



Archaeoleg Brython Archaeology

Segontium Pods, Fieldwork Report:  
Archaeological Watching Brief  
and Evaluation

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## Segontium Pods Fieldwork Report

Archaeological Watching Brief and Evaluation

Prepared for YGC

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## Appendix I: Context Descriptions

## Crynodeb

*Mae Archaeoleg Brython wedi cwblhau rhaglen o waith maes archaeolegol ar gyn-safle Ysgol Pendalar, Caernarfon, ger caer Rufeinig Segontium sy'n Heneb Gofrestredig. Comisiynwyd y Gwaith gan Ymgynghoriaeth Gwynedd Consultancy (YGC) er mwyn casglu gwybodaeth ar gyfer cais gynllunio ar gyfer pedwar uned hunangynhaliol ddomestig.*

*Roedd y gwaith maes yn cynnwys briff gwylio yn ystod cloddio dau bydew Arolwg Geodechnegol a gwerthusiad archaeolegol o'r safle.*

*Yn ystod y briff gwylio ni sylwyd unrhyw dystiolaeth bendant o ddyddodion archaeolegol. Cloddiwyd tair trench i werthuso'r safle. Darganfyddwyd dystiolaeth o archaeoleg Rufeinig ym mhob rhan o'r safle aseswyd. Canfodwyd haen o bridd tywyll o dan sylfaen adeilad yr ysgol, roedd hwn yn cynnwys crochenwaith Rhufeinig sy'n debygol o ddyddio rhwng y ganrif 1af hwyr a'r 2il ganrif gynnar OC. Oddi tan yr haen Rufeinig roedd haen sy'n debygol i gynrychioli cyn arwyneb y tir. Yn ogledd-orllewin y safle canfodwyd tair ffos, nid oedd y rhain o faint digon sylweddol i gynrychioli ffosydd amddiffynnol ond mae'n bosib eu bod wedi eu torri trwy lenwad ffos fwy sylweddol.*

*Mae'n debyg bod yr haen Rufeinig yn gysylltiedig â'r gaer adeiladwyd o goed yn un o gyfnodau cynharaf Segontium.*

*Mae'r gwaith maes yn dangos bod archaeoleg o nodd sylweddol yn parhau ar y safle. Bydd unrhyw waith clirio ac adeiladu ar y safle yn cael effaith ar yr archaeoleg. Argymhellir bod y crochenwaith o'r safle yn cael ei asesu gan arbenigwr a bod y samplau pridd a gasglwyd yn cael eu prosesu. Os oes deunydd sy'n addas i'w ddyddio trwy ddadansoddiad radiocarbon yn cael ei ganfod yn y samplau argymhellir bod dyddiadau manwl yn cael eu meddiannu.*

*Os yw'r datblygiad yn mynd ymlaen argymhellir cyflawni archwiliad archaeolegol llawn cyn dechrau adeiladu.*

## Summary

*Brython Archaeology have completed a programme of archaeological fieldwork on the former site of Ysgol Pendalar school, Caernarfon, adjacent to Segontium Roman fort which is a Scheduled Ancient Monument. The work was commissioned by Ymgynghoriaeth Gwynedd Consultancy (YGC) to inform a planning application for four self-contained domestic units.*

*The fieldwork comprised an archaeological watching brief during the excavation of two Geotechnical Inspection pits and an archaeological evaluation of the site.*

*During the watching brief no definite evidence of archaeological deposits was identified. Three trenches were excavated during the evaluation of the site. Evidence of Roman archaeology was identified in all areas of the site which were assessed. A dark layer of soil containing Roman pottery was identified immediately below the foundations of the school building, the pottery from this layer has been initially assessed as dating from the late 1<sup>st</sup> to early 2<sup>nd</sup> centuries AD. Below the Roman layer was a deposit which is likely to represent a former ground surface. At the north-west of the site three ditches were identified, these were not substantial enough to be considered defensive ditches but may have been cut into the fill of a more substantial ditch.*

*It is likely that the Roman deposit is associated with the timber fort which was built during the earliest phases of Segontium.*

*The fieldwork demonstrates that significant archaeology survives at the site. Any clearance and construction work is likely to have an impact on the surviving archaeology. It is recommended that the pottery recovered from the site is assessed by a specialist and that the soil samples collected are processed. If material suitable for radiocarbon dating is recovered from the samples it is recommended that accurate dates are obtained.*

*If the development proceeds it is recommended that the site is subject to full archaeological investigation before construction commences.*

# 1 Introduction

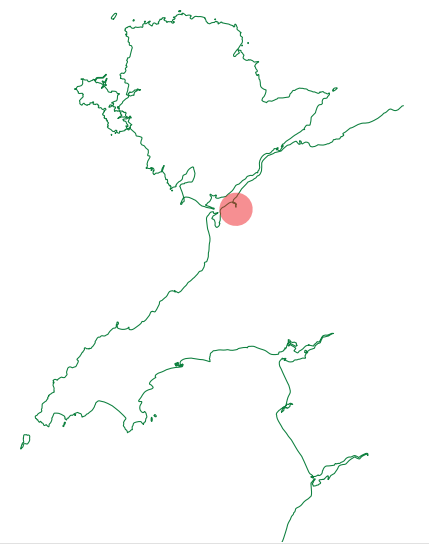
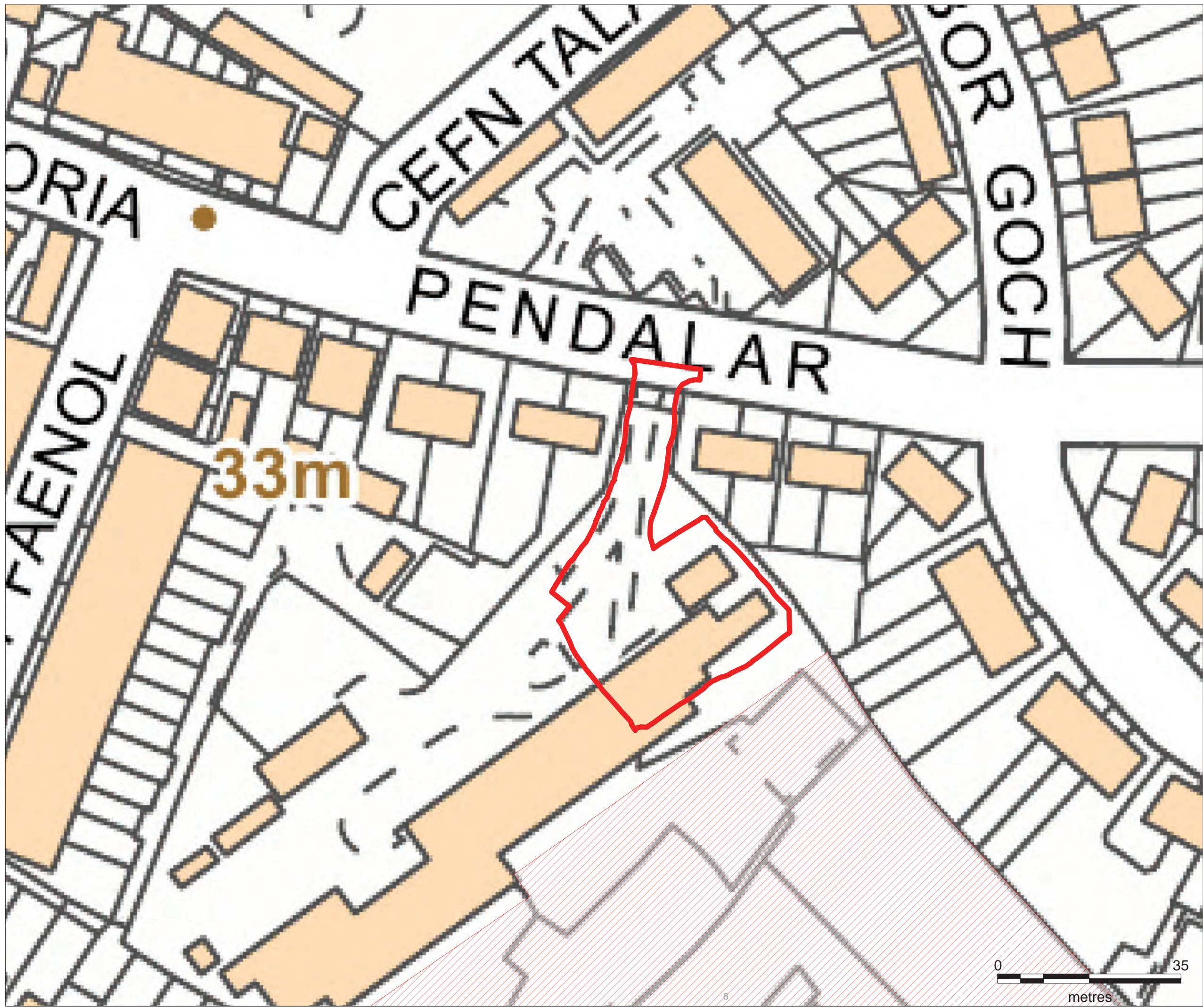
Archaeoleg Brython Archaeology CYF was commissioned by Ymgynghoriaeth Gwynedd Consultancy (YGC) to undertake a programme of archaeological fieldwork to inform the planning application for the development of four self-contained housing units on the former site of Ysgol Pendalar, Caernarfon, at NGR SH48516256 (See Figure 1). The proposed site is adjacent to Segontium Roman fort which is a Scheduled Ancient Monument.

This document is a report on the results of a watching brief conducted during the excavation of two Geological Inspection (GI) pits and an archaeological evaluation of the site.

The watching brief and evaluation were undertaken by ABA staff under the supervision of Karl Macrow, ABA Project Officer. The work was monitored by Jenny Emmett and Ashley Batten of Gwynedd Archaeological Planning Service (GAPS).

All works were undertaken to meet the relevant standards of the Chartered Institute for Archaeologists.





**Figure 1:**  
Site location plan.

**Key**

 Proposed Development Area

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Drawn By:	IGP
Date:	11/02/19
Location:	SH48516256
Project:	AB1809 Segontium Pods





## 2 Background

### 2.1 Project Background

The proposed development site lies immediately adjacent to the north-western corner of Segontium Roman Fort which is a Scheduled Ancient Monument (SAM) (CN0006). The site was formally the location of Ysgol Pendalar school which was demolished in 2007. The former school building was constructed in the mid-20th century and was not believed to have substantial foundations, however it was believed that significant disturbance may have been caused during the preparation of the site for construction. Demolition documents obtained by YGC indicated the presence of a small, 1.2m deep, swimming pool within the school building. Following a conversation with a former teacher at the school it has been confirmed that the pool was located towards the north eastern end of the school building and is likely to be within the development area.

### 2.2 Archaeological and Historical Background

#### 2.2.1 Prehistoric

Evidence of Prehistoric activity in the vicinity of the proposed development area is largely represented by artefacts. The earliest activity dates to the Neolithic and includes three stone axes (PRN 3110) which are recorded as being discovered at Segontium. A pit (PRN 34067) excavated during mitigation at the site of Ysgol yr Hendre which produced flint debitage and pottery was also radiocarbon dated to 2560-2350BC indicating activity during the Mid to Late Neolithic.

Possible Prehistoric activity (PRN 68745), which may have been associated with a roundhouse, was also found during archaeological evaluation to the south-east of the former Ysgol yr Hendre.

In the wider landscape it is believed that Twthill, which lies approximately 550m to the north-west, is the location of a Prehistoric defended enclosure. This interpretation has been widely debated but given the presence of a large bank it is likely that the site was defended at some point in time (Smith, 2005).

#### 2.2.2 Roman

Unsurprisingly given the close proximity to Segontium itself much of the recorded archaeology in the area dates to the Roman period.

Segontium was probably established as an auxiliary fort in AD77 by Gnaeus Iulius Agricola following the suppression of a rebellion by the Ordovices. The fort was continuously occupied to varying degrees until the late 4<sup>th</sup> century, developing over time with numerous phases of demolition and construction. The fort is thought to have been abandoned at the end of the 4<sup>th</sup> century.

Activity likely to be associated with the establishment of the fort was identified during archaeological excavations in advance of the construction of the new Ysgol yr Hendre approximately 500m to the east. A number of earth-cut ovens were dated to the 1<sup>st</sup> century AD with Bayesian analysis suggesting that they were likely to be associated with the initial establishment of Segontium (Kenney & Parry, 2013).

A vicus, or civilian settlement, is known to have developed around the fort during the 1<sup>st</sup> and 2<sup>nd</sup> centuries but evidence of continuation beyond this is limited. Evidence of the vicus has been found to the north-west, west and south of the fort (Hopewell, 2003). Given that the proposed development area is to the north-west of the fort it is possible that activity associated with the

vicus could be present. At the north-east boundary of the proposed development area a Roman drain (PRN 16066) was identified during the construction of houses on Pendalar and the wall at the rear of the properties on Caer Saint. The drain was identified following the excavation of the foundation trench for the wall and was orientated south-west to north-east. It was suggested that the drain originated at a point below the former school, likely to be within the proposed development area (Banholzer, 2002).

Further sites which are associated with the fort include the lower fort or Hen Waliau which is located approximately 300m to the south-west. It has been suggested that this was a storage depot which was built in the 4<sup>th</sup> century (Kenney & Parry, 2013). A Mithraeum (PRN 3098) dating to the early 3<sup>rd</sup> century was excavated in 1959 approximately 270m south-east of the proposed development, the site is now occupied by No. 14 Lôn Arfon.

A number of cemeteries and individual burials have been discovered around the fort suggesting that numerous locations were utilised for funerary practices during the occupation of the fort. Discoveries made to date suggest that the main burial ground (PRN 3092) was on the road from Segontium to Tomen y Mur, approximately 450m south-east of the proposed development. A total of 14 cremations were discovered during the cutting of graves at the Llanbeblig cemetery between 1850 and 1947, all of which appear to have been located on the southern side of the road. A single cremation (PRN 5558) dating to around 100AD was discovered during the excavations of foundations for houses on Ffordd Ysgubor Goch, 120m to the north. The burial of a mature woman is noted as having been discovered at the base of a re-cut ditch approximately 300m to the west, and burials are also mentioned as being discovered to the east on the road to Canovium (Pollock, 2006).

### 2.2.3 Early Medieval

Evidence of early medieval activity in the area was identified during archaeological excavations in advance of the construction of Ysgol yr Hendre in 2010. During the excavation an early medieval cemetery (PRN 34043) containing three square funerary enclosures around which an unenclosed cemetery, comprising 41 graves, had developed (Kenney & Parry, 2013). A further three square funerary enclosures (PRN 34045, 34046, 34047) were discovered to the north of the cemetery around which no further graves were identified. The enclosures were to between the mid 6<sup>th</sup> and late 7<sup>th</sup> centuries which clearly indicated activity in the area during this period. Given the size of the cemetery it is likely that a settlement was located nearby, evidence for which has not been discovered to date.

### 2.2.4 Medieval

Evidence of medieval activity within the study area is limited and may be related to the shift in focus to the banks of the Seiont which occurs with the establishment of the Welsh town. The main feature within the study area is the church of St Peblig (PRN 3108) which is a Grade I Listed Building (ID 3881). The current building is 14<sup>th</sup> century or later with much of the building dating to the late 16<sup>th</sup> and 18<sup>th</sup> centuries. The dedication of the site to St Peblig, who is said to have been the son of Macsen Wledig (Magnus Maximus), suggests that the site was of importance during the early Christian period. The church was given to Aberconwy Abbey in the 13<sup>th</sup> century by Llywelyn ap Gruffydd but no evidence of this earlier building has been identified.

Although it is likely that an earlier motte and bailey castle once stood on the site, Caernarfon castle and the town wall was constructed following the conquest of Edward I in 1283. The Welsh town was replaced by an English garrison borough and castle (Kenney & Hopewell, 2009). The castle was

built by Master James of St George with work starting in 1287 and continuing for approximately three years.

Approximately 450m south-west of the proposed development area are two medieval sites associated with St Helen. Capel Helen (PRN 3120) is referred to in an itinerary of John Ray dating to 1662. In the document Ray states that the remains of the chapel could formerly be seen close to Ffynnon Helen (PRN 3119), a holy well which is located in a private garden on South Road.

#### 2.2.5 Post Medieval and Modern

During the post-medieval period Caernarfon grew and spread towards Segontium. The 1<sup>st</sup> edition map of 1899 shows that town was encroaching on the north-western side of the fort but the proposed development area itself and the land to the north and east remained as enclosed fields. The majority of the housing estates which now surround the area were built in the mid 20<sup>th</sup> century which is also when Pendalar School was built on the site.

### 2.3 Topography and Geology

Segonitum is located on a high plateau which slopes away on all sides, most notably to the north-west where it overlooks the medieval walled town of Caernarfon and the Menai Strait beyond. Approximately 150m west is the lower fort, known as Hen Waliau, which is likely to have formed part of the Segontium fort complex providing access to Afon Seiont.

The BGS Geology of Britain Viewers states that the superficial geology consists of Devensian-Diamicton Till which formed up to two million years ago in the Quaternary period, indicating a landscape dominated by ice age conditions. The underlying bedrock consists of siltstone of the Nant Ffrancon subgroup, a sedimentary rock which formed in shallow seas approximately 449-478 million years ago during the Ordovician period (BSG, 2019).

### 3 Aims and Objectives

The aim of the watching brief was to identify any archaeology which may have been present within the GI pits and to mitigate any negative impacts which may have occurred during their excavation.

The objectives of the watching brief were:

- To identify any archaeological deposits within the limits of the GI pits.
- To investigate and record any archaeological deposits identified during the watching brief.
- To effectively disseminate the information collected to aid understanding and future management of the site.

The aim of the evaluation was to identify any whether archaeological deposits survived within the proposed development and assess how they would be impacted by the proposed development.

- To identify any archaeological deposits within the limits of the evaluation trench.
- To determine the scale, depth, character and condition of any buried archaeological remains which may be present within the proposed development area.
- If required, recommend appropriate mitigation against potential impacts.
- To effectively disseminate the information collected to aid understanding and future management of the site.



## 4 Methodology

### 4.1 Watching Brief

Two GI pits were excavated by YGC on the 26th of February 2019. Both GI pits 1 and 2 were excavated under archaeological supervision.

During the watching brief:

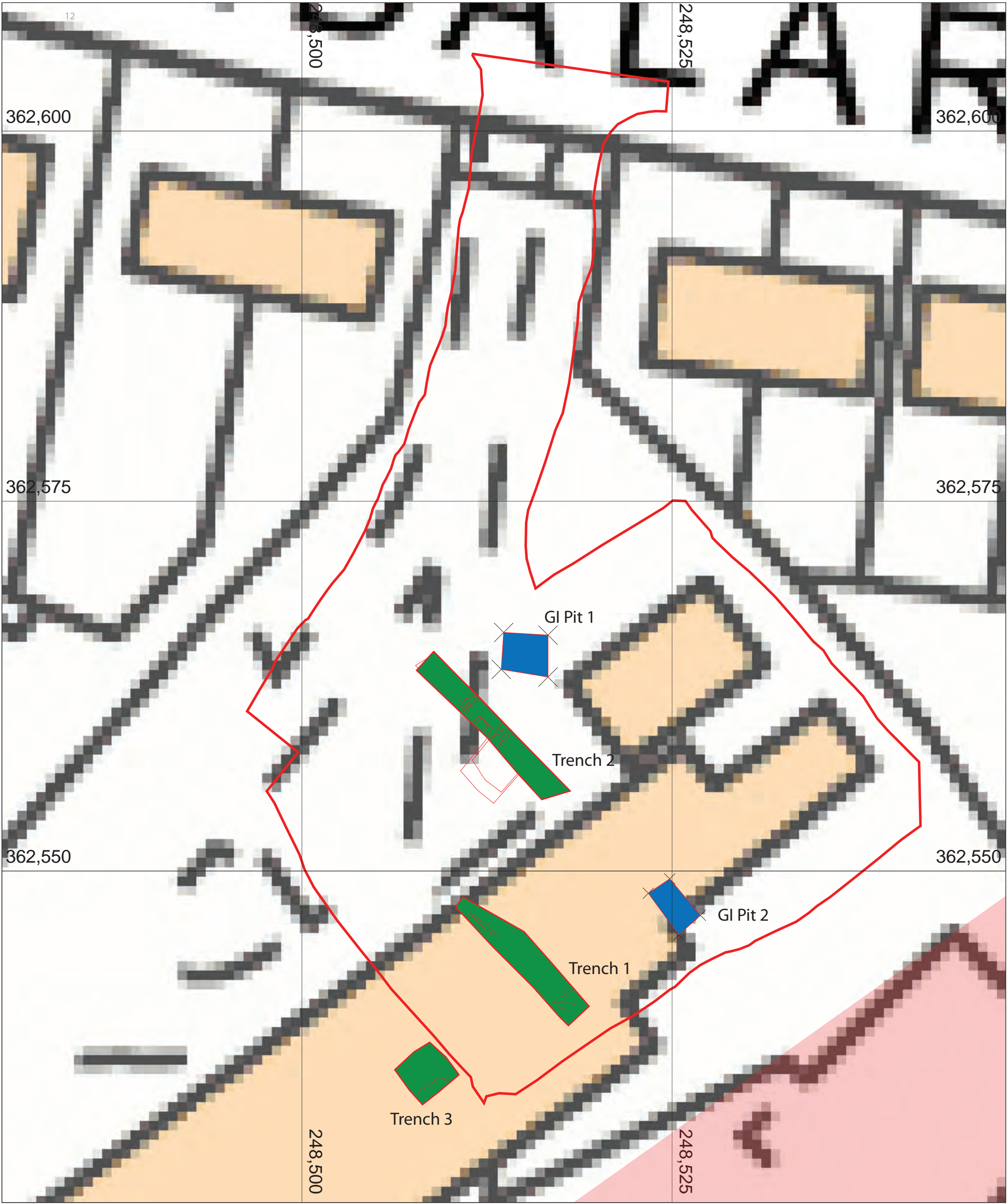
- An archaeologist was present during the excavation of both GI pits.
- The work was conducted in a manner which allowed for immediate cessation to allow investigation and recording of identified archaeological deposits.
- The excavator was fitted with a toothless, flat ditching bucket for all excavations until the level of natural glacial subsoil was reached.
- A written record of progress was made on pro-forma sheets.
- A survey tied in to OS NGR system was undertaken using a GPS with accuracy of  $\pm 5$ mm.
- A photographic record of progress was made using a DSLR camera, images are stored in .NEF/RAW format.

### 4.2 Evaluation

A single trench measuring 30m x 2m was originally planned but due to ecological constraints it was decided to excavate two staggered trenches of 15m x 2m, a third trench measuring 3m x 3m was excavated to further investigate identified deposits (See Figure 2). Excavations were undertaken between the 26th of February 2019 and the 1st of March 2019.





During the evaluation:

- The trenches were opened by mechanical excavator fitted with a flat, toothless ditching bucket under constant guidance by an archaeologist.
- Where concrete deposits were present the surface was broken using a hydraulic breaker prior to commencing excavation.
- Mechanical excavation continued until archaeological deposits were identified.
- The trenches were generally excavated to a maximum depth of 1.2m.
- All identified features were evaluated to gain as much information as possible within the scope of the evaluation.
- Bulk soil samples were collected from suitable deposits
- All features were recorded in writing, drawn, photographed and surveyed.
- The survey was tied in to OS NGR system and undertaken using a GPS with accuracy of  $\pm 5$ mm.
- A photographic record of progress was made using a DSLR camera, images are stored in .NEF/RAW format.



**Figure 2**  
Site Plan showing location of GI pits and  
evaluation trenches.

Grid: 25m

- Key**
-  Proposed development boundary
  -  Scheduled Ancient Monument (Segontium)
  -  GI Pits
  -  Evaluation Trenches

Drawn By:	IGP
Date:	11/04/19
Location:	SH48516256
Project Number:	AB1809



## 5 Results

### 5.1 Watching Brief

Two GI Pits were excavated by YGC to test the drainage of the site. GI Pit 1 was excavated on a grass verge to the south-east of the access drive, GI Pit 2 was excavated through concrete foundations at the south-eastern side of the former school building (See Figure 2).

#### 5.1.1 GI Pit 1

GI Pit 1 measured 4m in length, 4m wide and approximately 5m deep. Below the topsoil was a deep, dark homogenous layer of mid to dark brown sand silt. There were no visible features or variations in this deposit. This dark deposit sat on naturally deposited yellowish grey glacial till with occasional large stone inclusions.

#### 5.1.2 GI Pit 2

GI pit 2 was 4m in length, 1.5m wide and approximately 5m deep, it was excavated through the foundations of the demolished school, presumably through the edge of the former swimming pool, or other unknown deep feature, which was backfilled with un-mortared three frogged modern engineers' bricks and covered with a thin layer of concrete.

Directly below the modern slab was a small yellow patch of sand this is presumed to be a modern feature associated with the construction of the school. Directly below the slab was a mid-brown sandy silt similar to the dark deposit in GI pit 1. This layer was approximately 4m deep and when viewed from the edge of the pit seemed homogenous. There were no cuts or features visible in this layer though towards the base of it there were some dark patches that may have been degraded wood, these did not appear to be structural in nature. Underlying this dark deposit was the natural greyish yellow glacial till.

### 5.2 Evaluation Trenches

A total of three trenches were excavated during the evaluation. Trench 2 was in the same location as the eastern half of the originally proposed trench, the western half of the originally proposed trench was moved 3m to the south-west to become Trench 1. A further 3m x 3m trench (Trench 3) was excavated 4m to the south-west of Trench 1, immediately south of the proposed development area (See Figure 2).



### 5.2.1 Trench 1

Trench 1 measured 10.5m in length, 2m wide and reached a maximum trench depth of 1.6m (See Plates 1, 2 and 3 & Figure 3).

Context No.	Depth below surface	Description
001	0.1m	Modern foundations
002	0.4m	Roman dumped material
003	0.4m	Area of burnt material and slate
004	0.8m	Red-brown buried ground surface
005	0.45m	Modern foundations
006	0.3m	Modern foundations
007	0.6m	Modern foundations
011	0.8m	Cut of possible pit
013	0.8m	Possible edge of Roman ditch
015	1.4m	Illuvial clay in natural depression
016	1.1m	Modern cut for services
017	1.2m	Natural yellow clay
027	1.15m	Possibly churned up ground surface

Modern concrete foundations overlying a dark blue grey clay dumping layer (002) which contained numerous sherds of Roman pottery. This dump layer (002) overlay the red-brown buried ground surface (004) and filled a ditch [013] and possible pit [011] which were cut into a buried ground surface (004). This ditch [013] was only visible in the north east section of the trench. No terminus was visible in plan.



Plate 1: North east facing section of Trench 1, scales:1m.





Plate 2: North west end of Trench 1, showing the lack of features in the base and extent of modern truncations in the section, scales:1m.



Plate 3: South east end of Trench 1, showing the lack of features in the base of the trench. Layer (002) is visible in the step at the far end of the trench, scales:1m.

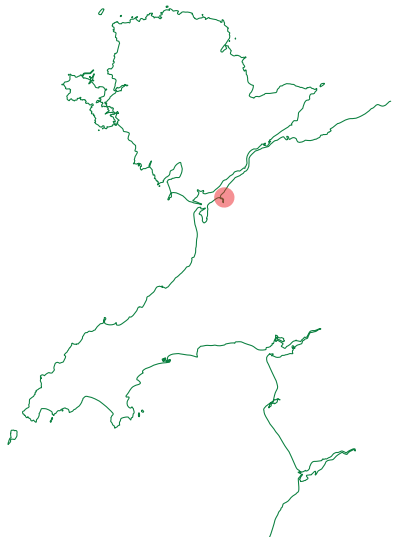
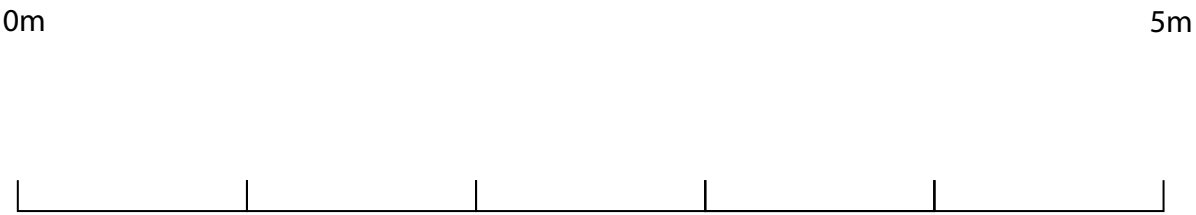
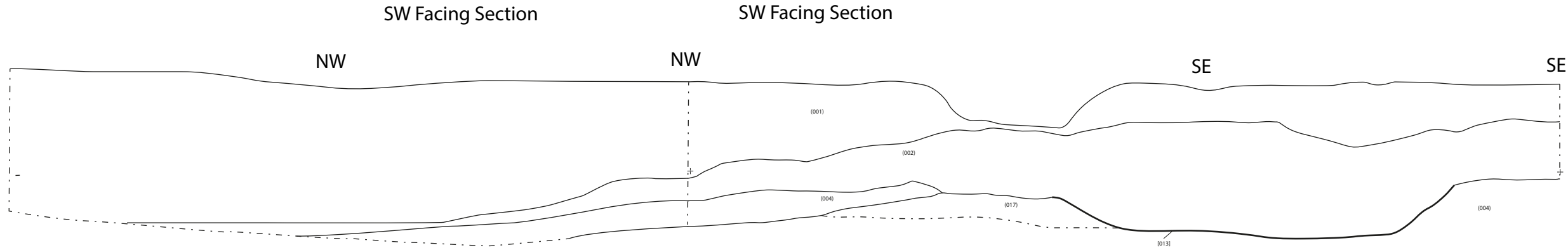
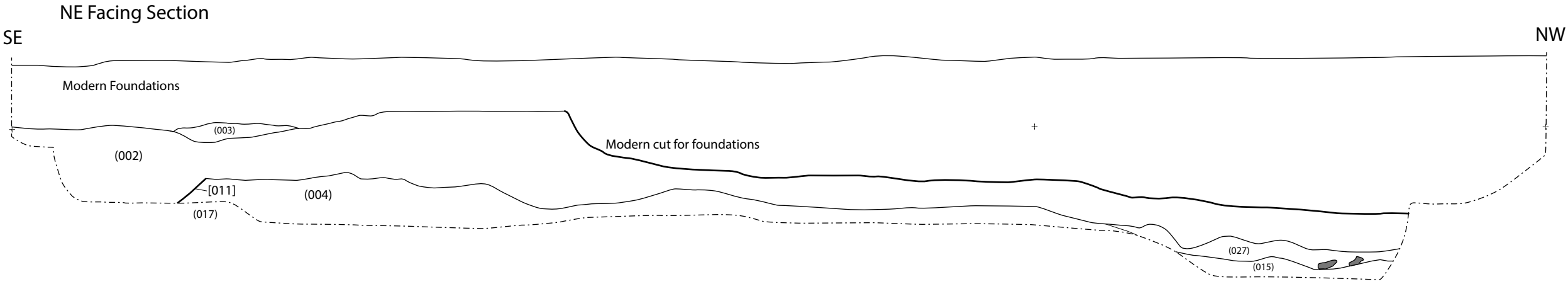


Figure 2  
Trench 1 Section Drawings.

- Key
- Stone
  - Limit Of Excavation
  - Edge Of Context
  - Cut Feature
  - Section Pin Location

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Drawn By:	KM
Date:	19/03/2019
Location:	SH48516256
Project:	AB1809 Segontium Pods



### 5.2.2 Trench 2

Trench 2 measured 11m in length, 2m wide and reached a maximum trench depth of 1.6m (See Plate 2 & Figure 4).

Context No.	Depth below surface	Description
010	1.1m	Ditch cut
012	0.9m	Ditch cut
014	0.9m	Ditch fill [012]
018	1.1m	Ditch fill [010]
019	0.0m	Topsoil
020	0.5m	Modern deposit
021	0.6m	Modern subsoil
022	0.8m	Possible disturbed layer containing Roman pottery
023	1.1m	Red-brown buried ground surface
024	1.3m	Natural yellow clay
025	1.0m	Fill of ditch [026]
026	1.0m	Cut of ditch

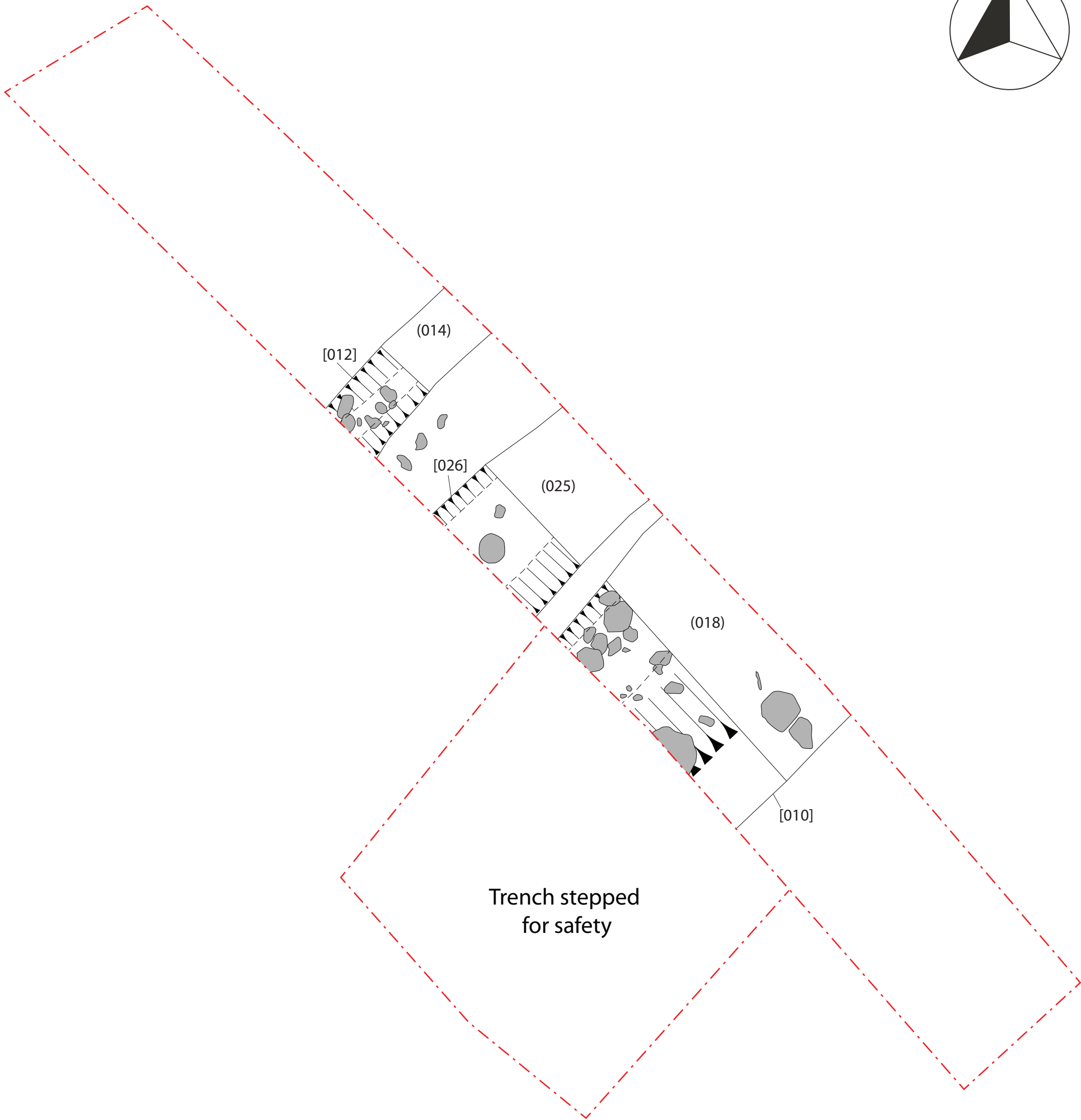
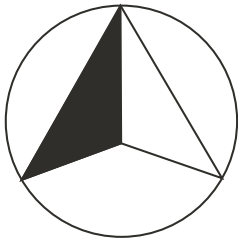
Due to the presence of live underground services at the north east end of the trench it was not dug to its intended length. It was largely truncated by modern landscaping activity, below this modern activity a mixed layer was visible (022), this contained both post-medieval and Roman pottery, it overlay a red-brown layer which may have represented a buried ground surface (023). Three parallel north-east to south-west orientated ditches were identified at the base of the trench. Ditch [010] was 0.95m wide and 0.25m deep. It was filled by a dark blue-grey silty clay (018) which contained several large stones and a shard of post medieval glass. Ditch [012] was 0.43m wide and 0.26m deep. It was filled by dark brown-black silty clay (014) which contained a small number of large stones. Ditch [026] was 1.75m wide 0.45m deep. It was filled by firm red-yellow sandy silt (025). Artefacts recovered from this trench included a shard of post medieval float glass from the top of fill (018); and a few fragmentary sherds of Roman pottery from layer (022) which also contained modern blue and white pottery and ceramic sewer pipe fragments.







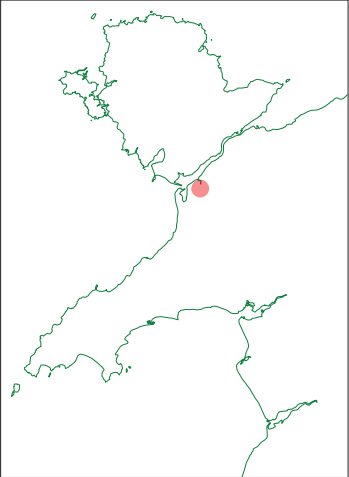
Plate 4: Working shot showing ditches in Trench 2 (view from north-west).






**Figure 4**  
Plan of Trench 2.

- Key**
-  Limit of Excavation
  -  Stones



Drawn By:	IGP
Date:	11/04/19
Location:	SH48516256
Project Number:	AB1809
	

### 5.2.3 Trench 3

Trench 3 measured 3.0m in length, 3.0m wide and reached a maximum trench depth of 0.60m.

Context No.	Depth below surface	Description
008	0.25m	Roman dump layer
009	0.55m	Red-brown buried ground surface

Modern foundations lying directly over a layer of dumped material (008). The dumped material contained sherds of Roman pottery and Ceramic Building Material (CBM) overlying what may be a buried ground surface (009). This trench was dug to further characterise the nature of the Roman dump layer seen in Trench 1 and as such only extended to the base of this layer which lay on the upper face of the buried ground surface (009).



Plate 5: North west facing section of Trench 3, scales:1m and 0.5m.

## 6 Interpretation

### 6.1 GI Pits

It was originally thought that the dark layers observed in the GI pits represented modern disturbance of the site during the construction of the school. However, in light of the evaluation results it is possible that the deep dark layer in GI Pit 2 could represent the fill of a large ditch, possibly relating to ditch cut [013] identified in Trench 1. The lack of pottery from this GI Pit is notable given its proximity to Trench 1, but is explained by the GI Pit being dug through the former schools swimming pool, which had removed the pottery rich Roman dump layer (002), the side wall of the pool was removed to reveal the layer in section but very little of the deposit itself was removed, as such there were no finds on the spoil heaps and no finds were retrievable in the section due to health and safety concerns.

The thick dark layer identified in GI Pit 1 most likely represented modern disturbance, however the dark patches seen towards the interface with glacial till may be associated with the dark Roman dumping layer (002) observed in Trench 1 to the south-west.

### 6.2 Evaluation Trenches

It is possible that the ditches identified in Trench 2 may be Roman in date although the post-medieval glass identified in the fill of ditch [010] suggests that the upper fills of these features may have been impacted during landscaping associated with the construction of the school. The stones within the bases of ditches [012] and [026] did not appear to be natural and were within a yellow clay which was similar to the surrounding natural deposits but could have been redeposited. It cannot be ruled out that the identified ditches may have been later re-cuts of a large defensive ditch but it is unlikely that any of the ditches identified had a defensive function. One of these ditches may line up with the drainage ditch noted in the HER (PRN 16066).

Radiocarbon dating would aid the dating of the ditches in Trench 2 if suitable material can be recovered from the samples collected during excavation.

It was unclear during excavation as to whether a red-brown deposit which appeared to overly the ditches in Trench 2 represented the same possible buried ground surface identified in Trenches 1 and 3. Given that post-medieval glass was recovered from one of the ditches this seems unlikely, however disturbance may have been greater in some areas than in others.

The wider, steep sided ditch [013] identified in the south west facing section of Trench 1 may be part of a defensive ditch and may indicate a portion of the terminus. Possible pit [011] found in Trench 1 had truncated a portion of the ditch edge. Both features were filled with the same spread of Roman material (002) indicating that they were contemporary. Both cuts may be part of the defensive earthworks for the Roman fort.

The lack of tip lines in the spread of Roman material present in Trenches 1 and 3, as contexts (002), and (008) respectively, indicates an intensive period of deposition over a short period of time. This may represent a clearing out of the fort or re-digging of ditches which may have been filled with domestic rubbish. The layer was thickest at the south-east end of Trench 1 and was found to be thinner to the south-west within Trench 3, this may be a result of landscaping associated with the former school, it is also possible that the mixed layer (022) identified in Trench 2 could contain material from this deposit.

A brief assessment of some of the pottery sherds recovered from the spread of Roman material in Trenches 1 and 3 by Dr Peter Webster of the National Museum of Wales suggests that the deposit dates to the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD (See Plate 4). This would suggest that the deposit relates to relatively early activity at the fort, possibly the timber incarnation of the fort which dates to the late 1<sup>st</sup> and early 2<sup>nd</sup> centuries which would have been associated with auxiliary infantry (Casey & Davis, 1993).



Plate 6: Samian pottery sherds from Trench 1

On the whole less Roman material was identified in Trench 2 compared to Trenches 1 and 3, this suggests that the impact from landscaping may have been grater downhill. It was unfortunate that a single trench could not have been excavated at the site as it may have aided understanding of the impact caused by previous landscaping of the site.



## 7 Conclusion

The evaluation was successful in determining the scale, depth, character and condition of archaeological remains present on the site. It has been demonstrated that undisturbed Roman deposits are present at the site and the disturbance below the footprint of the former school building appears to be minimal. It appears that landscaping associated with the former school was more extensive on the slope to the west, however it has also been shown that archaeology has survived in this part of the site. There may be further surviving evidence of defensive ditches, structures and cut features across the site which would be impacted by any groundworks undertaken.

Based on the limited information gained from the brief assessment of the pottery the identified deposits could be associated with the earliest phases of the fort. This could suggest that later deposits may have been disturbed by the construction of the school and what remains are the earlier, deeper, deposits below the level of construction.

It is evident that the impact on buried archaeology would occur as soon as the foundation slab of the former school was removed. Any excavation into deposits below this level, including the installation of services, would have a significant impact on buried archaeology.

The deposits at the site are likely to date to the earlier phase of the fort and could provide valuable information on the early history, and potentially establishment of Segontium.

## 8 Recommendations

### 8.1 Post Excavation

The dates provided for the pottery in this report have only been obtained through a very brief assessment of photographs and cannot be considered entirely reliable. It is recommended that the pottery is sent to the National Museum of Wales in Cardiff to be assessed by Dr Peter Webster.

A number of bulk soil samples were collected for processing by floatation to recover charred plant remains and macroscopic artefacts which may be present in residues. It is recommended that this processing is undertaken.

It is recommended that a palaeoenvironmental assessment is undertaken on the charred remains recovered from the bulk soil samples.

If suitable material is recovered from the bulk soil samples it is recommended that the ditches identified in Trenches 1 and 2 are prioritised for radiocarbon dating.

Once specialist information has been obtained an updated report should be completed and submitted to the Gwynedd Historic Environment Record, finds should be lodged at Storiol, Bangor.

### 8.2 Development of the Site

The date and nature of the identified deposits suggest that they are of regional, and possibly national, significance. If development of the site is to proceed a full programme of archaeological investigation should be undertaken prior to construction, it is likely that this would entail full excavation of the development area. The archaeology found during the excavation of the two trenches may suggest the potential for archaeology for the rest of the former school site, therefore the opportunities for potential new research may be considered (*Roman Research Framework for the Archaeology of Wales, Dr. J. L Davies with comments from Dr Edith Evans, 2017*) to appreciate the broader context and work that has come before.

There may be potential for archaeology

Given the location of the site within a housing estate it may be suitable for community engagement during archaeological works which could be beneficial for the local community, the developer and Segontium.

A Heritage Impact Assessment will be prepared based on the information gained during the watching brief and evaluation, this will assess the likely impact of the proposed development.

## 9 Bibliography and Sources Consulted

Banholzer, K. 2002. *Excavation Report on Pendalar New Houses, Caernarfon*. Unpublished Report.

British Geological Survey, Geology of Britain Viewer  
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed 8th February 2019)

Cadw. 2017. *Heritage Impact Assessment in Wales*.

Casey, P.J, Davies, J.L, with Evans, J. 1993. *Excavations at Segontium (Caernarfon) Roman Fort, 1975-1997*. CBA Research Report No. 90, Council of British Archaeology. London.

Chartered Institute for Archaeologists. 2014. *Standards and guidance for an archaeological watching brief*

Chartered Institute for Archaeologists. 2014. *Standards and guidance for the collection, compilation, transfer and deposition of archaeological archives*

Chartered Institute for Archaeologists. 2014. *Standards and guidance for the collection, documentation, conservation and research of archaeological materials*

Chartered Institute for Archaeologists. 2014. *Standards and guidance for desk based assessment*

Chartered Institute for Archaeologists. 2014. *Standards and guidance for excavation*

Chartered Institute for Archaeologists. 2014. *Standards and guidance for field evaluation*

Davies, D. L. with comments from Evans, E. 2017. *Roman Research Framework for the Archaeology of Wales*, [www.archaeoleg.org.uk/pdf/review2017/romanreview2017.pdf](http://www.archaeoleg.org.uk/pdf/review2017/romanreview2017.pdf)

English Heritage. 1991. *Management of Archaeological Projects* ('MAP2'), 2<sup>nd</sup> ed.

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

Hopewell, D. 2003. *Roman Fort Environs 2002-2003*, Gwynedd Archaeological Trust report No. 479

Kenney, L. & Parry, L. 2013. *Ysgol yr Hendre, Llanbeblig, Caernarfon: Report on Archaeological Excavations*. Gwynedd Archaeological Trust report No.1103.

Pollock, K.J. 2006. *The Evolution and Role of Burial Practice in Roman Wales*. BAR British Series 426

Watkinson, D. & Neal, V. 2001. *First Aid for Finds*. London: Institute for Conservation of Historic & Artistic Works

Wheeler, R.E.M. 1924. *Segontium and the Roman Occupation of Wales*. Cymmrodorion Society's Publications. London.

## Appendix I:

### Context Descriptions

## Appendix 1: Context Descriptions

### Trench 1

Context No.	Depth below surface	Description
001	0.1m	Modern foundations
002	0.4m	<u>Roman dumped material</u> Compact, dark red-brown, clay-silt, with moderate ceramic fragments in section. Mostly clear interfaces, though not clear around (007), drawn in section
003	0.4m	<u>Area of burnt material and slate</u> Compact, dark grey-black. clay-silt with moderate pieces of large slate inclusions (ca.50mm x 150mm x 5mm). Clear interfaces. The slate lay mostly along the bottom of this deposit.
004	0.8m	<u>Buried ground surface</u> Very compact, red-brown, silt-clay with moderate sand inclusions. Clarity of interface with (002) varies from very clear to unclear.
005	0.45m	Modern foundations
006	0.3m	Modern foundations
007	0.6m	Modern foundations
011	0.8m	<u>Cut of possible pit</u> Only a small portion visible in the trench. Possibly circular in plan; Sharp break of slope at the top of the cut; straight, steep sides; gentle break of slope into a flat base.
013	0.8m	<u>Possible edge of Roman ditch</u> One edge of a linear cut running NE-SW. Sharp break of slope at the top with straight sides and a sharp break of slope at the bottom into a flat base.
015	1.4m	<u>Alluvial clay in natural depression</u> Firm yellow-brown, clay, large stone inclusions in the base, clear interfaces.
016	1.1m	<u>Modern cut for services</u>
017	1.2m	<u>Natural yellow clay</u> Firm, yellow-brown, silt-clay, with occasional gravel inclusions <5mm diameter. Clear interface with contexts above.
027	1.15m	<u>Possibly churned up ground surface</u> Firm, red-brown, silt-clay, with moderate sand and small gravel inclusions, occasional stones >150mm diameter. Clear interface with context above, less clear interface with context below.

### Trench 2

Context No.	Depth below surface	Description
010	1.1m	<u>Ditch cut</u> Linear cut running SW-NE, break of slope top is gradual on the SE side and sharp on the NW side; Sides are sloping on the SE and near vertical on NW; break of slope bottom is imperceptible on the SE and sharp on the NW into a flat base.
012	0.9m	<u>Ditch cut</u> Linear ditch running SW-NE, sharp break of slope at the top; straight sloping sides; a sharp break of slope at the bottom into a flat base.
014	0.9m	<u>Ditch fill [012]</u> Firm, dark brown-black, silt-clay, with occasional small to medium stone inclusions. Clear interfaces.
018	1.1m	<u>Ditch fill [010]</u> Friable, dark blue-grey, silt-clay, moderate sand and gravel inclusions. Clear interfaces.
019	0.0m	<u>Topsoil</u>
020	0.5m	<u>Modern deposit</u>
021	0.6m	<u>Modern subsoil</u>
022	0.8m	<u>Possible disturbed layer containing Roman pottery</u>



		Firm, dark grey-brown, sand-silt, with occasional slate fragments, stones <15mm diameter, very occasional CBM and pot fragments. Interfaces diffuse and difficult to see.
023	1.1m	<u>Possible buried ground surface</u> Firm, red-brown, silt, clay, with frequent small stones (sub-rounded flint). Clear interfaces.
024	1.3m	<u>Natural yellow clay</u> Firm, yellow-brown, silt-clay, with occasional gravel <5mm diameter. Very clear interfaces.
025	1.0m	<u>Fill of ditch [026]</u> Firm, red-yellow, sand-silt, with occasional large stones >200mm diameter, occasional small stones <50mm diameter. Clear interfaces
026	1.0m	<u>Cut of ditch</u> Linear cut of ditch running SW-NE, sharp break of slope at the top; straight sloping sides; gradual break of slope at the bottom into a concave base.

#### Trench 3

<b>Context No.</b>	<b>Depth below surface</b>	<b>Description</b>
008	0.25m	<u>Roman dump layer</u> Firm, dark blue-grey, silt-clay, with frequent small-medium stones <100mm diameter. Occasional stones >150mm diameter, occasional pot and CBM. Diffuse interface with deposit below indicating possible trampling in antiquity.
009	0.55m	<u>Buried ground surface</u> Firm (friable once matted) dark red-brown, sand-silt, with frequent small pebbles <15mm diameter. Diffuse interface with context above.



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