

**Results of Archaeological Works at
Land adjacent to Penbryn Surgery,
Dwyran, Anglesey**

NGR SH 45152 65779

Report Number CR32-2013



C.R Archaeology

Compiled by C. Rees & M. Jones
on Behalf of Sustainable Homes (UK) Ltd

**Results of Archaeological Works at
Land adjacent to Penbryn Surgery, Dwyran,
Anglesey**

Planning Reference Number:

45C79G

National Grid Reference:

SH 45152 65779

Client:

Sustainable Homes (UK) Ltd

Report Author:

Catherine Rees & Matthew Jones

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1.0 Introduction

C.R Archaeology were instructed by Sustainable Homes (UK) Ltd to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference 45C79G, GAPS reference 0315je01/D1657).

A specification (CR26-2012 included as Appendix A) was written following an email from Development Control Archaeologist Jenny Emmett of GAPS (11th September 2012) as a methodology for a programme of works relating to a letter prepared by GAPS on the 15th March 2012.

The site is situated on the outskirts of the small urban centre of Dwyrn, located near the Menai Straits in Southern Anglesey (Figure 1). The proposed development lies adjacent to Penbryn Surgery and was in agricultural use prior to commencement of development works.

Planning permission has been granted for the erection of 15 dwellings on the site together with the construction of vehicular and pedestrian access (Figure 2).

A preliminary investigation of the Gwynedd Historic Environment Record by Jenny Emmett of GAPS highlighted a number of archaeological sites in the vicinity of the development and it was therefore specified that archaeological works be undertaken. This document records the results of these works.

A programme of Strip, Map & Sample was implemented at the site and the whole area was stripped to the natural under the supervision of an archaeologist. Three undated archaeological features were uncovered and a small assemblage of early Twentieth Century pottery was recovered from the plough-soil.

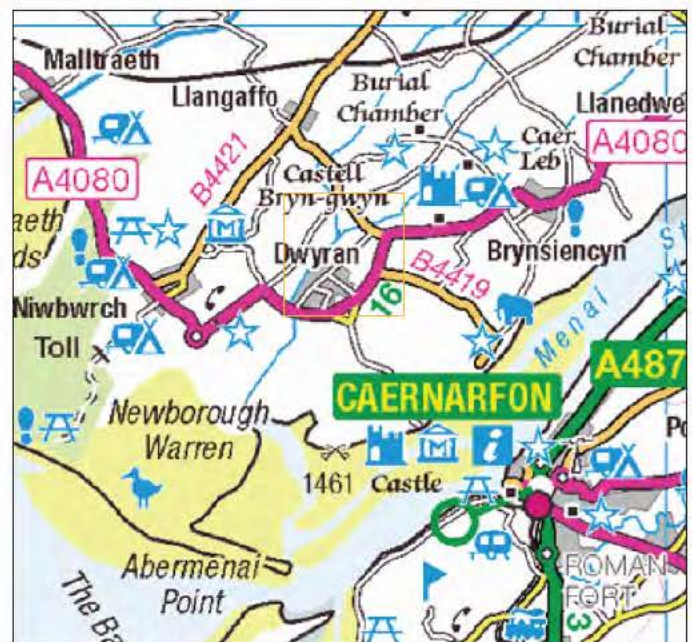
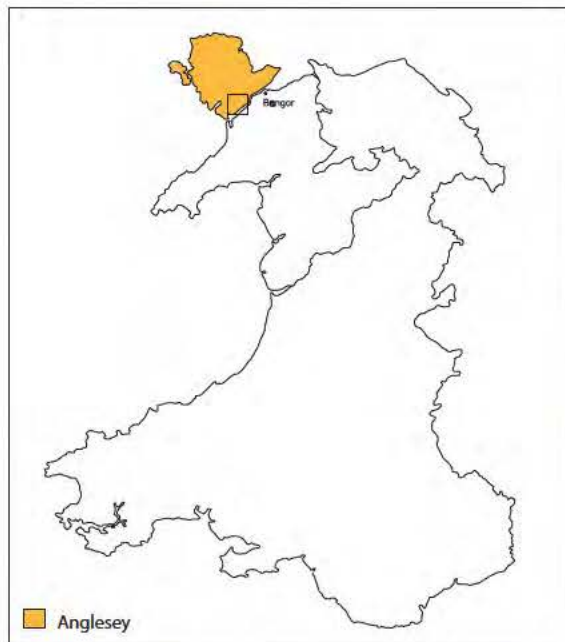


Figure 1. Location Map (Source OS Open Data Mapping)

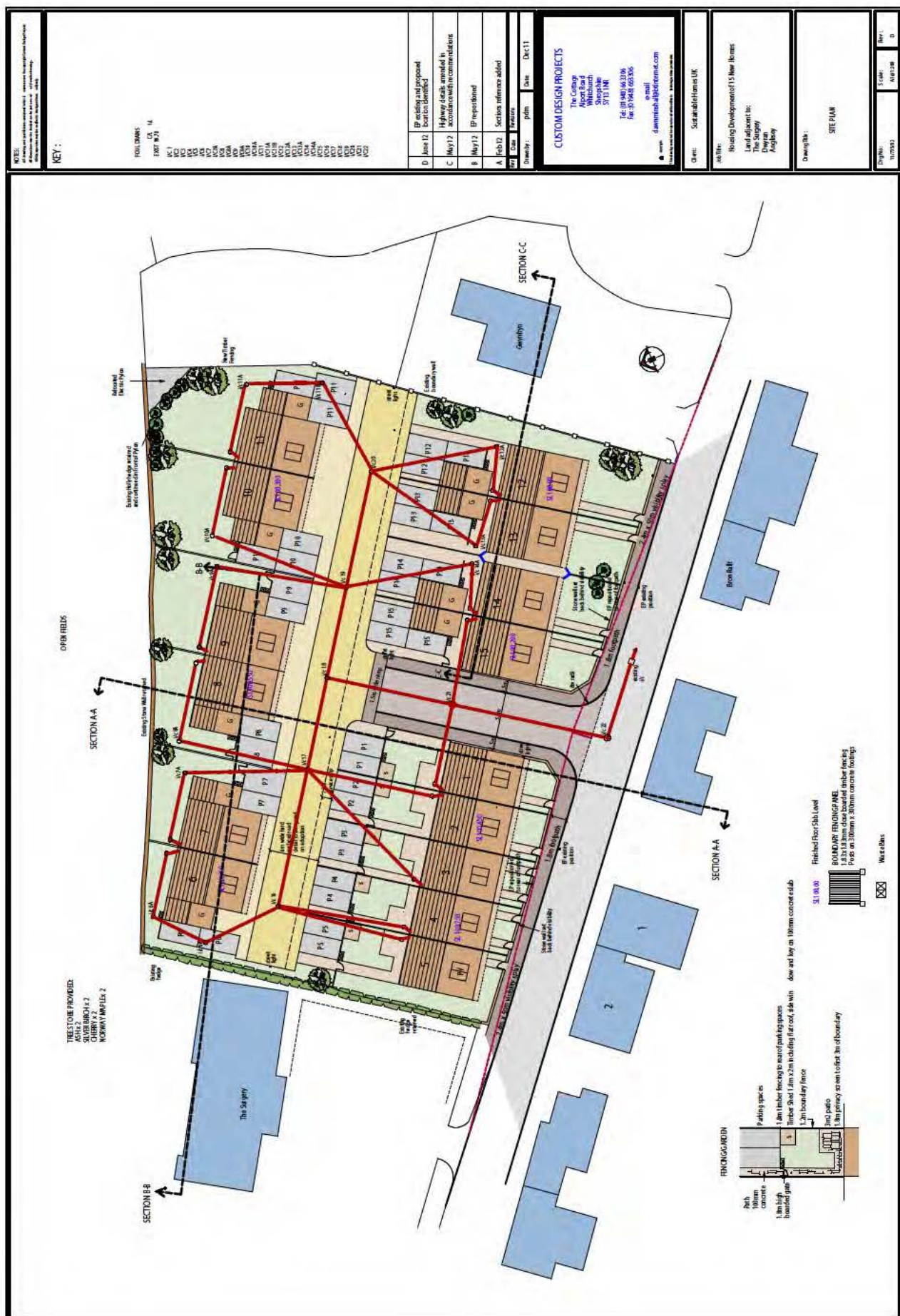


Figure 2. Proposed Development

2.0 Project Aims

This scheme of works aimed to monitor the stripping of the site down to natural to identify and assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aimed to fulfil the mitigation criteria for archaeological works as specified in a letter prepared by GAPS on the 15th March 2012.

3.0 Scheme of Works – Methodology

The methodologies employed at the site conformed to The Institute for Archaeologists: *Standard and Guidance for Archaeological Excavation* (Revised 2008).

3.1 Desk Based Research

A complete and coherent history of the site was compiled utilising material sourced from Anglesey Archives. A map progression was undertaken. Where relevant this was supplemented with information from local libraries, websites & specialist journals.

A search of the Gwynedd HER was conducted examining an area within a 500m radius of the site. The archaeological records for the parish of Llangainwen compiled by the RCAHMS in their survey of Anglesey were also consulted.

The works were carried out accordance with the IFA Standards and Guidance for historic environment desk-based assessment (www.archaeologists.net).

This material forms the historical background for this archaeological report.

3.2 Archaeological Strip, Map & Sample

Due to the potential for archaeological remains a programme of Strip, Map and Sample was implemented at the site. The topsoil and subsoil were removed from the development area using a mechanical excavator with a 1.8m toothless ditching bucket. Matthew Jones of C.R Archaeology was present during the stripping of the area and once an area had been stripped no machinery was permitted to track over the site until the area had been signed off by GAPS.

When archaeological remains/potential archaeological remains were encountered on-site the features were marked using spray paint and cordoned off to allow excavation by C.R Archaeology staff.

All archaeological features, structures or remains identified in the course of the excavation were trowel cleaned by hand. Investigation of such features, structures or deposits were sufficient to determine their character, size, date, significance and quality. Discrete features such as pits/postholes were half sectioned initially and were then completely excavated to in the hope of recovering artefactual material.

None of the features excavated yielded suitable material for dating/environmental processing and no significant discoveries were made.

All archaeological remains were recorded on a site plan at a scale of 1:100/ 1:50 as appropriate and detailed plans of features were drawn at 1:20. Sections through excavated features were drawn at a scale of 1:10.

Fieldwork was conducted by Matthew Jones of C.R Archaeology. Additional staff were not required.

3.2.1 Recording

The record forms at C.R Archaeology are based on the English Heritage system and full written, graphic and photographic records were made in accordance with the English Heritage *Field Recording Manual*. Sample forms can be provided on request. 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. A temporary benchmark (TBM) was established on the site and plans, elevations and sections contain grid and level information relative to OS data. All drawings were numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records. A 'harris matrix' diagram was constructed for the excavated area.

A high-resolution 13mp 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. Included in each photograph is an appropriate scale, north arrow and a record board detailing the site name, number and context number. General photographs were 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

Additional mitigation/contingency measures were not necessary in this instance.

3.2.3 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 (IfA 2008)* 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 (IfA 2008).

All artefactual material was 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.

No specialist conservation was necessary.

Following analysis all archaeological material recovered will be deposited in Oriel Môn Museum. 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 Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008).

3.2.4 Archive Compilation

All records created during the fieldwork have been checked for consistency and accuracy and will form part of the *Primary Site Archive (PI)* (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.

Any archive/artefactual material created/discovered during this archaeological project will be deposited at Oriel Môn, Llangefni. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition.

3.3 Timetable for Proposed Works

It was envisaged that works at the site would commence in late September – early October. This was somewhat delayed and C.R Archaeology staff commenced work on November 26th 2012 and we conducted over six days between this date and December 6th 2012. Work was carried out on a day rate basis and staff attended site as necessary. Additional time has been allotted for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services were informed of the exact site days to allow monitoring of works.

C.R Archaeology informed GAPS of the exact dates of fieldwork at least three days in advance of the commencement of works.

3.4 Staffing

The project was managed and staffed by Matthew Jones (BA (Archaeology & Welsh History), MA (Archaeological Practice). All C.R Archaeology projects are carried out in accordance with IfA *Standard and Guidance* documents.

3.5 Monitoring

The project was subject to monitoring by Gwynedd Archaeological Planning Services. The monitor was given prior notice of the commencement of the fieldwork.

GAPS were notified in writing of the commencement dates for archaeological site work. This contact was via telephone and email.

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. This consisted of:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

All staff have passed at least a CITB health and safety test at least operative level and carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363).

C.R Archaeology staff are also compliant with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

3.7 The Report

This 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 report also includes:

- A copy of the design brief and agreed specification
- A location plan
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- Sections/ detailed plans of important features
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork, and following consultation with Anglesey Archives should significant archaeological remains be encountered a PDF version will be sent for deposition in their Llangefni offices.

No archaeological material of significance was recovered and it was therefore not felt appropriate to submit the site results in journal form. The site archive including copies of all photographs in RAW and Tiff format will be deposited at Oriel Môn.

3.7.1 Copyright

C.R 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 Specification.

4.0 Geographical and Geological Context

The site (Grid Reference SH 45152 65779) is located within the Parish of Llangeinwen in the Hundred of Menai on the island of Anglesey (www.genuki.org.uk). The region predominantly comprises low-lying, agricultural land and is characterised by a pattern of dispersed farmsteads situated within irregular field systems.

4.1 Topography

The site is situated on the outskirts of the village of Dwyran and access to the plot was originally only possible from neighbouring farmland as the roadside portion of the field was enclosed with a drystone wall. This wall was partially removed prior to the commencement of works. The plot was generally well drained agricultural land although it was evident from the bramble and other ground cover that the plot had not been grazed for some time.

4.2 Geology

The 1: 50,000 scale bedrock geology of the site is described as “*Central Anglesey Shear Zone And Berw Shear Zone (Undifferentiated) - Hornblende Schist. Metamorphic Bedrock formed approximately 518 to 650 million years ago in the Cambrian and Neoproterozoic Iii Periods. Original rocks without interpretation. Later crushed in fault zone or shear zone*”. The superficial geology is detailed as “*Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions. These rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters* (www.bgs.ac.uk).

5.0 Historical Background

The site is located within the Anglesey Parish of Llangeinwen and the following section incorporates the RCAHMW data for this Parish, along with archive information and the HER data for a search area of 500m centred on the site.

5.1 General Prehistoric

A portion on a saddle quern generally considered to be “pre-Iron Age” was recovered from Maenhir Farm. Spindle whorls and three stone mortars (Prn 5575) and a ‘muller’ all of unspecified date were also recovered from the same farm (Anon 1877: 338-339).

5.1.1 Mesolithic

No artefacts or features of this period have been recorded in within the study area.

5.1.2 Neolithic

Two Neolithic flints, a triangulated arrow head and a scrapper, both dating from the Late Neolithic period have been recovered from the Dwyran area. The exact find spots of these items is not specified (Lynch 1991: 115-117).

5.1.3 Bronze Age

No artefacts or features of this period have been recorded in within the study area.

5.1.4 Iron Age

A number of circular structures have been identified at Tre-Anna and Maenhir farms (both farms can be seen in the top right of figures 3-5). Artefacts recovered from these sites date from the Romano-British period and are discussed below.

A cist burial containing a skeleton accompanied by an iron sword was discovered on farm land at Gelliniog Wen (exact location unknown). There has been some discussion as to the date of this burial but it is generally considered belong to the Iron Age (Hughes 1909: 256-7,367).

5.2 Romano-British

A hut group and rectangular buildings (Prn 3143) were uncovered in 1862 by workmen digging a drain near the aforementioned Tre Anna farm. Large quantities of Roman roof tiles and pottery were recovered from the site (Williams 1863: 278). Williams recorded that extensive Romano-British remains had been discovered from lands surrounding the farms of Maenhir and Tre-Anna (Williams W.1863.279/ Williams W.1874.182).

There are two further possible, although unexcavated, sites attributed a Roman date which have been identified within the research area. The first is a circular crop mark (Prn 3154) and the second a Roman Road (Prn 18360) recorded from aerial photography in 2003. It is possible that this could be the same road mentioned by Williams in *Archaeologia Cambrensis* (Williams 1855: 215).

A number of Roman coins have been recovered from in and around Dwyran village. In 1859 a coin of Postumus (260-269) was recovered from a cottage garden within the village. Thirteen Roman coins dating from Gordian III (238-244) and Constantine I (273-337) came from the L.Col. Hughes collection (Livens 1975:143-5). The Inventory of Romano-British coin hoards has described this group as a hoard although there is no evidence to support this (Robertson A. 2000.220). Three Portable Antiquaries Scheme (PAS) find spots have been identified within the search area, all relating to Roman coins.

5.3 Early Medieval

No artefacts, structures or features of this period have been recorded in within the study area.

5.4 Medieval

Although no Medieval artefacts, structures or features were recorded on the GAT HER as being located within a 500m radius of the site there are two churches with Medieval origins. Llangeinwen (NPRN 202) to the west and St Mary's (NPRN 199) to the north, both lie within an approximate 1km radius of the site. The site is believed to therefore have fallen within the Medieval fields of Dwyran/Llanceinwen.

5.5 Post Medieval

There are four Post-medieval houses within the search area: Gelliniog wen (Nprn 300868), Maes-y-Porth (Nprn 96319), Capel Elim (Nprn 405341) a small cottage that tradition has it was used as a chapel and Pen y Gamfa (Nprn 405825). A garden (Nprn 265434) associated with Tre-Anna Farm (Nprn 445) (only seen on the 2nd edition Ordnance Survey Map) is also recorded by the Royal Commission of Ancient and Historical Monuments Wales.

Dwyran Independent Chapel (Nprn 8785/Prn 7788) built in 1849 and converted to a shop in the 1980's.

Reflecting the agricultural nature of the area there were two mills identified within the research area. Melin Wen (Nprn 407925) was a watermill based at the head of Afon Braint and was demolished in the 1990's. The 1st and 2nd Ordnance Survey Maps show a windmill Melin Wynt (Nprn 40340/Prn 6322) the site isn't named on the 3rd edition Ordnance survey map. Pont Cadach (Nprn 23723) is a single span 19th century bridge.

The 1st, 2nd and 3rd Edition Ordnance Survey Maps (figures 3 – 5) all show the site as being an undeveloped plot of agricultural land.

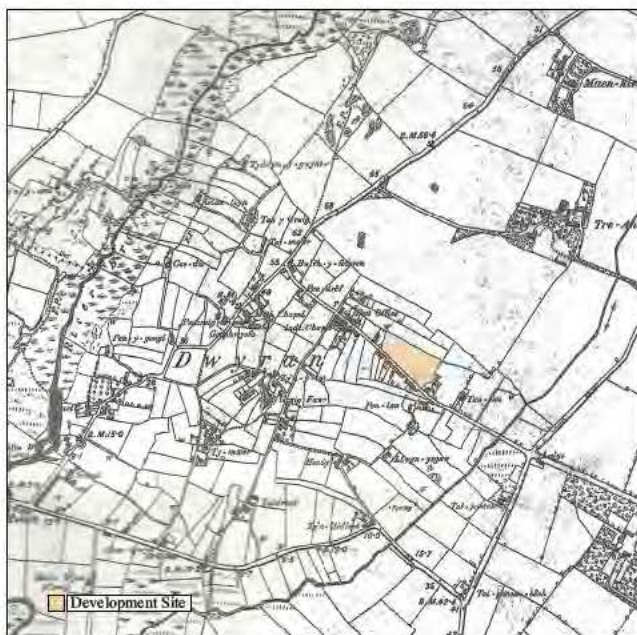


Figure 3. 1888 First Edition Ordnance Survey
(Copyright Anglesey Archives)

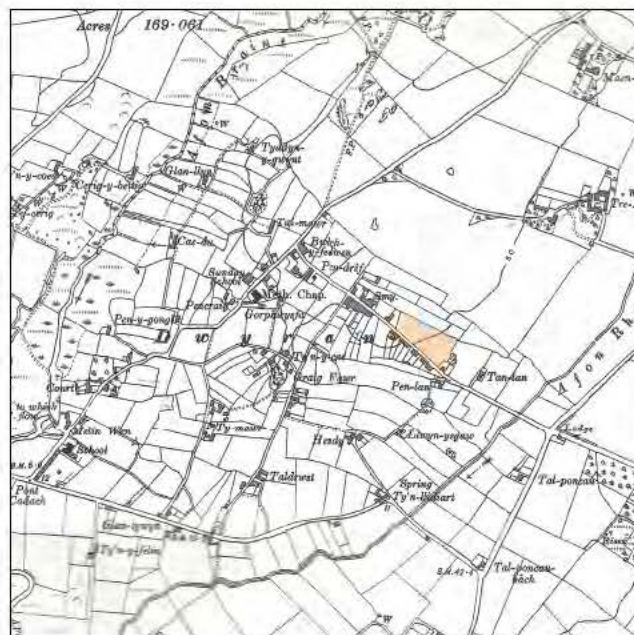


Figure 4. Ordnance Survey Map 1913
(Copyright Anglesey Archives)

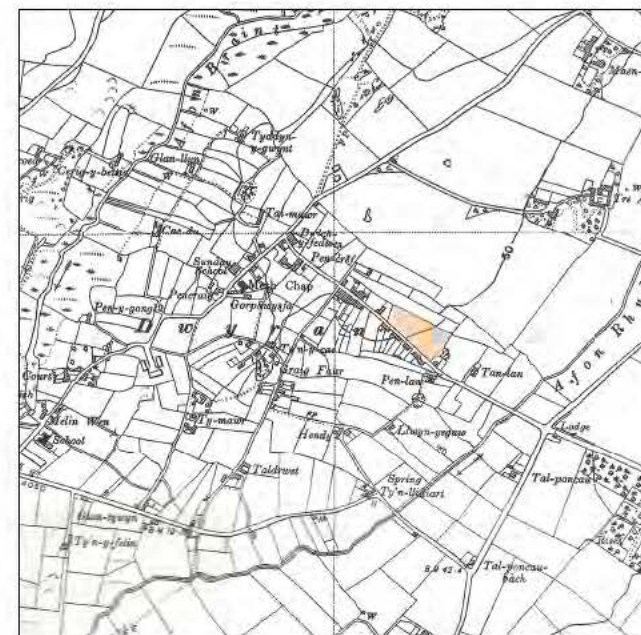


Figure 5. Ordnance Survey Map 1952
(Copyright Anglesey Archives)

6.0 Results of Archaeological Strip, Map & Sample

Three recognisable soil horizons were identified within the area stripped. The upper layer (08) was composed of turf/top soil layer which was approximately (0.20 - 0.35m in thickness). This layer was heavily disturbed and modern material was evident. Modern building rubble of brick and stone was evident on the surface of the area to be stripped. Wrappers and rubbish from later periods were found below this can which are indicate of the mixed nature of this layer.

Context (09) was a subsoil layer identified beneath Context (08). It was only distinguished from the topsoil by the lack of vegetation and there was no noticeable change in soil composition. It was a mid brown silty clay layer which like the topsoil contained modern material. The thickness of the subsoil was 0.30m - 0.50m. A few sherds of early Twentieth Century pottery were recovered from this layer but the finds were very limited. The natural (Context 10) was a friable orange-brown silt clay with rare large sub-angular stone inclusions. The natural was reached at a depth of between 0.50 – 0.85m.

Three features of undetermined date were recorded during the stripping along with a modern feature which truncated on of the aforementioned features (see accompanying CD and figure 6). The modern feature (assigned group number [03]) was a machine excavated pit cut within the last three years to determine the drainage potential of the soil/natural on-site. A personal discussion with groundsmen indicated that it is in excess of 2m in depth.

Three pits ([01], [04], and [06]) were recorded and excavated. All pits contained a single mid-brown loose silt clay fill. Due to the lack of dating evidence when half sectioned each pit was 100% excavated but no dating evidence was present. There was no indication as to the function or age of these features.

Pit [01] was oval in plan with a concave profile and slightly flattened base. The pit dimensions were 1.3m x 0.76m and the feature survived to a depth of 0.20m. Pit [04] was truncated by feature [03] and the dimensions given are approximate only. The depth may have been greater where truncated but in the section excavated the feature survived to a depth of 0.20m. The feature appeared to have been circular in plan. Pit [06] was a shallow circular pit with a diameter of c.1.0m. It survived to a depth of 0.10m. No datable archaeological features were present on the site. A table summarising all contexts present at the site is included as Appendix B.

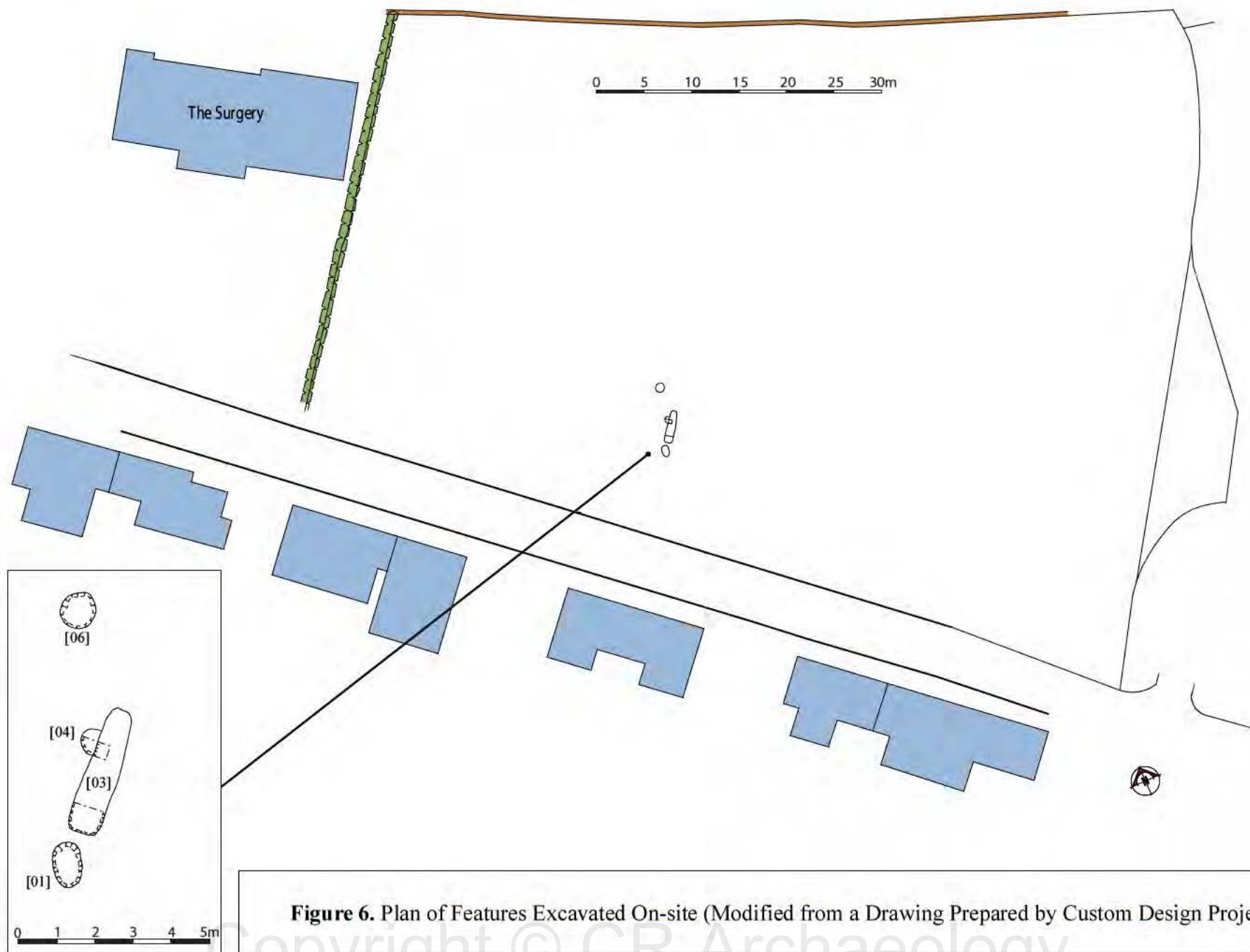


Figure 6. Plan of Features Excavated On-site (Modified from a Drawing Prepared by Custom Design Projects)



Plate 1. Section Through Pit [06]

Plate 2. Section Through Pit [01]

Plate 3. Soakaway [03] and Pit [04]

7.0 Conclusion

No datable archaeological features were present on the Dwyran site. Three shallow pits were excavated but no artefactual material was present. There is no way of confirming whether these pits were originally of a greater depth, or whether they are the surviving remnants of a larger complex of features. It is therefore worth considering that what we may be seeing are the bases of the deeper pits on-site with all traces of the shallower features having been removed through various processes over time.

The close grouping of the pits, especially given the general paucity of archaeological features on the site as a whole, would seem to indicate that they are likely to be related but their small number and lack of artefactual material makes further interpretation impossible.

The lack of dating evidence from these features does not allow for their placement within the local/regional archaeological chronology. It does however demonstrate that agricultural practises near the urban centre of Dwyran have not removed all traces of earlier activity and that the survival of archaeological features within the vicinity is possible.

A small amount of post-medieval (early Twentieth Century) pottery was recovered from the top/subsoil at the site but this is not believed to be indicative of the date of the features.

8.0 Bibliography

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

Anon. 1877. *The Museum*. Archaeologia Cambrensis Vol IV. 338-339

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

GAPS. 2012. *Letter Dated 15th March 2012*

Hughes, H. 1909. *Archaeologia Cambrensis*. 256-7, 367

The Institute for Archaeologists. 1985 (Revised 2010). *Code of Conduct*

The Institute for Archaeologists. 1990 (Revised 2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

The Institute for Archaeologists. 2001. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

The Institute for Archaeologists. 1995 (Revised 2008). *Standard and Guidance for Archaeological Excavation*

The Institute for Archaeologists. 2008. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*

Livens, R. 1975. *A Group of Roman Coins from Dwyran*. Transactions of the Anglesey Antiquarian Society and Field Club. 143-5

Lynch, F. 1991. *Prehistoric Anglesey: Second Edition*. The Anglesey Antiquarian Society. 115-117

RCAHMW. 1937. *An Inventory of the Ancient Monuments in Anglesey*. London

Robertson, A. 2000. *The Inventory of Romano-British Coin Hoards*. Royal Numismatics Society. University Press

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

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

Williams, W. 1855. Early British Remains in Wales. *Archaeologia Cambrensis*. Vol I Series III. 214-215

Williams, W. 1863. *Roman Remains at Maenhir, Llangeinwen, Anglesey*. *Archaeologia Cambrensis*. Vol IX. 278-280

Williams, W. 1874. *Stone Implements, Anglesey*. *Archaeologia Cambrensis*. Vol 5 Series IV. 181-185.

Websites (all websites consulted 07/01/2013)

www.bgs.ac.uk

www.coflein.gov.uk

www.genuki.org.uk/big/wal/AGY/Llangeinwen/index.html

www.mapapps.bgs.ac.uk/geologyofbritain/home.html

Appendix A.

CR26-2012 Specification for Archaeological Works at Land Adjacent to Penbryn Surgery, Dwyran, Anglesey

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1.0 Introduction

C.R Archaeology have been instructed by Sustainable Homes (UK) Ltd to conduct archaeological works at the above site in compliance with planning conditions placed on the development (Planning Reference 45C79G, GAPS reference 0315je01/D1657).

This specification has been written following an email from Development Control Archaeologist Jenny Emmett of GAPS (11th September 2012) as a methodology for a programme of works relating to a letter prepared by GAPS on the 15th March 2012.

The site is situated on the outskirts of the small urban centre of Dwyran, located near the Menai Straits in Southern Anglesey (Figure 1). The proposed development lies adjacent to Penbryn Surgery and is currently in agricultural use.

Planning permission has been sought for the erection of 15 dwellings on the site together with the construction of a vehicular and pedestrian access (Figure 2).

A preliminary investigation of the Gwynedd Historic Environment Record by Jenny Emmett of GAPS has highlighted a number of archaeological sites in the vicinity of the development and has therefore specified that archaeological works are undertaken. This document outlines a methodology for Strip, Map and Sample programme of works which will be conducted at the site.

2.0 Project Aims

This scheme of works aims to monitor the stripping of the site down to natural to identify, assess the survival, character and date of any archaeological remains and to excavate/record any archaeological remains uncovered.

It aims to fulfil the mitigation criteria for archaeological works as specified in a letter prepared by GAPS on the 15th March 2012.

3.0 Brief Historical Background

The following section is, through necessity, very brief and is intended to merely place the site in context. A more detailed history of the site will form an element in the proposed works.

Gwynedd Archaeological Trust Planning Officer Jenny Emmett has highlighted a number of sites of archaeological interest within the vicinity of the proposed development site and the following information has been taken from a letter dated 15th March 2012.

An extensive Romano-British settlement has been recorded approximately 350m from the site and numerous earthworks/cropmarks potentially representing archaeological remains of the same period have also been identified. The aforementioned earthworks/cropmarks have been recorded within 300m of the site and a probable Iron Age burial from the region is indicative of an elevated potential for remains from this period to be encountered.

The site is located within the Medieval fields of Dwyran/Llanceinwen. The site has been in agricultural use since at least the mid 19th Century and this lack of development greatly increases the likelihood of the survival of archaeological remains.

4.0 Scheme of Works – Methodology

The methodologies employed will conform to The Institute for Archaeologists: *Standard and Guidance for Archaeological Excavation* (Revised 2008).

4.1 Desk Based Research

A complete and coherent history of the site will be compiled utilising material sourced from Anglesey Archives. A full map progression will be undertaken. Where relevant this will be supplemented with information from local libraries, websites & specialist journals.

A search of the Gwynedd HER will be conducted examining an area within a 500m radius of the site. The archaeological records for the parish of Llangeinwen compiled by the RCAHMS in their survey of Anglesey will also be consulted.

The works will be carried out accordance with the IFA Standards and Guidance for historic environment desk-based assessment (www.archaeologists.net).

This material will form the historical background for a full archaeological report.

4.2 Archaeological Strip, Map & Sample

Due to the potential for archaeological remains a programme of Strip, Map and Sample will be implemented at the site. The topsoil and subsoil will be removed from the development area using a mechanical excavator with a 1.8m toothless ditching bucket. A C.R Archaeology staff member will be present during the stripping of the area and once the area has been stripped no machinery may track over the site until the area has been signed off by GAPS.

Where archaeological features are visible, or should any subsoil not have been removed cleanly by machine and may be obscuring any potential remains, areas of the site will be hand cleaned. If archaeological remains/potential archaeological remains are encountered then the features will be marked using spray paint and cordoned off to allow excavation by C.R Archaeology staff.

All archaeological features, structures or remains identified in the course of the excavation will be trowel cleaned by hand. Investigation of such features, structures or deposits will be sufficient to determine their character, size, date, significance and quality. Discrete features such as pits/postholes will be half sectioned initially and will only be completely excavated should they

yield artefactual material. Intermittent sections will be excavated through larger linear features such as ditches (with the exception of land drains) and 20% of such features will be excavated. Where archaeological features can be seen to cut each other sections will be positioned so as to establish the chronological relationships.

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 GAPS will be informed of the discovery and a mitigation strategy agreed before works will progress.

All archaeological remains will be recorded on a site plan at a scale of 1:100/ 1:50 as appropriate and detailed plans of features will also be drawn at 1:20. Sections through excavated features will be drawn at a scale of 1:10 or a scale of 1:20 should the feature be particularly large.

Fieldwork is to be conducted by Matthew Jones and/or Catherine Rees of C.R Archaeology. Both staff members are qualified, experienced archaeologists and cv's can be provided on request. Additional staff will be brought in as required and all staff members will have experience equivalent to AIfA level and cv's can be provided on request.

4.2.1 Recording

The record forms at C.R Archaeology are based on the English Heritage system and full written, graphic and photographic records will be made in accordance with the English Heritage *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. A temporary benchmark (TBM) will be established on the site and plans, elevations and sections will contain grid and level information relative to OS data. 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 13mp 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’.

4.2.2 Additional Mitigation/Contingency Measures

In the unlikely event of a significant archaeological discovery being made during the excavation C.R Archaeology will immediately inform both the client and the development control archaeologist Jenny Emmett. Consultation will take place between C.R Archaeology, Jenny Emmett and the client with regards to the most suitable course of action.

In the unlikely 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.

Any artefacts recovered that fall within the scope of the Treasure Act 1996 will be reported to the landowner, GAPS and to HM Coroner.

4.2.3 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* (IfA 2008) 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 (IfA 2008).

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 and further specialists will be appointed as required. A list of specialists will be prepared prior to the post-excavation phase of works.

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 all archaeological material recovered will be deposited in Oriel Môn Museum. 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 Institute for Archaeologists: *Standard and Guidance for Archaeological Watching Brief* (Revised 2008).

4.2.4 Archive Compilation

All records created during the fieldwork will be checked for consistency and accuracy and will form part of the *Primary Site Archive (PI)* (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.

Any archive/artefactual material created/discovered during this archaeological project will be deposited at Oriel Môn, Llangefni. Archive material will be deposited in accordance with the museum's terms and conditions for archive deposition.

4.3 Timetable for Proposed Works

It is envisaged that works at the site will commence as soon as possible, and permissions pending it is hoped that work can begin late September – early October. Work will be carried out on a day rate basis and staff will attend site as necessary. Additional time will be allotted as necessary for archive research, report compilation and site archiving. Gwynedd Archaeological Planning Services will be informed of the exact site days to allow monitoring of works.

C.R Archaeology will inform GAPS of the exact dates of fieldwork as soon as is possible and at least three days in advance of the commencement of works.

4.4 Staffing

The project will be managed by Matthew Jones (BA (Archaeology & Welsh History), MA (Archaeological Practice)). All projects are carried out in accordance with IfA *Standard and Guidance* documents.

4.5 Monitoring

The project will be subject to monitoring by Gwynedd Archaeological Planning Services. The monitor will be given prior notice of the commencement of the fieldwork. A projected time-scale and copy of the risk assessment can be provided on request to the monitoring body prior to the commencement of works.

GAPS will be notified in writing of the commencement dates for archaeological site work and GAPS will be updated with the results of all further works conducted as watching briefs. This will be initially as an email with attached JPEG photographs and when required further interim reports will be compiled.

4.6 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:

- Safety Helmets (EN397)
- Hi-visibility vests (EN471)
- Safety footwear – steel toecap and mid-sole boots and Wellingtons (EN345-47)

Any further PPE required will be provided by C.R Archaeology

All staff will have passed at least a CITB health and safety test at least operative level and will carry a Construction Related Organisation (CRO) White Card for Archaeological Technician (Code 5363) or a Site Visitor card.

C.R Archaeology staff will also comply with any Health and Safety Policy or specific on-site instructions provided by the client or their appointed Principal contractor or H&S coordinator.

4.7 The Report

The report 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 photographs taken.

The report will include as a minimum:

- A copy of the design brief and agreed specification

- A location plan
- All identified features and significant finds plotted on an appropriately scaled site plan
- Full dimensional and descriptive detail of all identified finds and features
- Sections/ detailed plans of important features
- Specialist reports when applicable
- A full bibliography of sources consulted
- An archive compact disc

A copy of the report in Adobe PDF format will be sent to the appropriate monitoring archaeologist for approval before formal submission. A bound paper copy and PDF digital copy of the report will be submitted as part of the formal submission. A digital Adobe PDF version and a bound paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of fieldwork, and following consultation with Anglesey Archives should significant archaeological remains be encountered a PDF version will be sent for deposition in their Llangefni offices.

A short article will be submitted to the Archaeology in Wales Journal and the site archive including copies of all photographs in RAW and Tiff format will be deposited at Oriel Môn.

4.7.1 Copyright

C.R 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 Specification.

5.0 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)*

GAPS. 2012. *Letter Dated 15th March 2012*

The Institute for Archaeologists. 1985 (Revised 2010). *Code of Conduct*

The Institute for Archaeologists. 1990 (Revised 2008). *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*

The Institute for Archaeologists. 2001. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

The Institute for Archaeologists. 1995 (Revised 2008). *Standard and Guidance for Archaeological Excavation*

The Institute for Archaeologists. 2008. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*

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

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

Appendix B.

Context Description List

Context Number	Context Type	Description	Dimensions
01	Cut	Cut of oval pit. Orientated on a N-S axis. Concave profile with flat base. Contained single fill (02)	Length: 1.3m Width: 0.76m Depth: 0.20m
02	Fill	Fill of pit [01]. Mid brown loose clay-silt with occasional small and medium rounded stone. Contained no finds or charcoal	Length: 1.3m Width: 0.76m Depth: 0.20m
03	Group	Modern feature. Roughly rectangular in plan. Fill contained modern rubbish. Excavator queried if may be the result of a machine scrape and conversation with groundworker on-site confirmed soak-away had been excavated in this area	Length: 2.5m Width: 0.80m Depth: 0.50m
04	Cut	Circular pit cut truncated by feature [03]. Contained single fill (05). Dimensions approximate as truncated by later feature [03]	Length: c.0.80m Width: c.0.80m Depth: c. 0.20m
05	Fill	Fill of pit [04]. Mid brown loose clay-silt with occasional small rounded stone. Contained no finds or charcoal	Length: 0.80m Width: c.0.80m Depth: c. 0.20m
06	Cut	Cut of shallow circular pit. Possibly the base of a feature cut from a higher level. Contained single fill (07)	Length: 1.00m Width: 1.00m Depth: 0.10m
07	Fill	Fill of [06]. Mid brown loose clay-silt with occasional small and medium rounded stone. Contained no finds or charcoal	Length: 1.00m Width: 1.00m Depth: 0.10m
08	Topsoil	Topsoil/turf layer. Only distinguished from subsoil by presence of vegetation. Mid brown silty clay. Contained modern material/rubbish	Covered whole site Average depth: 0.25m
09	Subsoil	Subsoil – mid brown silty clay. Contained modern material including concrete, iron and 20 th Century pottery	Covered whole site Average depth: 0.35
10	Natural	Natural - orange-brown silty clay with sand patches. Contained occasional large sub-angular stone	Covered whole site