guardianship of the Ministry of Works (subsequently Cadw) in 1957. The map evidence indicates little change after 1918, apart from the addition of two houses on Constantine Road, until the 1979 1:10000 edition which shows Ysgol Pendalar occupying the former fields to the north west of Cae Mawr farm. Most of the farm buildings had also been demolished at this point. The school was built in about 1968 and additional buildings were subsequently built to the northwest of the linear single block of school buildings shown on the 1979 map. The school was eventually relocated to a nearby purpose-built building that opened in 2007. The school buildings were demolished and only the concrete bases and hard-standing remain.

Wheeler recorded numerous Roman finds in the area to the south of the Roman road leading from the fort gate (Figure 02). These were discovered during both Wheeler's own excavations and the construction of the houses along Constantine Road and Vaynol Street. He recorded "pits and wells together with ill-defined remains of wooden booths or hutments beyond the ditches on the northwest side of the fort" suggesting the presence of the typical wooden strip buildings of a *vicus*. Elsewhere workmen constructing the houses found numerous wells, a road heading towards Hen Waliau an oven and much Roman pottery (Wheeler 1923)

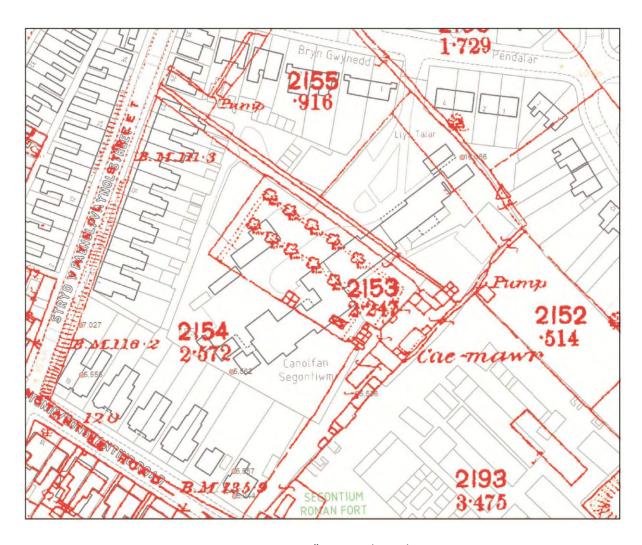


Figure 2. Cae Mawr 1887 OS 25" map with modern OS Mastermap

The surviving concrete building bases occupy two terraces below a third roughly level area of grassed over land that falls between the current Segontium boundary fence and the former school buildings. The latter is within the scheduled monument area. Brython Archaeology carried out an assessment of the pod development site (Macrow, Parry and Parry 2019) and excavated three trenches and observed two geological inspection (GI) pits. The assessment indicated that there had been disturbance to the archaeological deposits during the landscaping of the school but also demonstrated that archaeological features survived beneath the remains of the school. Three small ditches were identified at the north-west end of the site. These were not necessarily Roman but demonstrate the potential for the survival of archaeological features in the school grounds. A variety of deposits were identified beneath concrete slabs that defined the former footprint of the school. A deposit of dark soil containing 1st to 2nd Century pottery overlying a possible ground surface was found immediately beneath the slabs in one place. While this could not be conclusively shown to be an undisturbed Roman deposit it again demonstrates archaeological potential. The two GI pits that were excavated towards the north-east of the former school grounds identified a 4m deep deposit of mid-brown sandy-silt. The pits were too small to provide any context for this deposit and no dating evidence was recovered. It was suggested that the pits had cut into the fills of a substantial ditch but further excavation would be required to confirm this. Further excavation is expected in this area in advance of the development but no timetable has been agreed.

3. THE 2019 EXCAVATION

3.1 Introduction

A 25m x 35m area of the former school site was excavated (Figure 1). The site was on two levels; comprising a concrete building base at the south-west and, on a lower terrace, an asphalt surface, probably a former carpark. The remains of the school and deposits associated with its construction were removed using a Hyundai HX 140L 14-tonne tracked excavator by RG Hire under supervision of Gwynedd Archaeological Trust. The rest of the excavation was carried out by hand over a period of three weeks between 9th and 30th September 2019 with the project run as a community excavation.

The volunteers were from the local community along with students from Bangor University. The site director was David Hopewell and the site supervisors were Neil McGuinness and Michael Lynes, all from GAT.

The community excavation included a public engagement and outreach strategy which was delivered bilingually (Welsh and English). This included the involvement of the volunteers and liaison with visitors to the site during the excavation. Jade Owen, managed the public engagement and outreach strategy. Adele Thackray (Cadw) supervised a group of NEET (Not in Education, Employment, or Training) participants in the excavation and helped to arrange the open day.

A public open day was held on 22nd September which involved displays in the Segontium visitor centre and guided visits to the site.

Training formed a major part of the community excavation. Volunteers were trained in all aspects of recording and excavation with particular emphasis on drawn records, photographic recording and filling in and understanding context sheets.

Volunteers were recruited to assist throughout the three week excavation. Overall, 53 volunteers participated; these comprised local residents, existing GAT volunteers and Bangor University students. Bangor University students were supervised by Nebu George, Katarina Moeller and Eleanor Smart. A group of young people, part of Gwynedd Youth Service were also invited to become 'archaeologists for the day' and participate in the excavation.

Three local primary schools took part in this project: Ysgol yr Hendre, Ysgol Maesincla and Ysgol y Gelli. Prior to site visits, the Outreach and Education Assistant arranged an introductory session with each class. This served as a means to discuss what archaeology is, what archaeologists do and to outline the work GAT does. This also provided context for Segontium and the former Ysgol Pendalar site within the wider historic and cultural landscape and introduced the aims and objectives of the overall project and explained to pupils what they would be doing when they visit. School visits took place on weekdays between the 17th and 20th of September and engaged with 150 pupils through a suite of activities including building recording, artefact handling and excavating.



Figure 3. Concrete slabs on the upper part of the site during removal

3.2 The remains of the school and associated ground-works

The reinforced concrete base and asphalt surface were broken up using a tracked excavator and a hydraulic pecker. The rubble was then removed using the excavator with a toothless bucket and stored in two piles on the hard-standing to the north-east. This revealed further deposits associated with the construction of the school.

The majority of the upper terrace was sealed by a layer of topsoil which increased in depth from 0.1m at the south-east to 0.6m at the north-west. This contained modern building materials, 19th century pottery and frequent pieces of Roman pottery demonstrating that the topsoil was, for the most part, redeposited. It is likely that much of the earth had simply been moved from the top of the former field to the bottom of the building footprint to produce a terrace. It is also possible that topsoil had been carried from other parts of the development area during groundworks.

The asphalt in the lower terrace had been laid on base of crushed angular stone which had in turn been laid directly on top of a deposit of hard silty clay which contained *in situ* archaeological features. The topsoil had clearly been removed from the area prior to the construction of the carpark. Fragments of concrete at a slightly lower level suggest that there had been an earlier structure or road in this area. The crushed stone had been pressed into the top of the clay layer suggesting that it had been rolled and compacted.

Parts of the resulting crushed stone and clay interface could be removed using the excavator and toothless bucket but archaeological features containing stones could not be revealed without severe

damage using this method. The remains of the crushed stone and silty-clay layer therefore had to be removed by hand. The layer was very hard necessitating removal using pickaxes, mattocks, brick-hammers and mortar picks.

After removal of the overburden the site had mostly been restored to its original topographic state i.e. a gently sloping field. Some truncation of archaeological deposits had clearly occurred during the construction of the school. In the south-eastern half of the site this appears to have been limited to disturbance of topsoil relating to Cae Mawr farm and some truncation of deposits at the top of the slope at the south-west end of the site where deposits had been removed down to the top of the glacial substrate leaving cut features *in situ*. Truncation of deposits in the north-western half of the site appears to have been limited to removal of the 19th century topsoil and the loss of a small amount of the upper part of the *in situ* Roman period deposits

Several service trenches and wall foundations had been cut through the surviving deposits across the whole of the site. These are indicated on Figure 4

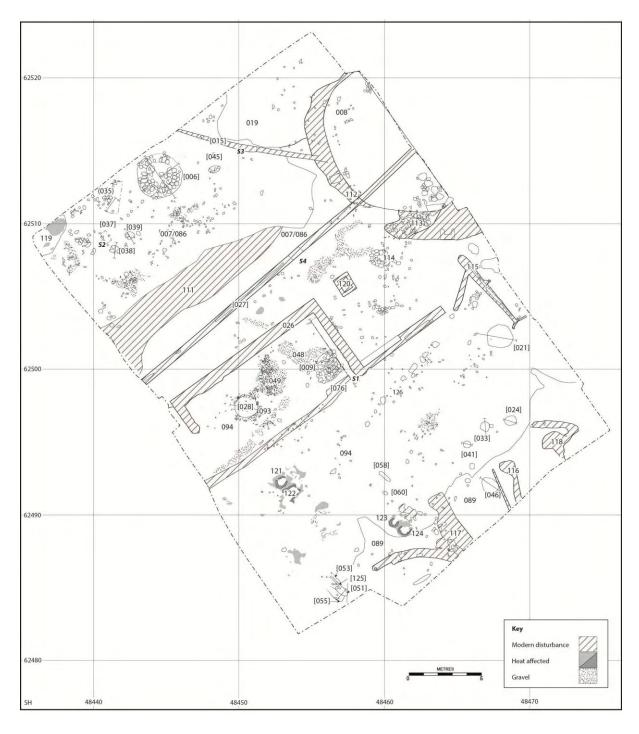


Figure 4. Former Ysgol Pendalar - Site plan, 2019 Excavations

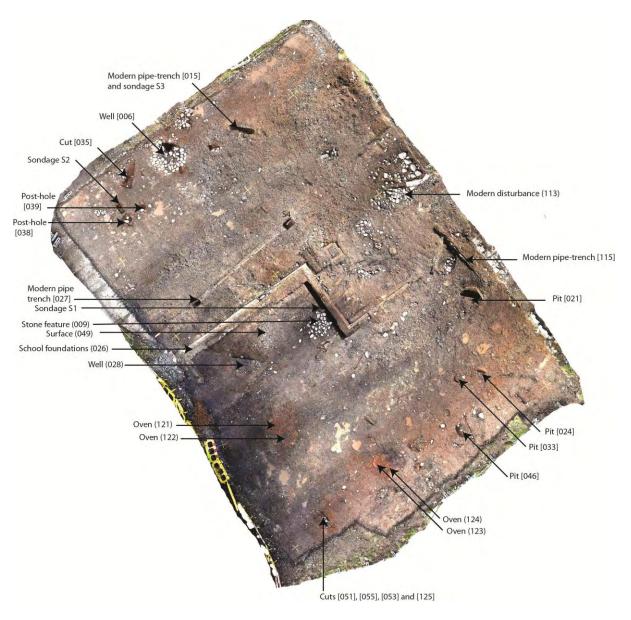


Figure 5. Orthographic projection of site from 3D model indicating with major features

3.3 Roman period and earlier deposits (sondages S1-S4)

The full extent of the excavation area, apart from the small proportion disturbed by modern features, retained early features below the remains of the school and ploughsoil. The majority of the features contained Roman material and none contained the common markers of post-medieval occupation that were found in the topsoil and were presumably associated with Cae Mawr farm such as Buckley pottery and modern glass.

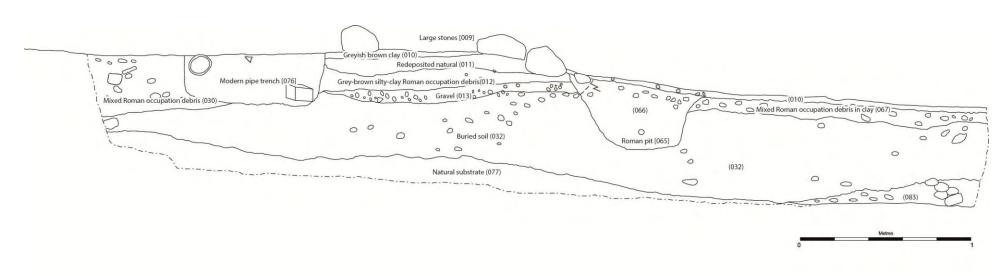


Figure 6. Sample section through the centre of the site (S1)

The sequence of deposits was not investigated in detail across the whole site but was observed where revealed by cut features and in a series of sondages S1 to S4 across the site, some of which were produced by removing the fill of modern cut features (see Figure 4 for locations). The most instructive was a section (Figure 6) in the central part of the site (S1). This identified a sequence of archaeological deposits c.0.6m deep. Similar although quite variable sequences could be identified in many places within the excavated area. The principal context groups in the section are described below. Sondage S2 was a deliberate overcut close to the western corner of the site revealing a mixed Roman deposit and a buried soil similar to those in sondage S1. Sondage S3 utilised a modern waterpipe trench and revealed a shallow mixed Roman deposit and what appeared to be natural substrate. Sondage S4 which again utilised a modern trench revealed a buried soil but was not entirely clear due to wider disturbance around the trench.



Figure 7. Central part of S1 showing Roman deposits and buried soil

3.3.1 Natural substrate

Sondage 1 was excavated down to the natural substrate (077). This was a somewhat variable midorange silt clayey-silt of glacial origin that was encountered at varying depths across the site (089 and 019). The deposits in the south-eastern 4 to 5 metres of the site had been truncated down to this level (089) as had those in the northern corner of the excavation (019).

3.3.2 Pre-Roman buried soil

The natural was overlaid in sondage 1 by a buried soil (032), up to 0.56m deep. This contained occasional flecks of charcoal but no finds were recovered from it suggesting that it is a pre-Roman agricultural soil. A collection of stones (083) sealed by the probable pre-Roman soil his could be part of an early feature perhaps indicating surviving prehistoric activity on the site. Pre-Roman buried soil

was encountered across much of the site; it survived to a depth of 0.25m in sondage S2 and could be seen in the western end of pipe trench 027 and the cut for pit 021 but was not present in S3.

3.3.3 Roman occupation layers

The central part of the section of sondage 1 contained several discrete contexts that are best interpreted as the fills of a cut feature associated with stony feature 009. This sequence had been truncated to either side by a modern pipe trench and a Roman cut feature, provisionally interpreted as a pit. To either side of this, a variable layer of hard packed grey and brown silty clay could be seen to overlie buried soil 032. This (030 and 067) contained fragments of Roman pottery, heat affected clay and charcoal. Similar deposits were found across the majority of the site (094 and 086) and were characterised by variable amounts and colours of clay and silt with frequent Roman finds often in the form of large fragments of unabraded Roman pottery. This appears to be a mixed Roman occupation layer.

Most of the features identified in the wider excavation are cut through the mixed Roman occupation layer (030, 067, 094 and 086) and there are heat affected features on the surface. This context group is best interpreted as a build-up of material that was deposited as a result of activity during the Roman period. The features cut through the top of the deposit are presumably relatively late in the sequence of Roman activity and it is likely that there are earlier phases of features cut at a lower level. There was not scope in the excavation to explore the potential multiphase deposits over the large excavated area so any earlier features within this deposit were not uncovered. The deposition of material over successive phases of activity is suggested by the area around two ovens (121 and 122) which is distinctly raised, probably as a result of successive short lived clay ovens being built in the same place (see below).

The latest Roman occupation context was a thin layer of grey clay (010 in sondage S1 corresponding to 007 at the north of the site). This was identified at several places in the excavation and overlaid most cut features particularly at the north of the site. This appeared to be derived from build-up of Roman occupation deposits (030, 094 etc.) but was more homogenous and contained only small pieces of Roman pottery, sometimes in scatters that were derived from one larger sherd. This appears to be a layer of trampled or weathered material that marks the end of the Roman activity in the area. This layer was not excavated across much of the site and it may be masking further features cut into the top of occupation deposits 030, 067, 094 and 086.

3.4 Roman features

A total of 24 Roman features were investigated during the excavation. These were all visible in the top of the exposed surface after the site was cleaned by hand. Some were only visible as collections of protruding stones. As noted above, the cuts of the features were in many cases obscured by the late trampled layer 010/007.

3.4.1 Wells

The most obvious feature was a circular patch of stones (006), at the north of the site. This was quarter-sectioned and found to be a well. It was 1.8m wide and cut into the natural substrate. The sides were somewhat uneven and showed no sign of lining. A quarter of the well was excavated down to a depth of 1.3m. Excavation stopped at this depth due to health and safety concerns; the

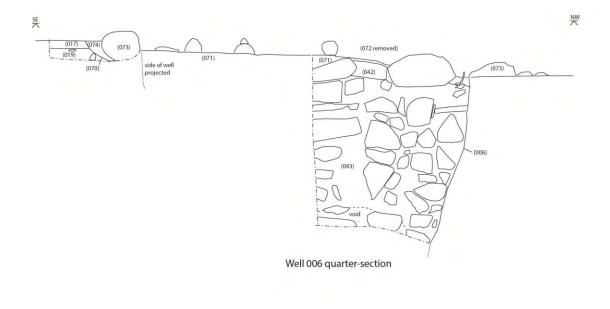
well continued for at least another 0.5m. The opening was surrounded by a clay-bonded double-faced parapet of rounded stones; about 75% of the basal course survived. The well had been deliberately infilled with large stones, possibly in part from the parapet, along with some pieces of slate and possibly earth. The lower part of the stone infill contained no earth and there were large voids between the stones. A flexible probe was inserted between the stones to an additional depth of 0.5m. The well had presumably been backfilled with stones and then capped with earth that filtered down into the voids at the top. There were no modern finds in the fill but the presence of slate was notable as these were not common in the other excavated Roman contexts.



Figure 8. Well 006 before excavation



Figure 9. Well 006 quarter section



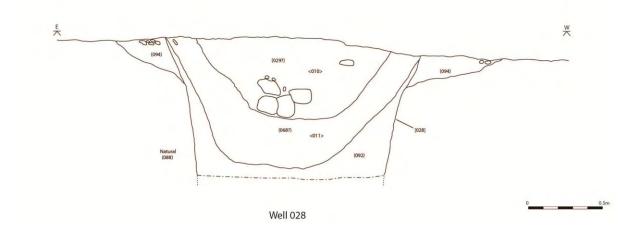


Figure 10. Wells 006 and 028 - sections

A second well (028) was discovered in the west side of the central part of the site. This was 1.5m in diameter with vertical sides that had been fairly neatly-cut through the glacial substrate. There was again no evidence of lining. The well was excavated to a depth of 1.0m but clearly continued to a greater depth. It was surrounded by small stones and gravel, apparently a metalled surface. It is, of course, possible that there had been a stone parapet and this had been entirely removed. The lower fills of the well appeared to be a result of natural silting. A deposit of larger stones and dumped material suggests a final phase of backfilling.



Figure 11. Well 028 before excavation showing remains of metalled surface



Figure 12. Well 028 – half-sectioned

3.4.2 Ovens/hearths

There were several patches of heat affected clay visible on the top of occupation level 094 and its equivalents. Four of these could be identified as clay ovens. These were cleaned and recorded but no further investigation was carried out. The ovens occurred in pairs and all were in the southern quadrant of the site.

The most southerly pair (123 and 124) comprised two circular walls of red fired clay with openings on the north-eastern side and was surrounded by less-consolidated heat-affected clay. They were quite small, with internal diameters of 0.35m and 0.5m, and had floors of small stones. Patches of charcoal to the north-east were presumably the result of raking out ashes from the ovens.



Figure 13. Ovens 123 and 124



Figure 14. Both pairs of ovens from orthographic projection

The second pair, 121 and 122, occupied a slightly raised area on the western side of the site. These again comprised hard reddened clay walls. Oven 121 was circular with an internal diameter of 0.5m and an opening on the north-east. Oven 122 was rectangular with dimensions of 0.6 m x 0.9m and probably opened to the south-west. It can be assumed that these simple clay walled ovens were fairly short-lived suggesting that the mound associated with them was the result of a succession of rebuilds and re-firings over time.

3.4.3 Pits, post-holes and other cut features

Several roughly circular cut features were identified and investigated; there were groups in the eastern and western quadrants of the site. The function of the features was not always clear; some were clearly pits while others could be interpreted as post-holes. All contained Roman pottery and none contained any later material.

Pit 021 was the largest, with a diameter of 1.9m and a depth of 0.4m. This had been recut, perhaps suggesting a function associated with industrial activity as opposed to being a simple rubbish pit.

Pit 046 was 1.3m in diameter and may have been re-used as a post hole.

Cuts 024 and 033 were less than one metre in diameter and were tentatively interpreted as truncated post-holes although they could alternatively be interpreted as small pits.

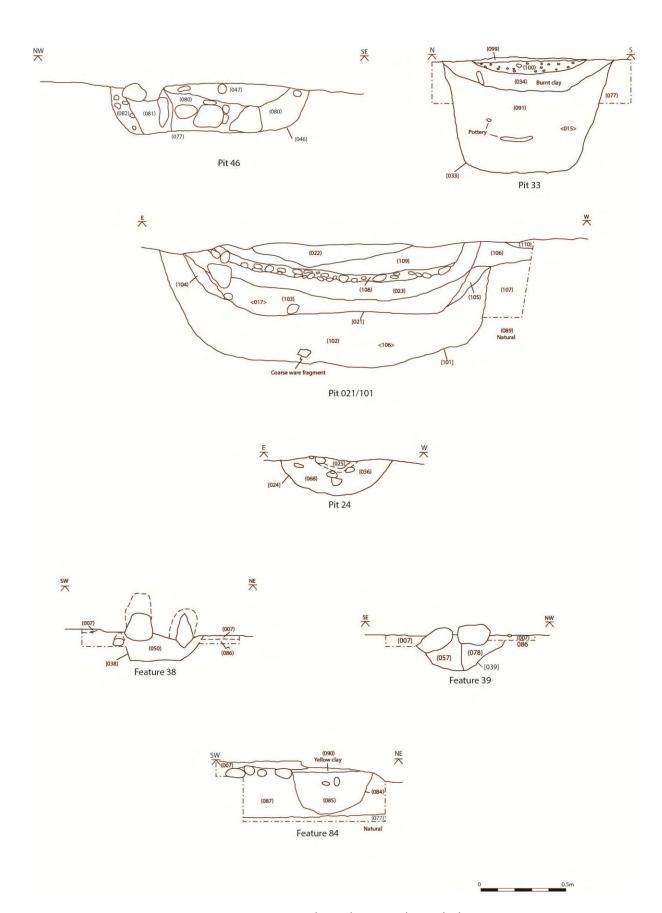


Figure 15. Sections through pits and post-holes

A group of small cut features at the north west of the site (038, 039 and 045) appeared to be the base of small truncated post-holes. All were identified by stones protruding through trampled surface 007 although their cuts were masked by this context. There was no discernible pattern to the post-holes that would have indicated that they were elements of a structure. They were also small and shallow suggesting that they did not hold substantial timbers. This suggests that they held small probably temporary structures associated with activity at the rear of the *vicus*. This area required more work to ensure that trampled layer 007 had been completely removed and did not mask other features. This was beyond the scope of the project but further excavation would probably aid in the interpretation of these features. Two small sub-rectangular cuts (058 and 060), both filled with charcoal, could be interpreted as industrial features but await further post-excavation work. Other cut features (035, 051, 053, 055 and 125) were sampled but could not be fully resolved and interpreted. These provided further evidence of the complexity of the buried archaeology.



Figure 16. Large recut pit (021) - half-section



Figure 17. Small pit (024) - half-section



Figure 18. Section through possible truncated post-hole also showing depth of mixed grey Roman deposit 007.

3.4.4 Metalled surfaces

Patches of rounded gravel and small stones pushed into the surface of occupation layer 094 and equivalents were identified in several places and are shown on Fig. 3. These are best interpreted as attempts to produce dry and stable surfaces around areas of higher use. The best preserved is 048 and 049 around well 028.



Figure 19. Metalled surface 048 with stony feature 009 in the background

3.4.5 Unexcavated features

There were several features that could be identified after the excavation area was cleaned; these were recorded photographically but no further investigations were made.

Wall or revetment 126 was visible as a line of stones running from north-east to south-west for 8m across the centre of the excavation. This was presumed to be a Roman boundary.

Sub-circular stony feature 009 was partially investigated by sondage S1. It appeared to be a cut feature but further investigation would be needed to determine its form and function

A sub-circular stony feature, 1.3m across, in the eastern/central part of the site appeared to be a pit or well but was in an area containing modern disturbance would require further excavation before it could be interpreted with any certainty.

4. FINDS AND POST-EXCAVATION ANALYSIS

The project incurred high machining and setup costs due to the need to breakup and remove a considerable amount of reinforced concrete. As a result there was limited scope for post excavation analysis. A secondary volunteer project was set up to carry out initial washing, processing and outline cataloguing of the finds. Barbara Kershaw and Louise Ingham carried out the work and the finds are now ready for specialist post excavation work.

The site produced 2286 sherds of roman pottery including a wide variety of forms and an unusually large proportion of decorated samian ware. Mortaria were common as were fragments of amphora probably indicating that food preparation was common in the immediate area. Only two coins were recovered, one dating from the late first/early second century and the second a radiate from the third century. A total of 91 sherds of glass were recovered along with numerous nails and tile fragments. Small finds included a bronze fibula, an iron intaglio ring, glass gaming pieces, a glass bead and a possible small enamelled box lid. The finds are now in storage awaiting further work.



Figure 20. A selection of pottery: decorated samian ware, a stamped amphora handle and a stamped mortarium rim.



Figure 21. Bronze fibula brooch



Figure 22. Iron intaglio ring

5. SUMMARY AND PROVISIONAL INTERPRETATION

The excavated area lies to the east of what appears to be a *vicus* if it is assumed that the 'ill-defined remains of wooden booths or hutments' identified by Wheeler lie alongside the Roman road. There has been little excavation in similar areas in Wales but geophysical surveys have indicated that there was considerable activity to the rear of *vicus* buildings. This is particularly evident at Canovium where there are large numbers of thermoremnant anomalies and/or pits in a comparable area (Hopewell 2005). These somewhat peripheral areas are potentially of great interest because they could provide information both about the activities that were carried out in the *vicus* buildings and about craft/light industrial activity associated with the fort.

The number of features, principally ovens, wells and pits, and the amount of Roman finds from the excavation indicate that this was an area of intense and sustained activity almost certainly associated with a roadside *vicus*. The range of finds suggests activity from the late first/early second century until at least the third. The ovens could indicate either bread-making or metalworking. The wells were presumably dug to provide water for the inhabitants of the *vicus*.

6 ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

The construction of the school without any archaeological mitigation in the late 1960s clearly resulted in a negative impact on the archaeology but the groundwork methodology appears to have inadvertently minimised the impact. The evidence from this excavation and the earlier assessment of the pod development suggests that the school grounds were levelled and landscaped predominantly using materials from the existing fields. Topsoil was transported from one area to another in order to produce terraces but the existing buried archaeological horizons do not appear to have been seriously truncated in the areas so far examined. It is worth noting that material in the topsoil has not necessarily been derived from the underlying horizons but may have been transported from elsewhere across the site.

The excavation was carried out over three weeks as a community project and thus was only able to investigate a small proportion of the archaeological deposits on the site of Ysgol Pendalar, albeit over a fairly large area. The excavation was able to identify, clean and record the upper contexts of the surviving Roman activity in the excavation area. This had a range of features cut into it thus demonstrating high archaeological potential. Sondages and half-sections through cut features demonstrated that buried stratigraphy survives over roughly 80% of the area. The overall depth of buried archaeology was found to be variable and was traced to between 0.05m to 0.7m in different places on the site with up to 0.35m of confirmed Roman material. Only the south-eastern and northern ends of the site had been truncated down to the top of the natural substrate and these retained archaeological features cut down to this level. The significant depth of stratified deposits is probably the result of at least two hundred years of activity associated with the fort and its *vicus* along with possible prehistoric activity identified beneath the buried soils predating Segontium. The sondages investigated a very small proportion of these deposits but in most cases revealed buried features that were not evident at the levels reached by the excavation. The features uncovered in

the excavation are therefore only likely to be a small proportion of the surviving archaeology in the area. This was demonstrated in the northern quadrant where the removal of only a centimetre or two of mixed Roman trample revealed the cuts of several features that had previously been undetectable.

The area that was excavated was beneath a reinforced concrete building base and a carpark and was therefore potentially one of the most heavily affected by the construction of Ysgol Pendalar. If the findings are extrapolated across the whole of the former school site it can be assumed that there is potential for well-preserved archaeology anywhere within the area. The area adjacent to the southwestern boundary i.e. adjacent to the Roman road is likely to retain remains of the *vicus* buildings and to be of particularly high potential. It is possible that the level of Roman activity decreases with distance away from the *vicus* although this assumes that it was a simple strip development. Geophysical survey in the environs of forts elsewhere in north-west Wales indicates that while *vici* often comprise simple strip development alongside the roads from the fort, side roads and other buildings are relatively common most notably at Caer Gai, Pennal and on the north side of Canovium (Hopewell 2005).

The area within the current scheduled area was not investigated but appears to have been unaffected by the school development apart from possibly being buried under a layer of redeposited topsoil.

Roman archaeology has been recorded in several places within Caernarfon. This has mostly been very fragmentary due to the expansion of the town around the fort. The only substantially undisturbed areas are around the northern apex of the fort i.e. the former school site and a strip along the north-east side of the defences. These surviving areas are therefore of particular importance to the understanding of this long-lived fort within its wider environment.

7. POST-EXCAVATION

The excavation produced a substantial collection of finds which will require specialist study in a subsequent phase of the project. Environmental samples were taken from several features. These will also have to be processed and examined by specialists in subsequent phases of the project.

8. ACKNOWLEDGEMENTS

The site of the former school is owned by Gwynedd Council. Thanks are due to Lowri Cadwaladr Roberts and Gareth Moriarty Owen for arranging access. The project was Grant-aided by Cadw, thanks to Ian Halfpenny for support and advice. The Segontium Visitor's Centre was the base for the excavation, thanks to Brian Thomas for assistance and putting up with us.

This was a demanding site to work on and the excvavation could not have happened without the 53 volunteers who carried out much of the work. Thanks are due for their hard work. Supervision training and outreach were carried out by Neil McGuinness, Michael Lynes, Jade Owen, Rhys Mwyn Adele Thackray, Nebu George, Katarina Moeller and Eleanor Smart.

Particular thanks are due to Barbara Kershaw and Louise Ingham who washed, catalogued and rebagged several thousand finds after the excavation had finished.

9. REFERENCES

Hopewell D., 2005, Roman Fort Environs in North West Wales Britannia 36

Macrow K., Parry L. W. and Parry I. G., 2019, Segontium Pods Fieldwork Report (Brython Archaeology)

Wheeler M., 1923, Segontium and the Roman Occupation of Wales, Y Cymmrodor XXXIII







