

The Surgery, Land off Beach Road, Y Felinheli, Gwynedd

Archaeological Assessment



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

The Surgery, Land off Beach Road, Y Felinheli, Gwynedd

Archaeological Assessment

Project No. G2284

Report No. 1073

Prepared for: Watkin Jones Group

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SUMMARY

An archaeological assessment was carried out on land at Beach Road, Y Felinheli in advance of the development of a Primary Healthcare Centre. The assessment identified few sites within the study area but as one of these is a Scheduled Ancient Monument, Dinas promontory fort (Cn047), the presence of buried archaeology might be expected. A strip, map and sample evaluation is recommended for the whole development area to determine whether buried archaeology does survive. If this is found it will lead to the development of a mitigation strategy involving either preservation or full excavation of the remains.

The impact of the development on the setting of the Scheduled Ancient Monument was considered but the design and position of the development mitigate the visual impact and no further recommendations to reduce the impact are proposed.

1. INTRODUCTION

Gwynedd Archaeological Trust (GAT) was been asked by the Watkin Jones Group to carry out an archaeological assessment in advance of the development of a Primary Healthcare Centre. The site is located on the shore of the Menai Straits on the north-western side of Y Felinheli, Gwynedd (centred on NGR SH51836695; see figure 1).

The archaeological assessment will be completed as part of planning application C10A/0485/20/LL. The development area covers about 0.6 hectares and a temporary compound is proposed on the northern side for the duration of the construction works.

This report conforms to the guidelines specified in *Standard and Guidance for Archaeological Desk-based Assessment* (Institute of Field Archaeologists, 1994, rev. 2001, 2008). The assessment report forms the first stage of a stage process. It comments on the visual impact of the development on the nearby Scheduled Ancient Monument and presents recommendations to mitigate the impact on potential buried archaeology.

2. AIMS AND OBJECTIVES

A desk-based assessment is defined as “a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate” (IFA 2008, 2)

The aims of the assessment are:

- to identify and record the cultural heritage within the defined study area;
- to evaluate the importance of what has been identified;
- to recommend ways in which impact upon the cultural heritage can be avoided or minimised.

A desk-based assessment is normally followed by a programme of field evaluation. In this case Gwynedd Archaeological Planning Service (GAPS) have recommended that the assessment be seen not as the start of an evaluation process but as part of a staged programme of mitigation, leading to the development of strategies to minimise the impact of the development on the setting of the Scheduled Ancient Monument and views to and

from it and the development of either strategies for preservation *in situ* or by record of potential below ground remains, as appropriate.

3. DESIGN BRIEF AND SPECIFICATION

The development includes the construction of a Primary Healthcare Centre. While the development site has a total size of 5716 square metres the internal floor space of the Centre is to be only 560 square metres, although the site has been specifically chosen to allow for expansion in future if necessary. The main building is to have two floors and external space will be used for car-parking. The building will be contemporary in style but the use of render, stone cladding and locally sourced materials is intended to compliment the buildings already in the area. The main area of roof is to be in slate, with some use of coloured aluminium roof sheeting and a sedum green roof on the entrance area (Design and Access Statement (cdnplanning 2010)), see figures 2 and 3.

There is also a temporary compound situated on the northern side of the development area. This is to be covered with stone to be removed at the end of the construction work. Some stripping and dumping of stone had commenced before the assessment but was halted until the mitigation strategy was agreed (plate 1).

Gwynedd Archaeological Trust provided a project design to Watkin Jones Group for undertaking the assessment (Appendix 3). The current document reports on the assessment consisting of a desk-based study involving primary and secondary sources and aerial photographs and a field walk-over survey.

4. METHODS AND TECHNIQUES

4.1 Desktop study

The desktop study comprised the consultation of maps, documents, computer records, written records and reference works, which form part of the Historic Environment Record (HER), located at Gwynedd Archaeological Trust (GAT), Bangor. The National Monuments Record (NMR RCAHMW, National Monuments Record of Wales, Plas Crug, Aberystwyth, SY23 1NJ) was checked for sites additional to the HER, and supporting information was examined at the NMR. Results from previous archaeological work within the area were reviewed.

Information about Listed Buildings and Scheduled Ancient Monuments from Cadw was examined in the regional HER, with supporting information from Cadw as required. The Register of Outstanding and Special Historic Landscapes and the Register of Parks and Gardens was checked, and also the location of World Heritage Sites.

Secondary sources were examined, including the Inventories of the Royal Commission on Ancient and Historical Monuments for Wales, and works held within the regional libraries. Indices to relevant journals, including county history and archaeology society journals and national society journals such as *Archaeologia Cambrensis* were checked, and 19th century topographical dictionaries, antiquarian tours and trade directories were examined where relevant.

Vertical and oblique collections held by the NMR were examined. All photographs examined are listed in the sources.

Archive maps were consulted at the Gwynedd County Record Office (Council Offices, Shirehall Street, Caernarfon, LL55 1SH); including the relevant estate maps and tithe maps.

Sites, buildings and find spots within the study area listed in the GAT HER and the National Monuments Record were identified. These are listed in Appendix 1 with PRN referring to the GAT HER unique Primary Record Number and NPRN referring to the National Primary Record Number.

4.2 Field search

The field search was undertaken on 24th August 2012. The whole of the field in which the development area lies was inspected and the impact on the setting of the Scheduled Ancient Monument was considered, with views from and to the monument being recorded. The field was covered in long grass but visibility of features other than very slight scarps would have been adequate. Brambles around the edge of the field could have obscured small features but this was considered unlikely.

Notes were taken, sketches and measurements were taken of sites of potential archaeological interest and a photographic record was made. Sites were located by reference to modern and 19th century maps. Weather conditions were good for the site visit.

4.3 Report

The available information was synthesised to give a summary of the archaeological and historic background and of the assessment and recommendations, as set out below. The criteria used for assessing the value of features was based upon those used by the Secretary of State for Wales when considering sites for protection as scheduled ancient monuments, as set out in the Welsh Office circular 60/96. The definitions of categories of importance and of terms used for impact, recommended field evaluation and mitigation are set out in Appendix 2.

5. ARCHAEOLOGICAL RESULTS

5.1 Topographic description and geology

The development site is located on the south-eastern shore of the Menai Strait, on the edge of the Arfon coastal plain (figure 1). The coastal plain is not flat but undulating and cut by occasional small rivers and streams. The development site is on land that slopes down towards the coast to the north-west and to the north-east. North of the site is a promontory formed by a ridge of rock aligned south-west to north-east. On the south-east side of the promontory is a short valley, which originally opened into a small bay, although much of this has been infilled with development.

The promontory is formed of Red Wharf Limestone. The site itself lies on a band of Plas Brereton Formation sandstone and conglomerates, with a narrow band of Nant Ffrancon subgroup siltstone, then a granite igneous intrusion to the east (British Geological Survey). The solid geology is overlaid by glacial deposits and fluvio-glacial gravels. The partial stripping of the temporary compound showed that gravels were visible under only about 200mm of topsoil, indicating that on the top of the hill at least soil depth was shallow.

5.2 Archaeological and historical background

Sites are referred to below by their PRN (Primary Record Number as listed in the regional Historic Environment Record (HER)). The sites are listed in appendix 1 and shown on figure 1. Also in figure 1 and in appendix 1 are sites in the National Monument Record (NMR). They are identified by their NPRN (National Primary Record Number), but they are not discussed below unless there is information in the NMR not held in the HER.

5.2.1. Earlier Prehistoric (4000 BC to 800 BC)

Compared to Anglesey Arfon has few earlier prehistoric monuments, and is especially lacking in chambered tombs (Smith 2002 and 2003). About 1km south of the development site is a possible chambered tomb (PRN 627) but this is not very convincing (RCAHMW 1960, 201; Smith 2002). A burnt mound (PRN 3470) lies just over 1km east of the site. These features are usually of Bronze Age date and may be related to cooking food for feasting.

The scarcity of prehistoric sites in the area is probably related to destruction by farming in this relatively fertile area, but may also be due to less antiquarian interest on the mainland compared to Anglesey. It is very unlikely that the scarcity of sites and finds reflects a lack of occupation of the area in the prehistoric period. Although the coastal plain would have been heavily wooded in the Neolithic period it would have been no harder to clear than Anglesey, and scattered Neolithic settlements would be expected, with perhaps more woodland clearance and activity in the Bronze Age.

A pollen core taken from a bog at Bodandreg (Chambers *et al* 1998) with an early Neolithic date from its basal horizons indicated a well-wooded environment with some possible small clearances indicated by ribwort plantain pollen. In the next zone grass expanded at the expense of oak woodland, with suggestions of clearance for pastoralism. In the upper part of the core the local environment seemed to be completely deforested and dominated by grass species. This later period may represent late Iron Age or Roman clearance.

5.2.2 Late Prehistoric / Romano-British (800 BC to 410 AD)

Activity in the Iron Age is more evident. There are a number of Iron Age settlements, along the lower slopes of the hills, dominated by the hillfort of Dinas Dinorwig (PRN 5), which lies about 3km east of the development site. Many of the Iron Age settlements continued in use into the Roman period, and settlements in the native form were constructed in the Roman period. A small settlement that lay on the route of the Felinheli bypass near Bush Farm was fully excavated in 1992 (Longley et al 1998). This revealed the remains of a prehistoric clay-walled roundhouse, which was replaced by a stone-walled roundhouse associated with Roman pottery. These houses were associated with a lynchet and field walls and so seem to have been in the corner of contemporary fields.

It is likely that there were as many settlements in the lowlands as survive in the uplands but that more have been removed by agriculture. The possibility of settlements not now visible on the surface is indicated by finds of quern stones (PRN 56 and 5428, Hughes 1939). In both cases these are fragments of rotary querns of a type used from the Iron Age onwards.

The presence of the promontory fort of Dinas (PRN 3682) near the development site raises the possibility that this was a focus for Iron Age and Roman period settlement. The fort occupies a promontory on the Menai Strait with a cliff on the seaward side. The landward side is defended by a semi-circular rampart with an entrance in the middle (RCAHMW 1960, 201). No investigation of the site has been undertaken but it is of a form typical of the Iron Age. However the discovery of a hoard of Roman coins within the fort in around 1910 (RCAHMW 1960, 201) may indicate use in the Roman period.

Hyde Hall (1952, 180), writing in 1809-1811, noted Dinas as “a small hill which strongly resembles an encampment” and considered the possibility that the parish, Llanfair Isgaer (Llanfair lower fort), was named after it. Although Hyde Hall was wary of this suggestion it seems reasonable and suggests that the fort was more prominent in the medieval period than at present.

Such forts and hillforts tended to form the focus for contemporary settlements and some trace of Iron Age and Roman period settlements would be expected in the area.

The probable line of the Roman road from Segontium (Caernarfon) to Kanovium (Caer Rhun, Conwy Valley) ran just over 2km to the south-east of the development site (Hopewell 2007), and there are no Roman military sites close to the development. However Roman influence seems to have penetrated the area as coins have been found not only at Dinas but also at Carreg Goch (PRN 35), although the whereabouts of both collections is unknown and no detail about them has been recorded. A probable Roman stylus (writing implement) has also been found near Carreg Goch (PRN 24122). There is a notable collection of three Roman brooches found eroding from the coast at various points along the edge of Llanfair wood (PRN 24094, 24095, 24096), which also indicate activity of this period in the area.

5.2.3 Medieval (410 AD to 1500 AD)

The site of Plas Llanfair was the focus of the medieval settlement of the parish of Llanfair Isgaer, with the church further to the south-west down the coast. Finds of a medieval strap end (PRN 24100), lead spindle-whorl (PRN 24106) and coins (PRN 24097) along the coast and in Llanfair Wood hint at medieval activity closer to the development site, as do the probably medieval buildings within Dinas fort. The RCAHMW Inventory (RCAHMW 1960, 201) describes the remains of two rectangular buildings and a possible third against the rampart in the western party of the fort. These are associated with traces of an enclosing wall. These appeared to be later than the rampart and are suggested as being medieval in date.

There was another township at Bodandreg (PRN 3238), first mentioned in an Edwardian extent of 1296 (GAT 1991). Although remains of the settlement have not been identified traces of fields possibly related to it have been noticed just to the west of the settlement (PRN 19198, 19199, 19200) (Smith 2004). Aerial photographs (CPE/UK/1939, frame 4174) also show lynchets along the slopes overlooking the coast, and these could be medieval, although it is possible they represent earlier cultivation in the late Iron Age and Roman periods.

5.2.4 Post-Medieval to Modern (1500-1850)

A mill is marked at the estuary of the Afon Heilyn on a chart of 1695 (figure 4) and Lewis Morris's chart of the coast of Anglesey (Cambria's Coastal Pilot 1737) shows the mill and the estuary but also marks the promontory fort as “Dinas” and shows a small bay called Porth gwenolwen, used as an anchorage, just on the north side of the promontory (figure 5). The tidal mill that gave Y Felinheli (the salt-water mill) its name is traditionally supposed to have been established in the mid-17th century and was out of use by 1783. A ferry

operated from the hamlet of Aberpwll to Moel y Don on the Anglesey shore from at least the 17th century, but the expansion of the town and its renaming as Port Dinorwic came in the 18th and 19th centuries when it was used to ship slate from the Dinorwic quarries at Llanberis owned by the Assheton Smith family of Vaynol. A road and then a tramway were built to link the quarries to the port, and port facilities were expanded (Davidson 2006, Chambers Jones 2004). By 1849 Port Dinorwic was described by Samuel Lewis (Lewis 1849) as “a considerable village and a port”.

Most of the activity was concentrated near the river mouth but further south-west in the shadow of Dinas ships were built from c.1780 onwards. In the mid-19th century Rev Rees Jones moved his shipbuilding business from Barmouth to Dinas and the company trading as Rees Jones and Sons built some 29 vessels (Davidson 2006). Shipbuilding ended at the close of the 19th century but the shipyard was used during the Second World War to build flat-bottomed tug boats. The Dowsett-Mackay Engineering Construction Co. Ltd. took over the old ship yard and erected a large shed over it (Chambers Jones 2004, 121), still visible on aerial photographs of 1947 (CPE/UK/1939, frame 4174, CPE/UK/1996, frame 2319). The present slipway probably dates to this period, although there was one in the 19th century as seen on the first edition OS map (figure 7).

The Bangor to Caernarfon turnpike road ran through Y Felinheli and belonged to the Caernarvonshire Old Turnpike Trust. The road was built in 1768 and had a tollgate at Tafarn y Grisiau (Davies 1977). The tollgate is noted in the tithe schedule but unfortunately is not labelled on the accompanying map. It is probably indicated by a rather rough mark in the corner of field 140, where later maps indicate a building that is almost certainly a tollhouse.

The railway from Bangor to Caernarfon with a branch line to the slate quay at Port Dinorwic, was opened in 1852. The line was privately financed and leased to the Chester and Holyhead Railway then to the London North Western Railway, which absorbed it in 1867. Passenger services finished in 1964 and the track was lifted in 1968 (Baughan 1991, 92-95 and 105), but the route is now used as a cycle path.

St Mary's church to the south of the site was built in 1864 (NMR 43784) for the expanding town as the old Llanfair church was nearly 2km to the south-west, and could not compete with the many different chapels being built in the town.

The development area and the land around were owned in 1839, when the tithe schedule was written, by John Griffith Watkins of Plas Llanfair. His father, John Griffith, had changed his name to Watkins-Griffith on inheriting the estate and John Griffith Watkins changed his surname back to Griffith, so on later documents he is named as John Griffith Griffith. In 1842 he was High Sheriff of Caernarvonshire (London Gazette 1842).

A search for estate plans in the County Record Office and National Library produced only a plan of land to be sold for the Bangor and Caernarvon Railway (National Library MAP 11859 (date 1851)), which gives no additional information about the development site than is shown on the tithe map. The land was never in the hands of the Vaynol Estate so it does not appear on their fine and detailed estate surveys.

The 1839 tithe map (figure 6) shows the area near Dinas. A house is shown in a field called Dinas (field 134) on the north-east side of the promontory, but the fort itself is within a field called Bonc Dinas (field 136). The development area lies within a field known as Cae Ysgybor ('barn field', number 138), which might suggest that the remains of a barn might be present, although no barn is actually shown on the tithe map. The field was under arable cultivation in 1839, and the smaller field to the south (field 139) was meadow.

Available aerial photographs show changes in the surrounding area, particularly the Dinas ship yard, but reveal very little about possible archaeology on the development site.

5.3 Statutory and non-statutory designations

The development site lies within the Dinorwig Landscape of Outstanding Historic Interest in Wales (Ref: HLW (Gw) 6) (Cadw/ICOMOS 1998), which is described as “*a low coastal plateau and adjoining glaciated valley situated on the north west side of Snowdon, containing evidence of landuse and settlement from the prehistoric period onwards, superimposed by recent extensive and outstanding remains of the 19th and 20th centuries slate industry*” (p91).

It is also within the Llanfair Isgaer Historic Landscape Character Area (HLCA). This is described as “*a managed landscape, near the Vaynol demesne, evidently developed for shooting*” (Gwyn and Thompson 2000).

A Scheduled Ancient Monument, Dinas Camp promontory fort (Cn047) lies about 100m north of the development area.

5.4 The Archaeological Survey (Figure 9)

Ten features have been identified within or near the development area (figure 2). Features not previously on the HER have been allocated a PRN (Primary Record Number) for the Gwynedd HER. Sites have been given a category of importance and the impact of the development on them has been graded (see Appendix 2).

In the text below the maps referred to are as follows:

Tithe map: tithe map of Llanfair-is-gaer parish (1840) with associated schedule (1839)

First edition OS map: Ordnance Survey County Series 25 inch 1st edition map of 1889, Anglesey sheet XXIII.6 (Figure 7)

Second edition OS map: Ordnance Survey County Series 25 inch 2nd edition map of 1900, Anglesey sheet XXIII.6 (Figure 8)

Third edition OS map: Ordnance Survey County Series 25 inch 3rd edition map of 1916, Anglesey sheet XXIII.6 (Figure 9)

PRN 3382 Dinas Camp

Grid ref: SH51906710

Period: unknown

Category: A **Impact:** Visual

The RCAHMW Inventory (RCAHMW 1960, 201) describes the site as a cliff fort with the landward side protected by a semi-circular rampart, the entrance through which was in the south-eastern side. Remains of up to three rectangular buildings of probable medieval date are also noted. A report on the site held in the NMR (in the Llanfair Isgaer parish file) and made in 1920 has more detail. The site seems to have been better preserved at this date and less covered by vegetation. A “strong rampart” is described at the top of the cliff, although this is probably a misinterpretation of the ridge of bedrock running along the site. A “partially paved way” is said to have lead down to the beach from the western end of the fort. A wall, as shown on the OS County Series maps, then cut across the site, but the ramparts were fairly clear. A circular enclosure is described as being visible on the east side of the entrance formed by the incurving of the rampart. The NMR also holds an inked plan of the site (figure 10) showing considerably more detail than the OS plan. LiDAR data produced by the Environment Agency (held in the HER) also shows the semi-circular rampart quite clearly.

There has been no excavation on the site and no evidence of its date apart from its general similarity to Iron Age sites and the discovery of a hoard of Roman coins by a Mr Parkes of Dinas Point while digging a hedge in around 1910. It is possible that Dinas Point was the house now called Sunnyside, which was built between 1900 and 1916 according to the OS maps (figures 8 and 9), and that the coins came from the foot of the rampart. Unfortunately the date and number of coins is unknown, although a note in the NMR files indicates that Mr Parkes had the coins in 1950, and it is not impossible that they still exist in private ownership.

The possible medieval buildings recorded within the western part of the fort suggest the reuse of the site but there is no evidence of the precise date of these or their status.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Design of building has reduced visual impact, as has the likely long-term presence of trees on Dinas (see discussion below)

PRN 34949 Track to Dinas Camp

Grid ref: SH51933 67078

Period: unknown

Category: E **Impact:** None

The tithe map shows a track leading from Beach Road to Dinas Camp. The Environment Agency LiDAR data indicates the slight remains of this track where it is still preserved in the garden of Rowen House. Although this track was clearly used for field access in the early 19th century it may represent the reuse of the remains of the original access track into the fort. This track probably cut across the north-eastern corner of the field in which the development area is located but no work is proposed within 50m of the closest end of this track.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

PRN 34950 Bangor and Caernarvon Railway

Grid ref: SH51856691

Period: 19th century

Category: B **Impact:** None

The railway from Bangor to Caernarfon opened in 1852, passenger services finished in 1964 and the track was lifted in 1968 (Baughan 1991, 92-95 and 105). The route is now used as a cycle path (plate 2), and although the embankments and cuttings are clear there is little trace of the line and related railway furniture.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

PRN 34951 Beach Road

Grid ref: SH519066696

Period: Post medieval

Category: C **Impact:** Unlikely

The road is shown on the 1840 tithe map running from the turnpike road down to the small bay north of Dinas. By 1889 a road had been constructed along the sea front and this was named Beach Row at its north-eastern end. By 1916 the name had changed to Beach Road and seems to have been applied to the southern end. The road crossed the railway at a level crossing, of which nothing now survives except the name of the adjacent house (Crossing Cottage). The road boundaries are hedges of blackthorn with willow, hazel and other trees (plate 3).

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

PRN 34952 Brick building

Grid ref: SH51877 66940

Period: 20th century

Category: D **Impact:** None

A small brick building stands at the foot of the railway embankment (plate 4). It is roofed with a concrete slab and has an opening on the north-east side with a wooden door-frame still intact. There are some iron fittings on the wall. There was no access to the building due to brambles and other vegetation.

The 1916 OS map marks a signal post and the form shown on the map suggests a signalling system set up across the width of the track. A small structure is shown in the same position as the brick building and it appears that the brick building was part of the signal system, probably containing electrical control equipment. The signal over the railway line can be seen on the 1947 aerial photographs.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None, this is just outside the development area

PRN 34953 Kissing gate

Grid ref: SH51906 66968

Period: 20th century

Category: D **Impact:** Likely

An iron kissing gate (plate 5) allows access to a footpath across the field leading to a beach on the Strait. The gate has a curving design and is set in concrete with a concrete step down into the field. It was painted a rust red colour but most of the paint has now gone. This is a recent municipal footpath gate.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None. This is a minor feature and has been recorded during this assessment.

PRN 34954 Field boundaries

Grid ref: SH5185 6695

Period: modern

Category: D **Impact:** Slight

The boundary of the development area with the railway is a high hedge of hazel with some ash and sycamore and occasional sycamore standards (plate 6). The boundary with Beach Road is a blackthorn hedge with willow and hazel. There is a low blackthorn hedge along the track around Dinas Camp. The other boundaries are modern post and wire fences. With the exception of the boundaries along-side the road and railway none of the field boundaries are shown on the OS County Series maps. They are shown on the 1973 1:10,000 map and must date from the mid-20th century.

Recommendations for further assessment: None

Recommendations for mitigatory measures: *None*

PRN 34955 Cottage and garden

Grid ref: SH51840 67069

Period: *Post medieval*

Category: C **Impact:** *None*

A cottage and garden are marked on the tithe map (figure 6) in roughly the same place as the building that currently stands immediately south-west of the scheduled area. In 1839 this was owned by John Griffith Watkins and occupied by Griffith Williams who also occupied the rest of the farm that included Dinas. Nothing can be seen on the ground at this location.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *None*

PRN 34956 Field boundary

Grid ref: SH51847 66954 (A)

Period: *Post medieval*

Category: C **Impact:** *Considerable*

The tithe map (figure 6) shows a field boundary running across the development area from Beach Road. This was not seen on the ground, but might survive as a buried feature. A tree shown on the OS County Series maps and still standing in 1947 (aerial photo CPE/UK/1996, frame 2319) may have originated in a hedge on this boundary.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *Record if revealed during strip, map and sample evaluation*

PRN 34957 Tollhouse

Grid ref: SH51879 66877

Period: *Post medieval*

Category: C **Impact:** *None*

Hyde Hall, writing in 1809-1811 (Hyde Hall 1952, 178) mentions “a turnpike called Tafarn y Grisiau” “near the fourth mile from Caernarvon”. The tollhouse is probably marked on the tithe map (figure 6) by a rough scribble and is noted in the schedule as number 141, Tavern y Grisiau tollgate house, owned by the trustees of the turnpike road. The area is labelled on the map as ‘Taffern Grecia’, a misspelling making it sound as if there was a Greek taverna in Port Dinorwic. The OS maps show a building on this site that is clearly a toll house, although not labelled.

Recommendations for further assessment: *None*

Recommendations for mitigatory measures: *None*

6. ASSESSMENT OF IMPACT

6.1 Archaeology

With the exception of PRN 34956, a field boundary indicated on the tithe map, there are no sites identified within the development area. Sites on the edge of the development area, such as PRN 34952, a signal building, are unlikely to be directly impacted by the development. However this does not rule out the presence of buried archaeology not visible on the surface. The promontory fort, Dinas (PRN 3382), shows that there was significant ancient activity in the area. It is likely that most of this activity dated to the Iron Age and Roman periods, but there are indications that the site was reused in the medieval period. Features relating to these periods could be present within the development area.

The fort opened into the small valley that Beach Road runs down. A track (PRN 34949) running up to the fort entrance in the early 19th century may indicate the original access route and it is likely that an earlier version of Beach Road formed part of this, giving access to the fort and to the bay to the north, which would have provided a sheltered landing site. It is likely that the fort was surrounded by contemporary fields, the boundaries of which might survive as buried features. It is less likely that there was a significant contemporary settlement close to the fort as these were generally more widely spaced, but small structures relating to agriculture, e.g. barns or livestock enclosures could be possible, as might remains of other activities such as industrial processes.

The absence of earlier prehistoric sites in the immediate area cannot be used to demonstrate a lack of occupation in earlier periods, as it is more likely to be due to a lack of archaeological investigation. This

slightly raised site overlooking the Menai Strait would have been attractive throughout prehistory for its access to transport along the Strait, marine resources and fairly good agricultural land, well-drained due to the gravel underlying it.

Any potential buried remains within any part of the development area are at risk. Even where ground is to be built-up disturbance caused by tracking machines over the area in wet conditions and the digging of service trenches and planting trees etc. could cause a threat. Similarly the thin soil depth means that there is little protection in the area of the temporary compound. It is necessary to establish over the whole area whether archaeology is present and to investigate and record any that is found, if it is not possible to protect it *in situ*.

6.2 Environmental Remains, Soil Morphology and Artefactual Potential

No peat deposits were located and it is unlikely that deposits preserving environmental remains survive on the development site, which is generally well-drained. The field has been used for arable cultivation and relict soils are unlikely to survive, especially as the modern soil cover appears to be thin. The potential for the survival of prehistoric artefacts is unknown, although finds from Iron Age sites in the area are often limited with very little pottery being found. Roman period activity might be expected to produce more finds (400 Roman pot sherds were recovered from Bush Farm (Longley et al 1998)) but medieval settlement in the area is often also largely aceramic and artefact poor. Only earlier sites, such as those from the Neolithic and Bronze Age, tend to produce larger numbers of finds, especially pottery, in this region. Even slight and insignificant Neolithic pits can produce considerable assemblages of pottery. Such features might also have important assemblages of charcoal and charred plant remains, which are also likely to survive well.

6.3 Visual Impact Assessment and setting of the Scheduled Ancient Monument

The location of the development is about 100m south-west of the promontory fort of Dinas Camp (Scheduled Ancient Monument Cn047) (plate 7). The development will therefore have an impact on the setting of the monument. The full impact is difficult to judge as the monument is currently covered in mature trees, but the potential impact is significantly reduced by the topography of the site. Although the surgery to be positioned on the highest area within the field to the south of the monument this is at the furthest end of a slight plateau, which will have the effect of minimising the visual impact of the building on the monument and reducing the sense of the development dominating the monument (plate 8).

Dinas is at a lower level than the development site and is orientated to look out into the Menai Strait and into a small valley to its south-east from which the access route seems to have run. This means that even without trees it is likely that a visitor to the Scheduled Ancient Monument (SAM) would concentrate on views to the north-west, north-east and south-east and would not significantly notice the development to the south-west. However the development will have an impact on the setting of this access route to the fort, making the topography less clearly visible.

The current tree cover means that in summer it would be almost impossible to see the development from the SAM, although it would be more visible in winter. It seems unlikely that Cadw would permit the removal of the mature trees from the site, and that they are potentially going to be present for the life of the new development.

It is clear that the development will have an impact on the setting of the monument, but at present the visual impact from the monument will be relatively low. If the trees were removed in the future the impact would be greater but it is argued that this would not block any significant views that allow the monument to be placed within its setting. The setting of the monument is already partially urbanised, with domestic dwellings and large light industrial buildings at the foot of the site to the south-east and north-east. Buildings on the escarpment to the east of the railway are considerably higher than the SAM and overlook it. The development will therefore not form a dramatic change to the character of the setting. The low level design of the new building, with only part reaching two stories, and the use of slate and sedum on the roofs, will also reduce its impact.

The development will also have a visual impact on the grade II listed building Castell Gwylan (reference number 19744). This was probably built as a boathouse for Porthamel Hall and is situated on the Anglesey shore of the Strait directly facing the development site (plate 9). The impact will be mitigated by the presence of mature trees along the shore, which obscure part of the view from Castell Gwylan. The presence of buildings behind the development when viewed from the house will also reduce its impact.

Development on this site is contrary to the Llanfair Isgaer Historic Landscape Character Area conservation priorities of “preservation of open spaces and areas of woodland” (Gwyn and Thompson 2000, 62), but this has no legal force.

7. RECOMMENDATIONS FOR MITIGATION

7.1 Buried archaeology

In order to thoroughly evaluate the development area for buried archaeology it is recommended that the topsoil and ploughsoil be stripped from the whole development area (with the exception of the area under mature trees near the shore) and temporary compound down to either archaeological levels or natural sub-soil. This should be done under using a machine with a toothless ditching bucket under constant archaeological supervision. Any potential features found should be evaluated and if found to be significant a design for mitigation should be produced to be agreed with the client, Gwynedd Archaeological Planning Service and Cadw. Where possible the mitigation should involve preservation of the archaeology undisturbed, but this can only be done if no disturbance by digging service trenches or the expansion of the Health Centre can be guaranteed. If preservation is not possible full excavation, recording and subsequent analysis and publication of the results will probably be the most appropriate approach.

It may be possible to leave the stripping and recording of the temporary compound area until the main construction works are complete, but this should only be done once the development area has been stripped, and if this proves to contain little or no archaeology the compound area might be considered to have a low risk of potential archaeology.

7.2 Setting

Planning permission has already been given for the development in this location and the design of the Health Centre has included a low profile and the use of local materials, to reduce its visual impact on the area. The building is to be situated as far as possible from the scheduled area within the development site. The development will have an impact on the setting of Dinas Camp but there is little more that can be recommended to reduce this impact that has not already been done, as planning permission has already been given for the development to be built on this site. However the use of planting on the eastern side of the development should be considered to help reduce the impact further.

7.3 Interpretation

The promontory fort is not particularly well-known in the area, largely because there is no public access. The public space provided by the new Healthcare Centre could provide an opportunity to increase awareness and understanding of the site as some compensation for the impact on the setting. An interpretation board might be provided with plans and information about the promontory fort. If archaeology is found within the development area this could also be included.

8. SUMMARY AND CONCLUSIONS

The archaeological assessment identified few sites within the study area but as one of these is a Scheduled Ancient Monument the presence of buried archaeology might be expected. A strip, map and sample evaluation is recommended for the whole development area and compound to determine whether buried archaeology does survive. If significant archaeological features or deposits are found this will lead to the development of a mitigation strategy involving either their preservation or full excavation.

The development will have an impact on the setting of the Scheduled Ancient Monument but the design and location of the development mitigates the visual impact to some extent. No further recommendations are therefore proposed to reduce the impact.

9. ARCHIVE

The archive consists of copies of historic maps and development plans, along with notes and digital images taken on the field visit. The archive is currently held by GAT under project code **G2284**.

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Tithe Map and Schedule of the Parish of Llanfair-is-gaer (1840 and 1939)

The catalogue of the Vaynol Papers was checked and the 1777 estate survey book (Vaynol Papers 4056) was inspected but this proved that the study area was not within the Vaynol Estate

Gwynedd Historic Environment Record

Ordnance Survey 25 inch 1st edition map of 1889, Anglesey sheet XXIII.6
Ordnance Survey 25 inch 2nd edition map of 1900, Anglesey sheet XXIII.6
Ordnance Survey 25 inch 3rd edition map of 1916, Anglesey sheet XXIII.6

`Great Britain Coasting Pilot' (G. Collins, 1695), copy in HER
Lewis Morris Chart, 1737/8 (Anglesey Record Office WM/1903/1), copy in HER

LiDAR data provided by the Environment Agency for use within the HER
Next Perspectives Aerial Mapping Data for use within the HER

National Library of Wales

MAP 11859 Plan of land for railway to be taken from John Griffith Griffith esq. (1851)

National Monuments Record, Aberystwyth

Llanfair Isgaer parish file

Aerial Photographs, NMR, Aberystwyth

Sortie	Date	Organisation	Frame number
CPE/UK/1939	20/01/1947	RAF	4174
CPE/UK/1996	13/04/1947	RAF	2319

Obliques NMR

References C858310 (date 2006), C85831 (date 2006), C873373 (date 2007)

APPENDIX 1: Sites previously listed on Gwynedd HER and National Monument Register

Table of sites within 1km of the study area previously listed in the Gwynedd HER

PRN	NAME	FORM	NGR	TYPE	PERIOD	BROADCLASS	STATUS
35	Roman Coin Hoard - Findspot, Carreg Goch	Find Only	SH52006610	FINDSPOT	Roman	Object	-
56	Quernstones - Findspot, Cerrig Yr Afon, Felinheli	Find Only	SH51876671	FINDSPOT	Unknown	Object	-
627	Burial Chamber (Possible), NE of Bryn, Felinheli	Other Structure	SH51546604	CHAMBERED TOMB	Prehistoric	Religious, Ritual and Funerary	
1932	Stone Jetty/Slipway, Moel y Don	Other Structure	SH51346756	SLIPWAY	Unknown	Transport	-
3238	Bodandreg Medieval Settlement	Placename	SH52706670	SETTLEMENT	Medieval	Domestic	-
3424	Enclosure, Moel y Don, Menai	Document	SH51656779	ENCLOSURE	Medieval	Agriculture and Subsistence	-
3463	Hut circle, Bush Farm, Felinheli	Multiple	SH52896750	HUT CIRCLE	Roman	Domestic	
3470	Burnt mound, Bodandreg, Felinheli	Other Structure	SH52946675	BURNT MOUND	Bronze Age	Domestic	
3682	Dinas Promontory Fort, Y Felinheli	Other Structure	SH51906710	PROMONTORY FORT	Unknown	Defence	Scheduled Ancient Monument
3683	Dinas - Medieval Buildings - Y Felinheli	Building - Ruined	SH51906710	BUILDING	Early Medieval	Domestic	Scheduled Ancient Monument
5428	Quern Stone - Findspot, "The Beehive", Felinheli	Find Only	SH51696640	FINDSPOT	Prehistoric	Object	-
5786	Possible Fish Trap, Castell Gwylan	Document	SH50906713	FISH WEIR	Unknown	Agriculture and Subsistence	-
5787	Possible Fish Trap, Castell Gwylan	Document	SH50856713	FISH WEIR	Unknown	Agriculture and Subsistence	-
6463	Old Cutter Inn, Moel y Don	Building - Roofed	SH51786789	INN	Unknown	Commercial	Listed Building
7226	'The Old Cutter', Moel y Don	Building - Roofed	SH51766790	BUILDING	Post-Medieval	Domestic	-
12705	Vaynol Estate Gasworks Chimney		SH52396761	GAS WORKS	Post-Medieval	Industrial	Listed Building
15853	Y Felinheli (Port Dinorwic) - Landscape		SH52506740	LANDSCAPE	Multi-Period	Unassigned	-
18326	Hut Circles, Possible, Y Felinheli	Cropmark	SH52556718	HUT CIRCLE	Roman	Domestic	-
19179	Early Land Boundary/Enclosure, Possible, Y Felinheli	Topography	SH52226628	BOUNDARY	Unknown	Agriculture and Subsistence	-
19198	Medieval Land Boundary, Possible, Y Felinheli	Topography	SH52406671	BOUNDARY	Medieval	Agriculture and Subsistence	-

PRN	NAME	FORM	NGR	TYPE	PERIOD	BROADCLASS	STATUS
19199	Terrace/Lynchet, Possible, Y Felinheli	Topography	SH52406671	TERRACED GROUND	Unknown	Monument	-
19200	Medieval Land Boundary, Possible, Y Felinheli	Topography	SH52476675	BOUNDARY	Medieval	Agriculture and Subsistence	-
19601	Trackway, Y Felinheli	Other Structure	SH52646751	TRACKWAY	Post-Medieval	Transport	-
19602	Boundary Bank, Y Felinheli	Earthwork	SH52636751	BOUNDARY BANK	Post-Medieval	Monument	-
19603	Railway Trackbed, Y Felinheli	Earthwork	SH52556752	RAILWAY	Post-Medieval	Transport	-
19604	Railway Embankment, Y Felinheli	Earthwork	SH52506750	EMBANKMENT	Post-Medieval	Monument	-
24094	Brooch, Findspot, Llanfair Wood, Y Felinheli	Find Only	SH51246660	FINDSPOT	Roman	Object	-
24095	Brooch, Findspot, Llanfair Wood, Y Felinheli	Find Only	SH51166652	FINDSPOT	Roman	Object	-
24096	Brooch, Findspot, NE of Llanfair Wood, Y Felinheli	Find Only	SH51436673	FINDSPOT	Roman	Object	-
24097	Coins, Findspot, Y Felinheli	Find Only	SH51516677	FINDSPOT	Medieval	Object	-
24098	Coin & Token, Findspot, Y Felinheli	Find Only	SH51676662	FINDSPOT	Post-Medieval	Object	-
24099	Gold/Brass Oval Ring, Findspot, Y Felinheli	Find Only	SH51216654	FINDSPOT	Modern	Object	-
24100	Strap End, Findspot, Y Felinheli	Find Only	SH51216654	FINDSPOT	Medieval	Object	-
24101	Sheath Tip, Findspot, Y Felinheli	Find Only	SH51296660	FINDSPOT	Post-Medieval	Object	-
24102	Cylindrical Object, Findspot, Y Felinheli	Find Only	SH51176655	FINDSPOT	Post-Medieval	Object	-
24103	Lead Weight, Findspot, Y Felinheli	Find Only	SH51186658	FINDSPOT	Post-Medieval	Object	-
24104	Lead Weight, Findspot, Y Felinheli	Find Only	SH51196656	FINDSPOT	Post-Medieval	Object	-
24105	Cog Fragment, Possible, Findspot, Y Felinheli	Find Only	SH51536672	FINDSPOT	Post-Medieval	Object	-
24106	Spindle Whorl & Weight, Findspot, Llanfair Wood	Find Only	SH51336659	FINDSPOT	Medieval	Object	
24122	Metal Objects, Findspot, Y Felinheli	Find Only	SH51886610	FINDSPOT	Post-medieval and	Object	

PRN	NAME	FORM	NGR	TYPE	PERIOD	BROADCLASS	STATUS
					Roman		
24504	Slipway and site of shipbuilding works	Other structure	SH52020 67159	SLIPWAY	Post-Medieval	Industry	
31173	Hollow Way, South West of Bush Farm	Buried Feature	SH52546701	HOLLOW WAY	Post-Medieval	Transport	-
PAS 381036	A sestertius of Marcus Aurelius (161-180)	Find Only	SH5267	FINDSPOT	Roman	Object	

Table of sites within 1km of the study area previously listed in the National Monument Register

NPRN	NMRWNAME	BROADCLASS	TYPE	PERIOD	FORM	NGR
6968	PORT DINORWIC INDEPENDENT CHAPEL (MORIAH), FELINHELI	Religious, Ritual and Funerary	CHAPEL	Post Medieval	Documents	SH52476748
6969	SALEM BAPTIST CHAPEL, FELINHELI	Religious, Ritual and Funerary	CHAPEL	Post Medieval	Building	SH52286724
6970	BRYNMENAI WELSH INDEPENDENT CHAPEL (BRYN-MENAI), FELINHELI	Religious, Ritual and Funerary	CHAPEL	Post Medieval	Building	SH52096698
6971	ELIM METHODIST CHAPEL (WESLEYAN) AND BETHANIA CHAPEL (CALVINISTIC METHODIST), PORT DINORWIC	Religious, Ritual and Funerary	CHAPEL	Post Medieval	Building	SH52526762
15751	MOEL-Y-DON;THE OLD CUTTER INN	Domestic	HOUSE	Post Medieval	Documents	SH51786789
33592	INDUSTRIAL CHIMNEY, PORT DINORWIC	Industrial	CHIMNEY	Post Medieval;19th Century	Building	SH5242267560
43784	ST MARYS CHURCH (NEW CHURCH)	Religious, Ritual and Funerary	CHURCH	Post Medieval	Not recorded	SH51856684
56583	BURIAL CHAMBER (POSS), N.E. OF BRYN, FELINHELI	Religious, Ritual and Funerary	CHAMBERED TOMB	Prehistoric	Other Structure	SH51546604
95308	DINAS CAMP	Defence	PROMONTORY FORT	Prehistoric	Earthwork	SH519671
240470	MOEL-Y-DON FERRY CROSSING, MENAI STRAITS	TRANSPORT	FERRY CROSSING	MEDIEVAL	Documents	SH5207167615
271466	WILL	Maritime	WRECK	Post Medieval	Documents	SH5267
272297	UNIDENTIFIED	Maritime	WRECK	Post Medieval	Documents	SH5167
302078	Y FELINHELI HARBOUR: SOUTH DOCK AND QUAY	Maritime	DOCK	Post Medieval	Other Structure	SH5240767697

NPRN	NMRWNAME	BROADCLASS	TYPE	PERIOD	FORM	NGR
	WALLS; PORT DINORWIC HARBOUR					
401254	MOEL-Y-DON; THE OLD CUTTER	Maritime	WRECK	Post Medieval	Wreck	SH51866785
404319	MOEL-Y-DON: SITE OF BATTLE, MENAI STRAITS, NEAR LLANEDWEN	Defence	BATTLE SITE	Medieval	Documents	SH518678
405671	CASTELL GWYLAN, LLANEDWEN	Domestic	BOAT HOUSE	Post Medieval		SH5114567397
408752	ARVONIA STORES, 58 STRYD BANGOR;BANGOR STREET. Y FELINHELI	Commercial	HARDWARE SHOP	19th Century	Documents	SH52526757
410182	MOEL Y DON PROMONTORY FORT	Defence	PROMONTORY FORT	Iron Age	Cropmark	SH51776778
411349	RECTORY, Y FELINHELI (PORT DINORWIC)	Domestic	RECTORY	Post Medieval	Documents	SH5182866792
414851	SHIPBUILDING YARD, Y FELINHELI	Maritime	SHIPYARD	Post Medieval	Documents	SH5202367169

APPENDIX 2: Definition of terms

Categories of importance

The following categories were used to define the importance of the archaeological resource.

Category A - Sites of National Importance.

Scheduled Ancient Monuments, Listed Buildings of grade II* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of regional or county importance.

Grade II listed buildings and sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of district or local importance.

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and damaged sites.

Sites that are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance of or during destruction, should be sufficient.

Category E - Sites needing further investigation.

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation.

Definition of Impact

The impact of the proposed pipeline on each site was estimated. The impact is defined as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

None:

There is no construction impact on this particular site.

Slight:

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, *e.g.* part of a trackway or field bank.

Unlikely:

This category indicates sites that fall within the band of interest but are unlikely to be directly affected. This includes sites such as standing and occupied buildings at the margins of the band of interest.

Likely:

Sites towards the edges of the study area, which may not be directly affected, but are likely to be damaged in some way by the construction activity.

Significant:

The partial removal of a site affecting its overall integrity. Sites falling into this category may be linear features such as roads or tramways where the removal of part of the feature could make overall interpretation problematic.

Considerable:

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

Unknown:

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed works.

Definition of field evaluation techniques

Field evaluation is necessary to fully understand and assess most class E sites and to allow the evaluation of areas of land where there are no visible features but for which there is potential for sites to exist. Two principal techniques can be used for carrying out the evaluation: geophysical survey and trial trenching. Topographic survey may also be employed where sites are thought to survive as earthworks. This involves the close inspection of earthwork and building remains and their accurate recording and interpretation.

Geophysical survey most often involves the use of a magnetometer, which allows detection of some underground features, depending on their composition and the nature of the subsoil. Other forms of geophysical survey, including resistivity survey and ground penetrating radar might also be of use.

Trial trenching allows a representative sample of the development area to be investigated at depth. Trenches of appropriate size can also be excavated to evaluate category E sites. Trenching is typically carried out with trenches of between 20 to 30m length and 2m width. The topsoil is removed by machine and the resulting surface is cleaned by hand, recording features. Depending on the stratigraphy encountered the machine may be used to remove stratigraphy to deeper levels.

Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology.

None:

No impact so no requirement for mitigatory measures.

Detailed recording:

This requires a full photographic record and measured survey prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Strip, Map and Sample:

The technique of Strip, Map and Sample involves the examination of machine-stripped surfaces to identify archaeological remains. The stripping is undertaken under the supervision of an archaeologist. Stripping and removal of the overburden is undertaken in such a manner as to ensure damage does not take place to surfaces that have already been stripped, nor to archaeological surfaces that have not yet been revealed.

Stripping is undertaken in as careful a manner as possible, to allow for good identification of archaeological features. A small team of archaeologists will be responsible for subsequently further cleaning defined areas where necessary. Complex sites which cannot be avoided will need to be fully excavated.

Watching brief:

This is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

Avoidance:

Features, which may be affected directly by the scheme, or during the construction, should be avoided. Occasionally a minor change to the proposed plan is recommended, but more usually it refers to the need for care to be taken during construction to avoid accidental damage to a feature. This is often best achieved by clearly marking features prior to the start of work.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision.

APPENDIX 3: Project Design for Archaeological Assessment

THE SURGERY, LAND OFF BEACH ROAD, Y FELINHELI PROJECT DESIGN FOR ARCHAEOLOGICAL ASSESSMENT (T0215)

Prepared for *Watkin Jones Group*, August 2012

1. INTRODUCTION

Gwynedd Archaeological Trust has been asked by the *Watkin Jones Group* to provide a cost and project design for carrying out an archaeological assessment of an area of land to be developed for a Primary Healthcare Centre. The site is located on the shore of the Menai Straits on the north-western side of Y Felinheli, Gwynedd (centred on NGR **SH51836695**; see figure 1).

The archaeological assessment will be completed as part of planning application **C10A/0485/20/LL**. The development area covers about 0.6 hectares and a temporary compound is proposed on the northern side for the duration of the construction works.

A mitigation brief has not been prepared for this scheme by Gwynedd Archaeological Planning Services (GAPS), but a recommendation was made for an archaeological assessment of the proposed development area leading to proposals to mitigate the impact of the development on the archaeology (GAPS correspondence **1025je01/D1267** dated 25th October 2010). This was not done at the time and the recommendation has now been superseded by an email dated 17/08/2012. This requires that:

“a staged programme of archaeological work must be commissioned to include as the first stage: an assessment of the development plot (including any landscaping, compounds or other areas of ground disturbance) through archival research, a review of historic mapping, aerial photographic evidence and other primary and secondary sources. A site visit should also be undertaken and an assessment should be made of the visual impact of the proposals on the SAM as well as the direct impact of the proposals on any below ground archaeological remains. Recommendations for suitable mitigation should be included.”

This design will conform to the guidelines specified in the brief and in *Standard and Guidance for Archaeological Desk-based Assessment* (Institute of Field Archaeologists, 1994, rev. 2001, 2008). It is recommended that the content of this design is approved by GAPS.

The assessment report forms the first stage of a stage process. The assessment report will present recommendations of mitigatory measures to reduce the visual impact of the development on the Scheduled Ancient Monument and to mitigate any potential impact on buried archaeology.

2. ARCHAEOLOGICAL AIMS

A desk-based assessment is defined as “a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate” (IFA 2008, 2)

The aims of the assessment are:

- to identify and record the cultural heritage within the defined study area;
- to evaluate the importance of what has been identified;
- to recommend ways in which impact upon the cultural heritage can be avoided or minimised.

A desk-based assessment is normally followed by a programme of field evaluation. In this case GAPS have recommended that the assessment be seen not as the start of an evaluation process but as part of a staged programme of mitigation, leading to the development of strategies to minimise the impact of the development on the setting of the SAM and views to and from it and the development of either strategies for preservation *in situ* or by record of potential below ground remains, as appropriate.

3. ARCHAEOLOGICAL BACKGROUND

The development area is about 100m south of Dinas Camp, a Scheduled Ancient Monument (Ref. Cn047). The temporary compound proposed adjacent to the development site is less than 70m south of the Scheduled Ancient Monument. Dinas Camp is a promontory fort probably of Iron Age date but inside it are remains of buildings that appear to be medieval. A hoard of Roman coins is also said to have been found on the site.

Ashley Batten of GAPS in an email dated 17/08/2012 has emphasised that

“There is significant potential for nationally important archaeological remains (associated with the nearby Scheduled Ancient Monument, Dinas Camp Ref. Cn047) to survive within this area. Extramural activity associated with the later-prehistoric promontory fort might be expected along the route to the entrance of the site. Given the topography of the area and the apparent lack of any historic disturbance in the locality, any remains that are likely to survive will be well-preserved and at shallow depths.”

4. PROGRAMME OF WORK

4.1 Introduction

The project will assess the potential archaeological impact of the development area and the temporary compound, which will take into account:

- The history of the site
- The potential impact of development on archaeological remains
- The potential impact of development on the setting of the Scheduled Ancient Monument
- The requirements for further assessment in the form of non-intrusive and intrusive field evaluation.

The project will be undertaken in four stages:

- Desk-based assessment
- Field visit
- Report compilation
- Project archive

4.2 Desk-based assessment

The desk-based assessment will involve a study of the following records

The regional Historic Environment Register (HER, GAT, Craig Beuno, Bangor, Gwynedd LL57 2RT) will be examined for information concerning the study area. This will include an examination of the core HER, and secondary information held within the record which includes unpublished reports, the 1:2500 County Series Ordnance Survey maps, and the National Archaeological Record index cards.

The National Monuments Record (NMR RCAHMW, National Monuments Record of Wales, Plas Crug, Aberystwyth, SY23 1NJ) will be checked for sites additional to the HER, and if required additional supporting information will be examined at the NMR.

Information about Listed Buildings and Scheduled Ancient Monuments from Cadw will be examined in the regional HER, with supporting information from Cadw if required. The Register of Outstanding and Special Historic Landscapes and the Register of Parks and Gardens will be checked, and also the location of World Heritage Sites.

Secondary sources will be examined, including the Inventories of the Royal Commission on Ancient and Historical Monuments for Wales, and works held within the regional libraries. Indices to relevant journals, including county history and archaeology society journals and national society journals such as *Archaeologia Cambrensis* will be checked. Also at this stage 19th century topographical dictionaries, antiquarian tours and trade directories will be examined where relevant.

Evidence from aerial photographs will be collated. Vertical and oblique collections held by the NMR, CCW and Welsh Assembly Government will be considered for examination. All photographs examined will be listed in the assessment report.

Archive maps, where relevant, will be consulted in the National Library of Wales at Aberystwyth, at the Gwynedd County Record Office (Council Offices, Shirehall Street, Caernarfon, LL55 1SH) and at the archives of the University College of Wales, Bangor (Archives Department, College Road, Bangor, LL57 2DG), as appropriate. This will include the relevant estate maps and tithe maps and information from Land Tax Assessments. Where relevant antiquarian prints and photographs from the national and regional archives will be examined.

Results from previous archaeological work within the area will also be reviewed.

4.3 Field survey

This part of the assessment will involve a walkover of the study area and assessing the sites identified during the desk-based study. Any additional sites noted will also be assessed. The location of potentially well-preserved environmental deposits will be noted.

The aims of this stage of the work are to:

- verify the results of the desk based assessment
- identify any further archaeological sites which may exist as above ground features
- assess the potential for the preservation of below-ground archaeology
- assess the impact upon the historic landscape
- assess the visual impact of the development on the SAM
- photograph and record the present condition of all sites noted.

The visual impact of the development on the Dinas Camp Scheduled Ancient Monument (SAM) will be assessed by visiting the site on the ground and recording views and lines of visibility. The report will include detailed comment on design, planting and or landscaping within the development plot as far as is possible from the available plans.

Access onto land is to be arranged by the Clients.

4.4 Field Evaluation/Further Works

Following the desk-based assessment further intrusive work will be required to identify the presence or absence of archaeological remains, their extent, nature, quality and character before determining the appropriate mitigation strategy, whether it be preservation *in situ*, archaeological excavation or a combination of the two.

The methodology of the further work will be informed by the assessment report but in this case, as planning consent has already been granted, it is anticipated that the most appropriate response will be a mitigation programme using strip, map and sampling techniques to evaluate the archaeology over the full area of the development. This will lead to either the preservation of archaeological remains or to their full excavation and analysis. Cadw must be consulted along with GAPS as part of the development of any such strategies.

The assessment report will present recommendations for mitigation.

4.5 Data processing and report compilation

Following completion of the stages outlined above, a report will be produced incorporating the following:

Non-technical summary

1. Introduction
2. Aims and purpose
3. Specification and Project Design
4. Methods and techniques, including details and location of project archive
5. Archaeological Background
6. Results of assessment in the form of a gazetteer
7. Assessment of impacts
8. Proposals for field evaluation and/or mitigation
9. Summary and conclusions
10. List of sources consulted.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the regional curatorial archaeologist and to the client prior to production of the final report.

4.6 Definition of category of importance

To assess the importance of sites and to allow the appropriate mitigatory action to be proposed for each, a framework of categories will be used with each site allocated to a particular category according to its relative importance:

Category A - Sites of National Importance.

This category includes Scheduled Ancient Monuments and Listed Buildings (Grade I and II*) as well as those sites which would meet the requirements for scheduling (ancient monuments) or listing (grade I and II* and certain grade II) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of Regional Importance

These sites are those which would not fulfil the criteria for scheduling, but may include Listed Buildings at grade II. They are sites of particular importance within the region. Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative. Sites that are Listed have legal protection, and it is recommended that all listed buildings are preserved *in situ*.

Category C - Sites of District or Local Importance

These sites are not of sufficient importance to justify a recommendation for preservation if threatened, but nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and Damaged Sites

These are sites which are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category. For these sites the most appropriate mitigation is often rapid recording either in advance or during destruction.

Category E - Sites needing further investigation

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A-D, are temporarily placed in this category, with specific recommendations for further evaluation. This category can also apply to areas as well as to individual sites.

5. DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged in an appropriate place within six months of the completion of the project. The location is to be agreed with the Curatorial Archaeologist.

Copies of the report will be sent to the regional HER (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT).

Given the nature of the proposed development as a space intended to be used by the local community, consideration will be given to interpretation within the surgery facility as a method of dissemination.

6. PERSONNEL

The work will be managed by John Roberts, Acting Head of Contracts. The work will be undertaken by one of the Trust's Archaeologists experienced in the relevant skills/periods required. Full details of personnel involved, with *curricula vitae*, can be supplied upon request.

7. MONITORING AND TIMING

Monitoring visits can be arranged during the course of the project with the clients and with the appropriate Development Control archaeologist.

Both Gwynedd Archaeological Planning Service and Cadw should be regularly updated throughout any archaeological programme. Each stage of work will need to be approved and signed off.

8. HEALTH AND SAFETY

The Trust subscribes to the SCAUM (Standing Conference of Archaeological Unit Managers) Health and Safety Policy as defined in **Health and Safety in Field Archaeology** (2006). Risks will be assessed prior to and during the work.

9. INSURANCE

Liability Insurance - Aviva Policy 24765101CHC/00045

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £5m in any one occurrence

The current period expires 21/06/13

10. OTHER

Any queries concerning the above should be directed to John Roberts at the Gwynedd Archaeological Trust Offices, Garth Road, Bangor. Telephone (01248) 352535ext234.

11. SOURCES CONSULTED

GAPS correspondence 1025je01/D1267 and email dated 17/08/2012

Reproduction of Client Drawings AL(10)00, AL(10)01 and plan of proposed site set-up

Standard and Guidance for Archaeological Desk-based Assessment (Institute of Field Archaeologists, 1994, rev. 2001 & 2008)

Figures and Plates

Figures

- Figure 1. Map of area around development site showing sites already known on the Gwynedd Historic Environment Record (HER) and National Monument Record (NMR).
- Figure 2. Development area with proposed building layout, showing archaeological sites identified in the assessment
- Figure 3. Sections and elevations of proposed Health Centre from Watkin Jones drawing AL(10)02
- Figure 4. 'Great Britain Coasting Pilot' (G. Collins, 1695), showing the mill and Llanfair House.
- Figure 5. Lewis Morris Chart, 1737/8 (Anglesey Record Office WM/1903/1), marking Dinas and Porth gwenolwen
- Figure 6. Part of 1840 tithe map of Llanfair-is-Gaer parish with approximate outline of development area in red and of compound in blue
- Figure 7. Part of first edition OS County Series map Anglesey sheet XXIII.06 (1889), development area in red, compound in blue and scheduled area in purple
- Figure 8. Part of second edition OS County Series map Anglesey sheet XXIII.06 (1900), development area in red, compound in blue and scheduled area in purple
- Figure 9. Part of third edition OS County Series map Anglesey sheet XXIII.06 (1916), development area in red, compound in blue and scheduled area in purple
- Figure 10. Survey of Dinas, Llanfair-is-gaer, from the parish file held in the NMR

Plates

- Plate 1. Temporary compound on 24th August 2012 from south
- Plate 2. Looking SW down the cycle track that reuses the railway line, from close to the former level crossing
- Plate 3. Looking NE down Beach Road from the former level crossing
- Plate 4. Brick building from the north-east
- Plate 5. Kissing gate from north-west side
- Plate 6. Boundary between development site and the former railway, from the north-east
- Plate 7. View from site of proposed Health Centre building north towards the Scheduled Ancient Monument
- Plate 8. View from field boundary adjacent to scheduled area, showing very approximate indication of location and size of proposed building (see figure 2 for location of shot)
- Plate 9. View from the development area to the north-west across the Menai Strait to Castell Gwylan

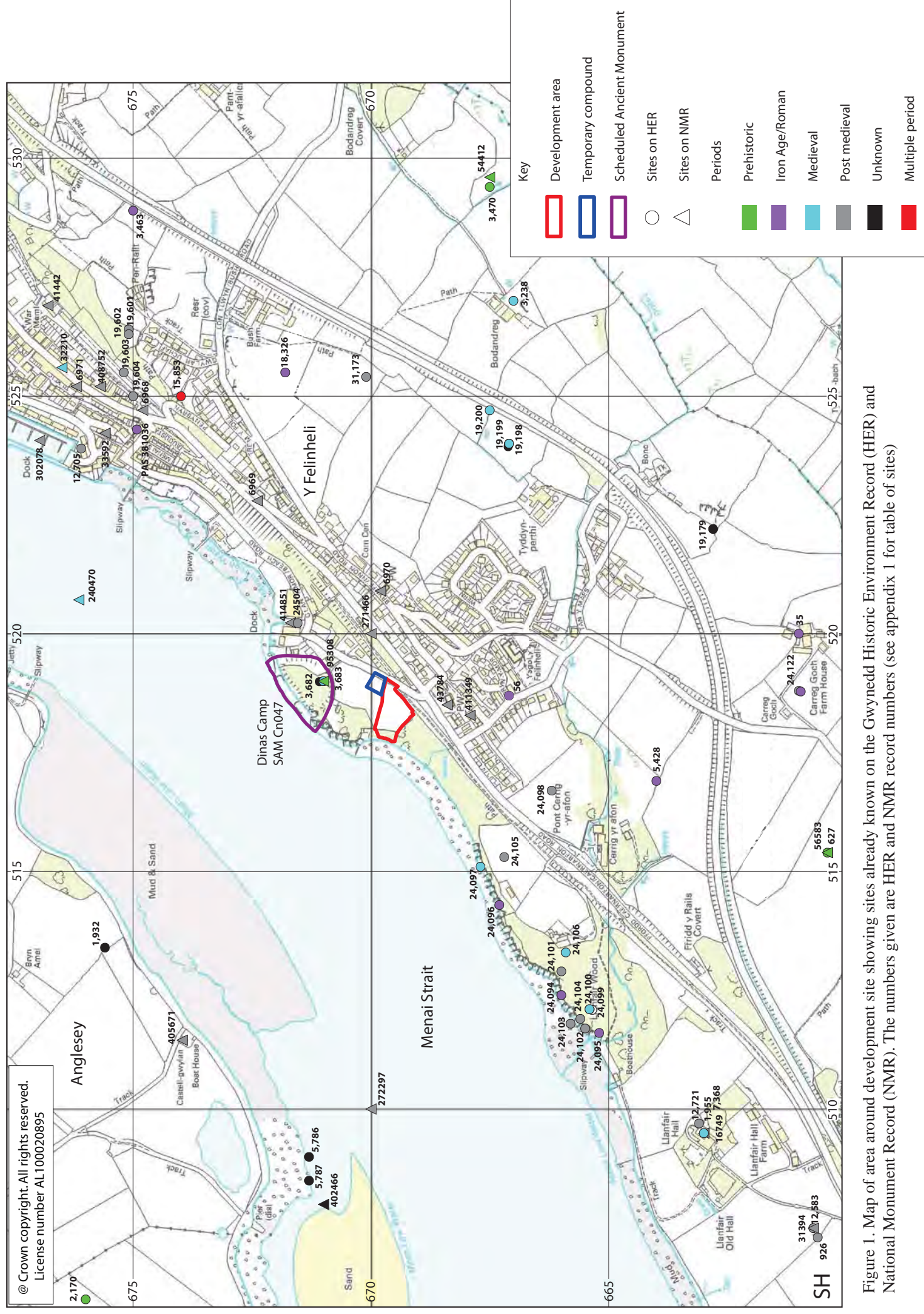


Figure 1. Map of area around development site showing sites already known on the Gwynedd Historic Environment Record (HER) and National Monument Record (NMR). The numbers given are HER and NMR record numbers (see appendix 1 for table of sites)

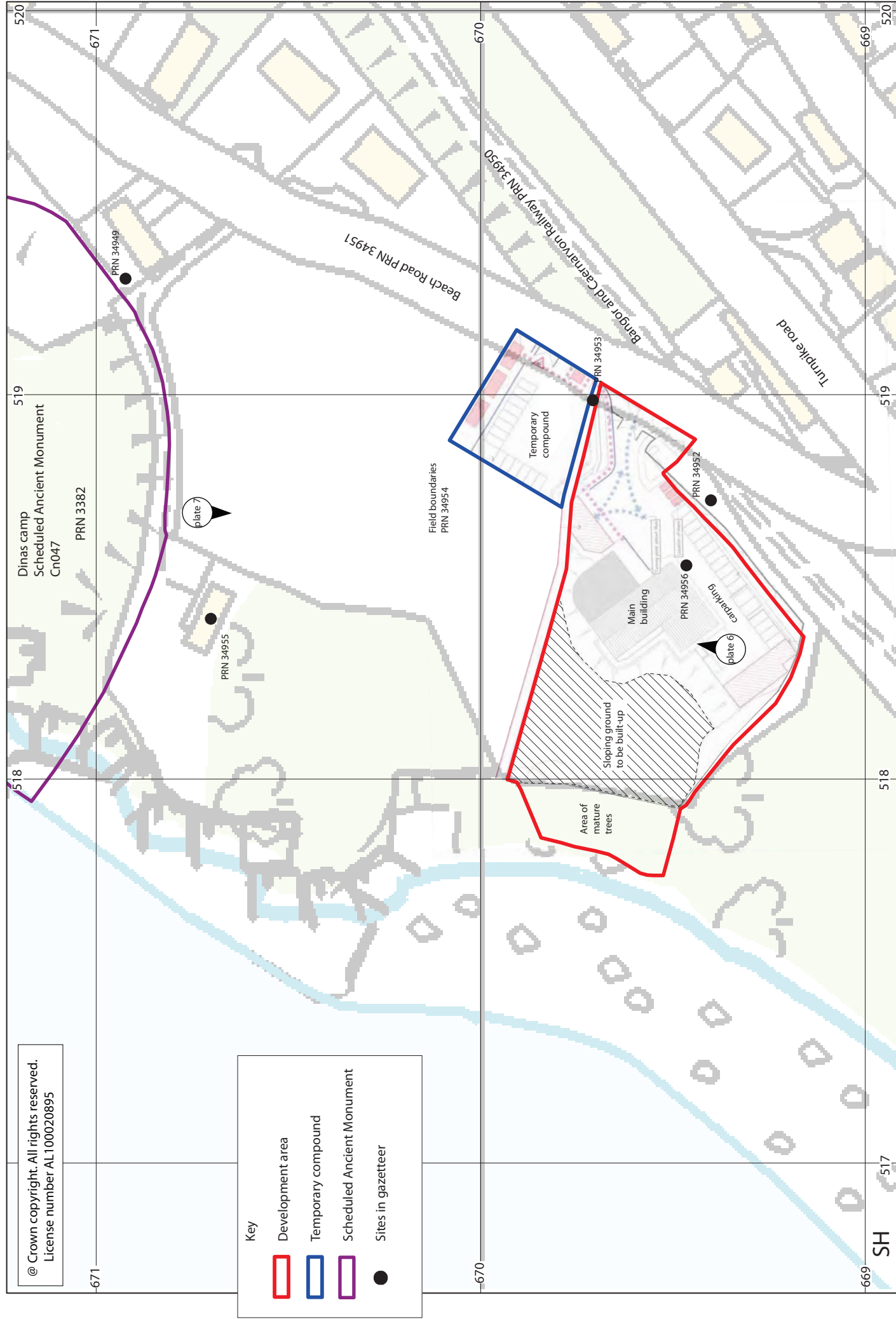


Figure 2. Development area with proposed building layout, showing archaeological sites identified in the assessment

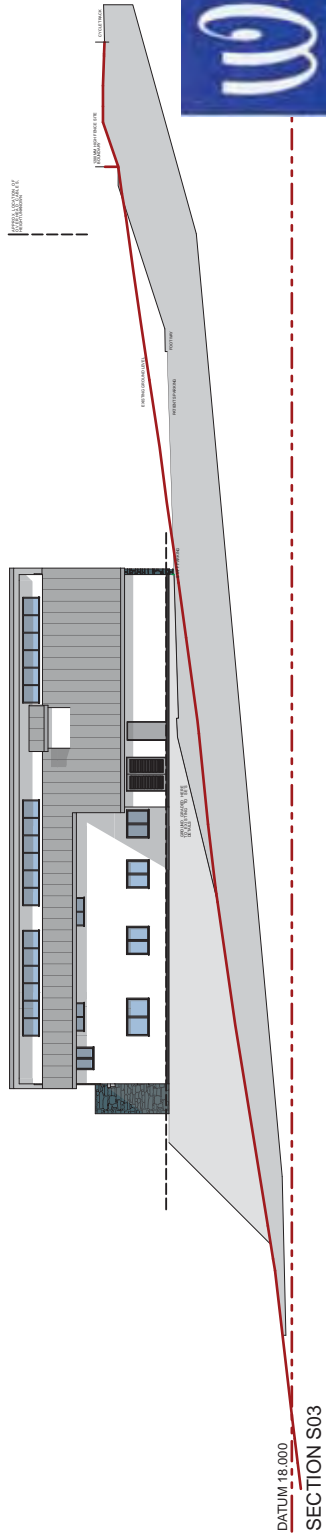
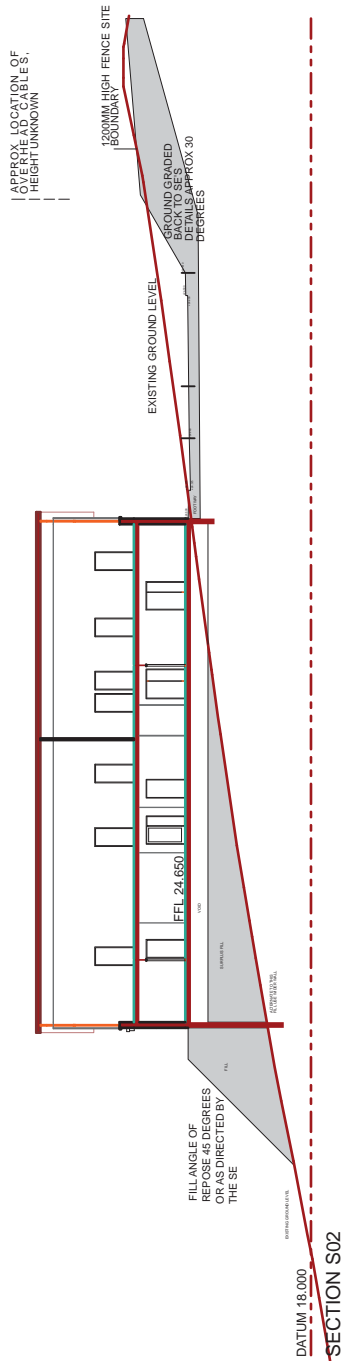
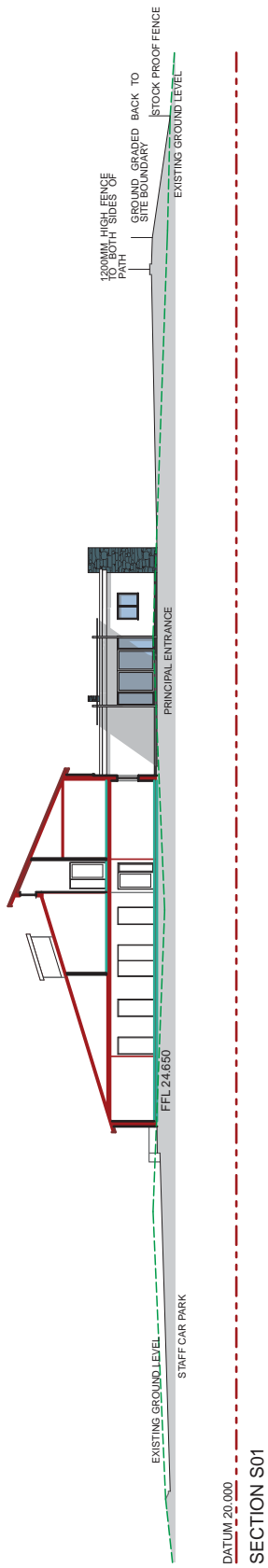


Figure 3. Sections and elevations of proposed Health Centre from Watkin Jones drawing AL(10)02



Drawing Title
Drawing Details

SECTION S01, S02 AND S03 THROUGH SITE
Job No. SH963
Drawing No. AL(10)02
Revisions

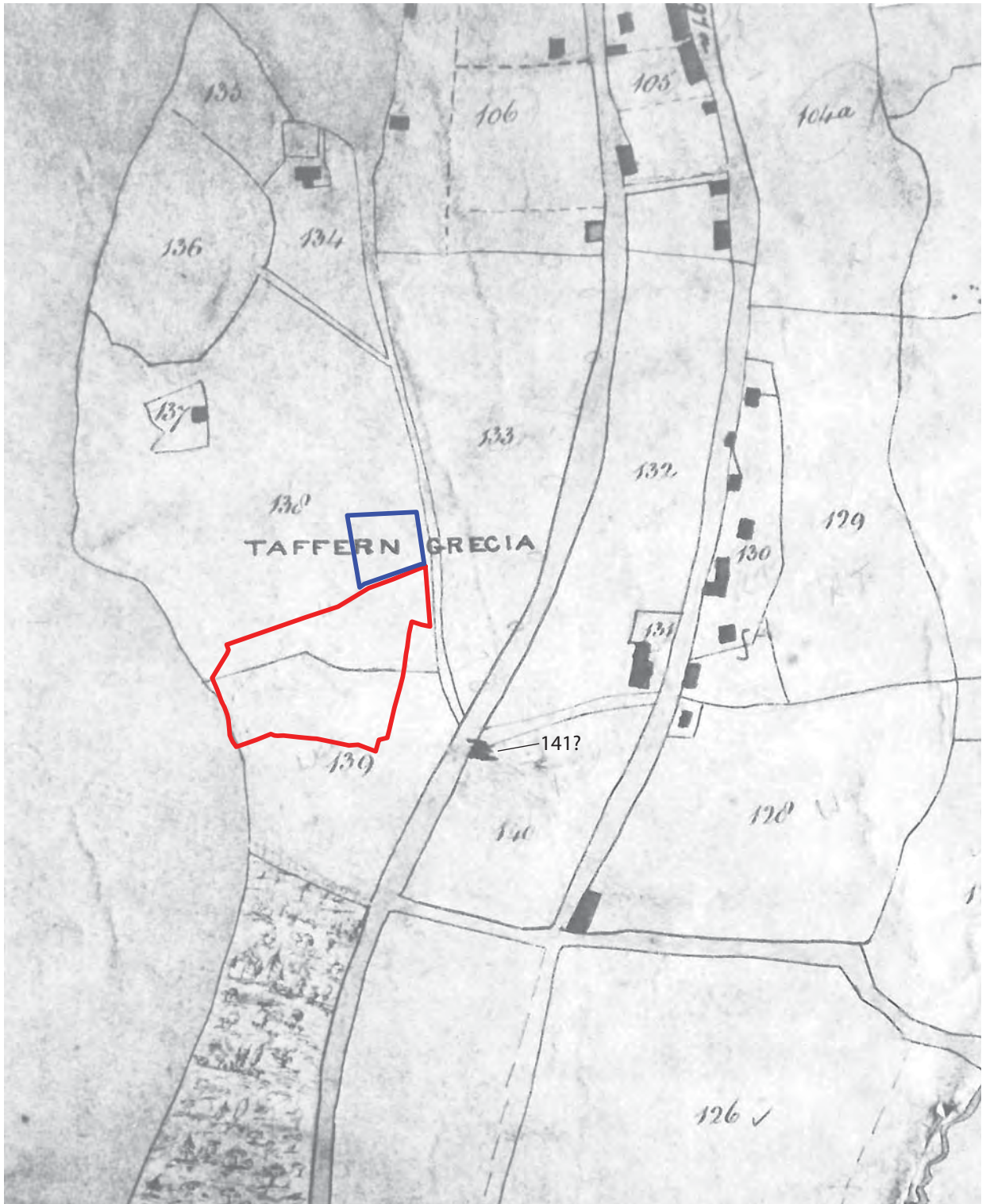


Figure 6. Part of 1840 tithe map of Llanfair-is-Gaer parish with approximate outline of development area in red and of compound in blue

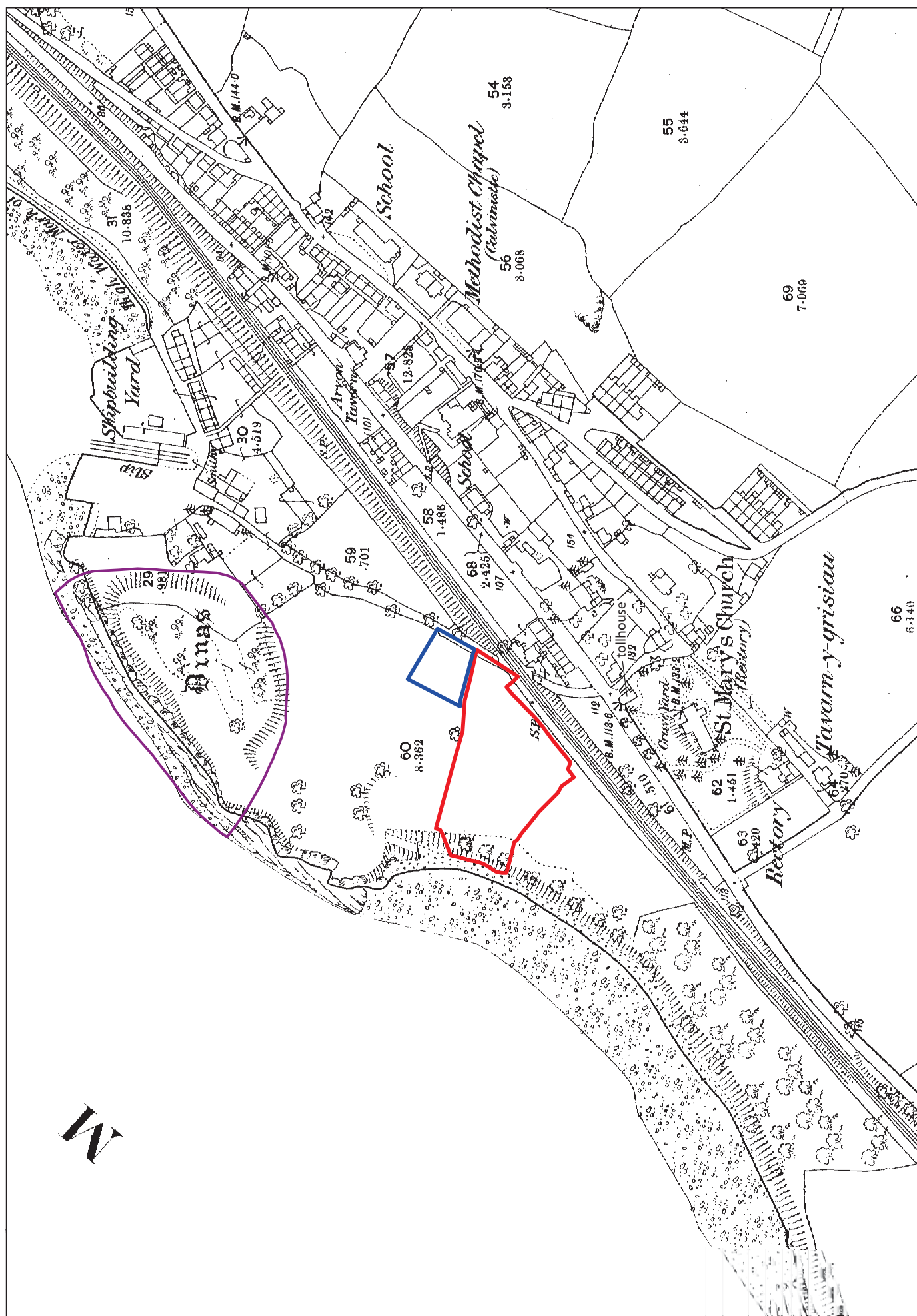


Figure 7. Part of first edition OS County Series map Anglesey sheet XXIII.06 (1889), development area in red, compound in blue and scheduled area in purple

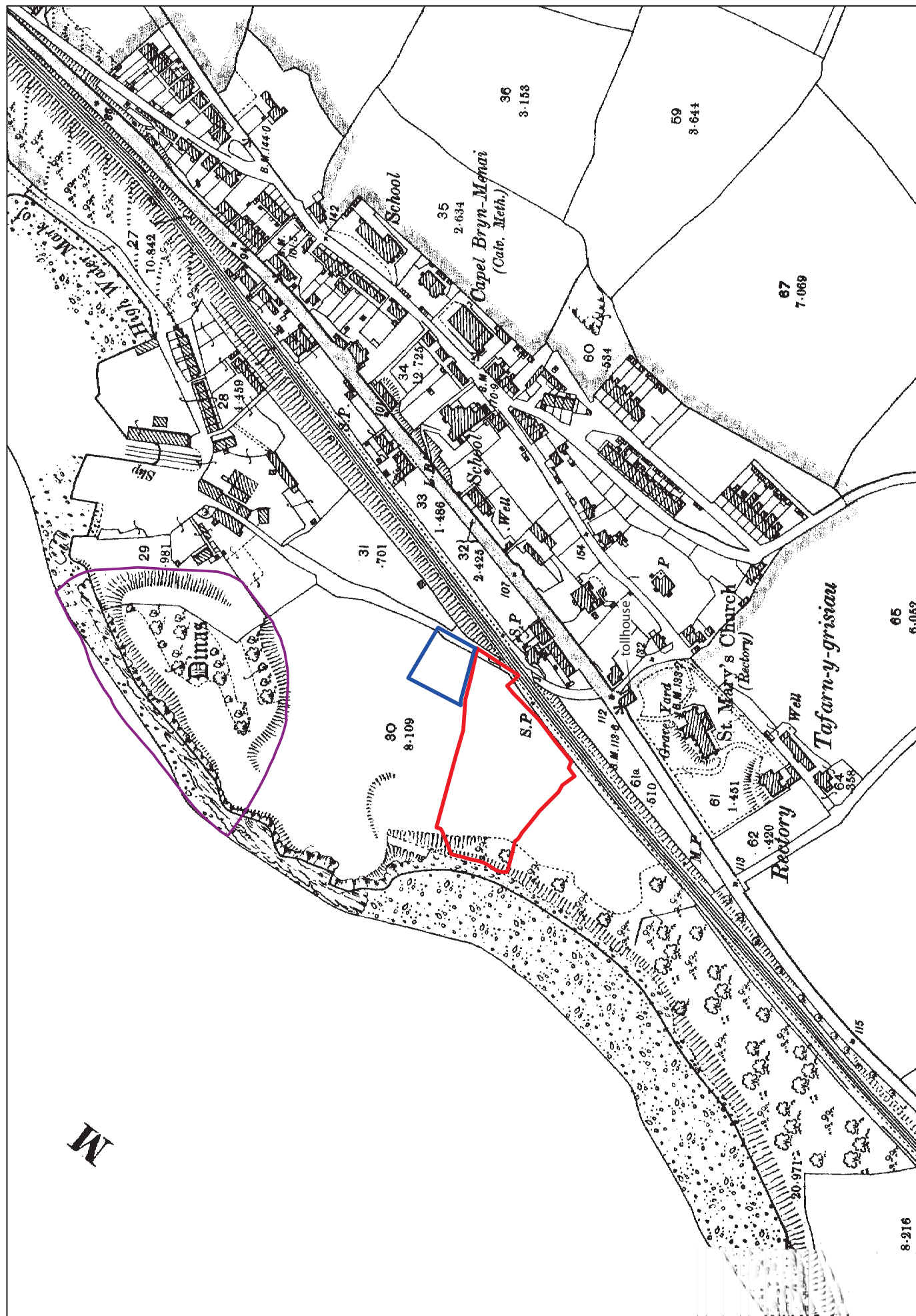


Figure 8. Part of second edition OS County Series map Anglesey sheet XXIII.06 (1900), development area in red, compound in blue and scheduled area in purple

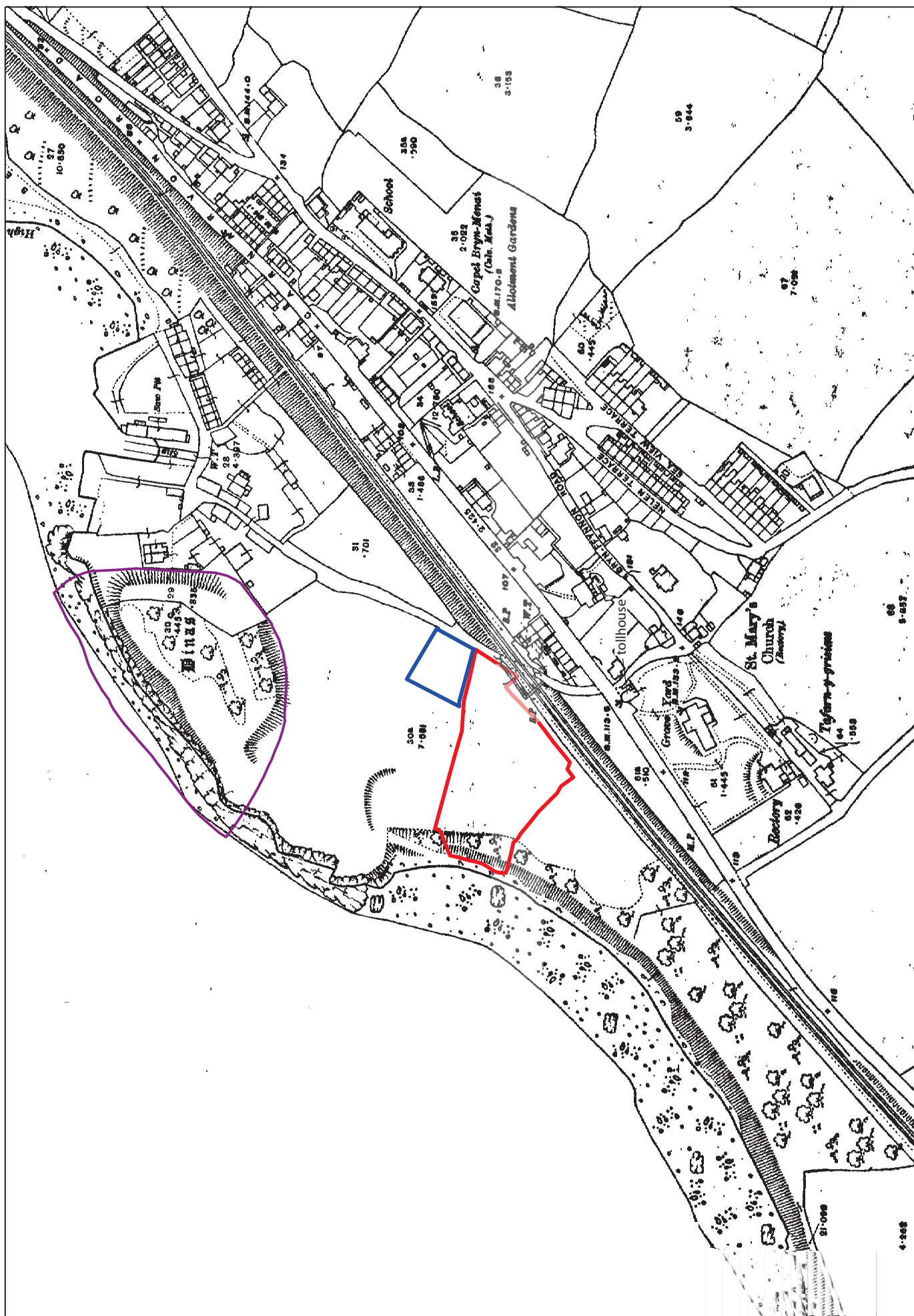


Figure 9. Part of third edition OS County Series map Anglesey sheet XXIII.06 (1916), development area in red, compound in blue and scheduled area in purple

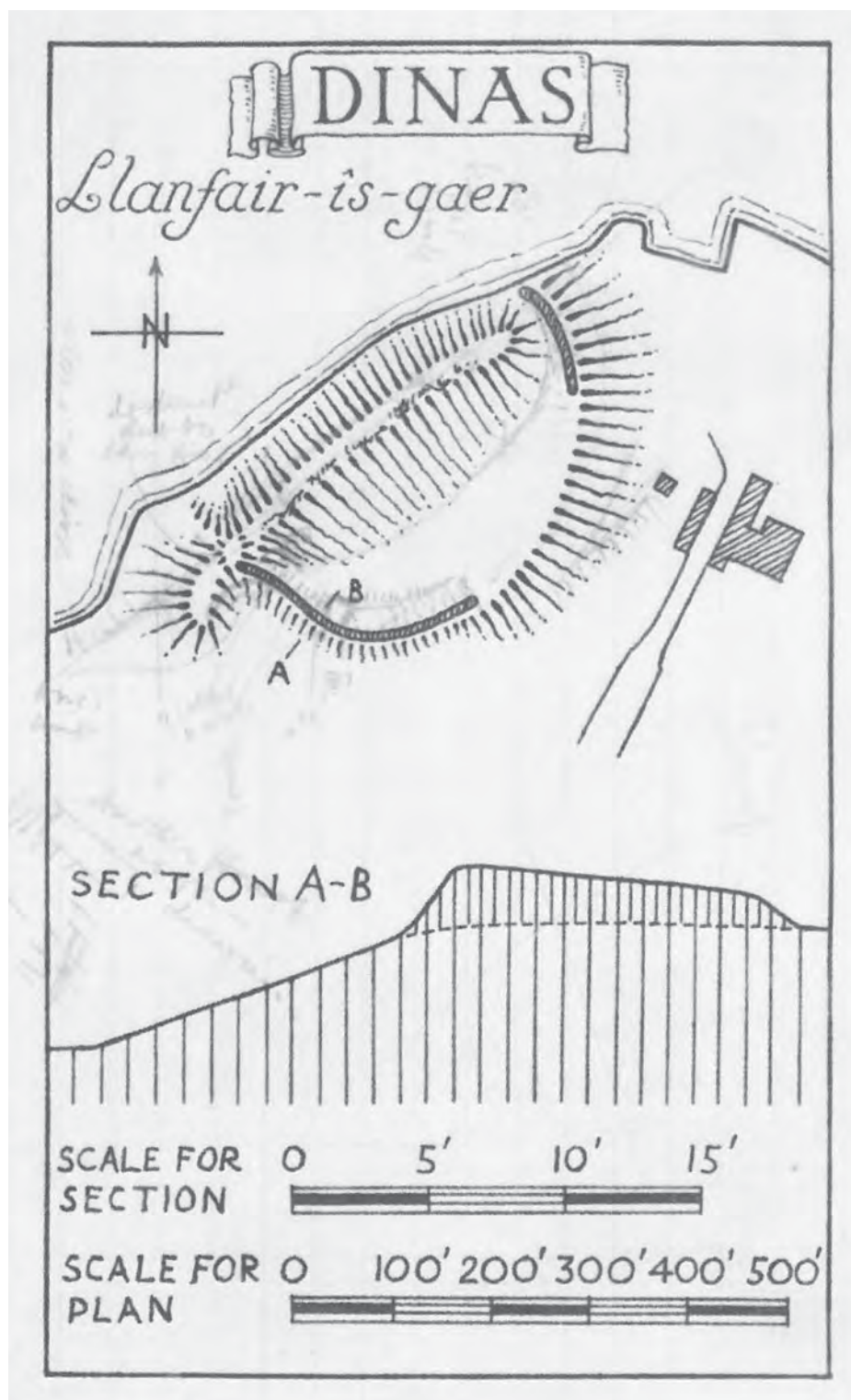


Figure 10. Survey of Dinas, Llanfair-is-gaer, from the parish file held in the NMR



Plate 1. Temporary compound on 24th August 2012 from south



Plate 2. Looking SW down the cycle track that reuses the railway line, from close to the former level crossing



Plate 3. Looking NE down Beach Road from the former level crossing



Plate 4. Brick building from the north-east



Plate 5. Kissing gate from north-west side

Plate 6. Boundary between development site and the former railway, from the north-east





Plate 7. View from site of proposed Health Centre building north towards the Scheduled Ancient Monument



Plate 8. View from field boundary adjacent to scheduled area, showing very approximate indication of location and size of proposed building (see figure 2 for location of shot)



Plate 9. View from the development area to the north-west across the Menai Strait to Castell Gwylan



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