

**PROPOSED CENTRE OF INNOVATION
AND ENTERPRISE, GOGERDDAN
CAMPUS, UNIVERSITY OF
ABERYSTWYTH, CEREDIGION**

**HISTORIC ENVIRONMENT DESK BASED
ASSESSMENT**

SN 62697 83580



Prepared by
Dyfed Archaeological Trust
For: AIEC Limited /
University of Aberystwyth



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RHIF YR ADRODDIAD / REPORT NO. 2016/33
RHIF Y DIGWYDDIAD / EVENT RECORD NO. 109364

Mai 2016
May 2016

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Gan / By

Menna Bell
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**PROPOSED CENTRE FOR INNOVATION AND ENTERPRISE, GOGERDDAN
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HISTORIC ENVIRONMENT DESK-BASED ASSESSMENT**

SUMMARY

DAT Archaeological Services were commissioned by John Collingwood of AIEC Limited to prepare a Historic Environment Desk-Based Assessment for the proposed development of Aberystwyth Innovation and Enterprise Campus located at the Gogerddan Campus of Aberystwyth University, Ceredigion. The proposed development comprises two main areas; entitled the North and South areas, and a third, supplementary area known as Cae Lodge. The North area is centred on SN 62707 83574 and measures approximately 0.9ha in size. The South area is centred on SN 62848 83504 and is approximately 0.7ha in size. The Cae Lodge area is approximately 1ha in size and is centred on SN62635 83824. This area has been proposed as a site for a relocated silage clamp. The Cae Lodge area was added to the initial development plan following submission of the first draft of this historic environment desk based assessment report. This report is an updated version of the assessment that includes an assessment of the Cae Lodge area. Information regarding the exact scale and nature of the development was not provided at the time of this assessment although available information indicates that the development areas will replace and/or add on to existing buildings in the Gogerddan Campus.

Designated historic environment assets (Scheduled Ancient Monuments, Listed Buildings, Historic Landscape Categorisation Areas, Historic Parks and Gardens) were identified within a 3km radius buffer zone from the proposed development for the Innovation and Enterprise Centre. The potential visual effect of the proposed scheme on the settings of the designated sites within this area was then evaluated. Non-designated archaeological sites were identified within a 1km radius buffer zone. A detailed site visit of the North and South development areas was undertaken on 22nd April 2016. The Cae Lodge development area was not visited.

The historic environment assessment has shown that the proposed development lies within an area containing a high density of archaeological sites of many periods. Of national significance are the sites of Neolithic and Bronze Age date associated with funerary and ritual monuments located directly to the southwest of the existing campus which form part of scheduled ancient monument CD259. The scheduled area of CD259 also contains evidence of Iron Age and early-medieval remains associated with a cemetery site which could well extend into the development areas. A circular cropmark of likely prehistoric date (NPRN 404548) recorded by the Royal Commission on the Ancient and Historical Monuments of Wales has been recorded within the Cae Lodge area. In addition further evidence for prehistoric activity, as well as medieval and post-medieval remains associated with the park and gardens surrounding Plas Gogerddan itself have been recorded in close vicinity to the proposed development.

It is expected that the Innovation and Enterprise Centre will extend or replace existing buildings and infrastructure on the campus. Ultimately, discussion on the presence or absence of a visual impact on the scheduled area of CD259 is somewhat speculative as full design details of the proposals are not known. It is also true to say that existing buildings have already compromised the setting of scheduled ancient monument CD259. However, even taking these points into consideration any further encroachment upon the area of the CD259 by the construction of new buildings will have at least an adverse moderate impact upon its setting in its wider landscape. It is considered that there will be a low or negligible adverse impact on all other designated and non-designated features within the surrounding landscape.

Owing to the proximity of the development areas to scheduled ancient monument CD259 and other prehistoric sites, it is considered that there is high potential for buried archaeological remains of Neolithic, Bronze Age and early medieval date to survive within the proposed development areas. The undeveloped triangular field of the North area, and the Cae Lodge area are both considered to have high potential for significant archaeological remains to survive and may require archaeological evaluation prior to development or in advance of a decision on any planning application. This could take the form of non-intrusive geophysical survey and/or intrusive trial trench evaluation. The potential for buried remains in the South area is considered to be lower owing to it having been previously developed. However, the existing development is largely characterised by glasshouses, and their below ground impact may only be superficial. Consequently, this area may warrant some form of archaeological mitigation and any intrusive works in this area should at least be archaeologically monitored.

1 INTRODUCTION

1.1 Project Proposals and Commission

1.1.1 DAT Archaeological Services were commissioned by John Collingwood of AIEC Limited to prepare a Historic Environment Desk-Based Assessment for the proposed development of Aberystwyth Innovation and Enterprise Campus located at the Gogerddan Campus of Aberystwyth University, Ceredigion (Figure 1). The initial proposed development comprised two main areas; the North and South areas (Figure 2). The North area is centred on SN 62707 83574 and measures approximately 0.9ha in size. The South area is centred on SN 62848 83504 and is approximately 0.7ha in size. A third, supplementary area was added following the first submission of a first draft of this report (submitted 25/05/2016) and consequently this report has been updated to include this area. This third area, known as "Cae Lodge" is approximately 1ha in size, is located over 0.15km north of the North area and is centred on SN62635 83824. The Cae Lodge development area is earmarked as a possible site for the relocation of a silage clamp.

1.1.2 Information regarding the exact scale and nature of the development was not provided at the time of the assessment, although the limited information provided suggests that the development areas will replace and/or add on to existing buildings in the Gogerddan Campus. It is understood that the North and South areas comprise the majority of the development. Owing to the lack of detailed information, this resulting report should be considered as preliminary guidance, not an exhaustive study, to inform decisions regarding archaeological and historic environment issues, including monument setting and visual impact.

1.2 Scope of the Project

1.2.1 This Desk-Based Assessment is presented as a fulfilment of a Written Scheme of Investigation (Appendix 1). The report follows the Standard and Guidance for Historic Environment Desk-Based Assessment as defined by the Chartered Institute for Archaeologists (CIfA 2014).

1.2.2 The results are intended to identify the extent and character of the known and potential archaeological resource, to assess the likely and potential impacts of the development on that resource and, if required, to outline a possible programme of further works to mitigate those impacts. The assessment should be seen as the first stage of the archaeological process and does not exclude the possibility that further archaeological involvement may be required prior to, or during, the proposed development.

1.2.3 The proposed development lies within the planning jurisdiction of Ceredigion County Council.

1.2.4 The assessment included a search of the resources held in the regional Historic Environment Record (HER), a site visit and on-line resources, including the National Monuments Record (NMR) of Wales data held by the Royal Commission on the Ancient and Historic Monuments of Wales in Aberystwyth (Coflein).

1.2.5 Considering the potential size and nature of the proposed development a 3km radius search area was considered sufficient with which to evaluate impacts on designated archaeological sites and elements of the historic environment (Scheduled Ancient Monuments, registered Historic Landscapes, registered Parks and Gardens, Grade I, II* & II Listed

Buildings). A 1km radius search area was used to evaluate the impacts on undesignated archaeological sites or features.

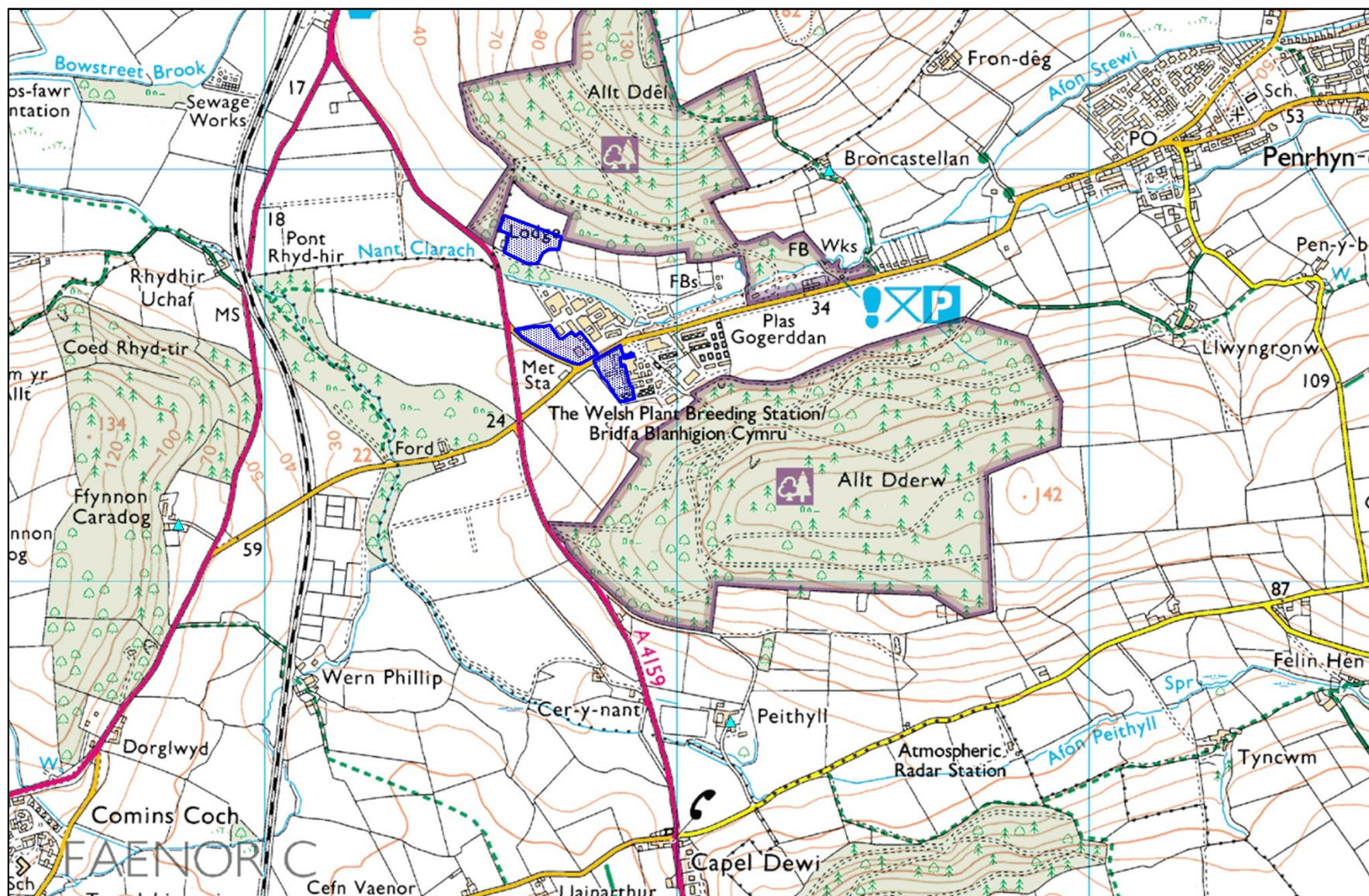


Figure 1: Location map based on the Ordnance Survey; with proposed development areas outlined in blue.

1.3 Abbreviations

- 1.3.1 All sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMS) are identified by their National Primary Record Number (NPRN). Scheduled Ancient Monument (SAM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.4 Illustrations

- 1.4.1 Printed map extracts are not necessarily reproduced to their original scale.

1.5 Timeline

- 1.5.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-medieval Period ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales

¹ The post-medieval and Industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

2. LOCATION AND TOPOGRAPHY

- 2.1 The proposed development for the Aberystwyth Innovation and Enterprise Campus is located to the west and south-west of the Institute of Biological, Environmental & Rural Sciences situated on the Gogerddan Campus of Aberystwyth University, some 4.6km north-east of the centre of Aberystwyth. The campus is located at the western floor of a narrow, steep sided and forested valley through which two watercourses converge to become the westward flowing Nant Clarach (Figure 1).
- 2.2 Gogerddan Campus is situated within the former grounds of Plas Gogerddan (PRN 7075); a late Georgian mansion house. The North and South development areas are bisected by a minor B-road which forks off to run along the western boundary of the North area. The Cae Lodge area is located over 0.15km north of the North area, to the south of Allt Ddél woodland. It is partially occupied by a large agricultural shed and associated yard. The A4159 road flanks the western side of the campus. The existing university campus is comprised mainly of large post-medieval and modern agricultural buildings, blocks of up to three storey high buildings and several glass houses and polytunnels. The South development area is presently largely occupied by the aforementioned glass houses, whilst the North area encompasses a number of agricultural buildings and a small triangular field.
- 2.3 The underlying solid geology of this area is the Aberystwyth Grits Group – comprised of sandstone and mudstone; sedimentary bedrock formed approximately 428 to 444 million years ago in the Silurian Period. The superficial geology is one of alluvium; clay, silt, sand and gravel; formed up to 2 million years ago in the Quaternary period in a local environment once dominated by rivers. Geological information has been obtained through the British Geological Survey mapping portal.

3. METHODOLOGY

- 3.1 This Historic Environment Desk-Based Assessment followed the required methodology as defined by the CIfA (2014) and as laid out in the Written Scheme of Investigation (Appendix 1), which was prepared by DAT Archaeological Services.

Desk Top Study

- 3.2 Computer-based and other resources within the regional HER were consulted in the preparation of this document. Sufficient information was consulted to inform comment on the goals of the assessment. GIS layers were used to assess and illustrate what the likely effects of the proposals upon the historic environment might be.
- 3.3 Designated historic environment assets (including Scheduled Ancient Monuments, Listed Buildings, Historic Landscape Categorisation Areas, Historic Parks and Gardens) were identified within a 3km radius buffer zone from the proposed development for the Innovation and Enterprise Centre. The potential visual effects of the proposed development on the settings of the designated sites within this area were evaluated.
- 3.4 Non-designated archaeological sites were identified within a 1km radius buffer zone. These study areas were considered sufficient to enable an assessment of the archaeological potential of the development areas to be made.

Site Walkover Survey

- 3.5 A detailed site visit was undertaken on 22nd April 2016. The visit comprised a walkover of the North and South areas proposed for development to identify the presence of any visible archaeological remains. Cae Lodge development area was not visited as at the time of the site visit as it was not included in the initial development proposal. In addition during the site visit the area surrounding the proposed development was also evaluated. Views towards the proposed development location from archaeological sites as well as views from the development were considered and assessed. Specific consideration was given to designated sites; particularly the scheduled ancient monument CD259 and its inter-visibility with other monuments in the wider area. The existing setting of this monument was taken into account, as were any significant views from/to the monument. Photographs were taken and field observations recorded in note form.

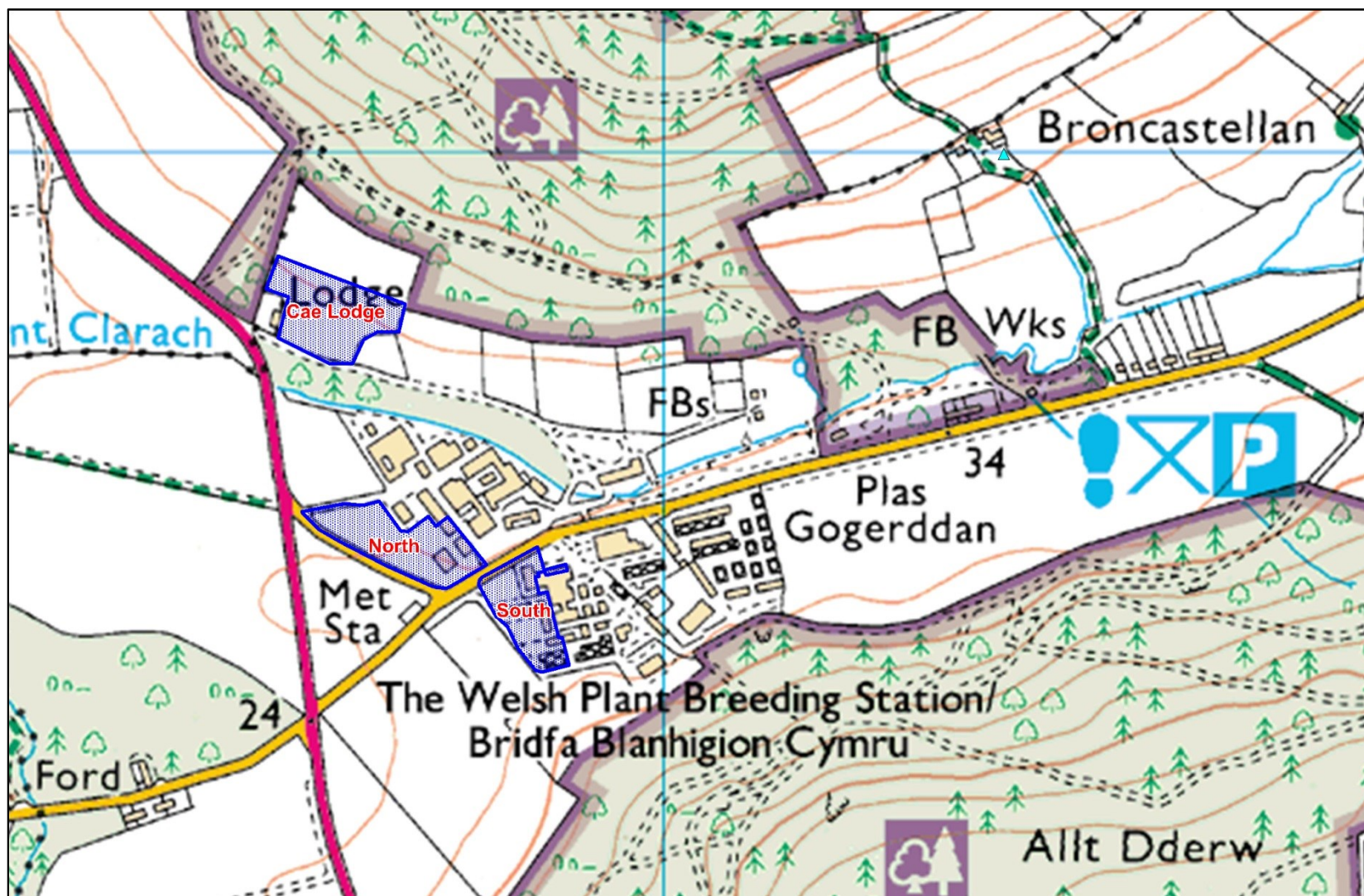


Figure 2: Map showing an overview of the development areas at the Gogerddan Campus.

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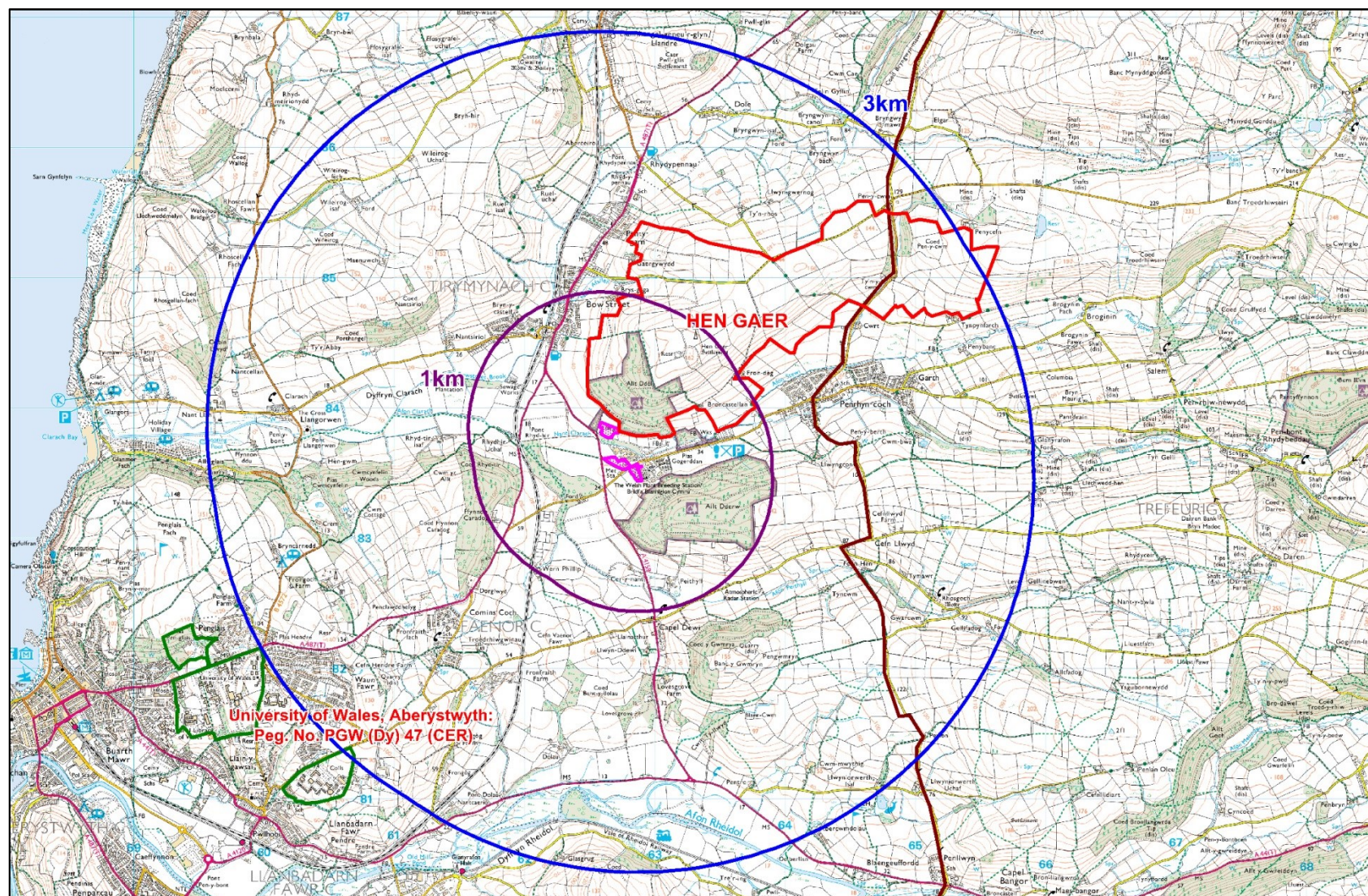


Figure 3: Map extract based on the Ordnance Survey showing the Hen Gaer Historic Landscape Character area and the University of Wales, Aberystwyth Grade II* Registered Park and Garden; with proposed development site outlined in pink.

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4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The Historic Landscape

- 4.1.1 The proposed development falls just outside any Historic Landscape Categorisation Area (HLC) recorded on the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw 1998). The nearest HLC is Hen Gaer (Figure 3), whose southwestern edge meets the north-eastern corner of the Cae Lodge development.
- 4.1.2 The following extract, taken from the Upland Ceredigion Historic Landscape Categorisation report (Murphy 1999) provides a comprehensive description of this area:

HEN GAER

GRID REFERENCE: SN 640846
AREA IN HECTARES: 282.7

Historic Background

This area lay within Strata Florida's Y Dywarchen Grange in the Medieval Period, and may have included the site of a gallows (Williams 1990, 57). In the post-medieval Period the area passed into the hands of the small independent estate of Court Farm and the Gogerddan estate. Estate maps of the late 18th century show the area as either unenclosed, enclosed with medium-sized fields or as a plantation. The plantation belonged to the Gogerddan estate, and has been replanted with conifers by the Forestry Commission. By the 1840s the whole area had been enclosed. The general impression from estate maps is of a landscape that was open until the mid-18th century, even at lower levels of 50m. A single farmstead/cottage - Ty'n y cwm - is probably of post-medieval date.

Description and essential historic landscape components

This area lies across the western terminal of a rounded, east - west aligned ridge. The ridge crest achieves a height of 160m, the flanks run down to about 50m. The whole of the area is under a regular field system of medium-sized enclosures. The fields are divided by earth banks topped with hedges. These hedges are generally in good condition, though are usually augmented with wire fences. Improved pasture dominates the landscape, with a coniferous plantation under-planted on an older deciduous plantation at the western end, and coniferous and deciduous plantations at the eastern end.

There are few sites in the archaeological record for this area, but those that are known provide great time-depth to the landscape. The most prominent site is a substantial Iron Age hillfort, Hen Gaer, which lies on the crest of the ridge. Other sites include: finds of Roman date, a Bronze Age round barrow and burnt mound; the latter possibly indicating a settlement, and a place-name suggesting pillow mound or rabbit warren of Medieval or later date.

To the west, south and north lower lying more ancient enclosed and settled land provides a clearly defined boundary with this area. To the east the area is historically similar to this area, but the field boundaries have become derelict and the appearance of the land to the east is now quite different.

- 4.1.3 The overall impact of the proposed development on the character of the Hen Gaer designated HLC is considered to be negligible.

4.1.4 Lying at just over 3km from the development area is the Grade II* Registered Park and Garden of the University of Wales, Aberystwyth; Plas Penglais, Penglais Campus and Llanbadarn Campus (Register No PGW (Dy) 47 (CER)) (Figure 3). The overall impact of the proposed development on the character of this Registered Park and Garden located at 3km from the development is considered to be negligible.

4.2 Scheduled Ancient Monuments

SAMs within 1km of the proposed development

4.2.1 There are 2 scheduled ancient monuments (SAMs) within a 1km buffer zone of the proposed development (Table 2, Figure 4).

SAM Ref No	Site Name	Site Type	Period	NGR	Distance (km) & direction from nearest development boundary
CD026	Hen Gaer	Hillfort	Prehistoric	SN632843	0.71 (NE)
CD259	Plas Gogerddan cemetery group	Round barrow, standing stones and early medieval cemetery	Multi-period	SN626835	0.02 (SW)

Table 2: Scheduled ancient monuments within 1km of the proposed development (Figure 4)

4.2.2 Scheduled ancient monument CD259 Plas Gogerddan cemetery group lies approximately 0.02km SW from the North development area (Figure 5). CD259 comprises two areas both located within pasture fields; Area A encompasses a prehistoric earthen circular barrow, a re-erected standing stone and the known extent of an early medieval burial site. Area B comprises a single standing stone but is considered to be associated with the prehistoric monuments in Area A.

4.2.3 The round barrow in Area A measures 16m in diameter and has a maximum height of 0.5m. Aerial photography has revealed that a ditch measuring 30m in diameter surrounds the barrow. The standing stone is located 55m NNW of the barrow and measures 1.75m in height, 1.2m in length and 0.75m in width. An excavation in advance of a gas main in 1986 revealed evidence for human activity on the site from the late Neolithic/early Bronze Age period to modern times (Murphy 1992). Numerous prehistoric pits and post holes around the standing stone in Area A were excavated, to the west of which were three Later Bronze Age ring ditches with a number of later Iron Age crouched burials. To the east and north-east of the standing stone at least twenty-two early medieval graves were excavated, three of which appear to have been enclosed within rectangular timber structures. A radio carbon date from one of the graves produced a 3rd – 7th century date (Murphy, *ibid*). Consequently, Plas Gogerddan is the only ecclesiastical site in Ceredigion with archaeological evidence that has been absolutely dated to the Early Medieval period. In addition, the excavations demonstrated that the standing stone was re-erected during the 19th century (Murphy, *ibid*).

4.2.4 The solitary standing stone in Area B measures 1.55 in height, 1.05m in length and 0.75m in width. It is situated 0.17km WNW of the round barrow in Area A.

4.2.5 This group of sites is considered to be of national importance for it is an important relic of a prehistoric and early medieval funerary and ritual landscape. The monument retains significant archaeological potential, including environmental and structural evidence.

4.2.6 Hen Gaer Hillfort (CD026) is a small well-preserved oval hilltop enclosure situated on high ground some 0.71 km NNE of the proposed development (Figure 4). The monument, dating to the Iron Age period, comprises a single defensive bank surrounding an area of approximately 1ha. Traces of an outer ditch survive as do possible internal features.

SAMs within 3km of the proposed development

4.2.5 There are a further 5 scheduled ancient monuments within a 3km buffer zone of the proposed development (Table 3, Figure 4).

SAM Ref No	Site Name	Site Type	Period	NGR	Distance (km) & direction from nearest development boundary
CD005	Castell Gwallter	Castle	Medieval	SN622867	2.83 (N)
CD027	Garth-Penrhyn-Coch	Defended Enclosure	Prehistoric	SN658840	2.90 (E)
CD098	Castell Gwar-Cwm	Motte	Medieval	SN653824	2.59 (SE)
CD099	Caer Pwll-Glas	Hillfort	Prehistoric	SN633866	2.78 (N)
CD152	Bronfloyd Leadmine	Lead mine	Post-medieval/Modern	SN650834	2.99 (E)

Table 3: Scheduled ancient monuments within 3km of the proposed development (Figure 4)

4.2.6 Castell Gwallter (CD005) is a 12th century; medieval motte and bailey castle located 2.83km north of the development area. The castle mound is ditched, counterscarped and circular flat-topped and is around 32-33m in diameter and 4.5m high. There is a small ditched and banked bailey or court on the north side. This measures around 38m north-south by 28m and there are indications of a much larger court on the east side of the motte. This is roughly rectangular with rounded corners, roughly 80-100m east-west by 126-135m, and is defined largely by scarps. The castle is located on agricultural land and is enclosed on the east by a band of woodland.

4.2.7 Garth Penrhyn-Coch (CD027) is a small defended enclosure of probable Iron Age date located 2.9km E of the proposed development. It is found within agricultural land and is bisected by a field boundary. Roughly 56m in diameter the single bank survives up to a maximum height of 1.6m on the east, where there are also slight traces of an outer ditch.

4.2.8 Castell Gwar-Cwm (CD098) is a surviving castle mound or motte; roughly 5m high, 8m in diameter with an outer ditch 5m wide. The site lies in a small copse by the side of a road junction, and is covered with trees.

4.2.9 Caer Pwll-Glas (CD099) is a small hillfort located on the summit of a hill, 2.78km N of the proposed development. It is defended by double banks with a ditch in between, enclosing a c.1.2ha area. It is covered by a dense plantation of trees.

4.2.10 Bronfloyd leadmine (CD152) comprises the remains of a former leadmine first worked in the 17th century. The roughly 6ha area lies 2.99km to the E of the proposed development. The above ground remains of the leadmine lie on a north facing hillslope, and include adits, shafts, spoil tips and dressing floors.

4.3 Listed Buildings

Grade I, II* & II

Listed Buildings within 1km and 3km of the proposed development

4.3.1 There are 7 listed buildings within a 1km buffer zone of the proposed development and 29 listed buildings within 3km (Tables 4 & 5, Figure 4). Only Grade II listed buildings lie within 1km of the site area.

Listed Building Ref No	Grade	Site Name	Site Type	Period	NGR	Distance (km) and direction from nearest development boundary
LB9858	II	Bridge at Plas Gogerddan	Bridge	Post-medieval	SN6289 983636	0.07 (NE)
LB9876	II	Plas Gogerddan	Mansion	Post-medieval	SN6295 883653	0.12 (NE)
LB19059	II	Cambrian House	House	Post-medieval	SN6235 384814	0.95 (N)
LB27005	II	Milestone near Pont Rhyd-hir	Milestone	Post-medieval	SN6195 983704	0.63 (W)
LB83661	II	Court Villa	House	Post-medieval	SN6349 883764	0.64 (E)
LB83665	II	Peithyll	Offices	Post-medieval	SN6313 982643	0.84 (S)
LB83667	II	Plas Gwyn	House	Post-medieval	SN6377 183946	0.96 (NE)

Table 4: Listed Buildings within 1km of the proposed development area (Figure 4).

4.3.2 At Plas Gogerddan is LB9858, a single-span bridge over the Nant Clarach, said to date from 1743, situated 0.07km NE of the proposed development.

4.3.3 The Grade II listed building LB9876 is the late 17th century country house of Plas Gogerddan that was much extended in 1860. It lies 0.12km NE of the proposed development. The estate was sold in 1949 to the University College of Wales and today forms the Gogerddan Campus of the University of Aberystwyth. The house is recognised as a country house of historic importance as the seat of one of the principal gentry families of the county from the middle ages to the 20th century.

4.3.4 Within a buffer zone of 3km around the proposed development area, all of the listed buildings are Grade II except for a single Grade II* building, the Church of All Saints at Tirymynach built between 1838 and 1841. It is listed as Grade II* as it is one of the first Gothic Revivalist churches in Britain. All of the listed buildings are post-medieval in date.

Listed Building Ref No	Grade	Site Name	Site Type	Period	NGR	Distance (km) and direction from nearest development boundary
LB9829	II	Lychgate at Church of Saint Michael	Lychgate	Post-medieval	SN6231 086870	2.99 (N)
LB9838	II	Plas Cwmcynfelin	Dwelling	Post-medieval	SN6037 883470	2.22 (W)
LB10686	II	Llangorwen Cottage	Cottage & Byre	Post-medieval	SN6028 583755	2.32 (W)
LB19059	II	Cambrian House	House	Post-medieval	SN6235 384814	0.95 (N)
LB19060	II	Penrhiw	Cottage	Post-medieval	SN6243 485013	1.13(N)
LB19061	II	Milestone on E side of A 487	Milestone	Post-medieval	SN6254 185200	1.31 (N)
LB19062	II	Capel y Garn	Chapel	Post-medieval	SN6266 785416	1.53 (N)
LB19063	II	No 2 The Cross	Cottage	Post-medieval	SN6019 183967	2.37 (NW)
LB19064	II	No 3 The Cross	Cottage	Post-medieval	SN6018 283964	2.38 (W)
LB19065	II	Crow's Nest, No 4 The Cross	Cottage	Post-medieval	SN6017 583963	2.39 (W)
LB19066	II	Church Hall	School House	Post-medieval	SN6042 984120	2.15 (NW)
LB19067	II	Bryngwyn Canol	Farmhouse	Post-medieval	SN6441 986209	2.91 (NE)
LB19068	II*	Church of All Saints	Church	Post-medieval	SN6033 883832	2.22 (W)
LB19069	II	Pont Llangorwen	Bridge	Post-medieval	SN6028 483774	2.28 (W)
LB19070	II	Ffynnon Ddu	Farmhouse	Post-medieval	SN5993 683709	2.63 (W)
LB19071	II	Hen-gwm	House	Post-medieval	SN6044 883574	2.13 (W)
LB19072	II	Ty'n Rhos	Farmhouse	Post-medieval	SN6366 285487	1.90 (NE)
LB26998	II	Lovesgrove	Mansion	Post-medieval	SN6286 781647	1.79 (S)
LB26999	II	Plas Frongog	House	Post-medieval	SN6137 681168	2.71 (SW)
LB27000	II	Plas Dolau	House	Post-medieval	SN6228 881382	2.13 (SW)
LB27001	II	Dolau Cottages	Cottages and Outbuilding	Post-medieval	SN6227 281433	2.09 (SW)
LB27002	II	Plashendre	House	Post-medieval	SN6007 382264	2.86 (SW)
LB27003	II	Coach-house and stable at Plashendre	Coach-house and Stable	Post-medieval	SN6009 282274	2.84 (SW)
LB27004	II	Milestone on A44	Milestone	Post-medieval	SN6239 181117	2.37 (SSW)
LB27006	II	Farm buildings at Fronfraith Farm	Farm Buildings	Post-medieval	SN6178 181926	1.86 (SW)
LB27056	II	Nantcaerio	House	Post-medieval	SN6144 280937	2.87 (SW)
LB82492	II	Cart shed at Glascrug	Cart shed	Post-medieval	SN6225 680542	2.96 (SSW)

LB82502	II	Glascrug	Farmhouse	Post-medieval	SN6230 280559	2.93 (SSW)
LB83660	II	Church of Saint John the Divine	Church	Post-medieval	SN6436 584141	1.58 (NE)

Table 5: Listed Buildings within 3km of the proposed development (Figure 4)

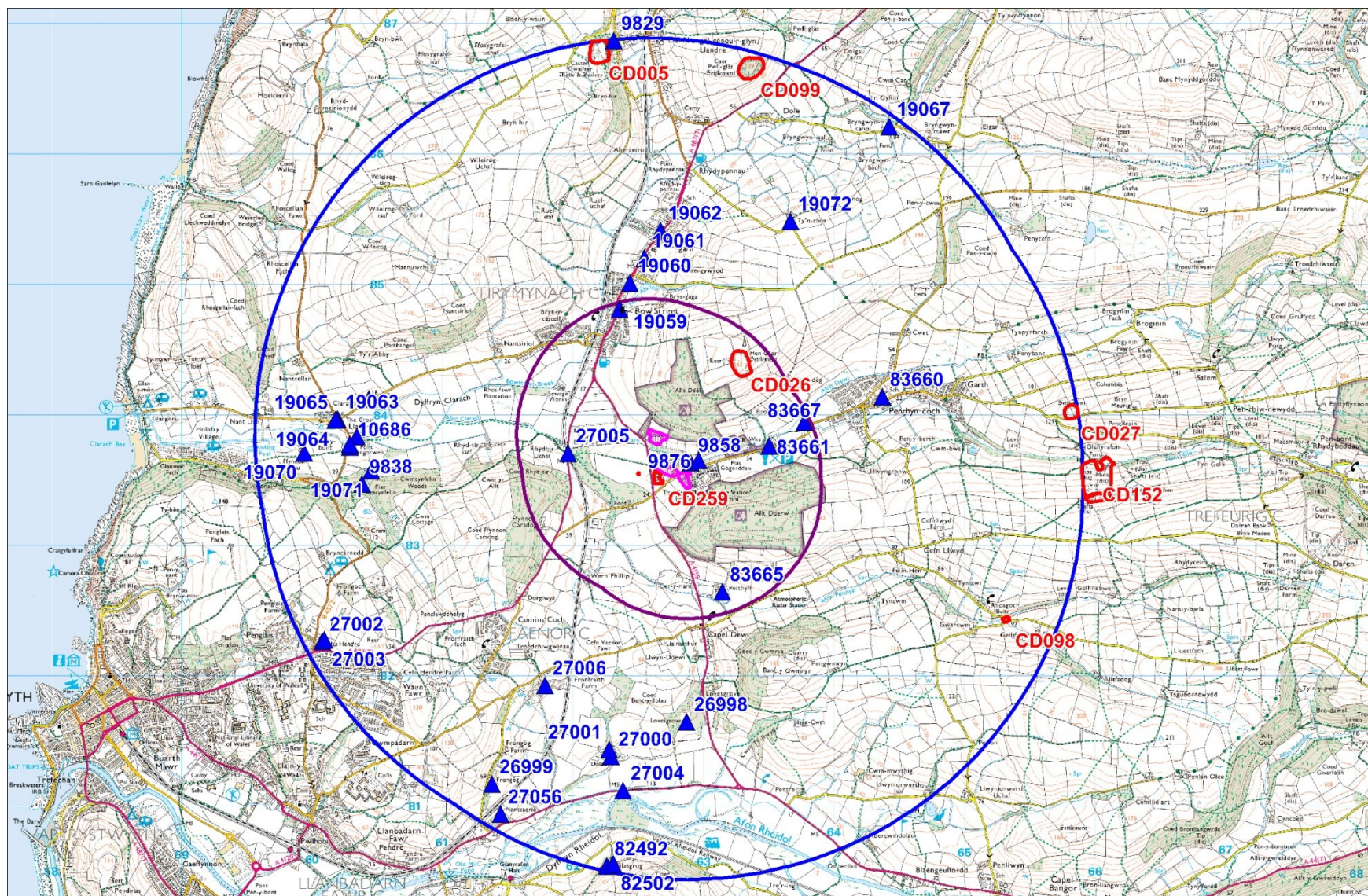


Figure 4: Map showing Scheduled Ancient Monuments (red) and Listed Buildings (blue) within 1km & 3km radius of the development (outlined in pink).
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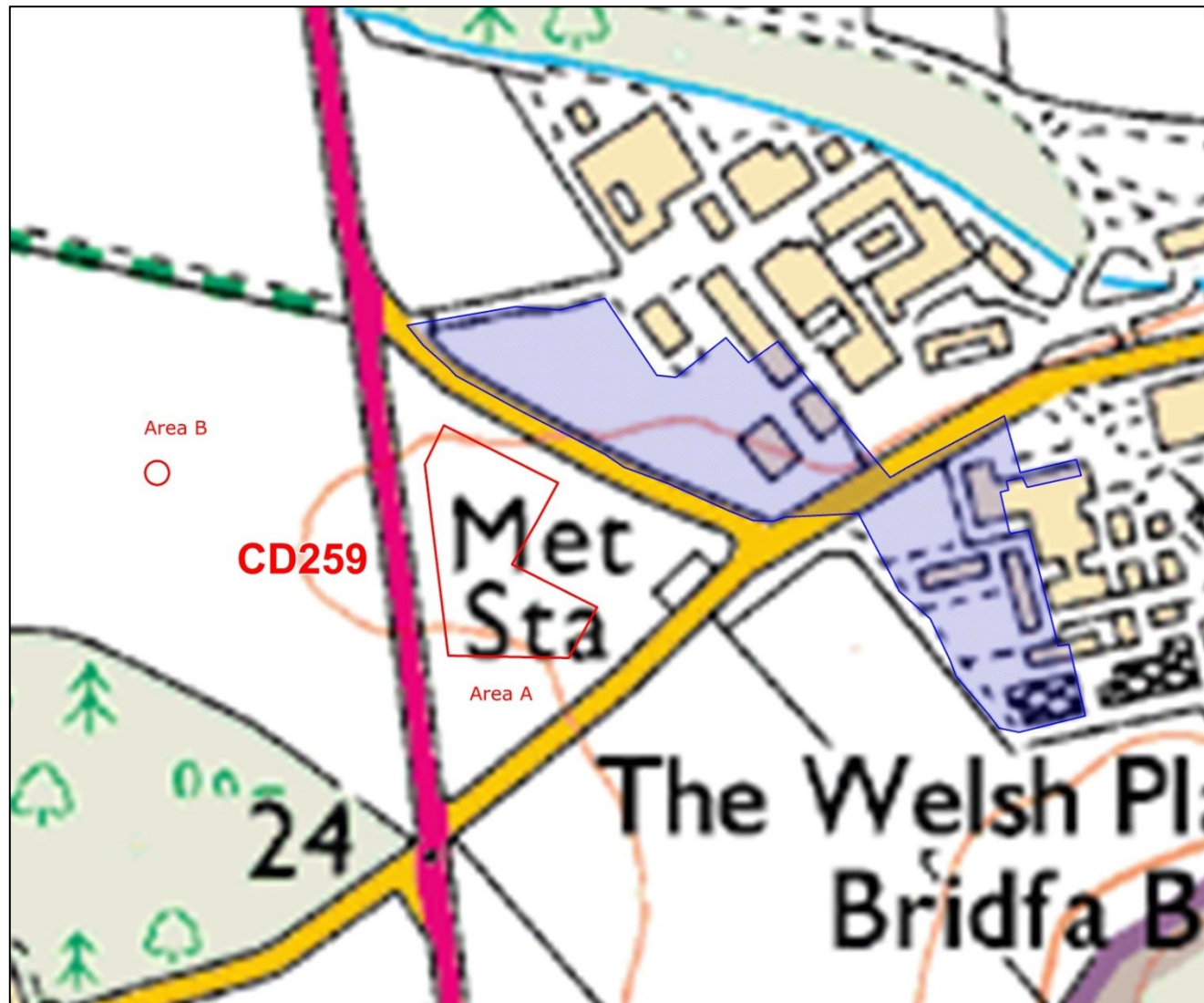


Figure 5: Map extract showing the 2 areas that comprise SAM CD259; the main proposed development is shaded blue.

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4.4 Known Archaeological Remains

- 4.4.1 Table 6 lists the designated and non-designated archaeological and historic assets that are recorded in the Regional HER and the NMR within a 1km radius of the proposed development areas. The distance of each site to the nearest boundary of the three development areas is also recorded. The regional HER records 60 sites of archaeological interest, 25 of which are also recorded on the NMR. A further 7 sites are recorded only on the NMR. The distribution of these sites is illustrated in Figure 6.
- 4.4.2 There are no recorded archaeological sites within the boundaries of the North and South development areas. However, there is one recorded site within the Cae Lodge area: NPRN 404548; Gogerddan Park Enclosure Cropmark. In addition to this PRN 19243; post-medieval Cae Lodge house is located just 0.14km west of the Cae Lodge area boundary.
- 4.4.3 Apart from SAM CD259, the listed buildings at Plas Gogerddan and enclosure cropmark NPRN 404548, the remaining recorded archaeological sites within the study are all situated outside of the immediate vicinity of the proposed development areas. Consequently, these will not be directly impacted upon by the construction of the proposed development.

Prehistoric

- 4.4.4 There are a large number of prehistoric sites recorded within the 3km study area; many can be assigned to a specific period, whereas others are merely noted as being 'prehistoric'. Most notable is the Gogerddan Park Enclosure Cropmark (NPRN 404548) which is located at the south-eastern corner of the Cae Lodge development area. This cropmark was documented during RCAHMW aerial reconnaissance in 2006. It survived as segment of an oval ditched enclosure and measured approximately 46m x 37m. The remainder of the cropmark had been built upon by modern farm buildings to the east and obscured by a road and woodland to the south. In lieu of a site visit to the Cae Lodge development area, recent satellite imagery was examined. This revealed that since the 2006 reconnaissance the southern half of the Cae Lodge development area has been compromised; it appears that the surface had been stripped and the area has since been turned into a yard. The cropmark is no longer visible and its condition is unknown. Around 0.25km west of this site is another well preserved prehistoric enclosure cropmark (NPRN 86831). Further sites include a concentric enclosure cropmark (PRN 37110) and an artefact scatter (PRN 37111) located around 0.26km and 0.24km to the south-west of Cae Lodge. Further artefact scatters (PRN 37112) and (PRN 37113) are located 0.36km and 0.87km to the east of the South development area. There is also an artefact scatter (NPRN 306606) recorded 0.34km northwest of the Cae Lodge area.
- 4.4.5 A Neolithic findspot (PRN 9994) has been recorded 0.45km to the east of the proposed South development area.
- 4.4.6 Bronze Age sites are numerous within the study area, including further records relating to scheduled ancient monument CD259 (PRNs 5405, 8237, 11822, 55942 & NPRN 402198; all part of CD259). A round barrow burial mound (PRN 2016) is located within the scheduled hillfort of Hen Gaer (CD026) with a further 2 round barrows located at Penyberth, Gloucester Hall, 0.96km to the east (PRN 5407) and 0.55km to the northwest at the southern end of Bow Street (PRN 55943/NPRN 300541). A former standing stone (PRN 55926) was also formerly located 0.25km to the west of the development site, close to and possibly associated with the scheduled ancient monument CD259.

4.4.7 Iron Age sites within the 1km search area include the crouched burials associated with scheduled ancient monument CD259, the scheduled hillfort of Hen Gaer (PRN 2015/NPRN 92249) 0.71km to the north; a defended enclosure at Bow Street 0.49km to the northwest (PRN 52080); and a further defended enclosure 0.19km to the northwest (PRN 11827/NPRN 86831). An Iron Age or Roman findspot (PRN 5166) was also recorded at around 0.32km to the west of the development area towards Tirmynach.

4.4.8 The prehistoric sites recorded range from possible occupation or working sites (artefact scatters, enclosures or hillforts) through to funerary and ritual sites (Bronze Age round barrow burial mounds, standing stones and Iron Age burials). The large number of prehistoric sites within the 1km study area means that the potential for further, hitherto unknown sites to be present is high. The scheduled prehistoric sites and findspots in close proximity to the development areas would definitely indicate a high potential for further funerary and ritual sites to be present within the development area.

Roman

4.4.9 A single Roman or Iron Age findspot (PRN 5166) lies around 0.32km to the west of the site towards Tirmynach. This is the only Roman site in the area and the potential for further sites of this date is considered to be relatively low.

Early medieval

4.4.10 A single early medieval site is recorded in the study area; PRN 13005 is the early medieval cemetery site that forms part of scheduled ancient monument CD259. It is located approximately 0.60km southwest of the North development area, and the remains of this cemetery may well extend into the proposed development area.

Medieval

4.4.11 There are seven medieval sites recorded within the study area. These include; Broncastellan medieval settlement (PRN 10914) located 0.65km northeast of the proposed development and documentary evidence for a holy well at Ffynon Caradog (PRN 11252) located 0.94km southwest of the proposed development. PRN 11826 is a square cropmark located 0.18km west of SAM CD259 and may even be associated with the early medieval cemetery (PRN 13005). There is documentary evidence for a fortified house at Peithyll some 0.82km south of the development area and further documentary evidence for fords (PRNs 12440 and 12441) located 0.18km and 0.66km away respectively. Finally, there is documentary evidence for a house (PRN 12861) shown on a 16th century map 0.86km southwest of the proposed development.

PRN	NPRN	Site Name	Site Type	Period	NGR	Distance (km) from nearest development area boundary
2015	92249	Hen Gaer; Pen Gaer	Hillfort (CD026)	Iron Age	SN63288439	0.71
2016		Hen Gaer	Round Barrow (CD026)	Bronze Age	SN63228440	0.75
5166		Tirymynach	Findspot	Roman, Iron Age	SN6384	0.32
5405		Carreg Llwyd	Standing Stone (CD259)	Bronze Age	SN6249483544	0.13
5407		Penyberth; Gloucester Hall	Round Barrow	Bronze Age	SN638839	0.97
5408	24695	Bow Street Mill Site	Mill	Post-medieval	SN62148460	0.84
5409	24411	Gogerddan Hill	Pillow Mound	Post-medieval, medieval	SN6384	0.32
5411	23873	Gogerddan	Bridge	Post-medieval	SN6289983636	0.07
7075	5487	Gogerddan	Mansion	Post-medieval	SN6295883653	0.12
7074	5463	Glan Nant	Cottage	Post-medieval	SN62358481	0.95
8237		Carreg Llwyd	Standing Stone (CD259)	Bronze Age	SN62648351	0.05
9994		Gogerddan	Findspot	Neolithic	SN629836	0.45
10065	35200	Rhyd-Tir-Uchaf	Farmhouse	Post-medieval	SN61888375	0.69
10914		Broncastellan	Settlement	Medieval	SN63378400	0.65
11252		Ffynnon Caradog	Holy Well	Medieval	SN61798314	0.94
11347		Gogerddan Woods	Findspot	Neolithic, Bronze Age	SN632838	0.39
11822	402198	Gogerddan Round Barrow	Round Barrow (CD259)	Bronze Age	SN6264783477	0.09
11826		Gogerddan	Cropmark	Medieval	SN6245783500	0.19
11827	86831	Gogerddan	Defended enclosure, Cropmark	Iron Age?; Prehistoric	SN62388389	0.19
12437		Peithyll	Fortified House	Medieval	SN63138266	0.82
12440		Gogerddan	Ford	Medieval	SN629838	0.18
12441		Bont Rhyd-Tir	Ford	Medieval	SN619838	0.67
12861		Gogerddan	Country House	Medieval	SN6283	0.86
13005	310262	Gogerddan	Cemetery (CD259)	Early medieval	SN62648351	0.06
13063		Gogerddan	Trackway, Terrace (CD259)	Unknown	SN626835	0.09
19236		No Name	School	Post-medieval	SN62358475	0.89
19237		No Name	Mill	Post-medieval	SN62258462	0.80
19238		No Name	Chapel	Post-medieval	SN62108465	0.90
19239		No Name	Blacksmith's Workshop	Post-medieval	SN62298462	0.79
19242		Bont Rhyd-Ti	Bridge	Post-medieval	SN61988373	0.60
19243	5490	No Name	Lodge	Post-medieval	SN62618384	0.01
19248		No Name	Aqueduct	Post-medieval	SN63658387	0.82
19249		No Name	Quarry	Post-medieval	SN63188335	0.30
19250		No Name	Quarry	Post-medieval	SN63548278	0.92
24386		Pwll Crwn Woods	Managed Woodland	Post-medieval	SN622834	0.46
25438	7176	Ysgoldy Nantafallen	School House	Post-medieval	SN62228449	0.70

36859	265098	Gogerddan Park	Park	Post-medieval	SN62858377	0.14
37110	305836	Gogerddan	Cropmark	Prehistoric	SN62338371	0.27
37111	301089	Gogerddan	Artefact scatter	Prehistoric	SN62358373	0.24
37112	305722	Gogerddan	Artefact scatter	Prehistoric	SN63258362	0.36
37113	305723	Gogerddan	Artefact scatter	Prehistoric	SN63748377	0.87
38137		Gogerddan	Parkland Structure I	Post-medieval	SN6281683852	0.10
38138		Gogerddan	Parkland Structure Ii	Post-medieval	SN6295583792	0.24
38139		Allt Ddel	Structure	Post-medieval	SN6313683809	0.35
38140		Allt Ddel	Footbridge I	Post-medieval	SN6316883704	0.31
38141		Allt Ddel	Footbridge Ii	Post-medieval	SN6337283744	0.51
38142		Allt Ddel	Footbridge Iii	Post-medieval	SN6336383778	0.52
38143		Allt Dderw	Quarry Ii	Post-medieval	SN6311083472	0.21
38144		Allt Dderw	Quarry Iii	Modern	SN6295982998	0.45
38168		Allt Ddel Boundary Bank	Boundary Bank	Post-medieval	SN6297984198	0.44
52080	300451	Bow Street	Defended Enclosure	Iron Age	SN62308430	0.50
55926		Carreg Llwyd	Standing Stone	Bronze Age	SN6236383558	0.25
55942		Plas Gogerddan	Prehistoric Monument Complex (Part of CD259)	Bronze Age	SN6263783507	0.07
55943		Bow Street	Round Barrow	Bronze Age	SN6221284317	0.56
58035		Pont Rhyd-Hir	Milestone	Post-medieval	SN6195983704	0.63
58264		Court Villa	House	Post-medieval	SN6349883764	0.64
58267		Peithyll	Offices	Post-medieval	SN6313982643	0.84
58269		Plas Gwyn	House	Post-medieval	SN6377183946	0.96
108071		Milestone	Milestone	Post-medieval	SN61958370	0.63
	7208	Noddfa Welsh Independent Chapel, Bow Street	Chapel	Post-medieval	SN62108455	0.82
-	401562	Gogerddan Lodge	Cropmark	Unknown	SN62378405	0.27
-	404548	Gogerddan Park	Enclosure	Prehistoric	SN62648378	0.00
-	306606	Plas Gogerddan	Artefact Scatter	Prehistoric	SN62258400	0.35
-	33038	Bow Street	Town	Unknown	SN6284	0.58
-	41371	Bow Street	Railway Station	Post-medieval	SN6210084400	0.70
-	265082	Ffynnon-Caradog	Country House Garden	Unknown	SN6177883133	0.95

Table 6: Non-designated sites recorded on the HER and NMR 1km of the proposed development (Figure 6)

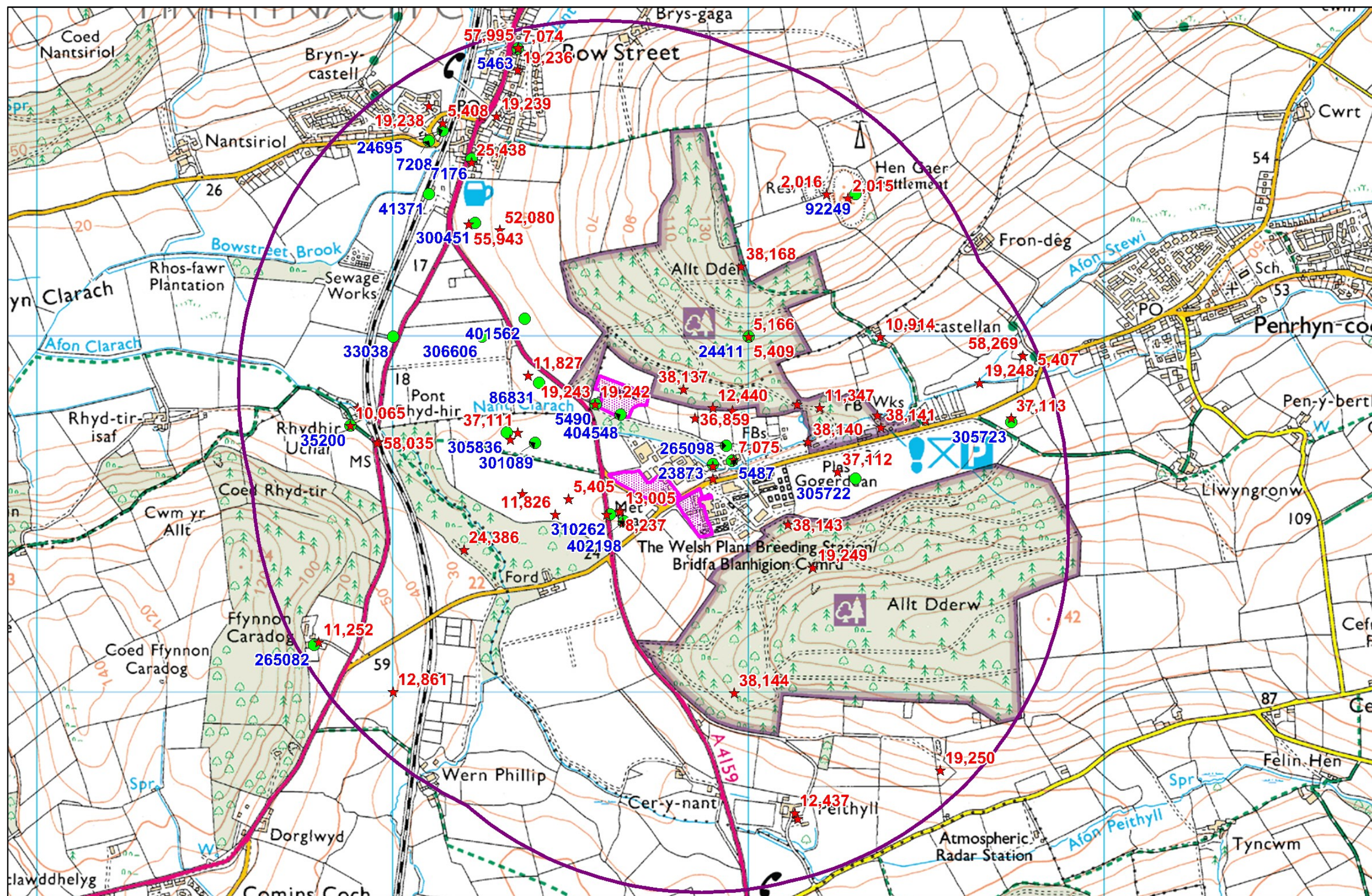


Figure 6: Map showing distribution of archaeological sites recorded on the Historic Environment Record (red stars) and National Monument Record (green dots) within a 1km radius search area of the proposed development areas (outlined in pink).

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4.5 Archaeological finds

4.5.1 There are five records of archaeological finds being found within the 1km buffer zone of this proposed scheme as briefly discussed above. All are considered to be prehistoric in age (See Table 7 and Figure 7).

PRN	Type	Summary	Period	NGR	Distance (km) from nearest development area boundary
9994	Finds	One flint scraper	Neolithic	SN629836	0.05
37111	Finds	Fifty pieces of worked flint were found in three scatters (see also PRNs 37112 & 37113) as a result of field walking on private land near the village of Penrhyncoch. Flint cores, blades and scrapers were among the artefacts found.	Prehistoric	SN62358373	0.24
37112	Finds	See PRN 37111	Prehistoric	SN63258362	0.36
11347	Finds	A broken perforated stone, probably a mace head.	Neolithic, Bronze Age	SN632838	0.39
37113	Finds	See PRN 37111	Prehistoric	SN63748377	0.87

Table 7: Records of archaeological finds within 1km of the development area (Figure 7)

4.5.2 This number of prehistoric finds within close proximity to the development site is further evidence of the significance of the area during prehistory and indicates that there is potential of hitherto unknown sites to survive in this landscape.

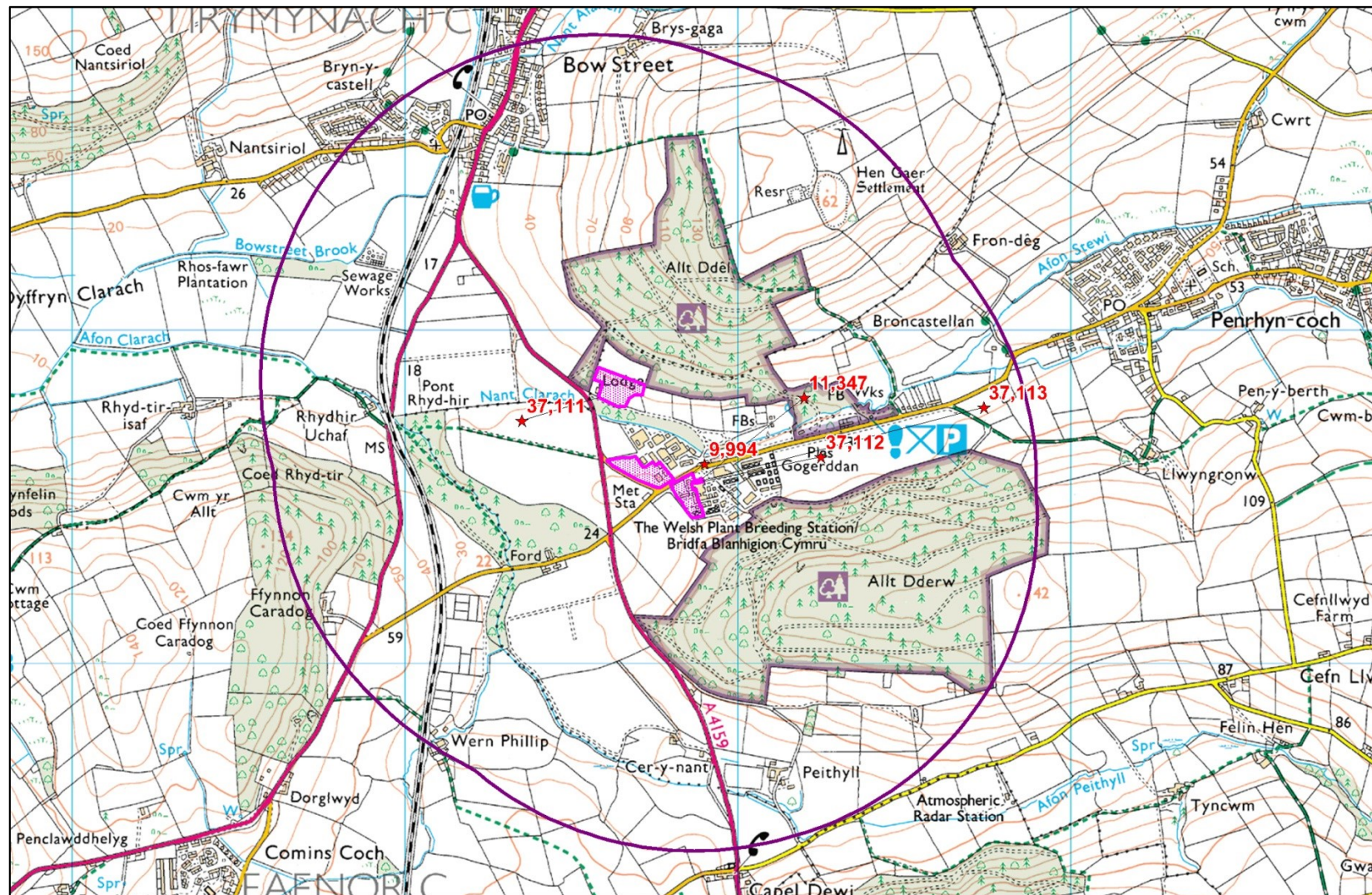


Figure 7: Map showing the location of find spots within 1km of the development area.

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4.6 Historic Mapping

Ordnance Surveyor's Drawings 1823

- 4.6.1 The earliest map consulted is an Ordnance Surveyor's Drawings of 1823 which shows that the landscape of the development area has changed very little since the early 19th century with the only notable disparity being the absence of the modern A4159 road (Figure 8). This map shows the two "erect" standing stones (PRNs 8237 & 5405) west of the forked minor B-road, Plas Gogerddan mansion (PRN 7075) and its associated buildings. The North and South development areas are shown to be devoid of dwellings or features. Allt Ddêl woodland has yet to encroach upon the Cae Lodge area, indeed it appears that Cae Lodge has yet to be built. The surrounding land is shown as vacant fields with managed woodland flanking the northern and south-western sides of the valley.
- 4.6.2 In the published article on the archaeological excavations of the monuments comprising the scheduled area of CD259, Murphy makes reference to a map, allegedly based on the Ordnance Surveyor's drawing, which depicts three standing stones in the area, forming a triangular formation with the remaining two (Murphy 1986:4). Murphy continues to state that staff at the Gogerddan campus (formally known as the Plant Breeding Station), recall that in 1961 a small standing stone, located to the west of the extant western standing stone, was removed. It is interesting to note that this third stone is not depicted on the map.



Figure 8: The Ordnance Surveyors drawing of 1823 showing the locations of the two standing stones in SAM CD259 and Plas Gogerddan. The development areas are outlined in pink.

Llanbadarn Fawr 1842 tithe map

- 4.6.3 The Llanbadarn Fawr tithe map of 1842 does not vary greatly from the Ordnance Surveyor's drawing (Figure 9). The monuments within SAM CD259 are not depicted but the route of a race course is shown running through its locality. Although not depicted on the 1823 Ordnance Surveyor's drawings, the race course had been established by 1812, of which the two standing stones would have offered prime viewing locations (*ibid*). The proposed development areas remain vacant whilst Plas Gogerddan's outbuildings encroach from the east and the woodland of Allt Ddêl from the north. It is interesting to note that in the tithe apportionments, field "108" which falls within the North development area, bears the name "Cae Felin". Literally translated, the field name is "Mill Field" which is intriguing since there are no other known references to a mill site within the vicinity.

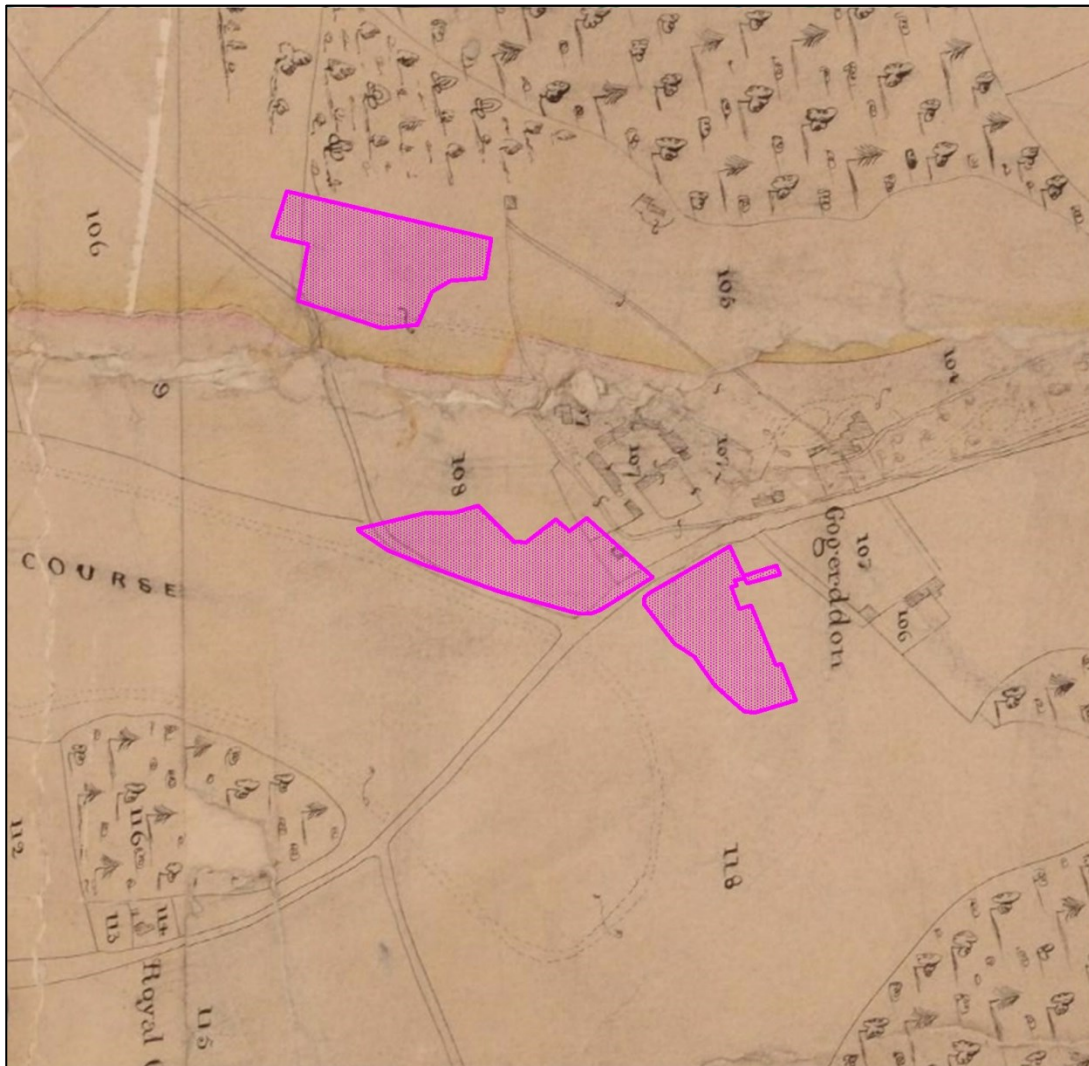


Figure 9: The 1842 Llanbadarn Fawr tithe map showing the extent of the Plas Gogerddan and its surroundings. The two development areas are shown outlined in pink.

1st edition 1888 Ordnance Survey Map, 1:2500

- 4.6.4 The 1st edition Ordnance Survey map published in 1888 shows that Plas Gogerddan had developed somewhat during the latter half of the 19th century (Figure 10). The mansion house and associated agricultural

buildings on the northern side of the road remains much the same whilst the enclosed dwelling south of the road has since developed into a number of small garden plots. The forked B-road is now shown to be lined with an avenue of trees which may be a parkland feature associated with the origins of Plas Gogerddan in the late 17th to early 18th centuries. There is a small square enclosure shown just beyond the northern boundary of the North development area. The development areas remain devoid of recorded structures and features. The two standing stones of SAM CD259 are depicted in the field to the west of the development. The race course is no longer depicted although a light track traces the line of its course past the standing stones. Cae Lodge is now depicted as are the fringes of Allt Ddêl wood which enclose the site on three sides.

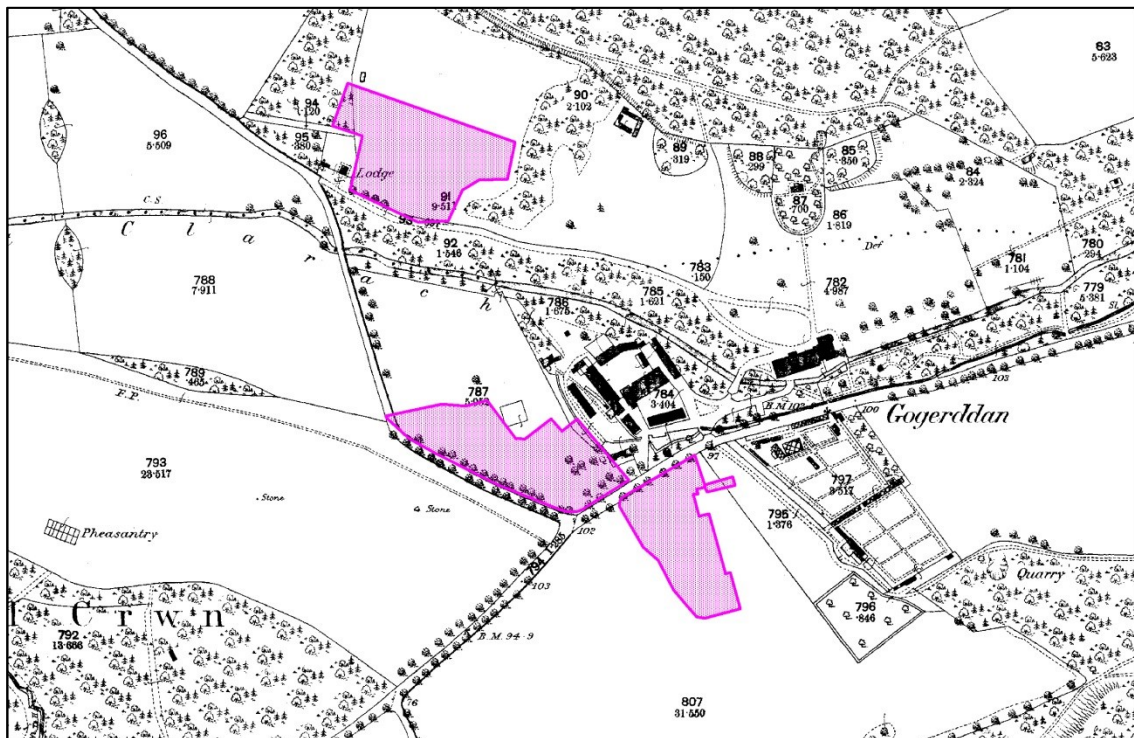


Figure 10: The 1st edition 1888 1:2500 Ordnance Survey map showing the development areas outlined in pink.

2nd edition 1905 Ordnance Survey Map, 1:2500

- 4.6.5 The 2nd edition Ordnance Survey map published in 1905 shows little change save for the absence of the avenue of trees lining the road and the details of the garden plots (Figure 11). The fields within the development areas still appear to be unoccupied whilst the small square enclosure seen on the 1st edition close to the North development area is no longer depicted. It is interesting to note that the eastern standing stone of SAM C259 is also omitted whilst the western stone remains. The track of the former race course is still depicted. The Cae Lodge development area remains unchanged.

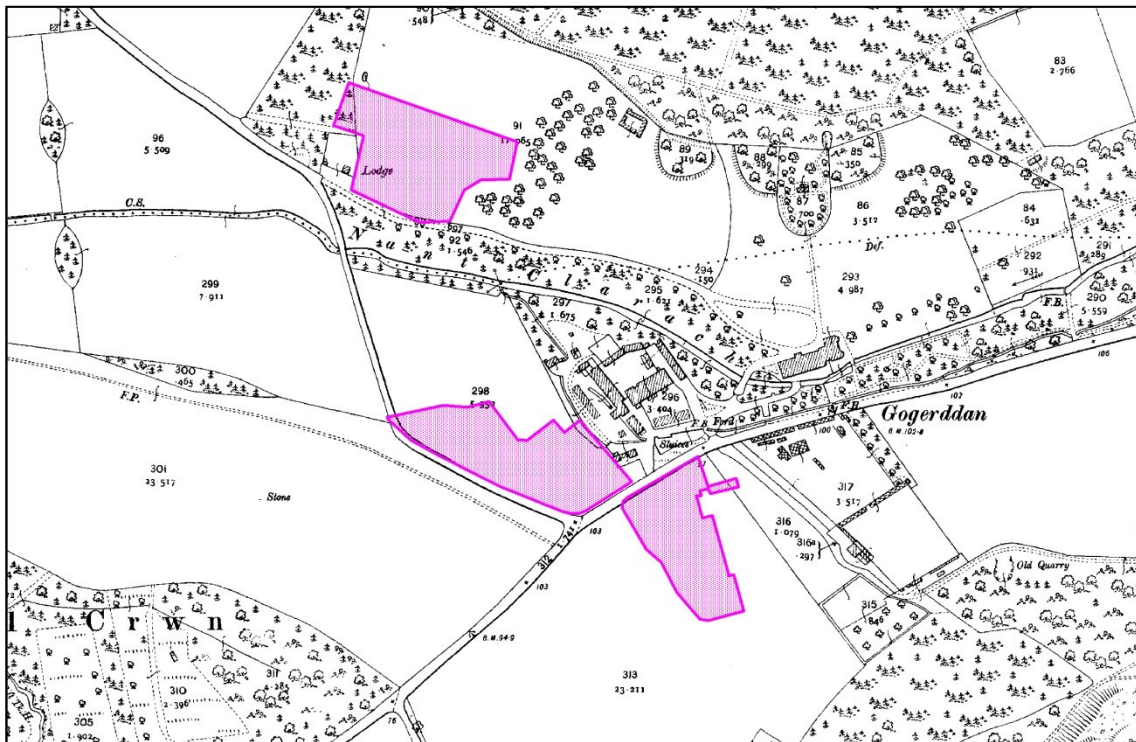


Figure 11: The 2nd edition 1905 1:2500 Ordnance Survey map showing the development areas outlined in pink.

4.7 Previous Archaeological Work

- 4.7.1 As previously discussed, the field immediately southwest of the North development area within which SAM CD259 is located, was partially excavated in 1986 in response to the construction of a gas pipeline which passed directly through the two standing stones and ring ditches (Figure 11). The excavation was undertaken by Dyfed Archaeological Trust and a summary of which was published in *Archaeology in Wales* the same year and followed by a detailed article in *The Archaeological Journal* in 1992 (Murphy 1986 and 1992). The excavated site is referred to as Plas Gogerddan.
- 4.7.2 The excavations comprised a long, linear trench along the western boundary of the field (along the course of the gas pipe, now Area A of the SAM) within which the remains of three Bronze Age ring ditches and associated inhumations cremations and Iron Age burials were revealed (Murphy 1986).
- 4.7.3 A large area was also excavated to the east of this linear trench; focusing investigation around the vicinity of, and including, the eastern standing stone (PRN 8237). These excavations revealed that the standing stone had been re-erected sometime during the 19th century and was not located in its original pit, thought to have been located some two metres to the north. It is also conceivable that the standing stone may not have prehistoric origins and was erected during the 19th century as a marker for the race course (*ibid*).
- 4.7.4 Around the standing stone were several features all considered to be of prehistoric date and associated with the stone. These included numerous post-holes, pits, a hearth, a small cist and a possible cremation.

Radiocarbon dates obtained from a sample of these features indicate late Neolithic to late Bronze Age activity.

- 4.7.5 Clustered around the north, east and south of the standing stone were at least twenty-two graves, all orientated east –west. Three of these graves were enclosed by the remains of a rectangular timber structures and dark coffin stains were present in nine of the graves. Material from a coffin stain in one of the graves yielded a radiocarbon date range from the 3rd – 7th centuries placing the cemetery in the early medieval period. The limits of the cemetery were not defined within the area of excavation and it was considered very likely to be more extensive, particularly to the north and east (Murphy 1992).

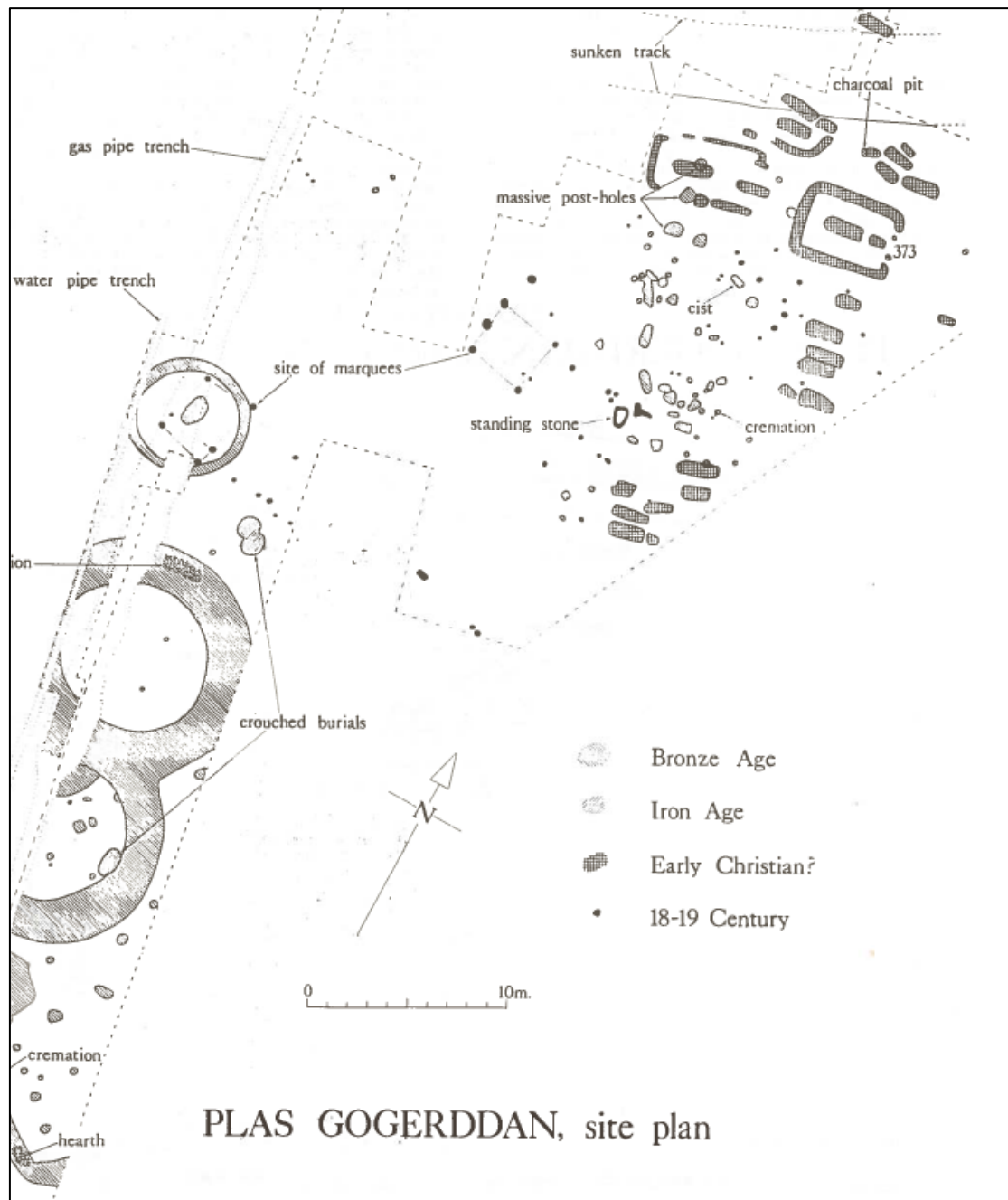


Figure 12: The site plan of the excavation undertaken in 1986 showing the extent and nature of the archaeology investigated within the Area A of scheduled ancient monument CD259 (Murphy 1986).

- 4.7.6 The early medieval burials at Plas Gogerddan were reviewed during the pan Wales, Cadw funded Early Medieval Ecclesiastical Sites project in 2004. The review noted that whilst early medieval re-use of prehistoric funerary/ritual sites as burial foci are well documented elsewhere in Wales, there is only one other known site in Ceredigion; that at Dyffryn Bern (PRN 50158) in Penbryn parish, near Aberporth (Ludlow, 2004).
- 4.7.7 Conclusions at the time of the excavation considered the cemetery at Plas Gogerddan to be "undeveloped"; the cemetery was not associated with a chapel. However, the review in 2004 identified a late 16th century map which marked a chapel at "Gogirthan", suggesting that there may have been a later chapel on the site. This inference has significant implications for the site for it suggests that the site was eventually developed (*ibid*) and the chapel site has since been lost. Further to early medieval reuse of prehistoric funerary sites is the possibility that early chapels may have been built upon or close to barrows. Such a theory has been postulated for a number of sites in Ceredigion with two in particular; the churchyard in Mwnt (PRN 31488) which appears to overlie at least one round barrow and is in close proximity to a second. Another site is Llanilar Church (PRN 5171) which is sited in close association with a Neolithic and early Bronze Age settlement and burial complex (*ibid*). It is possible that such an association may be present with round barrow (PRN 11822) and the early medieval cemetery (PRN 13005) at Plas Gogerddan.
- 4.7.8 Owing to the significance and rarity of the archaeological remains recorded and the potential for further archaeology within the vicinity, the area was scheduled in 2009. The scheduled area A is an irregular polygon as it respects the boundary of the modern allotment in the center of the field (Figure 5). This irregularity is most likely a consequence of pragmatism in order to avoid incorporating the allotment into the scheduled area and does not necessarily negate the potential for further buried archaeology within the vicinity. It is not known when the modern weather station and allotment were established in the field but both appear on a location plan in the detailed published article (Murphy 1992).
- 4.7.9 An archaeological watching brief was undertaken in 2008 during the development for new glasshouses at eastern end of the Gogerddan campus (SN6315583570). The area monitored during the groundworks measured 35m wide and 18m long. The watching brief did not reveal any deposits, features or artefacts or archaeological significance (Halfpenny 2008).

4.8 Site Walkover survey

- 4.8.1 The purpose of a walk over survey is to verify the information gained during the desk-based assessment and to consider the actual topography, terrain and setting of the landscape under assessment. It is also designed to identify previously unrecorded sites which may or may not be impacted upon by the proposed development.
- 4.8.2 This site walkover survey was undertaken on the 22nd April 2016 during fine and pleasant weather conditions. The North and South development areas on the campus were visited and photographed, with consideration given to proximity and visibility of the surrounding designated and non-designated archaeological sites. As stated earlier in this report, the Cae Lodge development area was not visited as it was not included in the proposals at the time of the commission and subsequent site visit.

- 4.8.3 The North development area encompasses a narrow, triangular field and a number of modern agricultural buildings at the northwest of the campus (Photos 1 & 2). An embankment lined with mature deciduous trees runs parallel with the road, set back around 12m from the modern fence line. This line of trees is depicted on the 1st edition Ordnance Survey map (Figure 10) and may represent a parkland feature associated with the earliest origins of Plas Gogerddan. The field rises gently southwards towards this broad embankment. The modern agricultural buildings overlook this field from the northeast and enclose a tarmacked yard (Photo 3). Whilst the broad embankment is likely to be a post-medieval feature associated with the construction of the road it is still a feature of historic interest.
- 4.8.4 The South development area is largely occupied by modern glass houses and polytunnels and a small number of modern, campus buildings and manicured lawn areas (Photos 4 & 5). No previously unrecorded archaeological features were identified within either development area.
- 4.8.5 Given their proximity to the proposed development scheduled ancient monuments CD027, CD098 and CD259 were visited, along with listed buildings LB83661 (Court Villa House), LB83667 (Plas Gwyn House) and LB9876 (Plas Gogerddan Mansion) to assess the visual impact of the development on these sites. Despite its close proximity to the site, SAM CD026 hillfort was not visited owing to lack of access.
- 4.8.6 Particular consideration was given during the site visit to the impact of the development on scheduled ancient monument CD259 and its inter-visibility with other monuments in the wider area. The present setting of this monument was taken into account, as were any significant views from/to the monument.
- 4.8.7 SAM CD259 that comprises a number of elements as described above, is located immediately west of the proposed development and is bisected by the A4159 road. The eastern area of the monument is marooned on a triangular parcel of land, on which it is possible to see a standing stone (PRN 8237) and the discrete low mound of a round barrow (PRN 11822). Also located in this field are a meteorological station and an allotment which are enclosed within rectangular fences. The land here is higher than the level of the narrow triangular piece of land opposite, rising greatest to the southwest. The remainder of the SAM is standing stone (PRN 5405) which stands alone in the field west of the A4159 road (Photo 6). It appears that this field is used for arable farming and there is evidence of recent tillage. Indeed, around the stone itself patches of bare earth and parched grass reveal recent tractor ruts (Photo 7).
- 4.8.8 No other archaeological sites were visited during this survey owing to their remoteness to the development area.

5 ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL AND IMPORTANCE

- 5.1 The historic environment desk-based assessment has shown that there are no archaeological sites recorded within the proposed North and South development areas at the Innovation and Enterprise Centre at the Gogerddan campus, University of Aberystwyth. There is one recorded site within the Cae Lodge development area; NPRN404548 Gogerddan Park Enclosure Cropmark. However, its condition remains unknown as the site appears to have been recently compromised by the creation of a hard standing, although if this work was only superficial below ground remains may well remain undisturbed. The presence of this feature and cropmark PRN11827 situated nearby increases the potential for further, hitherto unrecorded archaeology to survive in the area.
- 5.2 There are no known archaeological remains of national significance within the proposed development areas, although the site area has a number of scheduled ancient monuments in its immediate vicinity, specifically CD259.
- 5.3 There are numerous listed buildings in the wider study area, but again, none of these lie within the proposed development site. All are Grade II except for the Grade II* Gothic revivalist Church of All Saints at Tirymynach (LB19068); situated at over 2km to the west of the proposed development.
- 5.4 Plas Gogerddan parkland is not a registered park or garden and no registered park or garden exists within the 3km buffer zone.
- 5.5 The proposed development does not lie within a registered historic landscape (HLC) area, although Hen Gaer HLC lies immediately north of the Cae Lodge development area.
- 5.6 With the exception of the tree lined embankment, the site walkover did not identify any upstanding archaeological remains within the proposed development areas.
- 5.7 In terms of other archaeological sites it is only possible to provide an indication of the potential for remains to be present within the development areas based on the results of this assessment. This is discussed below by general prehistoric/historical period providing an assessment of the potential and the likely significance should archaeological sites of that date be present. Archaeological potential is defined in Table 8. Archaeological and historical importance is ascribed to the sites according to the criteria in Table 9.

Archaeological Potential	Definition
High	Known archaeological remains of the period within the site area, or an abundance of remains of the period within the near vicinity
Medium	A number of archaeological remains of the period are present in the vicinity or wider area, and/or the topography or location of the site would be typical for remains of that period
Low	Few sites of a specific period are known in the wider area, or where the topography of the site is unlikely to contain remains of that period. Or where no archaeological records of a certain period are present, but the location of the site is one that would be considered suitable or typical for remains of that period to exist
Negligible	Where there is no evidence for archaeological remains of a certain period to be present and the location/topography is most unlikely to contain remains of that period, or where a site area has already been totally disturbed

Table 8: Definitions of archaeological site potential

Site Importance	Definition
High	Features of national importance - Scheduled Ancient Monuments, Listed buildings Grade I and II*, well preserved historic landscapes, registered parks and gardens and historic battlefields
Medium	Non-scheduled sites of regional or county importance. Listed Buildings Grade II, reasonably preserved historic landscapes
Medium / Low	Features of district or local importance but generally common features at a national or regional level
Low	Minor sites or sites so badly damaged that too little now remains to justify their inclusion in a higher grade
Uncertain	Features about which insufficient is known to attribute them to a higher rank, or which cannot be sufficiently accurately located to justify their consideration
Negligible	Where a site area has already been totally disturbed by previous development or natural processes

Table 9: Definitions of archaeological site importance

- 5.8 The potential for archaeological remains of Palaeolithic and Mesolithic date to be present within the site area is considered to be low to negligible. No remains of these dates have been discovered within the search area, although it is possible that some of the flint scatters recorded could have contained Mesolithic finds. Should remains of these dates be present within the area they would be of medium or high archaeological importance.
- 5.9 A Neolithic find has been recovered close to the east of the proposed development and a second find of Neolithic or Bronze Age date was found within 0.50km of the proposed development to the northeast. Further Neolithic remains were identified during the archaeological excavation undertaken by Murphy in 1986. These excavations also discovered

information regarding the environs of the two Bronze Age standing stones, as well as recording the Bronze Age ring ditches of former barrows, burials and other associated buried archaeological remains. The excavations led to the scheduling of the area around the two standing stones CD259, as they were considered to be of national importance. For the Neolithic and Bronze Age periods, the potential for further remains to be present within the development area is considered to be medium to high. Should further Neolithic and Bronze Age remains be identified within the site area these would be of high importance.

- 5.10 Iron Age activity has been recorded within the scheduled area of SAM CD259. The evidence for Iron Age burials within SAM CD259 is highly significant for there is scant surviving evidence of this type of activity in West Wales. To the north of the proposed development is the scheduled Iron Age hillfort of Hen Gaer, and two other defended enclosures are recorded in the vicinity of the proposed development. A single Iron Age or Roman find has been recorded near Tirmynach. There is no known Iron Age activity within the lower valley of the Afon Clarach in the vicinity of the proposed development and no definitive Roman sites in the search area. The archaeological potential is thus considered low for archaeology of the Iron Age to be present, but if it were it would likely be medium/low importance. For the Roman period the potential is low to negligible, and the importance would be medium/low.
- 5.11 Evidence from the 1986 archaeological excavations to the west of the proposed development indicated the presence of a substantial early medieval cemetery. The report on the excavations stated that the limits of the cemetery were not defined and they were considered very likely to be more extensive, and extend to the north and east (Murphy 1992), which suggests that it could extend into the proposed development. The archaeological potential for further early medieval cemetery activity to be present within the proposed development area is considered high, and likely be of high importance.
- 5.12 The proposed development area presumably lay in agricultural lands associated with surrounding settlement or within parkland associated with the medieval phases of Plas Gogerddan Mansion. It is possible that remains of the original garden layout could be present. The archaeological potential for remains of medieval date is considered to be medium and the archaeological importance of remains associated with parkland would be considered low/medium and if associated with agriculture, low.
- 5.13 For the post-medieval period the development site lay within the formal parkland of the later Gogerddan Mansion, although no features are indicated within the proposed development area on earlier mapping. The potential for further remains of post-medieval date associated with the gardens is considered to be low, and the archaeological importance of such remains would be considered medium/low.
- 5.14 No significant remains of the modern period are likely to lie within the proposed development site.

Palaeo-environmental potential

- 5.15 Upland areas are usually favorable environments for peat deposits. Substantial deposits of peat have a high potential for paleo-environment analysis and are a valuable resource. However, the potential for such deposits within the development area is considered to be very limited owing to its topography and underlying geology. Located in the valley floor, the underlying soils are alluvium gravels, sands, silts and clay.

However, archaeological features such as that present in the area of scheduled ancient monument CD259, have the potential to retain significant fauna and faunal environmental evidence in their deposits.

6 POTENTIAL IMPACTS OF THE PROPOSED CENTRE FOR INNOVATION AND ENTERPRISE ON THE HISTORIC ENVIRONMENT

6.1 Previous impacts to development area

- 6.1.1 The majority of the North area of the proposed site for the Centre for Innovation and Enterprise at the Gogerddan campus has suffered relatively little from previous development, although modern buildings do encroach into its southeastern part. The South area on the other hand has been extensively built on. Evidence from historic mapping indicates that the development area of Cae Lodge has remained undeveloped until very recent, modern times with the construction of the large agricultural shed and yard/hard standing. As previously mentioned, this proposed development area was not visited and consequently it is difficult to assess the impact of this recent activity on the known (NPRN 404548) and indeed, unknown archaeology within the field. However, owing to the proximity of recorded archaeology within and in close proximity to the area the archaeological potential is considered to be high.
- 6.1.2 Where the proposed development areas have been previously built upon, previous disturbance from building foundations, infrastructure, services and landscaping may well have significantly disturbed archaeological remains that might have been present. Conversely, the majority of the structures in this area are greenhouses and therefore their impact may only be superficial, preserving underlying deposits and features. Consequently, the potential of buried archaeology in this area should not be dismissed but considered to be medium/low.
- 6.1.3 Where it has not been built upon it would appear that the North area may have been subject to some landscaping in the past, although the extent of this is not clear and may merely be the remains of parkland features associated with Plas Gogerddan. The potential for archaeological remains to survive in this area is therefore considered to be high.
- 6.1.4 Assuming the area has not been subject to significant landscaping and has not been in agricultural usage since at least the post-medieval period it is suggested that archaeological levels are likely to lie close to the existing ground surface. They could be present at around 0.30m below the present ground level, at the interface between the topsoil and undisturbed subsoils/natural geological levels.

6.2 Potential direct impacts of the proposed development

- 6.2.1 In the absence of information regarding the proposed development, the assessment of impacts is arguably ambiguous for it is difficult to assess the impact without knowing the exact scale and nature of the development. The following summary considers what the likely impacts of the proposed development could be.
- 6.2.2 In general the following are likely to be required as part of the development:
- Construction of contractor's compound and materials storage areas;
 - Demolition of existing buildings and structures;
 - Access tracks/improvement of access:-including road widening;
 - Site stripping and ground levelling;
 - Excavation of building footings, platforms or pile foundations;
 - Service trenches;

- Landscaping of the site area; and
 - Other ancillary infrastructure.
- 6.2.3 All of the above activities could require ground reduction or site stripping either during or prior to their implementation. It is likely that depths of disturbance of 0.30m or more would be required and therefore archaeological features or deposits could be exposed, damaged or destroyed by the works.
- 6.2.4 This study suggests that ground reduction works associated with the construction of the Innovation and Enterprise Centre will not directly impact upon any known archaeological sites within the North and South development areas. However, the tree lined embankment bordering the southern side of the North area does have some historic value as a possible parkland feature and any physical impact on this ought to have some form of mitigation.
- 6.2.5 Recent changes notwithstanding, any groundworks associated with the construction of the proposed silage clamp on Cae Lodge may have a ***moderate adverse direct impact*** upon cropmark NPRN404548.
- 6.2.6 Evidence from the 1986 archaeological excavations to the west of the proposed development indicated the presence of a substantial early medieval cemetery of high archaeological importance. This study suggests that the cemetery could well extend to the north and east into the proposed development; particularly in the North development area. Ground reduction works could have a ***major adverse direct impact*** upon these features and deposits if they survive in the development areas.

6.3 Potential visual impacts of the proposed development

- 6.3.1 'Setting' can be defined as the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced. Defining the setting of a historic asset ultimately relies on informed judgement, based on a range of considerations, including among others
- current landscape or townscape context
 - views to, from and across or beyond the historic asset or place
 - the prominence of the historic asset or place in views throughout the surrounding area
 - character of the surrounding landscape
 - general and specific views including foregrounds and backdrops
 - views from within an asset outwards over key elements in the surrounding landscape,
 - relationships with other features, both built and natural
- 6.3.2 As previously stated, information concerning the exact nature and scale of the proposed development was not available at the time of the production of this assessment. Consequently, it has been difficult to assess the visual impact of the development upon designated archaeological sites and their setting. However, the information available suggests that the development will be confined to the bounds of the existing Gogerddan campus and it is assumed that the construction of the development will either replace or extend the existing infrastructure and buildings and not be at a greater height than the highest existing building in the campus. Therefore consideration of visual impact (adverse or otherwise) has been made within the parameters of the present campus.

- 6.3.3 Any discussion of visual impact must acknowledge that the existing Gogerddan campus has already compromised the setting of the designated and non-designated features in the surrounding historic landscape.

Designated archaeological features

- 6.3.4 Overall, the proposed development will have no visual impact upon the majority of designated sites within the study area of 3km; with notable exceptions. A summary of the estimated visual impacts of the proposed development is shown in Tables 10 & 11.

Scheduled ancient monument CD259

- 6.3.5 This assessment considers that the proposed development could have an **adverse major/moderate visual impact** upon on SAM CD259 prehistoric and early medieval cemetery group which lies only 0.02km west of the North development area. Unfortunately, proposed development notwithstanding, encroachment of the built environment and the impingement of modern infrastructure has long since compromised the setting of this monument; including the intrusion of the weather station and allotment area, the latter located in the centre of the field, abuts the scheduled area and measures approximately 42m long and 24m wide. Enclosed by a post and wire fence, the interior of the allotment is occupied by numerous, tall tree saplings (Photo 9). The view northwards towards the North development area from round barrow (PRN 11822) is obscured by the allotment saplings (Photo 10). The view northeast towards the South development area is already compromised by existing two storied, modern buildings within the campus (Photo 11).
- 6.3.6 North of the round barrow (PRN 11822), standing stone (PRN 8237) stands alone against the backdrop of the North development area and the existing campus agricultural buildings (Photo 12). A similar vista is offered towards the northeast in the direction of the South development area which is just visible behind the allotment, weather station and existing campus buildings (Photo 13).
- 6.3.7 The final element of this monument is a standing stone (PRN 5405) which is located in Area B of the scheduled monument, approximately 0.14km north-west of Area A. This solitary stone is located at a slightly higher elevation and comfortably overlooks the monuments in Area A. Looking eastwards from this stone the modern agricultural buildings beyond the North development area and the campus buildings and glass houses of the South area are visible (Photos 14 & 15). From its elevated position, the stone will overlook both development areas whilst maintaining visibility with Area A of the scheduled monument. The situation of this monument and the topography of the valley and immediate landscape are such that there is no inter-visibility between SAMCD259 and any other scheduled ancient monument within the 3km search radius.
- 6.3.8 When viewed from ground level within the South development area it is not possible to see the monuments within SAM CD259. The prospect from the north-western corner offers only a view of a road junction and the top of the saplings in the allotment area. The view further south is obscured by the modern NFU buildings (Photos 16 & 17).
- 6.3.9 The sloping gradient and tree lined embankment within the North development area renders it nigh impossible (at ground level at least) to see the monuments in SAM CD259 from its northern boundary (Photo 18). However, when viewed from the road side it is possible to see both standing stones whilst the round barrow remains obscured by the allotment plot (Photo 19).

Scheduled ancient monument CD027

- 6.3.10 Scheduled Ancient Monument CD027 Iron Age defended enclosure is situated on a ridge at approximately 140m above sea level and 2.9km east of the proposed development. Its location enables an elevated vantage westwards of the narrow valley, within which the Gogerddan Campus is visible (Photo 8). Depending on the nature of the development, it is very likely that any obtrusive addition to the campus will be visible from this monument. However, given that the campus buildings are already visible from the monument, along with other aspects of the built environment it is likely that the visual impact will be slight. Therefore there is considered to be an **adverse negligible visual impact** upon scheduled ancient monument CD027 from the proposed development

Hen Gaer Historic Landscape Character area

- 6.3.11 The Hen Gaer HLC lies to the north of the proposed development. The proposed development areas lie on the opposite side of the existing Gogerddan Campus from the Hen Gaer HLC and the probable scale and character of the development is unlikely to radically alter the existing situation and thus there is considered to be an **adverse negligible** no impact on the setting of the HenGaer HLC area from the proposed development.

Listed buildings

- 6.3.12 The listed buildings of Plas Gogerddan mansion (LB9876) and bridge (LB9858) (Photo 20) lie in close proximity to the proposed development. Direct access to the house was not gained but the visual impact was assessed from the western approach to the house. The house itself is located at the northeastern end of the Gogerddan campus and is shielded from view by a band of trees along its southern and western sides. A small gap in this screen permits a view out to the campus. Here, the views to the North development area are obscured by existing campus and agricultural buildings. It is possible that any buildings of more than one story will be visible from the house, particularly if one is constructed in the South area (Photo 21). However, bearing in mind that the setting of these 2 listed buildings has already been highly compromised by the existing campus buildings it is considered that the proposed development will have an **adverse low/negligible visual impact** on these listed buildings and their setting.

Non-designated archaeological features

- 6.3.13 Despite the lack of details regarding the nature and scale of the silage clamp, it is considered to have a visual impact on any of the designated archaeological site within the assessment area.
- 6.3.14 For the majority of the non-designated archaeological sites within this assessment area it is estimated that these will suffer an **adverse negligible or no visual impact** to their setting.

SAM Ref No	Site Name	Site Type	Period	NGR	Distance (km) and direction from development	Magnitude of visual impact	Likely significance of impact on setting
CD026	Hen Gaer	Hillfort	Prehistoric	SN632843	0.83 (NNE)	None	None
CD027	Garth-Penrhyn-Coch	Defended Enclosure	Prehistoric	SN658840	2.90 (NE)	Negligible	Slight
CD098	Castell Gwar-Cwm	Motte	Medieval	SN653824	2.59 (SE)	None	None
CD099	Caer Pwll-Glas	Hillfort	Prehistoric	SN633866	3.01 (N)	None	None
CD152	Bronfloyd Leadmine	Lead mine	Post-medieval/Modern	SN650834	2.99 (E)	None	None
CD259	Plas Gogerddan cemetery group	Round barrow. Standing stones and early medieval cemetery	Prehistoric/Early medieval	SN626835	0.02 (SW)	Moderate/Major	Moderate/Major

Table 10: Table showing the visual impact on scheduled ancient monuments within 3km of the development area.

Listed Building Ref No	Site Name	Site Type	Period	NGR	Distance (km) and direction from development	Magnitude of visual impact	Likely significance of impact on setting
9838	Plas Cwmcynfelin	Dwelling	Post-medieval	SN60378 83470	2.23 (W)	None	None
9858	Bridge at Plas Gogerddan	Bridge	Post-medieval	SN62899 83636	0.07 (NE)	Low/Negligible	Slight
9876	Plas Gogerddan	Mansion	Post-medieval	SN62958 83653	0.12 (NE)	Low/Negligible	Slight
27005	Milestone near Pont Rhyd-hir	Milestone	Post-medieval	SN61959 83704	0.65 (NW)	None	None
83661	Court Villa	House	Post-medieval	SN63498 83764	0.64 (NE)	None	None
83665	Peithyll	Offices	Post-medieval	SN63139 82643	0.84 (SE)	None	None
83667	Plas Gwyn	House	Post-medieval	SN63771 83946	0.96 (NE)	None	None
10686	Llangorwen Cottage	Cottage & Byre	Post-medieval	SN60285 83755	2.32 (W)	None	None
19059	Cambrian House	House	Post-medieval	SN62353 84814	1.23 (N)	None	None
19060	Penrhiw	Cottage	Post-medieval	SN62434 85013	1.41 (N)	None	None
19061	Milestone on E side of A 487	Milestone	Post-medieval	SN62541 85200	1.58 (N)	None	None
19062	Capel y Garn	Chapel	Post-medieval	SN62667 85416	1.79 (N)	None	None
19063	No 2 The Cross	Cottage	Post-medieval	SN60191 83967	2.43 (NW)	None	None
19064	No 3 The Cross	Cottage	Post-medieval	SN60182 83964	2.44 (NW)	None	None
19065	Crow's Nest, No 4 The Cross	Cottage	Post-medieval	SN60175 83963	2.45 (NW)	None	None
19066	Church Hall	School House	Post-medieval	SN60429 84120	2.23 (NW)	None	None
19068	Church of All Saints	Church	Post-medieval	SN60338 83832	2.27 (W)	None	None
19069	Pont Llangorwen	Bridge	Post-medieval	SN60284 83774	2.32 (W)	None	None

19070	Ffynnon Ddu	Farmhouse	Post-medieval	SN59936 83709	2.66 (W)	None	None
19071	Hen-gwm	House	Post-medieval	SN60448 83574	2.15 (W)	None	None
19072	Ty'n Rhos	Farmhouse	Post-medieval	SN63662 85487	2.07 (N)	None	None
26998	Lovesgrove	Mansion	Post-medieval	SN62867 81647	1.79 (S)	None	None
26999	Plas Frongog	House	Post-medieval	SN61376 81168	2.71 (SW)	None	None
27000	Plas Dolau	House	Post-medieval	SN62288 81382	2.13 (SW)	None	None
27001	Dolau Cottages	Cottages and Outbuilding	Post-medieval	SN62272 81433	2.09 (SW)	None	None
27002	Plashendre	House	Post-medieval	SN60073 82264	2.86 (SW)	None	None
27003	Coach-house and stable at Plashendre	Coach-house and Stable	Post-medieval	SN60092 82274	2.84 (SW)	None	None
27004	Milestone on A44	Milestone	Post-medieval	SN62391 81117	2.37 (SSW)	None	None
27006	Farm buildings at Fronfraith Farm	Farm Buildings	Post-medieval	SN61781 81926	1.86 (SW)	None	None
27056	Nantcaerio	House	Post-medieval	SN61442 80937	2.87 (SW)	None	None
82492	Cart shed at Glascrug	Cart shed	Post-medieval	SN62256 80542	2.96 (SSW)	None	None
82502	Glascrug	Farmhouse	Post-medieval	SN62302 80559	2.93 (SSW)	None	None
83660	Church of Saint John the Divine	Church	Post-medieval	SN64365 84141	1.58 (NE)	None	None

Table 11: Table showing the visual impact on listed buildings within 3km of the proposed development.

7 CONCLUSIONS AND MITIGATION PROPOSALS

- 7.1 The historic environment assessment has shown that the proposed Centre for Innovation and Enterprise at the Gogerddan campus of the University of Aberystwyth lies within a landscape containing numerous archaeological sites of many periods. Of greatest significance are the remains of the Neolithic and Bronze Age funerary and ritual monuments located directly to the southwest of the existing campus which form part of scheduled ancient monument CD259; as well as the Iron Age crouched burials and early medieval cemetery site which also fall within the scheduled area of CD259 and are therefore collectively and individually considered to be of national importance.
- 7.2 Evidence from the 1986 archaeological excavations within the area of CD259 proposed that the early medieval cemetery could well extend to the north and east, which suggests that it may well survive into the proposed development area; particularly the North area.
- 7.3 The medieval and post-medieval remains associated with the park and gardens surrounding Plas Gogerddan are also of significance, as is the presence of well-preserved prehistoric cropmarks within and around the vicinity of the Cae Lodge development area.
- 7.4 Owing to the proximity of the development areas to scheduled ancient monument CD259 and the high potential for buried archaeological remains of Neolithic, Bronze Age and early medieval date to survive within the areas proposed for development, some form of archaeological mitigation will almost certainly be required where groundworks could potentially expose, damage or destroy underlying remains.
- 7.5 The undeveloped triangular field in the North development area is a high risk area for significant archaeological remains and may require to be evaluated prior to any intrusive works within this area. This could take the form of non-intrusive geophysical survey and/or intrusive trial trench evaluation.
- 7.6 The potential for buried remains in the South area is considered to be low as it may well have been compromised by previous development. However, given that this area is largely occupied by glasshouses, their impact upon below ground archaeology may only be superficial. Consequently, this area may warrant some form of mitigation and any intrusive works in this area should at least be archaeologically monitored.
- 7.7 The potential for buried remains in the Cae Lodge development area is considered to be high and therefore would justify the need for some form of archaeological evaluation to take place prior to any intrusive groundworks associated with the construction of the silage clamp. This could take the form of non-intrusive geophysical survey and/or intrusive trial trench evaluation.
- 7.8 It is anticipated that the Innovation and Enterprise Centre will extend and/or replace existing buildings and infrastructure on the campus but details of the final design scheme for the proposed development were not available at the time of writing the assessment. Therefore it is difficult to assess the scale of the visual impact on the scheduled area of CD259 from the proposed development. It is also true to say that existing buildings have already compromised the setting of scheduled ancient monument CD259. However, even taking these points into consideration any further encroachment upon the area of the CD259 by the construction of new buildings will have an adverse impact upon its setting in its wider landscape. Therefore it is advised that further discussions on the scale of

visual impact, adverse or otherwise, should consider its nature and significance in terms of *Will the proposed development improve or exacerbate adverse impacts on the setting of this nationally important monument?*

- 7.9 In terms of the visual impact on other designated and non-designated features of the Historic Environment this study considers that the proposed development will have a low or negligible adverse impact upon their setting.
- 7.10 Ultimately, decisions on the requirement and scope of any further programme of archaeological works lies with Ceredigion Planning Authority with advice from Development Management at Dyfed Archaeological Trust.

8. PHOTOGRAPHS



Photo 1: View facing northeast over the field of the North development area including the adjacent agricultural buildings. (DAT Photo 3912-109364)



Photo 2: View facing north over field of North development area and agricultural buildings behind. (DAT Photo 3919-109364)



Photo 3: View facing northeast over the field in the North development area showing its sloping gradient and trees atop of broad embankment. (DAT Photo 3916-109364)



Photo 4: Overview of South development area viewed from the northwest showing the existing campus buildings and modern glass houses in the background. (DAT Photo 3929-109364)



Photo 5: The glass houses and polytunnels in the South development area. (DAT Photo 3931-109364)



Photo 6: Standing stone PRN 5405 in Area B of SAM CD259. (DAT Photo 3926-109364)



Photo 7: Standing stone PRN 5405 within area B of SAM CD259 showing the close proximity of recent tractor tracks around the base of the stone. (DAT Photo 3928-109364)



Photo 8: View facing east from below SAM CD027 (no access to site) looking towards proposed development areas. Gogerddan campus is visible in the distance. (DAT Photo 3943-109364)



Photo 9: The weather station (left) and allotment (centre) that are both situated within the same field as SAM CD259. (DAT Photo 3923-109364)



Photo 10: View facing north from round barrow (PRN11822) within the scheduled area of SAM CD259 towards the North development area showing how the allotment obscures the view. (DAT Photo 3921-109364)



Photo 11: The view northeastwards looking towards the South development area from SAM CD259 with the low mound of round barrow (PRN11822) in the foreground. Note the two storied, modern buildings currently visible from SAM CD259. (DAT Photo 3922-109364)



Photo 12: Standing stone (PRN 8237) stands alone against the backdrop of the North development area and the existing campus agricultural buildings. View facing north. (DAT Photo 3908-109364)



Photo 13: View facing northeast to the South development area. Standing stone (PRN 8237) of SAM CD259 is in the foreground. (DAT 3910-109364)



Photo 14: Standing stone (PRN 5405) of SAM CD259 set against the background of the modern agricultural buildings that lie beyond the North development area. View facing north. (DAT Photo 3924-109364)



Photo 15: Standing stone (PRN 5405) of SAM CD259 set against the background of the modern agricultural buildings beyond the North development area and the campus buildings and glass houses of the South area. View facing north-east. (DAT Photo 3926-109364)



Photo 16: The prospect from the northwestern corner of the South development area offers a view of the road junction and the top of the allotment saplings in the background. (DAT Photo 3930-109364)



Photo 17: View facing northwest from the South development area towards SAM CD259. The view is obscured by modern NFU buildings. (DAT Photo 3932-109364)



Photo 18: View facing south from the northern boundary of the North development area. The sloping gradient and tree lined embankment renders it high impossible (at ground level at least) to see the monuments in SAM CD259. (DAT 3914 - 109364)



Photo 19: View facing northwest overlooking SAM CD from road side adjacent to the North development area. (DAT Photo 3918-109364)



Photo 20: View facing northeast from in front of northern boundary of South development area towards Plas Gogerddan house (LB9876) and its bridge (LB9858) (not visible). (DAT Photo 3933-109364)



Photo 21: Viewing facing southwest towards South development area from access to Plas Gogerddan mansion. (Photo 3934-109364)

9. SOURCES

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Database

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Websites

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Cartographic

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Llanbadran Fawr tithe map of 1842

1st Edition Ordnance Survey 1888 Cardiganshire 1:10560

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10. PROJECT ARCHIVE

Project Number: FS15_107

Project Name: Aberystwyth University Innovation and Enterprise Centre

Event Record Number: 109364

Site Visit forms x2

Digital Photographs: x 43 JPEGs

Digital Photographs Film Number: -109364

APPENDIX 1

ABERYSTWYTH INNOVATION AND ENTERPRISE CAMPUS, ABERYSTWYTH UNIVERSITY, CEREDIGION: HISTORIC ENVIRONMENT DESK BASED ASSESSMENT WRITTEN SCHEME OF INVESTIGATION

1. Introduction

- 1.1 This written scheme of investigation presents a proposed methodology for a desk-based assessment of the planned site of the Aberystwyth Enterprise and Innovation Campus at Aberystwyth University, located at the Gogerddan Campus to the east of Aberystwyth, Ceredigion. The proposals comprise two areas, the North and South areas. The North area is centred on SN 62707 83574 and is approximately 0.9ha in size. The South area is centred on NGR SN 62848 83504 and is approximately 0.7ha in size (Figure 1).
- 1.2 Information regarding the exact nature and scale of the development has not been provided at this stage. It would appear that both areas will replace or add on to existing buildings at the Gogerddan Campus. The areas lie to the east and northeast of the scheduled ancient monument reference CD259, which comprises the sites of a round barrow and two standing stones 0.70km west of Plas Gogerddan. These are Bronze Age monuments of national significance. Cadw have been consulted on the proposals and have recommended that an assessment is provided with the planning application that considers the setting impacts on the monuments.
- 1.3 Further recommendations from the Development Management section of Dyfed Archaeological Trust (in their capacity as archaeological advisors to the planning authority) have also recommended a full desk-based assessment to consider not only scheduled remains but also the impact of the development proposals on non-designated archaeological and historical sites.
- 1.4 The desk-based assessment has been commissioned from DAT Archaeological Services by AIEC Limited prior to the planning application being submitted to Ceredigion County Council Planning Department.
- 1.5 This document outlines the proposed methodology that will be used to undertake the assessment and provide the information required in support of the planning application for the development.
- 1.6 The report will be a primarily desk-based study of the site area, identifying any known archaeological or historical sites within the site and its environs, identifying potential setting impacts on scheduled ancient monuments or listed buildings in the vicinity, identifying any historic landscape areas that may be affected by the proposals and assessing the potential for hitherto unknown archaeological remains to be present within the proposed development area.
- 1.7 The report will include an assessment of potential impacts that might occur to buried or upstanding archaeological or historical sites within and in the vicinity of the proposed development.
- 1.8 An indication of what further archaeological works might be required, if any, will also be prepared.
- 1.9 The specification is in accordance with the *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute for Archaeologists (IfA), 1994, revised 2001 & 2008).

- 1.10 The Trust always operates to best professional practice. DAT Archaeological Services is the contractual arm of Dyfed Archaeological Trust that has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.
- 1.11 ***Dyfed Archaeological Trust is a CIfA Registered Archaeological Organisation.***
- 1.12 ***All permanent staff members of DAT Archaeological Services are CSCS² registered.***

2. AIM AND OBJECTIVES OF THE PROJECT

- 2.1 This document provides a scheme of works for:

The preparation of a desk-based archaeological assessment for a proposed Aberystwyth enterprise and innovation campus at Aberystwyth University, located at the Gogerddan campus to the east of Aberystwyth, Ceredigion. The proposals comprise two areas; the North area is centred on SN 62707 83574 and is approximately 0.9ha in size, the South area is centred on NGR SN 62848 83504 and is approximately 0.7ha in size. The report will assess the potential impact the development may have on any archaeological remains, if present within the areas, and an assessment of the wider impact of it on the historic environment. The assessment shall be presented within a report which will be submitted with the planning application for the new development.

- 2.2 Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake desk-based assessment.
- 2.3 To identify any known archaeological remains and assess the potential of any hitherto unknown archaeological deposits within the location of the proposed development and any associated infrastructure.
- 2.4 To identify any known historic environment features within the wider area that could be affected indirectly by the proposed works.

3. DESK-BASED ASSESSMENT METHODOLOGY

- 3.1 The archaeological desk-based assessment will involve the preparation of a stand-alone report. The report will be prepared using relevant information from a number of sources, and will comprise a number of elements, including:
- Dyfed Archaeological Trust Historic Environment Record data and other relevant information (including a review of online information held on the RCAHMW Coflein site);
 - identification of any scheduled ancient monuments, listed buildings, conservation areas or historic landscape areas within or in the vicinity of the site area from information held by Dyfed Archaeological Trust, CADW and RCAHMW ;

² *Construction Skills Certification Scheme (Health and Safety Tested)*

- readily available bibliographic information, cartographic material and photographs (including aerial photographs) held at the trust, RCAHMW, local records office and National Library of Wales;
 - a review of historic maps;
 - relevant web-based information;
 - site visit and walkover survey;
 - assessment of the archaeological potential of the area; and
 - assessment of likely impacts on any identified remains (or potential remains) or setting issues and likely requirements, if any, for further stages of archaeological work.
- 3.2 The proposed site visit would be undertaken to provide an assessment of the presence of any visible archaeological remains within the proposed development area and its visibility from nearby cultural heritage features. It would include specific consideration of CD259 and its inter-visibility with other monuments in the wider area. The existing setting of the monument will be taken into account, as will any significant views from/to the monument if appropriate and its relationship with other monuments in the vicinity.
- Photographs will be taken of the site area and its environs and these will be used within the report.
- 3.3 To complete an appropriate assessment a 1km search area around the site boundary for non-designated archaeological features and 3km for designated sites (SAMs, listed buildings etc) will be used to determine the presence of known historic environment features within and in the vicinity of the proposed development.
- 3.4 The following will be considered when preparing the assessment, although in some cases no such features may be present and will thus not be considered further:
- scheduled ancient monuments (SAMs) and their settings;
 - non-scheduled ancient monuments and their settings;
 - listed buildings and their settings;
 - registered parks and gardens and their essential settings;
 - registered historic landscapes;
 - non-registered historic landscapes;
 - buried archaeological potential;
 - palaeo-environmental potential;
 - place-name evidence;
 - newly identified sites of historic importance
- 3.5 A report will be prepared on the results of the assessment. This report will include information on known sites within and in the vicinity of the proposed development site. Maps of known archaeological and historical sites will be presented in the report. Photographs will be used where appropriate.
- 3.6 The report will be fully representative of the information gained from the above methodology, even if there should be negative evidence. The report will include the following:

- A) a concise non-technical summary of the appraisal results;
 - B) the report will contain at least one plan showing the site's location in respect to the local topography;
 - C) the report should list all the sources consulted;
 - D) where necessary, the report will also contain suitably selected plans and maps (including historic maps) of significant archaeological features;
 - E) written descriptions of all archaeological features observed during the site visit;
 - F) statement of the local and regional context of the historic assets identified. consideration, where appropriate, of the national archaeological research agenda;
 - G) an assessment of the relative value or significance of each recognised historic asset;
 - H) an impact assessment of the proposed development on the potential archaeological resource.
 - I) an evaluation of the impact of any changes to the setting of cd259.
- 3.7 Once completed, a copy of the report will be submitted to the lpa for the consideration of their archaeological advisers. a further copy of the report should be provided to the Dyfed Archaeological Trust for deposition within the regional Historic Environment Record (HER).
- 3.8 Where appropriate, a summary report on any new significant archaeological discovery will be submitted for publication to a national journal (e.g. archaeology in wales) no later than one year after the completion of the work.
- 3.9 Although there may be a period during which client confidentiality should be maintained, the report and the archive should normally be deposited in the appropriate repository not later than six months after completion of the work.

4. STAFF

- 4.1 The project will be managed by Fran Murphy, project manager DAT Archaeological Services.
- 4.2 The report and site walkover survey will be undertaken by Menna Bell, archaeologist DAT Archaeological Services.

5. HEALTH AND SAFETY

- 5.1 All permanent members of DAT Archaeological Services staff are CSCS³ registered.
- 5.2 DAT Archaeological Services will carry out a health and safety risk assessment prior to the site walkover survey to ensure that all potential risks are minimised.
- 5.3 All relevant health and safety regulations must be followed where advised by the client.
- 5.4 As the site visit will likely be undertaken by a single archaeologist, it may be necessary to implement lone working procedures and contacts.

³ *Construction Skills Certification Scheme (Health and Safety Tested)*

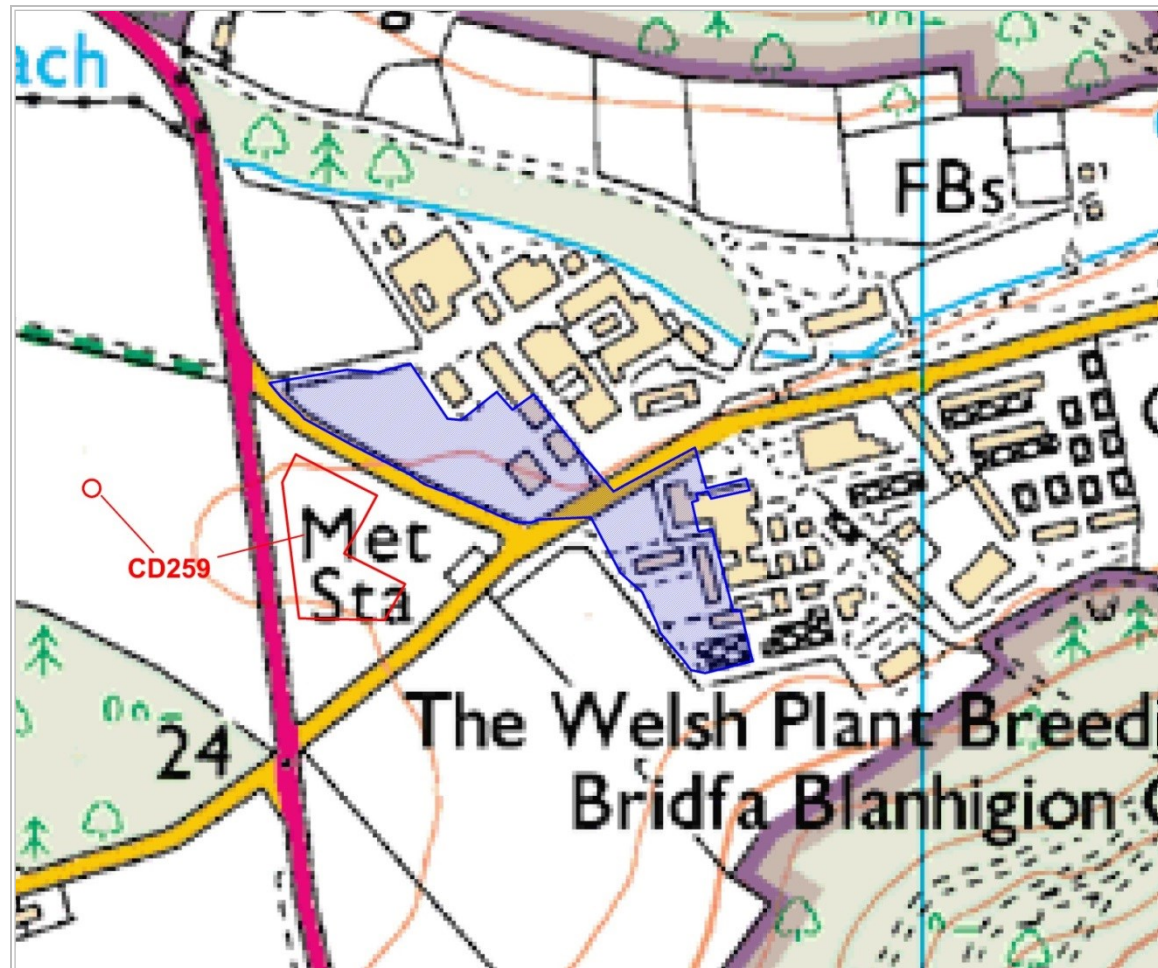


Figure 1: Site Location Plan. Development area outlined in red.

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PROPOSED CENTRE OF INNOVATION AND ENTERPRISE, GOGERDDAN CAMPUS, UNIVERSITY OF ABERYSTWYTH, CEREDIGION, HISTORIC ENVIRONMENT ASSESSMENT

RHIF YR ADRODDIAD / REPORT NO. 2016/33
RHIF Y DIGWYDDIAD / EVENT NO. 109364

Mehefin 2016
June 2016

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Menna Bell

Swydd / Position: **Archaeologist DAT Archaeological Services**

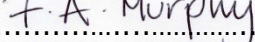
Llofnod / Signature  Dyddiad / Date 28/06/2016

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Fran Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **Project Manager DAT Archaeological Services**

Llofnod / Signature  Dyddiad / Date 28/06/2016

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau
sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report

