Archaeology Wales

Land at Gwynfaen Farm Penyrheol, Swansea

Archaeological Desk Based Assessment



By Susan Stratton

Report No. 1674



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Summary

In February 2018, Archaeology Wales was commissioned by Asbri Planning on behalf of their clients, to carry out an Archaeological Desk-Based Assessment, including a site visit, to determine the archaeological potential of land off Brynafon Road/Gower View Road, Penyrheol, Swansea (centred on SS 57914 99484) and assess the potential impact of proposed development. The work was undertaken in advance of the submission of a planning application for residential development.

No registered Historic Landscape, Historic Parks & Garden or Conservation Areas or Listed Building will be directly or indirectly affected by the proposed development.

The site lies within the Landmap historic landscape area of the Lower Loughor and Lliw Valleys (SWNSHL571). The value of this landscape is currently unassessed. Although the proposed development will remove the characteristic agricultural aspect from the site area, its position on the edge of, and surrounded by urban development, along with the large area of the historic landscape, means that the proposed development is considered to have only a Minor impact on this landscape. Similarly the site lies on the edge of the Landmap Historic Landscape of Loughor, Gorseinon and Penllegaer (SWNSHL254), the value of which is also currently unassessed. This is an urban area, the proposed development will essentially extend this area, but this is considered to be a Minor impact.

No Scheduled Ancient Monument will be directly affected by the proposed development. The medieval chapel of St.Michael's (GM363) lies just over 1km to the northwest. This was associated with a monastic grange comprising largely agricultural land which encompassed the site area. These associations with this specific site are not considered significant however, and no other tangible link to the site is known, therefore the indirect impact of proposed development on GM363 is considered to be Negligible. There are limited visual impacts on the post-medieval Pencoed Lead Works (GM282), lying 1.8km to the west. These indirect visual impacts are considered to have a Negligible impact on GM282.

No specific sites of archaeological interest have been identified within the bounds of the proposed development area. The archaeological potential of the site is also considered to be relatively low, with some potential for possible post-medieval coal mining activity identified in the general area. Such remains, should they exist, are considered to be of low (local) archaeological value, but as no specific associated features have been identified within the site area the proposed development is considered to have a Negligible to Minor impact on potential coal-mining activity.

Due to the limited archaeological potential of the site no specific archaeological mitigation measures are suggested. Care should be taken to ensure any visual impact of the final design scheme upon the Scheduled site of Pencoed Lead Works (GM282) remains minimal.

1 Introduction

- 1.1 In February 2018 Archaeology Wales (AW) was commissioned by Asbri Planning, on behalf of their clients Pobl Group and Coastal Housing Group, to carry out an Archaeological Desk-Based Assessment, including a site visit, of a proposed residential development on land off Brynafon Road/Gower View Road, Penyrheol, Swansea centred on SS 57914 99484 (AW Project No: 2590, Figure 1).
- 1.2 A Specification for the Desk-Based Assessment was produced by AW in February 2018 and approved by Glamorgan-Gwent Archaeological Trust Curatorial Division (GGAT-CD), who act as archaeological advisors to the local planning authority, City and County of Swansea (henceforth CCS) (see Appendix III).
- 1.3 The purpose of the Desk-Based Assessment, which is detailed in the following report, is to provide CCS with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy (revised edition 9, 2016), Section 6.5, and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to highlight and assess the impact upon standing and buried remains of potential archaeological interest and to ensure that they are fully investigated and recorded if they are disturbed or revealed as a result of subsequent activities associated with the development.
- 1.4 Detailed development plans are not yet available. It is understood however, that the proposed development will comprise plans for approximately 150 dwellings, along with associated infrastructure and ancillary works. The boundary of the proposed development area is presented in Figure 2.

2 Site Description

- 2.1 The site is located on land off Brynafon Road (to the south) and Gower View Road (to the east) in Penyrheol, Gorseinon, centred on SS 57914 99484. The area of proposed development currently consists of two parcels of land. The larger western parcel is a field bounded by hedgerows currently used for pasture. The eastern parcel is a smaller strip of land comprising of rough scrub.
- The site covers an area of approximately 6.5 hectares on gently sloping land from approximately 40m above ordinance datum (AOD) in the north-east to approximately 30m in the south-west.
- 2.3 To the north the site is bounded by recent and ongoing residential development, with mixed residential development and agricultural land beyond. To the south the site is bounded by recent residential development, with further late-20th century residential development along Brynafon Road and beyond. To the east the site is bounded by mid to late 20th century residential development along Gower View Road and beyond. This residential development forms the western limit of nucleated settlement at Penyrheol. To the west the site is bounded by agricultural land, comprising largely irregular fields of rough pasture, bounded by hedgerows, with the tidal marshes along the River Loughor beyond.
- The tidal marshes lie approximately 50m to the west, with the river itself approximately 400m to the west. The settlement of Penyrheol forms the eastern and southern boundary, and runs continuously into the settlement of Gorseinon beyond, with Loughor lying

- approximately 1km to 1.5km to the southwest. The centre of Swansea lies some 9km to the southeast, and Llanelli 7km to the west.
- 2.5 The geology of the area proposed for development forms part of the Grovesend Formation composed of a mixture of mudstone, siltstones and sandstones. The superficial deposits are characterised as Till Devensian Diamicton silt (BGS 2018).

3 Methodology

- 3.1 The methodology for this desk-based assessment follows that set out in the specification (Appendix III).
- 3.2 The primary objective of this desk-based assessment is to assess the impact of the development proposals on the historic environment. This will help inform future decision making, design solutions and potential mitigation strategies. The aim is to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.
- 3.3 The work includes a comprehensive assessment of regional context within which the archaeological evidence rests and aims to highlight any relevant research issues within national and regional research frameworks.
- 3.4 This report provides information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation in situ will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record has been recommended.
- 3.5 This assessment considers the following:
 - a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area through assessment of various readily available primary sources:
 - 1. Collation and assessment of all relevant information held in the regional Historic Environment Record (HER) at Glamorgan-Gwent Archaeological Trust within a 1km radius from the assessment area boundary.
 - 2. Collation and basic assessment of the impact on all Designated archaeological sites (Scheduled Ancient Monuments, Listed Buildings, Historic Parks & Gardens, Conservation Areas) within a 5km radius of the aforementioned area.
 - 3. Assessment of all available excavation reports and archives including unpublished and unprocessed material affecting the site and its setting.
 - 4. Assessment of all relevant extant aerial photographic (AP) evidence, including that held at the Central Register of Air Photography for Wales, in Cardiff.
 - 5. All sources indexed in the County Archive.
 - 6. Records held by the developer e.g. bore logs, geological/geomorphological information, aerial photographs, maps, plans.
 - 7. Map regression analysis using all relevant cartographic sources e.g. All editions of the Ordnance Survey County Series, Tithe and early estate maps (as

available).

- 8. Place name evidence.
- 9. Internet sourced satellite imagery.
- 10. Historic documents (e.g. Charters, registers, estate papers).
- b) The significance of any remains in their context both regionally and nationally and in light of the findings of the desk based study.
- c) The history of the site.
- d) The potential impact of any proposed development on the setting of known sites of archaeological importance.
- e) The potential for further work, with recommendations if requested and where appropriate for a suitable investigative and/or mitigation methodology.
- f) The potential for further work, with recommendations if requested and where appropriate for a suitable investigative and/or mitigation methodology.
- 3.6 This work conforms to the Standard and Guidance for Archaeological Desk Based Assessment, as produced by the Chartered Institute for Archaeologists (CIFA 2014).
- 4 Archaeological and Historical Background
- 4.1 Previous archaeological studies
- 4.1.1 No previous archaeological studies have been identified within the proposed development area.
- 4.1.2 Two archaeological investigations have taken place within the bounds of the 1km search area. These are both desk-based.
- 4.1.3 Glamorgan-Gwent Archaeological Trust carried out a desk-based assessment (Bowen 2010) of the potential of the archaeological resource of a development area at Gorseinon Infants and Nursery, and Gorseinon Juniors. The study identified no new sites of archaeological interest and has no relevance to the proposed development site.
- 4.1.4 The final recorded archaeological investigation in the area relates to the wide ranging and general study undertaken by Reading University and Cotswold Archaeology (Allen et al 2015) examining the rural settlement of Roman Britain. This study has no direct relevance to the proposed development site.
- 4.2 The Historic Landscape (Figure 3)
- 4.2.1 The proposed development area does not lie within the boundaries of any Historic Landscape Categorisation Areas (HLCA) recorded in the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw et al 1998), nor do any HLCAs lie within the wider 5km search area around the proposed development.
- 4.2.2 The proposed development site does not lie within any Conservation Areas. Two Conservation Areas lie within 5km of the proposed development area. The closest is the Conservation Area of Loughor (CA:029), which lies roughly 2km to the south-west centred on the remains of the 1st century Roman fort of Leucarum and the Norman

- Loughor Castle. The Conservation Area of Penclawdd (CA:015) lies under 5km to the south-west of the development site.
- 4.2.3 The site does not lie within any registered Historic Parks & Gardens. One Grade II listed Park lies within the wider 5km search area. Penllergaer (GM54) lies just under 5km to the east of the development area. It is a large-scale picturesque layout of a formerly wooded park and grounds, including lakes and an artificial waterfall. It was created in the mid 19th century by John Dillwyn Llewelyn, a nationally important figure in horticulture. It has a large walled kitchen garden which includes the ruins of a pioneering orchideous house.
- 4.2.4 The site lies within the Landmap Historic Landscape of Lower Loughor and Lliw Valleys (SWNSHL571). These Landmap areas are not designated landscapes, but they contain objective and subjective information designed to enable landscape quality to be taken into account in decision making. The Lower Loughor and Lliw Valleys covers an area of 22.758 square kilometres, comprising a large area of agricultural land surrounding Gorseinon to the north, east and south. The overall value of this area is unassessed. It is described as an agricultural area with an irregular fieldscape and open areas, elements of which may date back to the early medieval period. There was a significant 19th and early 20th century industrial component that has now largely disappeared, although its influence is marked on the settlement pattern of the area. The boundaries to this area are somewhat indistinct.
- 4.2.5 The site is bounded on the east and south by the Landmap Historic Landscape of Loughor, Gorseinon and Penllegaer (SWNSHL254), which covers an area of 5.679 square kilometres immediately to the south-east of the proposed development area. The overall value of this area is also unassessed. It is described as a near-continuous block of settlement with associated industrial areas. The Loughor component of this area has its origins in the Roman period, succeeded by a medieval castle and borough. There was then little further growth until the 19th century, spurred by associated industrial activity. Industrial components are now less important than residential ones in this area.

4.3 Scheduled Ancient Monuments (Figure 3)

- 4.3.1 Scheduled Ancient Monuments are sites considered to be of national importance and have statutory protection under the Ancient Monuments and Archaeological Areas Act 1979. No Scheduled Ancient Monuments lie within the boundary of the proposed development area.
- 4.3.2 Twenty-one Scheduled Ancient Monuments lie within the applied 5km search area. The closest is St. Michael's Chapel (GM363), the remains of a small medieval chapel formerly belonging to a grange of Neath Abbey. It lies just over 1km to the north-west of the proposed development site. Melin Mynach watermill (GM501), the site of successive post-medieval and modern industrial mills, lies just over 1km to the east of the site. Pencoed Lead Works (CM282), one of the earliest non-ferrous smelting sites in Wales, established by Sir Thomas Stepney in 1754-5, lies across the River Loughor 1.8km to the west.
- 4.3.3 The remaining Scheduled Ancient Monuments lie in excess of 2km from the proposed development site. These include a Bronze Age round cairn (GM201), Dan-y-Lan Camp

Iron Age hillfort (GM268), Roman Practice Camps (GM502) and (GM269), and Medieval church (GM415), chapel (CM324), and castle (GM 200 & GM046) sites. Post-medieval and modern sites are mainly related to industry, including coal mines (CM262 & CM265), engine houses (CM266 & CM263), and a dockyard (GM398). There is also a 19th century astronomical observatory (GM410) and orchideous house (GM596).

4.4 Listed Buildings (Figure 3)

- 4.4.1 No Listed Buildings lie within the proposed development area.
- 4.4.2 There are 39 Listed Buildings within 5km of the proposed development area. One, the Equatorial Observatory at Penllergare (LB 26500), 4km to the east of site, is Grade II* listed. The remaining buildings are all Grade II listed.
- 4.4.3 The closest Listed Buildings to the site are a small cluster of three sites in Gorseinon, less than 1km to the south-east of site. These are the Church of Saint Catherine (LB 26260) and the War Memorial it its grounds (LB 26261), and the Church of the Blessed Sacrament (LB 87524). The remaining Listed Building lie over 1km from the development site. The full list is given in Appendix II.
- 4.5 Known Archaeological Remains and Historical Development (Figure 4, Appendix I)
- 4.5.1 The Historic Environment Record records thirteen non-designated sites of archaeological and historic significance within the 1km applied study area. None of these sites are located within the proposed development area. These sites are presented in the table below, the full catalogue provided by Glamorgan-Gwent Archaeological Trust is included to the rear of this report (Appendix I).

PRN	Site Name	Form	Period	Designation
00207w	Roman Coin from Gorseinon	Coin	Roman	
00992w	St Michaels Church	Church	Post-Medieval	
01203w	Forge, Gorseinon	Forge	Post-Medieval	
01268w	Mine, Llwchwr	Mine	Post-Medieval	
01289w	Quarry, Gorseinon	Quarry	Post-Medieval	
01290w	Quarry, Gorseinon	Quarry	Post-Medieval	
01291w	Quarry, Gorseinon	Quarry	Post-Medieval	
01294w	Quarry, Gorseinon	Quarry	Post-Medieval	
01934w	Llannent	Settlement	Unknown	
01935w	Gwyn Faen	Dwelling	Post-medieval	
01937w	Lime Kiln, Gorseinon	Lime Kiln	Post-Medieval	
02823.0w	Lwchwr Groyne	Groyne	Post-Medieval	

05213w	Ffynnon Gwlangel	Well	Unknown	

- 4.5.2 There are also seven sites listed on the National Monuments Record (NMR) maintained by the Royal Commission of Ancient and Historical Monuments Wales (RCAHMW) within the same search area. None of these sites lie within the proposed development area. One of these NMR sites (Gwyn Faen dwelling) is duplicated on the HER records. The remaining sites relate to 19th and 20th century urban and religious buildings in Gorseinon to the east of the proposed development area.
- 4.5.3 No records of artefacts or coins are recorded within the Portable Antiquities Scheme database (www.finds.org.uk) within the proposed development site, while three Roman coins and one Medieval have been found within a 1km search area.
- 4.5.4 The recorded archaeological sites are briefly described below, according to period, where they are incorporated into a summary of the historical development of the area.

Prehistoric: Palaeolithic (c.450,000 – 10,000 BC), Mesolithic (c.10,000 – 4400 BC), Neolithic (4400 BC – 2300 BC), Bronze Age (2300 BC – 700 BC) & Iron Age (700 BC – AD 43)

- 4.5.5 There is very little evidence for prehistoric activity in the locality of the proposed development area, and no prehistoric sites are recorded in the 1km search area.
- 4.5.6 A Bronze Age round cairn and an Iron Age hillfort are the only evidence of prehistoric activity within 5km of the site.

Roman (AD 43 - c. AD 410)

- 4.5.7 During the Roman period a fort was constructed close to the Loughor estuary, located over 2km to the southwest of the site. This fort was built soon after the Roman invasion of Britain by the Second Augustan Legion. The Roman occupation of the area is dated to *c*.75AD, lasting to 120AD. A subsequent reoccupation of the fort is documented to have occurred during the late 3rd century AD (Marvell et al 1997). The fort, called Leucarum, was built to guard the communication routes passing through the River Loughor. A road connected the site with other major forts at Neath to the east and Carmarthen to the west. The current Loughor/Swansea Road is believed to follow the approximate line of this route through Gorseinon.
- 4.5.8 There is no evidence of Roman activity at the development site. A Roman coin findspot (00207w) is located in Gorseinon, 350m to the south of the proposed development area. The coin was found in 1932 and is a rare Antoninus Pius in good condition. Otherwise evidence of Roman activity in the surrounding area is concentrated in Loughor, 2km to the south-west.

Early Medieval (c. AD 410 - AD 1086) & Medieval (1086 - 1536)

4.5.9 During the post-Roman, early-medieval period this area lay within the early medieval commote/cwmwd of Gower Uwch-coed, which became part of the kingdom of Glywysing and then subsequently Morgannwg (Glamorgan) by the 10th century. From

the late 10th century Gower, along with several neighbouring commotes, formed a territory known as Ystrad Tywi, which was fought over by the neighbouring kingdoms of Deheaubarth (to the west) and Morgannwg (to the east), and it frequently changed hands between the two before settling as part of the kingdom of Deheubarth after 1081. It is during this period of unrest in the 10th century that Gorseinon supposedly got its name. The traditional story tells of a battle between Meredith and Eynon ap Owain ap Hywel Dda in the 980s or 990s. Versions would appear to differ, but either Eynon rested his troops or was killed in an area of marshy ground (Gors) in the vicinity, and the area was subsequently known as Gors-Eynon.

- 4.5.10 The Normans arrived in 1093, and led a successful invasion of the area, establishing a castle on the site of the former Roman fort in Loughor by the early 12th century. After the Norman invasion the area became known as Gower Supraboscus. Settlement was probably established close to the castle in Loughor. The area around the proposed development site is likely to have been relatively remote from the settlement but may have lain in the agricultural hinterland.
- 4.5.11 In the mid-12th century much of the surrounding land was granted by Henry de Villiers to Neath Abbey. The centre of their grange was established at Cwrt-y-carnau, the site of St. Michael's Chapel (GM363), over 1km to the north-west of site.
- 4.5.12 Two medieval sites are recorded within the 1km search area. Ffynnon Gwlangel (05213w) is located within the bounds of Gwyn Faen Farm, roughly 300m south-west of the development area. It is considered to be a possible holy well, most probably of medieval origins. Llannent settlement (01934w) is located 550m north of the proposed development site and is a possible shrunken medieval settlement.

Post-Medieval (1536 – 1899) & Modern (1900 – present day)

- 4.5.13 The majority of sites recorded on both the HER and NMR within the 1km search area are post-medieval and modern in date. They chart the industrial and residential rise of Gorseinon as Swansea and the surrounding district became increasingly industrially significant.
- 4.5.14 No post-medieval or modern sites are recorded within the proposed development area. The closest site is Gwyn Faen (01935w), a 19th century, two-storey house located 250m to the west. The house is part of a post-medieval farmstead and is demonstrative of the agricultural landscape (which the site itself is a part of), which was increasingly encroached upon by 19th and 20th century urban expansion. Another post-medieval farmstead, Pen-Cefn Arda Isaf (19619), located 800m to the west, now lies within **Gorseinon's urban development.**
- 4.5.15 Industrial activity in the area is represented by quarries (01294w, 01291w, 01290w and 01289w), a mine (01268w), a lime kiln (01937w), and a forge (01203w). The importance of religion to the residents of the growing settlement of Gorseinon is demonstrated by the number of late 19th and early 20th century chapels.

- 5 Map Regression
- 5.1 Ordnance Survey Drawing, Swansea 21, 1813
- 5.1.1 The earliest available detailed map of the site area is the Ordnance Survey drawing of the Swansea area, drawn up in 1813 by Thomas Budgen. The map shows the site area, to the north-west of Loughor Common, as agricultural land. The field boundaries show little resemblance to the current boundaries, which are also observed on the later OS maps, and are likely to more representative of general agricultural land rather than an accurate depiction of enclosure boundaries.
- 5.1.2 Immediately to the south-west of the development area is a small settlement labelled "Blackhill" consisting of about eight buildings. This is likely a small agricultural settlement or farmstead. The name, in the context of coal mining activity known in the general area during the 19th century, may suggest coal deposits were noted in this area which raises the possibility of unrecorded coal mining activity.
- 5.2 Tithe map Llandilo Talybont Parish, 1844 (Figure 5)
- 5.2.1 The Llandilo Talybont Parish tithe map was drawn up in 1844. The map shows no field boundaries in the development area. The site area is part of an open area of land running down to the River Loughor to the west, with the field boundaries observed in the 1813 map now absent. The tithes for this area were attributed Tir Brennin, or royal land. No occupier information is available.
- 5.2.2 The southern boundary of the site appears to correspond to the boundary of this open land with a large area of common to the south, labelled as Field 60-a. It is part of Cefenarda Farm, owned by Thomas Williams and occupied by John Gibbs.
- 5.2.3 At this point all that remains of the Blackhill settlement, here marked as "Black Hill" are two isolated buildings, orientated roughly north-east south-west. They appear to be the easternmost of the buildings observed on the 1813 map. It seems that Blackhill has largely been abandoned.
- 5.3 Ordnance Survey County Series First Edition 1877, 1: 2500
- 5.3.1 The first edition Ordnance Survey map shows that by this point the current field boundaries had been established for the western field in the site area, including a small wooded area to the north-west corner which is still in existence. The eastern field in the development area was part of a much larger field extending to the east of its current limits.
- 5.3.2 The southern extent of the site is still bounded by a western spur of common land from Loughor Common. This narrow strip of land, labelled at "Black Hill", contained a trackway running westward to Gwyn-fain, a cluster of buildings and small enclosures which is likely a farmstead. These buildings and enclosures are still visible today. The route of the trackway itself appears to be that now followed by Brynafon Road, and it runs east to join the main north-south road, now Frampton Road.
- 5.3.3 Of the two buildings noted to the west of the site area (Black Hill) only one, the southern-most, is still extant at this point.

- 5.4 Ordnance Survey County Series Second Edition 1898, 1: 2500 (Figure 6)
- 5.4.1 This map does not show substantial differences from the County Series First Edition of 1877. Gwyn-faen Farm is now marked with the current spelling rather than the preceding Gwyn-fain.
- 5.5 Ordnance Survey County Series Third Edition 1916, 1: 2500
- 5.5.1 This map does not show substantial differences from the preceding two County Series Editions for the site area.
- 5.5.2 To the east of the site area, along Frampton Road and Pen-yr-heol Road, residential dwellings were appearing, spreading from the settlement centres of Pen-yr-heol and Pen-cae-crwn.
- 5.6 Ordnance Survey County Series Fourth Edition 1935, 1:2500
- 5.6.1 This map shows no substantial differences from the preceding Country Series Editions for the western field of the development site. However, the eastern field now contains an isolated semi-detached building accessed by a track. This building still exists on what is now Fernhill Road, outside the proposed development area.
- 5.7 Ordnance Survey Plan 1959, 1:2500
- 5.7.1 This map shows the development of residential streets in the eastern field. Gower View Road, which forms the site area's eastern boundary, had been partially established at this point.
- 5.7.2 No differences are observable in the western field of the development area, or the surrounding areas to the south, west and north.
- 5.8 Ordnance Survey Plan 1988, 1:2500
- 5.8.1 This map shows the site as it appears on current mapping. Gower View Road has extended northwards along the western boundary of the development area, and the cul-de-sac Heol Y Pibydd leads off of it to form the northern boundary.
- 5.8.2 To the south of the site area the former trackway has become Brynafon Road, and the residential street Ffordd Y Coegylfinir, which forms the current southern site boundary, has been established in the southern part of the western field.
- 6 Aerial Photographs & Lidar (Figures 7 & 8)
- 6.1 A search for aerial photographs of the area produced 26 images. While most images depicted the area proposed for development clearly, the aerial images did not evidence further detail than that obtained through cartographic/written sources.

- A series of images were taken by the Royal Air Force in the 1940s. In the earliest of these, from 1945, it appears that the western field may have been recently ploughed. In later images from 1946 and 1947 the two fields of the development area are pasture. The semi-detached dwelling that sits at the end of what is now Fernhill Road is present in the south-east of the eastern field (Figure 7).
- 6.3 Further photographs were taken by the RAF in 1951. These clearly show the initial development of the southern extent of Gower View Road in the eastern field (Figure 7), which now forms the eastern boundary of the site. The western field remains as empty pasture.
- Ordnance Survey photographs from the 1960s, Meridian Airmaps from the 1970s, and MAFF images from the 1980s show a northern extension of Gower View Road in the eastern field. The western field continues in use as pasture, with a build-up of scrub observable along the northern edge of the proposed development area.
- 6.5 Photographs by Hard Hat Photography from the early 2000s predate the Ffordd Y Coegylfinir housing development in the south of the western field. The western field is still pasture with an area of scrub on the northern boundary, while the eastern field has an increasing covering of scrub across the area.
- 6.6 Lidar data at 50cm DTM is available for the site area, illustrating the site in relatively clear detail (Figure 8). Modern urban development is clearly visible surrounding the site to the south, east and north. The area of scrub along the eastern edge of the site, along with hedgerows and footpaths, are visible but nothing of apparent archaeological interest. The main field area to the west appears relatively featureless.
- 6.7 No new archaeological features have been identified from aerial photographs or Lidar data.

7 Site Visit (Photos 1 to 14)

- 7.1 A site visit was undertaken on the 16th of March 2018. The conditions were fine and dry. The site itself could not be accessed due to landowner restrictions, but it was possible to walk almost the entire site boundary with clear views of and across the site.
- 7.2 The site comprises one main field to the west, and a strip of scrubland to the east.
- 7.3 The land slopes down from north-west to south-east. A stream runs along the western boundary, draining to the south-west.
- 7.4 The western field of the proposed development area is currently used for pasture. Although it was not possible to access the field the surrounding fields were very boggy in places, and the proposed development area appeared the same.
- 7.5 The western field of the proposed development area is bounded by a series of earth banks topped by trees, except to the south where it is bounded by a fence line of the recent residential development. Along the north-western edge bounding the stream is a strip of thin woodland.
- 7.6 The parcel of land to the east mainly consists of scrub, with a dense mixture of trees, gorse and brambles. A bank topped with trees and bushes separates it from the western field.

- 7.7 A trackway providing vehicular access to the rear of the properties on Gower View Road runs partially down the eastern edge of the site.
- 7.8 The northern part of the eastern strip, which bounds directly on to Gower View Road to the east, has been subject to levelling activity associated with the recent residential development of Heol Y Pibydd that bounds the site to the north. The area is flat and grassy and has an equipped children's play area.
- 7.9 A small stream or drain runs along the northern edge of the area, draining to the west.
- 7.10 No other features have been identified within the site area.

8 Impact Assessment

- 8.1 Assessment of Archaeological Potential and Importance
- 8.1.1 No sites of archaeological interest had previously been recorded within the proposed development area prior to assessment.
- 8.1.2 Research undertaken as part of this assessment has not identified any new sites within the proposed development area.
- 8.1.3 There would appear to be little potential for archaeological remains associated with the Prehistoric, Roman or early medieval periods. During the medieval period this area formed part of a monastic grange associated with Neath Abbey, this is likely to have mainly comprised agricultural land, but no specific sites or features of archaeological interest have been identified within the site area associated with this.
- 8.1.4 During the post-medieval period the site appears to have been used as agricultural land. Local place-name evidence from historic map sources suggests the potential for unrecorded coal mining activity in the general area. No such features have however been identified through research and a site visit, therefore this potential is considered to be Low. Should such remains exist, they would be considered to be of Low (Local) archaeological value.

8.2 Previous Impacts

- 8.2.1 The site comprises largely marginal pastoral land with areas of scrub. Some ploughing activity is suggested by aerial photographs, but it is anticipated that disturbance is likely to be relatively minimal across much of the site and therefore potential archaeological preservation may be relatively good.
- 8.2.2 Modern development surrounds the site, and it is possible that ground disturbance and dumped material associated with these developments may be present around the edges of the site, particularly along the scrub-covered eastern part of the site. Groundworks are visible in places along this eastern edge, particularly in association with, and adjacent to, the existing playground area.

- 8.3 Potential impacts from proposed development
- 8.3.1 The proposed development is assumed to cover the full extent of the area outlined in Figure 2, and includes the construction of approximately 150 residential units, along with associated infrastructure and ancillary works. Any of the following activities associated with the proposed development could therefore expose, damage or destroy archaeological remains:
 - Enabling works, such as the installation of the contractor's compound, construction of access roads, parking areas, storage areas, borrow pits and associated services;
 - Landscaping and terracing works, including the removal of previous field boundaries and earthworks;
 - Surface stripping and levelling;
 - Construction of roads and infrastructure:
 - Foundation excavations;
 - Service installation;
 - Any other ground disturbing works
- 8.3.2 The proposed development also has the potential to generate indirect (visual) effects on archaeological sites, such as altering the visual setting or tranquillity of the sites and landscapes.

Historic Landscapes

- 8.3.3 No registered Historic Landscape will be directly or indirectly affected by the proposed development.
- 8.3.4 No Conservation Area will be directly affected by the proposed development. Two Conservation Areas lie within 5km of the proposed development (Loughor and Penclawdd), neither however share any visual, historic or other links to the proposed development area, and neither will be indirectly affected.
- 8.3.5 No registered Historic Park & Garden will be directly affected by proposed development. Penllegaer (GM54) lies within 5km of the site, but this shares no visual, historic or other link to the site and will not be indirectly affected.
- 8.3.6 The site lies within the Landmap Historic Landscape of Lower Loughor and Lliw Valleys (SWNSHL571), the overall value of which is unassessed. This is a largely agricultural area, the proposed development will therefore remove this characteristic from this area. However, the historic landscape as a whole covers an extensive area, and the loss of this area, which is already surrounded on three sides by urban development, will have only a Minor impact.
- 8.3.7 The site is also bounded by the Landmap Historic Landscape of Loughor, Gorseinon and Penllegaer (SWNSHL254), the overall value of which is also unassessed. The proposed development will effectively extend this area, which has been drawn around urban and associated industrial limits. Given the overall size of this area, and the fact it surrounds the site on three sides, the proposed development is considered to have a Minor impact on this historic landscape as a whole.

Scheduled Ancient Monuments

- 8.3.8 No Scheduled Ancient Monument will be directly affected by the proposed development.
- 8.3.9 Just over 1km to the northwest lies St.Michael's Chapel (GM363). This small medieval chapel was once part of a medieval monastic grange, an area of largely agricultural land encompassing the site area. Despite this association however there are no tangible links to connect the two sites, and they do not share a visual relationship, therefore any indirect impact on GM363 will be Negligible.
- 8.3.10 Just over 1.7km to the west lies Pencoed Lead Works (GM282), on the banks of the Loughor River. This is the only Scheduled Ancient Monument with any potential visual connection to the site. The site itself is not discernible from the proposed development area, but its location on the river bank offers some general views eastward towards the proposed development site. The site will however be backed by further urban development, visual impacts will be limited through intervening vegetation, and this view is not considered to be an important viewpoint from the former Lead Works, therefore any indirect impact on GM282 will be Negligible.
- 8.3.11 There will be no indirect impact on any other Scheduled Ancient Monument.

Listed Buildings

- 8.3.12 No listed buildings will be directly affected by the proposed development.
- 8.3.13 There are 39 listed buildings within the applied study area surrounding the proposed development. These buildings however either lie within the dense urban settings of Gorseinon and Loughor, or lie at some distance from the proposed development site, with no physical, visual or historic links to the site. There will therefore be no indirect impact on any Listed Buildings.

Non-designated Archaeological Sites

8.3.14 No specific sites of archaeological interest have been identified within the proposed development site. A general potential for post-medieval coal mining activity has been identified, should such remains exist within the proposed development area then there is the likelihood that they would be directly impacted upon. However, no evidence of such features have come to light, and therefore the potential for remains to exist within the site area is considered to be low. The potential impact on these remains is therefore considered to be Negligible to Minor.

- 9 Conclusions
- 9.1 Impacts on Designated Assets
- 9.1.1 No registered Historic Landscape, Conservation Area or Historic Park & Garden will be directly or indirectly affected by the proposed development.
- 9.1.2 The site lies within the Landmap Historic Landscape of Lower Loughor and Lliw Valleys (SWNSHL571), the value of which is currently unassessed. The main characteristic of this area is agricultural, therefore the loss of agricultural land will have an impact. However, given the size of the Landscape area, and the position of the proposed development surrounded on three sides by urban development, this impact is considered to be Minor.
- 9.1.3 Similarly the site lies adjacent to the Landmap Historic Landscape of Loughor, Gorseinon and Penllegaer (SWNSHL254), the value of which is also currently unassessed. This is an urban area, the proposed development will therefore extend this landscape, but this is considered to be a Minor impact.
- 9.1.4 No Scheduled Ancient Monument will be directly affected by the proposed development. There are some historic associations with St.Michael's Chapel (GM363), a medieval chapel associated with a monastic grange comprising agricultural land that encompassed the site area. These associations are not considered significant however, and the indirect impact of the loss of this agricultural land is considered to have a Negligible impact on GM363. Similarly there are potential indirect visual impacts on Pencoed Lead Works (GM282), on the banks of the Loughor River to the west. The visual impact is not great however, and the views are not considered significant from the former lead works, therefore this too is considered to be a Negligible impact.
- 9.1.5 No listed building will be directly or indirectly affected by the proposed development.
- 9.2 Impacts on Non-designated Assets
- 9.2.1 No specific sites of archaeological interest have been identified within the bounds of the proposed development area.
- 9.2.2 Research suggests there is a relatively limited potential for archaeological remains within the immediate area. Some potential for post-medieval coal-mining activity is identified in the general area, considered to be of low (local) value, but no evidence of any associated remains have been identified within the proposed development area. The impact on potential coal-mining remains is considered to be Negligible to Minor.

Table 1: Sites of archaeological interest affected by the proposed development

Reference	Site Name	Site Type	Value	Magnitude of Impact
SWNSHL571	Lower Loughor and Lliw Valleys	Landmap Historic Landscape Area	Unknown	Minor

SWNSHL254	Loughor, Gorseinon and Penllegaer	Landmap Historic Landscape Area	Unknown	Minor
GM363	St.Michael's Chapel	Medieval Chapel	High (SAM)	Negligible
GM282	Pencoed Lead Works	Post-medieval lead works	High (SAM)	Negligible
-	Black Hills	Post-medieval coal mining	Low	Negligible to Minor

9.3 Mitigation

- 9.3.1 When considering the final design and layout of the scheme care should be taken to ensure the visual impact of the proposed development remains at a reduced level in terms of its impact on Pencoed Lead Work (GM282) to the west.
- 9.3.2 Due to the low potential for archaeological remains to exist within the proposed development area, and its limited impact on surrounding archaeological assets, no further mitigation measures are suggested.

10 Sources

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Unpublished

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Anon	1844	Tithe Map, parish of Llandilo Talybont
Ordnance Survey	1813	Ordnance Survey Drawing, Swansea 21
Ordnance Survey	1877	County Series Map First Edition 1:2500
Ordnance Survey	1898	County Series Map Second Edition 1:2500
Ordnance Survey	1916	County Series Map Third Edition 1:2500
Ordnance Survey	1935	County Series Map Third Edition 1:2500
Ordnance Survey	1959	Ordnance Survey Plan 1: 2500
Ordnance Survey	1988	Ordnance Survey Plan 1: 2500

Aerial Photographs

3GTUDT19Pt1	03/08/1945	RAF	B/W
106GUK1625	07/07/1946	RAF	B/W
106GUK1400	11/04/1946	RAF	B/W
3GTUDUK120	03/04/1946	RAF	B/W
106GUK1419	15/04/1946	RAF	B/W

106GUK1629	08/07/1946	RAF	B/W
106GUK1294	25/03/1946	RAF	B/W
CPEUK2264	27/08/1947	RAF	B/W
CPEUK1997	13/04/1947	RAF	B/W
540RAF522	04/06/1951	RAF	B/W
58RAF671	17/05/1951	RAF	B/W
540RAF545	01/07/1951	RAF	B/W
OS62030	28/04/1962	OS	B/W
OS63071	25/05/1963	OS	B/W
Meridian40/69	18/04/1969	Meridian	B/W
OS69267	10/06/1969	OS	B/W
Meridian75/70	23/09/1970	Meridian	B/W
Meridian6/81	16/04/1981	Meridian	B/W
MAFF86/86	15/06/1986	MAFF	
	01/05/1992	Geonex (NRSC)	Colour
OS92112	17/05/1992	OS	B/W
OS99398	14/10/1999	OS	B/W
Getmapping	01/01/2000	Getmapping	Colour
	01/01/2004	Geoinformation Group	Colour
Geoinformation		Geoinformation Group	Colour
COWI	06/06/2006	COWI	Colour
Nextperspectives	01/01/2009	Getmapping	Colour
Nextperspectives	01/01/2014	Nextperspectives	Colour
Hard Hat Photography	24/10/2002	Hard Hat Photography	Colour

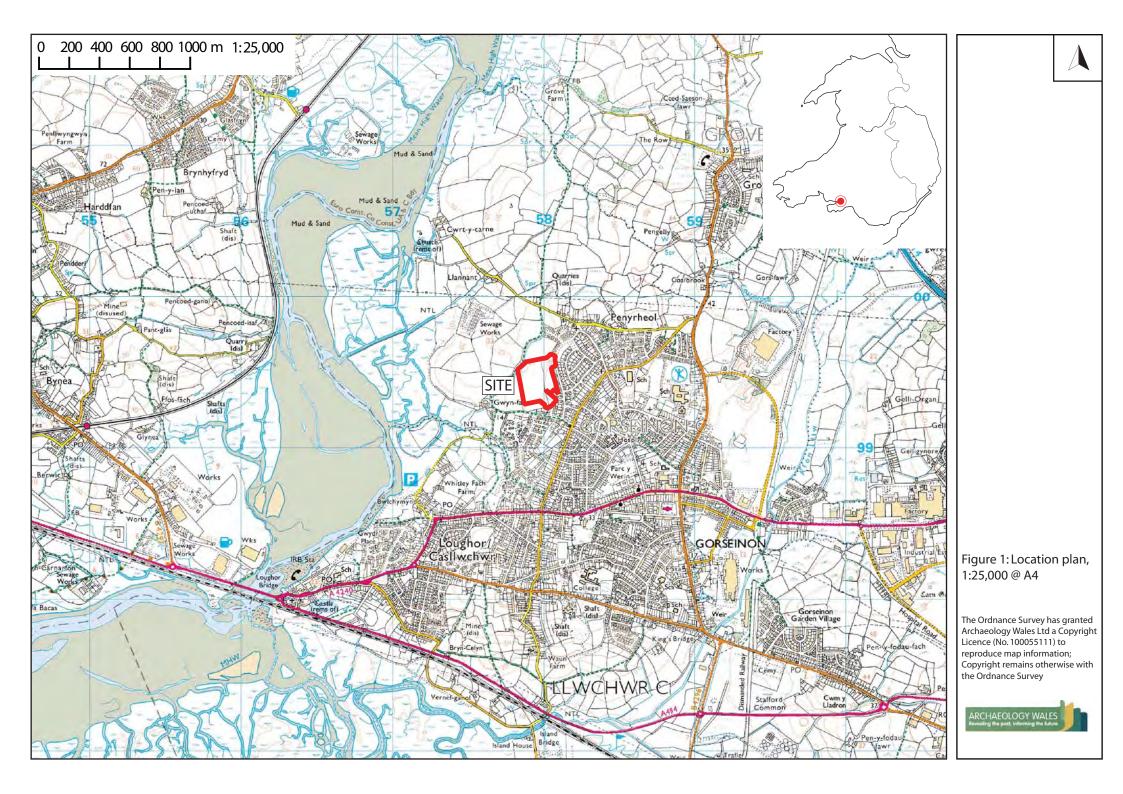
Databases

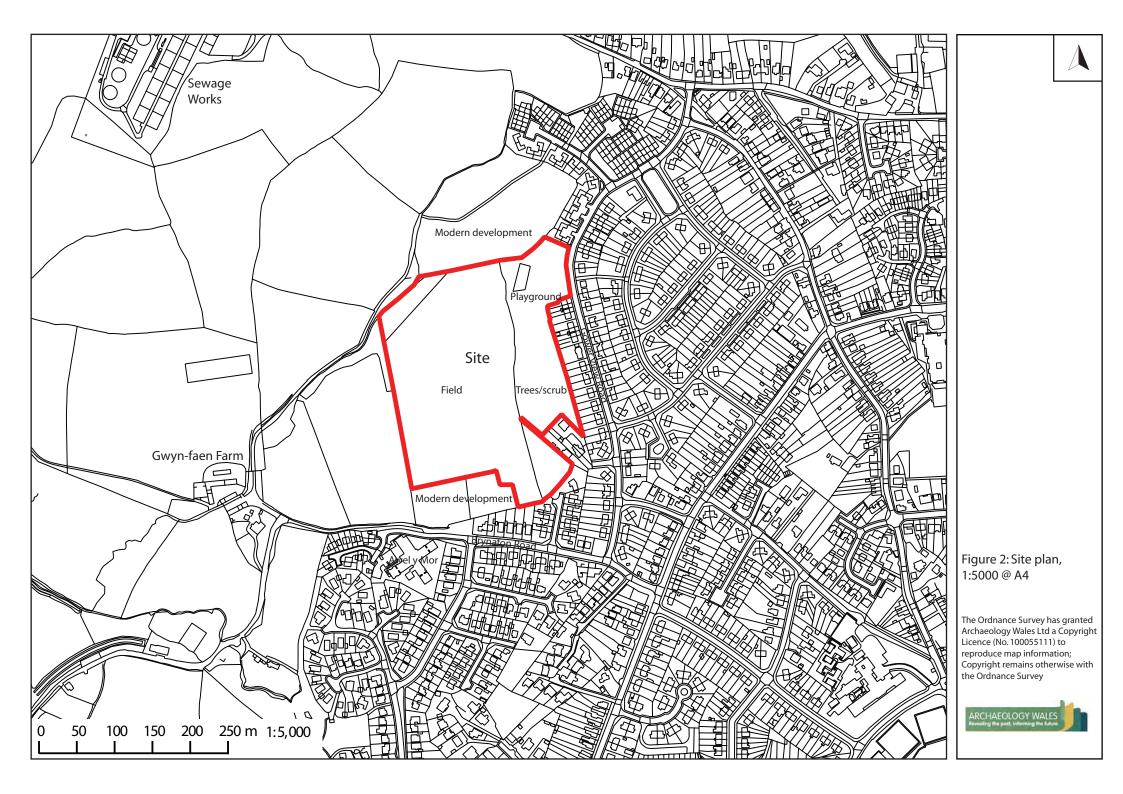
Regional Historic Environment Record (HER), held and maintained by Glamorgan-Gwent Archaeological Trust

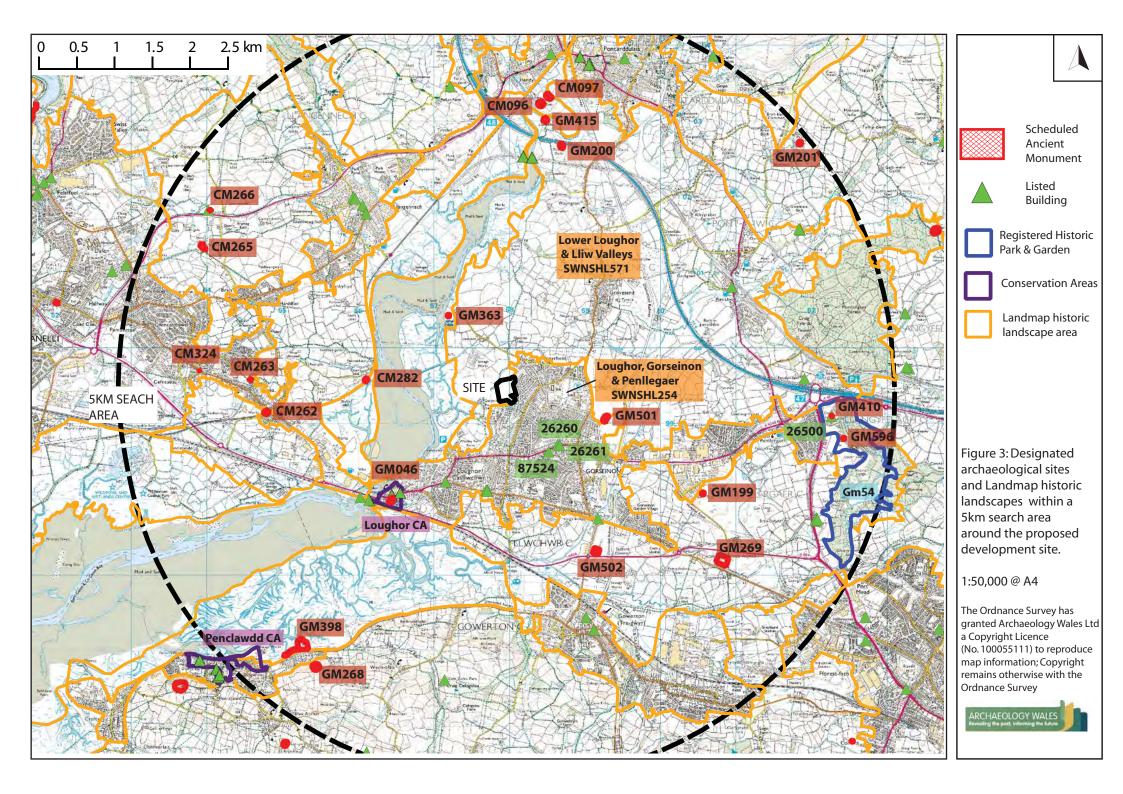
Online resources

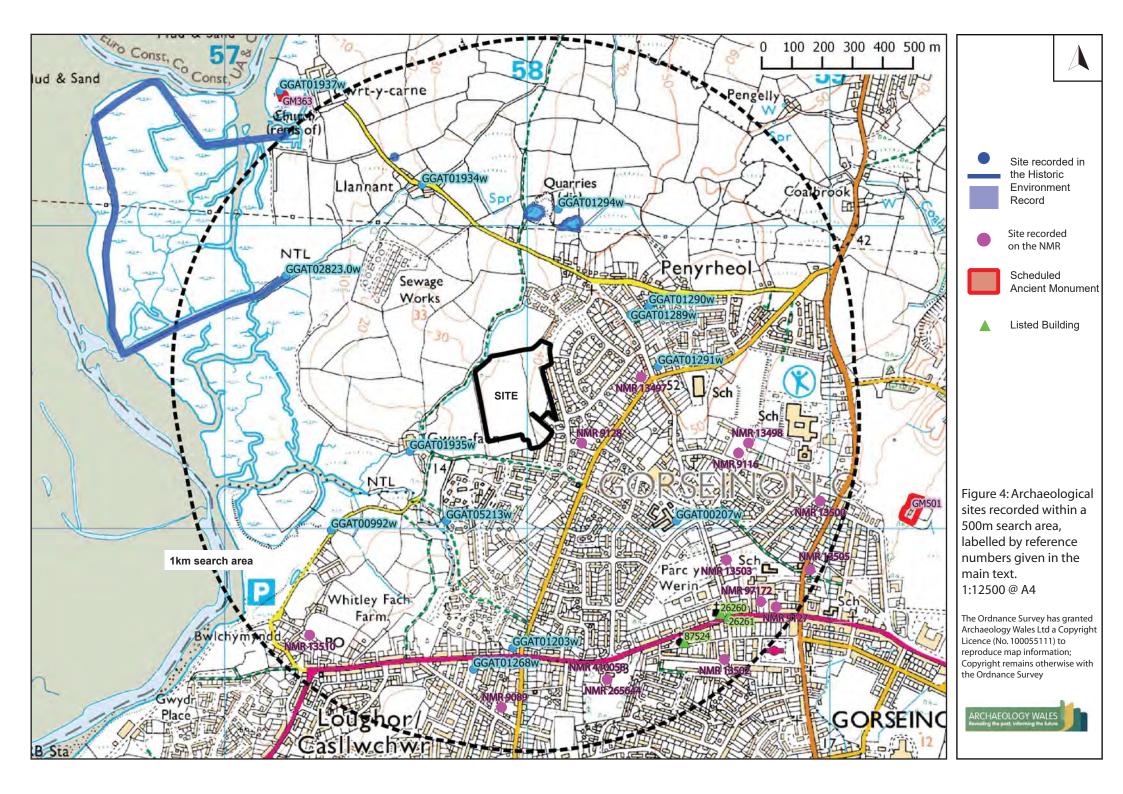
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The Rural Settlement of Roman Britain: an online resource. M. Allen, N. Blick, T. Brindle, T. Evans, M. Fulford, N. Holbrook, L. Lodwick, J.D. Richards and A. Smith. 2015 (updated 2018) - http://archaeologydataservice.ac.uk/archives/view/romangl/index.cfm (accessed 27/03/18)









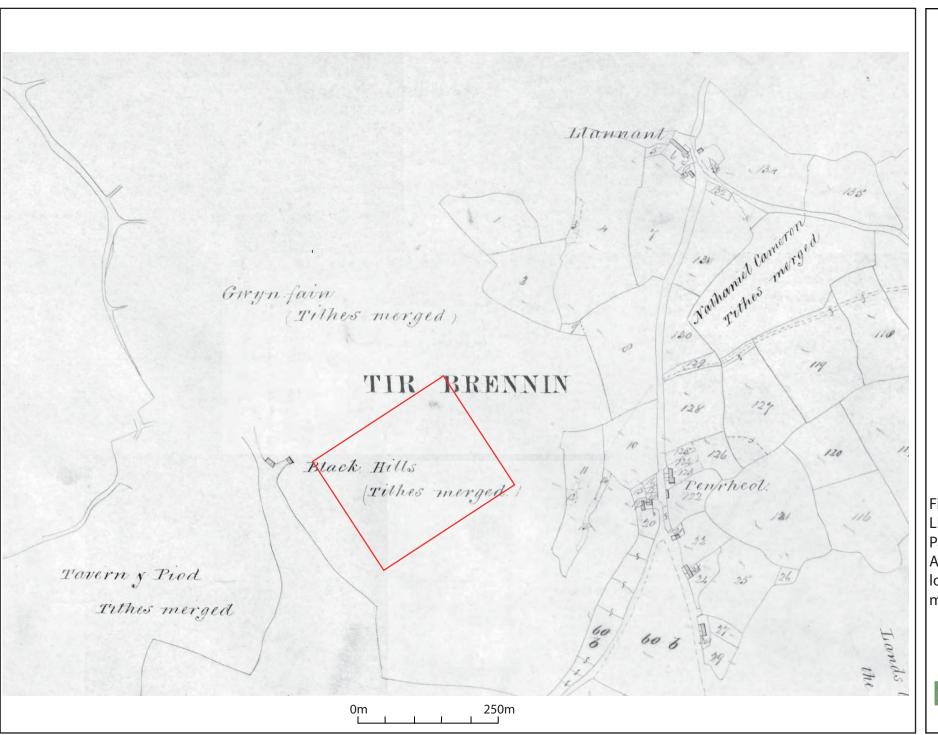




Figure 5: Tithe map, Llandeilo Talybont Parish 1844. Approximate location of site marked in red.



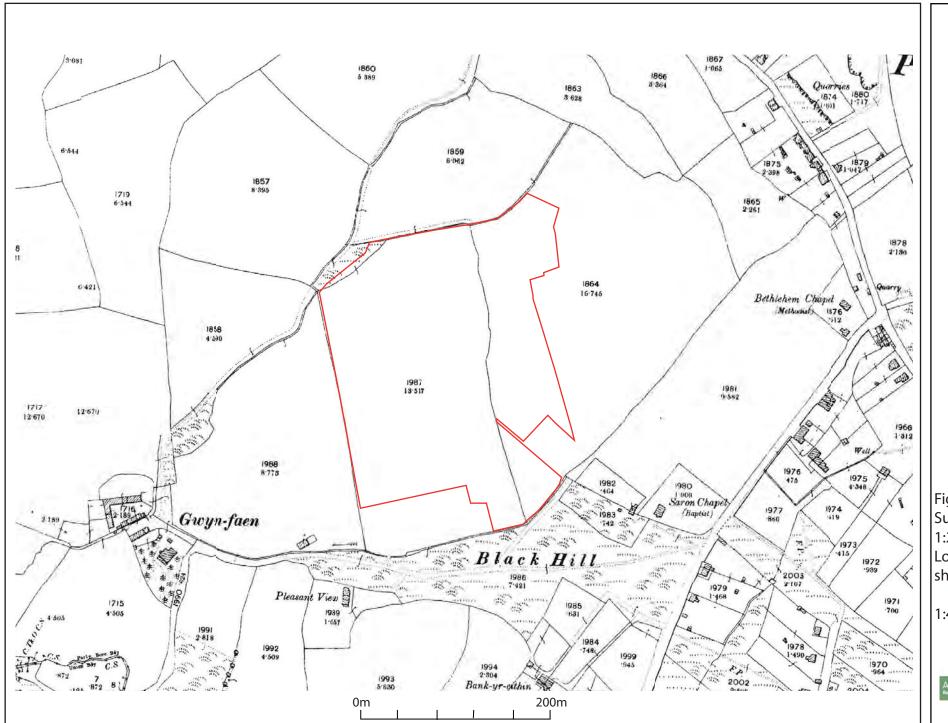




Figure 6: Ordnance Survey county series 1:2500 map of 1898. Location of site shown in red.

1:4000 @ A4









Figure 7: Aerial photographs taken by the RAF in 1946 (left) and 1951 (right) Approximate site location marked in red.

Photos courtesy of the aerial photography unit, Welsh Govt.



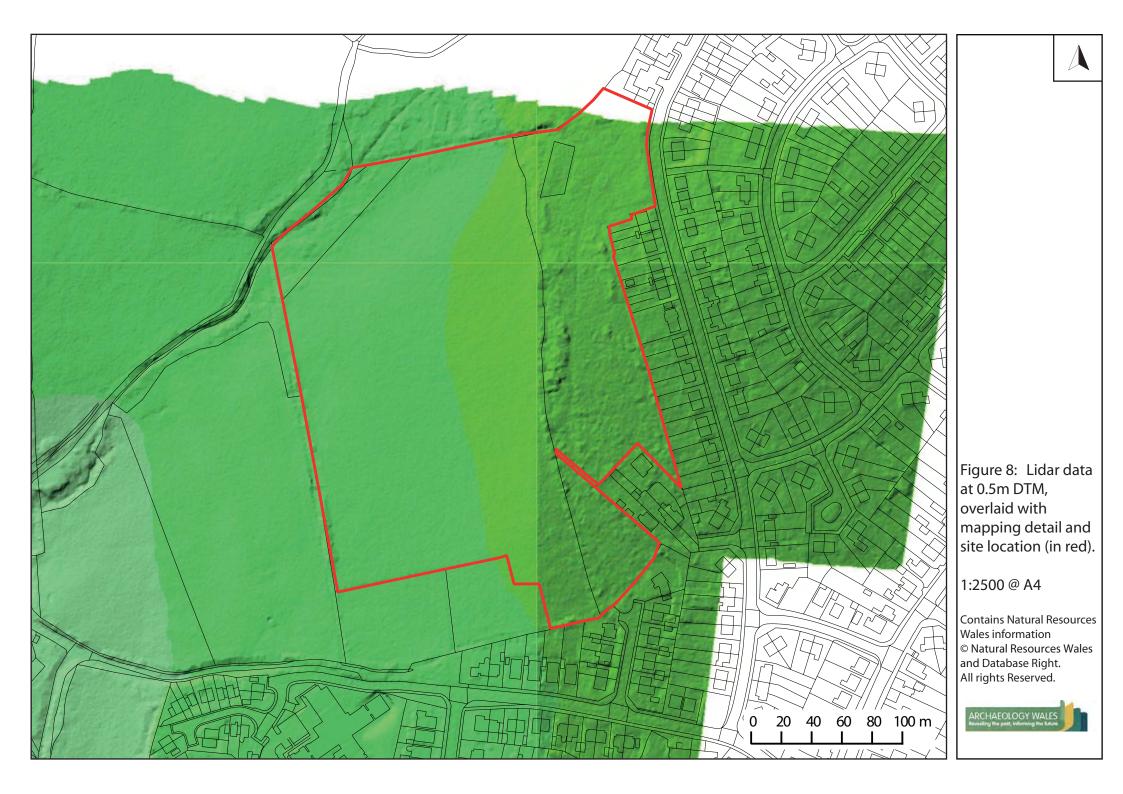




Photo 1: View from the southern end of site, on Ffordd Y Coegylfinir, looking west across the site to the River Loughor.



Photo 2: General view of site, looking north across the western field from the southern boundary.



Photo 3: View from the southern end of the site, on Ffordd Y Coegylfinir, looking north-east across the western field to the eastern area of scrub.



Photo 4: View from the southern edge of site, on Ffordd Y Coegylfinir, looking north along the boundary between the main western field and the eastern area of scrub (on the right).



Photo 5: Gwyn Faen Farm, 250m to the west of site. Looking south-west.



Photo 6: General view across site from the western boundary, showing the western field, eastern area of scrub, and modern housing beyond. Looking south-east.



Photo 7: General view across site from the western boundary, showing the western field, and eastern area of scrub beyond. Looking east.



Photo 8: View of the wooded area on the north-western edge of the western field. Looking east.



Photo 9: General shot looking away from site across the River Loughor. Taken from the western boundary, looking south-west.



Photo 10: View of the northern site boundary with the modern housing development Heol Y Pibydd, showing the stream/drainage ditch. Looking west.



Photo 11: View across the western field from the edge of the eastern area of scrub. Looking south-west.



Photo 12: View of the northern part of the eastern area of scrub showing the recent levelling activity and children's play area. Looking east.



Photo 13: General shot of the eastern area of scrub. Looking south.



Photo 14: Looking north along the eastern boundary of site with the rear gardens of Gower View Road, showing the trackway and modern housing development. Looking north.

Archaeology Wales

APPENDIX I: HER Gazetteer

GLAMORGAN GWENT ARCHAEOLOGICAL TRUST HISTORIC ENVIRONMENT RECORD ENQUIRY REPORT - CORE RECORDS

Enquiry reference number: 5757
Prepared by: Calli Rouse, Glamorgan Gwent Archaeological Trust
Produced for: Philip Poucher, Archaeology Wales

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Search criteria

1km radius of NGR SS 57914 99484

PRN 00207w NAME ROMAN COIN FROM GORSEINON NGR SS58499902 COMMUNITY Gorseinon TYPE Roman, Findspot, RANK: 1 SUMMARY A rare variety - of Antoninus Pius in good condition.

DESCRIPTION Found in foundation of hospital 1932. A rare variety - of Antoninus Pius in good condition.

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

Arch Camb Vol 91 1936 p311

PRN 00992w NAME ST MICHAELS CHURCH NGR SS57359899 COMMUNITY Llwchwr TYPE Post-Medieval, Church, RANK: 1 SUMMARY Built 1185 Victorian Gothic

DESCRIPTION Built 1185 Victorian Gothic

CONDITION

CONDITION: Intact DESCRIPTION: - RELATED EVENT: - RECORDED: 1980

STATUS None recorded

CROSS REFERENCES Associated with 223w

SOURCES

01/mm mention/Lliw Valley BC//1980/Listed Building List/

PRN 01203w NAME Forge, Gorseinon NGR SS57959860 COMMUNITY Gorseinon

TYPE Post-Medieval, Forge, RANK: 1

SUMMARY This site comprises a Post-Medieval forge situated within Gorseinon. No further information is currently available.

DESCRIPTION This site comprises a Post-Medieval forge situated within Gorseinon. No further information is currently available.

CONDITION

CONDITION: Destroyed DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

PRN 01268w NAME Mine, Llwchwr NGR SS57829853 COMMUNITY Llwchwr

TYPE Post-Medieval, Mine, RANK: 1

SUMMARY This site comprises a Post-Medieval mine situated within Llwchwr. The mine is not visible on the 1st-3rd edition OS maps; no further information is currently available.

DESCRIPTION This site comprises a Post-Medieval mine situated within Llwchwr. The mine is not visible on the 1st-3rd edition OS maps; no further information is currently available.

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED: 1981

STATUS None recorded CROSS REFERENCES - -

SOURCES

Map Ordnance Survey 2nd Edition OS map 6" Map Ordnance Survey 1st Edition OS map 6" Map Ordnance Survey 3rd Edition OS map 6"

PRN 01289w NAME QUARRY, Gorseinon NGR SS58349970 COMMUNITY Gorseinon

TYPE Post-Medieval, Quarry, RANK: 1

SUMMARY Quarry visible on OS 1st (1877), 2nd (1898), 3rd (1916) and 4th (1935) edition maps.

DESCRIPTION *Quarry visible on OS 1st (1877), 2nd (1898), 3rd (1916) and 4th (1935) edition maps.*

CONDITION

CONDITION: Destroyed DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

PRN 01290w NAME Quarry, Gorseinon NGR SS58409973 COMMUNITY Gorseinon

TYPE Post-Medieval, Quarry, RANK: 1

SUMMARY This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as an 'Old Quarry'. No further information is currently available.

DESCRIPTION This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as an 'Old Quarry'. No further information is currently available.

CONDITION

CONDITION: Destroyed DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

Map Ordnance Survey 3rd Edition OS map 6"

PRN 01291w NAME Quarry, Gorseinon NGR SS58439953 COMMUNITY Gorseinon

TYPE Post-Medieval, Quarry, RANK: 1

SUMMARY This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as an 'Old Quarry'. No further information is currently available.

DESCRIPTION This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as an 'Old Quarry'. No further information is currently available.

CONDITION

CONDITION: Destroyed DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

Map Ordnance Survey 3rd Edition OS map 6"

PRN 01294w NAME Quarry, Gorseinon NGR SN58100005 COMMUNITY Gorseinon

TYPE Post-Medieval, Quarry, RANK: 1

SUMMARY This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as possessing multiple quarries with pathways running throughout. No further information is currently available.

DESCRIPTION This site comprises a Post-Medieval quarry situated within Gorseinon. The 3rd edition OS map depicts the area as possessing multiple quarries with pathways running throughout. No further information is currently available.

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

Map Ordnance Survey 3rd Edition OS map 6"

PRN 01934w NAME LLANNENT NGR SN57650013 COMMUNITY Gorseinon

TYPE Unknown, Settlement, RANK: 1

SUMMARY In 1550 several farmsteads apparently at Llannant where today there's just 1. "It is very likely that these farmsteads, held by tenants of the landlord of the grange . and the present farm represents the reamains of a shrunken medieval settlement."

DESCRIPTION In 1550 several farmsteads apparently at Llannant where today there's just 1. "It is very likely that these farmsteads, held by tenants of the landlord of the grange . and the present farm represents the reamains of a shrunken medieval settlement."

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS None recorded CROSS REFERENCES - -

SOURCES

PRN 01935w NAME GWYN FAEN NGR SS57619925 COMMUNITY Gorseinon

TYPE Post-Medieval, Settlement, RANK: 1

SUMMARY This site comprises a Post-Medieval Settlement entitled 'Gwyn Faen' situated within the community of Gorseinon. The RCAHMW description is as follows: 'Gwyn-faen is a mid nineteenth-century, two storey house with a symmetrical facade under a curving canopy with cast-iron open columns' (National Monument Records).

DESCRIPTION This site comprises a Post-Medieval Settlement entitled 'Gwyn Faen' situated within the community of Gorseinon. The RCAHMW description is as follows: 'Gwyn-faen is a mid nineteenth-century, two storey house with a symmetrical facade under a curving canopy with cast-iron open columns' (National Monument Records).

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS *None recorded*

CROSS REFERENCES Same as 18908

SOURCES

Archive RCAHMW National Monuments Record

PRN 01937w NAME Lime Kiln, Gorseinon NGR SN57180044 COMMUNITY Gorseinon

TYPE Post-Medieval, Lime kiln, RANK: 1

SUMMARY Duplicate of PRN 01936w

DESCRIPTION Duplicate of PRN 01936w

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED:

STATUS *None recorded*

CROSS REFERENCES - -

SOURCES

PRN 02823.0w NAME LWCHWR GROYNE NGR SS57209983 COMMUNITY Gorseinon

TYPE Post-Medieval, Groyne, RANK: 1

SUMMARY This site comprises a Post-Medieval Groyne situated within the community of Gorseinon. No further information is currently available.

DESCRIPTION This site comprises a Post-Medieval Groyne situated within the community of Gorseinon. No further information is currently available.

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED: 1997

STATUS *None recorded*

CROSS REFERENCES - -

SOURCES

PRN 05213w NAME FFYNNON GWLANGEL NGR SS57739902 COMMUNITY Gorseinon

TYPE Unknown, Holy well, RANK: 1

SUMMARY Ffynnon Gwylangel on Gwynfaen farm, Llandeilo Talybont parish: 'Gwyl Fihangel' is a suggested etymology.

DESCRIPTION Ffynnon Gwylangel on Gwynfaen farm, Llandeilo Talybont parish: 'Gwyl Fihangel' is a suggested etymology (Jones 1954, 182). Evans 2003: GGAT 73 Early-Medieval Ecclesiastical Sites Project database

CONDITION

CONDITION: Not known DESCRIPTION: - RELATED EVENT: - RECORDED: 2004

STATUS None recorded CROSS REFERENCES - -

SOURCES

Book Jones, F 1954 The Holy wells of Wales GG.9121.JON Evans EM, 2003-04, GGAT 73 Early Medieval Ecclesiastical Sites Project

AM - 03.20.18 (15:03) - HTML file produced from GGAT HER, GGAT file number 1773. Glamorgan Gwent Archaeological Trust, Heathfield House, Heathfield, Swansea, SA1 6EL. tel (01792) 655208, fax (01792) 474696, email her@ggat.org.uk, website www.ggat.org.uk

Archaeological data, from the Regional Historic Environment Record, supplied by The Glamorgan-Gwent Archaeological Trust in partnership with Local Authorities, Cadw and the partners of ENDEX GGAT, 2010.

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APPENDIX II: Designated Archaeological Sites

Conservation Areas within 5km

Local Planning Authority	Reference	Name	Date of
			designation
SWANSEA	WAL/SWA/CA:015	Penclawdd	1976/01/01
SWANSEA	WAL/SWA/CA:029	Loughor	1973/08/17

Historic Parks & Gardens within 5km

Reference No.	Name	NGR	Grade
GM54	Penllergaer	SS6261198211	П

Scheduled Ancient Monuments within 5km

Reference No.	Name	Eastings	Northings	Site Type	General Period
CM096	Hendy Castle Mound	258413	203221	Motte	Medieval
CM097	Hendy Earthwork	258519	203319	Enclosure	Medieval
CM262	Glynea Colliery	254781	199148	Coal Mine	Post-
					Medieval/Modern
CM263	Genwen Engine House	254575	199575	Engine	Post-
				house	Medieval/Modern
CM265	St David's Colliery	253940	201330	Coal Mine	Post-
					Medieval/Modern
CM266	Penprys Pit Engine House	254040	201818	Engine	Post-
				house	Medieval/Modern
CM282	Pencoed Lead Works	256100	199572	Lead mine	Post-
					Medieval/Modern
CM324	Capel Dewi, Llwynhendy	253893	199698	Chapel	Medieval
GM046	Loughor Castle	256435	197982	Castle	Medieval
GM199	Garn Goch Round Barrow	260557	198073	Round	Prehistoric
				barrow	
GM200	Llandeilo Castle Mound	258685	202670	Motte	Medieval
GM201	Pant-y-Ffa Round Cairn	261840	202706	Round cairn	Prehistoric
GM268	Dan-y-Lan Camp	255434	195776	Enclosure	Prehistoric
GM269	Mynydd Carn-Goch Roman	260822	197184	Practice	Roman
	Earthworks			camp	
GM363	St Michael's Chapel, Cwrt-y-	257192	200428	Chapel	Medieval
	Carne				
GM398	Penclawdd Sea Dock and	255262	196063	Dockyard	Post-
	Canal				Medieval/Modern
GM410	Remains of Astronomical	262264	199096	Observatory	Post-
	Observatory at Penllergaer				Medieval/Modern
GM415	Site of St Teilo's Old Parish	258470	203004	Church	Medieval
	Church, Llandeilo, Talybont				
	(now removed to St Fagans)				

GM501	Melin Mynach, Gorseinon	259271	199059	Mill	Post-
					Medieval/Modern
GM502	Roman Practice Camp on	259147	197301	Practice	Roman
	Stafford Common			camp	
GM596	Penllergaer Orchideous	262415	198796	Garden	Post
	House			building	Medieval/Modern

Listed Buildings within 5km

Reference No.	Name	Eastings	Northings	Grade
11194	Y Bwthyn	259526	203823	H
11196	The Old Town Hall	256550	198079	II
11208	Circular Pigsty at Beili Gras	260695	203859	II
18233	The Sanctuary	256438	198048	11
19450	Neuadd-fach	258550	203886	П
19452	Viaduct at Morlais Junction East (partly in Grovesend community)	258182	202527	II
19454	Hen Gapel (also known as Tynewedd Chapel)	257214	203457	П
20547	Loughor Railway Viaduct (partly in Llwchwr community)	256027	198021	II
21095	St Cennych's Church	256059	201878	П
21096	Bethesda Chapel	255930	201984	П
21097	Bethesda Capel Bach	255960	201970	II
21103	Cornish Engine House of Penprys Colliery	254013	201821	П
21104	Capel Salem	256102	201770	II
22086	Hope Independent Chapel	259058	203752	II
22768	Church of St John	259014	196432	П
22769	Temple United Reformed Church	259119	196267	П
22770	Cefn Goleu Park	257142	195605	II
23484	Caer Eithin Engine House, Berthlwyd Colliery	256110	194650	II
25866	Viaduct at Morlais Junction East (partly in Llanedi community)	258297	202513	II
26256	Pont Lliw Mill	260940	200800	II
26257	Penderi Fawr Farmhouse including attached cowhouse	261901	199587	II
26258	Gwenlais-uchaf	261845	201552	П
26259	Barn at Gwenlais-uchaf	261831	201566	П
26260	Church of Saint Catherine	258637	198714	П
26261	War Memorial in grounds of Church of Saint Catherine	258664	198707	II
26496	Bryn-rhos	262058	197707	II
26497	North farmyard range at Bryn-rhos	262061	197743	П
26498	West farmyard range at Bryn-rhos	262046	197727	П
26499	East farmyard range at Bryn-rhos	262074	197726	П
26500	The Equatorial Observatory, Penllergare	262260	199094	11*
26846	Loughor Railway Viaduct (partly in Llanelli Rural community)	256141	197985	II
26847	Capel Moriah	257706	198114	П

26848	Schoolroom at Capel Moriah	257692	198116	П
26849	Gates and railings at Capel Moriah	257700	198100	11
26850	The War Memorial	257151	198224	II
26851	Boundary Stone at Kingsbridge	259172	197737	II
81147	The War Memorial	258933	203842	II
81148	Wall and Railings at Hope Independent	259050	203736	II
	Chapel			
87524	Church of the Blessed Sacrament	258517	198620	II

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APPENDIX III Written Scheme of Investigation



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WRITTEN SCHEME OF INVESTIGATION

FOR AN ARCHAEOLOGICAL DESK-BASED ASSESSMENT AT LAND AT GWYNFAEN FARM, PENYRHEOL, SWANSEA

Prepared for:

Asbri Planning

Project No: 2590

February 2018



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Figure 1. Site location

Figure 2. Detailed plan of the site

Summary

This Written Scheme of Investigation (WSI) details the proposal for an archaeological Desk Based Assessment and Site Visit in association with the proposed development of approximately 150 dwellings on land off Brynafon Road/Gower View Road, Penyrheol, Swansea centred on SS 57914 99484. It has been prepared by Archaeology Wales Ltd for Asbri Planning prior to the proposed submission of a planning application. The local planning authority is the City and County of Swansea.

The purpose of the proposed Desk Based Assessment and Site Visit is to highlight and assess the impact of the proposed development on the archaeological resource.

All work will be undertaken in accordance with the standards and guidelines of the Chartered Institute for Archaeologists (2014).

1. Introduction and planning background

This WSI details the proposal for an archaeological Desk Based Assessment and Site Visit to be undertaken in association with the proposed development of approximately 150 dwellings on land off Brynafon Road/Gower View Road, Penyrheol, Swansea centred on SS 57914 99484 (Figure 1 and 2). The site is currently in the pre-planning stages, the local planning authority is the City and County of Swansea (CCS).

This WSI has been prepared by Philip Poucher MCIfA, Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of Asbri Planning on behalf of their clients.

The methodology set out in this WSI has been agreed with Glamorgan-Gwent Archaeological Trust – Curatorial Division (GGAT-CD) in its capacity as archaeological advisors to the local planning authority (CCS). The purpose of the proposed Desk Based Assessment and Site Visit is to provide the CCS with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy (revised edition 9, 2016), Section 6.5 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to highlight and assess the impact of the proposed development on the archaeological resource.

All work will conform to the Standard and Guidance for Archaeological Desk Based Assessment (CIfA 2014) and be undertaken by suitably qualified staff to the highest professional standards. AW is a Registered Organisation with the CIfA.

2. Development Details & Site Description

The proposed development is still in the developmental stages and therefore detailed proposed designs are not yet available. However, it is understood that the proposed development will comprise plans for approximately 150 dwellings, along with associated infrastructure and ancillary works.

The site has been allocated for residential development in the adopted Unitary Development Plan, and between 2013 and 2016 residential development was established to the south and north of the current site. The remaining area between the recent developments comprises a large field of rough pasture, bounded by hedgerows, with an area of woodland and scrub along the eastern edge. The site slopes down to the west, from approximately 40mOD to 30m OD. A stream/drain runs along the northwest boundary. The site covers an area of approximately 6.5 hectares.

To the north the site is bounded by recent development, with mixed residential development and agricultural land beyond. To the south the site is bounded by recent development, with further late-20th century residential development along Brynafon Road and beyond. To the east the site is bounded by mid to late 20th century residential development along Gower View Road and beyond. This residential development forms the western limit of nucleated settlement at Penyrheol. To the west the site is bounded by agricultural land, comprising largely irregular fields of rough pasture, bounded by hedgerows, with the tidal marshes along the River Loughor beyond.

The tidal marshes lie approximately 50m to the west, with the river itself approximately 400m to the west. The settlement of Penyrheol forms the eastern and southern boundary, and runs continuously into the settlement of Gorseinon beyond, with Loughor lying approximately 1km to 1.5km to the southwest. The centre of Swansea lies some 9km to the southeast, and Llanelli 7km to the west.

The underlying geology of the area comprises mudstones, siltstones and sandstones of the Grovesend Formation, overlain by Devensian till (BGS 2018).

3. Objectives

The primary objective will be to assess the impact of the development proposals on the historic environment by means of a Desk Based Assessment and Site Visit. This will help inform future decision making, design solutions and potential mitigation strategies. The aim will be to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.

The work will include a comprehensive assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

The work will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

4. The proposed archaeological work

The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- Desk Based Assessment (Stage 1)
- A site visit (Stage 2)
- The production of an illustrated report (Stage 3)

5. Method Statement for a Detailed Desk Based Assessment (Stage 1)

The assessment will consider the following:

- a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area through assessment of various readily available primary sources:
- 1. Collation and assessment of all relevant information held in the regional HER at Swansea, including listed building records, within a 1km radius of the assessment area boundary.
- 2. Collation and consideration of the impact on Designated archaeological sites (Scheduled Ancient Monuments, Historic Parks & Gardens, registered historic landscapes, Conservation Areas) within a 5km radius of the assessment area boundary.
- 3. Assessment of all available excavation report and archives including unpublished and unprocessed material affecting the site and its setting.
- 4. Assessment of all relevant extant aerial photographic (AP) evidence. This will include those held by the regional HER and the Central Register of Air Photography for Wales, in Cardiff.

- 5. All sources indexed in the County Archive, and as appropriate, site files held by the RCAHMW.
- 6. Records held by the developer e.g. bore hole logs, geological/geomorphological information, aerial photographs, maps, plans
- 7. Map regression analysis using all relevant cartographic sources e.g. All editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
- 8. Place name evidence
- 9. Internet sourced satellite imagery and Lidar imagery as available.
- 10. Assessment of records held at the Portable Antiquities Scheme.
- 11. Historic documents (e.g. Charters, registers, estate papers).
- b) The significance of any remains in their context both regionally and nationally and in light of the findings of the desk based study.
- c) The history of the site, based on the areas of research outlined above.
- d) The potential impact of any proposed development on the setting of known sites of archaeological importance (this will constitute a brief assessment, rather than a formal assessment such as that detailed in the Cadw guidelines of 2017).
- e) The potential for further archaeological remains to be present, which have not been identified in pre-existing archaeological records.
- f) The potential for further work, with recommendations if requested and where appropriate for a suitable investigative and/or mitigation methodology.

6. The Site Visit (Stage 2)

The site visit will be a visual walked search of the entire development area. The ground surface will be visually inspected for all earthworks, structures and finds. The location of any environmental archaeological deposits, or areas which may have a potential for such deposits, will also be taken into account along with the more traditional 'visible' archaeology.

All located sites or finds will be accurately fixed by means of GPS. Each individual find or site location will have an accurate NGR reference attached. Where a close cluster of related features is identified a single NGR for the centre of the cluster will be used, and each constituent feature separately described in the text.

The character, function, condition, vulnerability, potential dating and relationship to other features of each identified site or find will be described fully. The importance of the site or find will be assessed in terms of local, regional or national significance.

A sketch survey of each identified site layout will be made with accompanying metric measurements

Written, drawn and photographic records of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs, including metric scales, will be taken using cameras with resolutions of 10 mega pixels or above. Photographs will be taken in RAW format.

Illustrations will be drawn to a scale of 1:50, 1:20 and 1:10 as required, and these will be related to Ordnance Survey datum and published boundaries where appropriate.

7. The production of an illustrated report and the deposition of the site archive (Stage 3)

A report will be produced which synthesises the results of stages 1 and 2 and thereby assesses the total archaeological resource within the development area.

The results will be presented in such a way that data and supporting text are readily cross-referenced. The regional HER Officer will be contacted to ensure that any sites or monuments not previously recorded in the HER are given a Primary Record Number (PRN) and that data structure is compatible with the HER. The historical development of the site will be presented in phased maps and plans comprising clearly, the outline of the site.

Within the report an attempt will be made to indicate areas of greater or lesser archaeological significance and the sites will be ranked in level of overall archaeological importance (locally, regionally and nationally).

All relevant aerial photographs and historic maps will be included and be fully referenced. Any site photographs included in the report will be appropriately captioned and clearly located on a suitably scaled site plan.

The report will be used to inform future decision making regarding further stages of archaeological work (Field Evaluation, Watching Brief etc), the development construction and processes used.

The report will specifically include the following:

- 1. a copy of the design brief
- 2. a location plan

- 3. all identified sites plotted on an appropriately scaled plan of the proposal site
- 4. a gazetteer of all located sites and finds with full dimensional and descriptive detail including grid reference and period

Copies of the report will be sent to: Asbri Planning Ltd, GGAT-CD, and for inclusion in the regional HER. Digital copies will be provided in pdf format if required.

Any further stages of archaeological work, after the submission of the report for stages one and two outlined above, will be the subject of an additional GGAT-CD curatorial brief against which a further AW specification will be drawn up.

The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited with the National Monuments Records, held and maintained by the RCAHMW, Aberystwyth, on completion of site analysis and report production. It will also conform to the guidelines set out in 'The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017' (National Panel for Archaeological Archives in Wales 2017). The digital archive will be deposited with the NMR.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after completion of the work.

Other significant digital data generated by the survey (ie AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

8. Staff

The project will be managed by Philip Poucher MCIfA (AW Project Manager) and the assessment undertaken by Susan Stratton (Archaeology Wales). Any alteration to staffing before or during the work will be brought to the attention of GGAT-CD and the client.

Additional Considerations

9. Health and Safety

9.1. Risk assessment

Prior to the commencement of the site visit AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations* 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

9.2. Other guidelines

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology (2002)*.

10. Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

11. Quality Control

11.1. Professional standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for **Archaeologists'** Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology and the Standard and Guidance for archaeological watching briefs currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

11.2. Project tracking

The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

12. Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' Arbitration Scheme for the Institute for Archaeologists applying at the date of the agreement.

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APPENDIX IV: Archive Cover Sheet

ARCHIVE COVER SHEET

Land at Gwynfaen Farm, Penyrheol, Swansea

Site Name:	Land at Gwynfaen Farm, Penyrheol, Swansea
Site Code:	GFP/18/DBA
PRN:	-
NPRN:	-
SAM:	-
Other Ref No:	-
NGR:	NGR SS 57914 99484
Site Type:	Housing development on agricultural land
Project Type:	Desk Based Assessment
Project Manager:	Philip Poucher
Project Dates:	January 2018 - May 2018
Categories Present:	-
Location of Original Archive:	AW
Location of duplicate Archives:	RCAHMW, Aberystwyth
Number of Finds Boxes:	-
Location of Finds:	-
Museum Reference:	-
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

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