

## CHAPTER 11: ARCHAEOLOGY AND HERITAGE

### Introduction

- 11.1 This chapter assesses the impact of the proposed development on Archaeology and Heritage. In particular, it considers the potential effects of the proposed development on both the upstanding heritage (including Scheduled Ancient Monuments, Listed Buildings) as well as the potential for significant below ground archaeological remains to survive across the three proposed development areas. Upstanding features (including Scheduled Ancient Monuments, Listed Buildings), and known location of historic features will be discussed individually, along with the archaeological potential across each development. The results of the programme of evaluation trenching have also been incorporated into this chapter.
- 11.2 The chapter describes the methods used to assess the impacts, the baseline conditions currently existing within the three development zones and surroundings, the potential direct and indirect impacts of the development arising from the below ground impact on identified and as yet, undefined archaeological assets, as well as the visual impact on known historical assets from the development proposals and the mitigation measures required to prevent, reduce, or offset the impacts and the residual impacts. It has been written by John Roberts, Richard Cooke, Jane Kenney, Robert Evans and Andrew Davidson of the Gwynedd Archaeological Trust.

### Planning Policy Context

#### National Planning Policy

- 11.3 The framework for the protection of archaeology in Wales within the planning process is provided by Welsh Office Circular 60/96 'Planning and the Historic Environment: Archaeology' (December 1996) in conjunction with Planning Policy Wales (chapter 6; 2011) and Cadw's position on the sustainable management of the historic environment in Wales as defined in *Conservation Principles* published in March 2011.

#### Local Planning Policy

- 11.4 This chapter has been written with reference to the current local authority development plan framework which includes the IOACC Stopped Unitary Development Plan (UDP), Gwynedd Structure Plan (1993) and the IOACC Local Plan (1996).
- 11.5 Policy EN12 of the Anglesey UDP relates specifically to archaeological sites and the historic environment. It states:

*'The Council will use its planning powers to ensure that Scheduled Ancient Monuments and their settings are retained intact and preserved for future generations. Unscheduled Archaeological Sites and broader historic landscapes which merit protection for their historic interest and significance will also be protected.' Furthermore, 'Where proposals affect other unscheduled archaeological remains which do not merit preservation, provision will be made to encourage, develop or provide further opportunities to record, investigate, properly manage, understand or enhance the historic environment.'*

11.6 Policy D15 of the Structure Plan states that:

*'in considering proposals for development the planning authorities will ensure that:*

- i scheduled ancient monuments and their settings will be preserved intact and areas of archaeological importance and unscheduled archaeological sites (including those important sites which are presently unknown but which may be discovered during the plan period) and their settings which are considered to be of sufficient regional, local or academic interest to merit preservation, will be preserved and planning permission will be refused;*
- ii for archaeological sites not meriting preservation, planning consent will be withheld until provision has been made by the developer for an appropriate archaeological response before and during the development, either through written legal agreement or through the attachment of conditions to any planning consent;*
- iii for archaeological sites of unknown importance and areas of high archaeological potential provision will be made for investigation before and during development*
- iv schemes for development of visitor and educational facilities at and management of appropriate archaeological sites will be encouraged provided they comply with the above.'*

## Approach

### Desk Based Assessment Methodology

11.7 The assessment is based upon the guidelines set out in *Welsh Office Circular 60/96 'Planning and the Historic Environment: Archaeology'* (December 1996) and *Welsh Office Circular 61/96 'Planning and the Historic Environment: Historic Buildings and Conservation Areas'* (December 1996). The assessment is also based upon guidelines set out in *Standards and Guidance: Desk-based Assessments* (IFA, 1994, revised 2001 & 2008). The proposals for fulfilling these requirements were as follows:

- a) to identify and record the cultural heritage of the area to be affected
- b) to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape)
- c) to recommend ways in which damage to the cultural heritage can be avoided or minimised.

11.8 This involved consultation of maps, computer records, written records and reference works, which make up the Historic Environment Record (HER), located at Gwynedd Archaeological Trust, Bangor. A range of aerial photographs were examined at National Monuments Record, Aberystwyth dating from the 1940's and 1960's, as well as more recent colour aerial coverage. Estate maps, tithe maps and OS maps were examined at the University of Wales Bangor archives and the National Library of Wales, Aberystwyth. The University holds the Penrhos archive which is a vast collection of estate papers and other manuscripts relating to the Stanley family. The map evidence only has been used for this report, but it needs to be recognised that the collection as a whole comprises a huge resource which has the potential to contribute further to our understanding of the development of Penrhos estate.

11.9 Information about Listed Buildings and Scheduled Ancient Monuments was obtained from Cadw. Secondary sources were consulted to provide background information, particularly on the development of the town and harbour of Holyhead. A programme of archaeological excavation has recently been undertaken to the east of the study area, at Ty Mawr and Trefignath, and also prior to the construction of the A55 dual carriageway. Both these programmes of work confirmed the dense distribution of archaeology within the area. Sites noted on the Gwynedd HER are referred to by their Primary Record Number (PRN), a unique number given to each site. A full list of sources consulted is given in the references section below.

11.10 The available information was synthesised to give a summary of the archaeological and historic background and of the assessment and recommendations, as set out below

11.11 The criteria used for assessing the value of features was based upon those used by the Secretary of State for Wales when considering sites for protection as scheduled ancient monuments, as set out in the Welsh Office circular 60/96. The definitions of categories used for impact, field evaluation and mitigation are set out below.

### **Geophysical Survey Assessment Methodology**

11.12 Detailed magnetic survey (gradiometry) was used as an efficient and effective method of locating archaeological anomalies and ground penetrating radar was selected as the most suitable methodology for the identification of bedrock.

11.13 *Gradiometry:* Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument. The mapping of the anomaly in a systematic manner allows an estimate of the type of material present beneath the surface. Strong magnetic anomalies are generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and ditches are seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil.

11.14 The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The instrument consists of two fluxgates very accurately aligned to nullify the effects of the Earth's magnetic field. Readings relate to the difference in localised magnetic anomalies compared with the general magnetic background. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each gradiometer has a 1m separation between the sensing elements so enhancing the response to weak anomalies.

11.15 *Radar:* Two of the main advantages of radar are its ability to give information of depth as well as work through a variety of surfaces, even in cluttered environments which normally prevent other geophysical techniques being used. A short pulse of energy is emitted into the ground and echoes are returned from the interfaces between different materials in the ground. The amplitude of these returns depends on the change in velocity of the radar wave as it crosses these interfaces. A measure of these velocities is given by the dielectric constant of that material. The travel times are recorded for each return on the radargram and an approximate conversion made to depth by calculating or assuming an average dielectric constant.

11.16 Drier materials such as sand, gravel and rocks, i.e. materials which are less conductive (or more resistant), will permit the survey of deeper sections than wetter materials such as clays which are more conductive (or less resistant). Penetration can be increased by using longer wavelengths (lower frequencies) but at the expense of resolution.

11.17 As the antennae emit a "cone" shaped pulse of energy an offset target showing a perpendicular face to the radar wave will be "seen" before the antenna passes over it. A resultant characteristic *diffraction* pattern is thus built up in the shape of a hyperbola. A classic target generating such a diffraction is a pipeline when the antenna is travelling across the line of the pipe. However it should be pointed out that if the interface between the target and its surrounds does not result in a marked change in velocity then only a weak hyperbola will be seen, if at all.

11.18 The Ground Probing Impulse Radar used was a SIR3000 system manufactured by Geophysical Survey Systems Inc. (GSSI). The radar surveys were carried out with a 200MHz antenna. This mid-range frequency offered a good combination of depth of penetration and resolution.

### **Field Evaluation Methodology**

11.19 A programme of targeted field evaluation and a report on the findings of this phase of work has been completed. Forty-four trenches were excavated to target anomalies identified in the geophysical survey. Any significant archaeological deposits encountered were manually cleaned, excavated and recorded to determine extent, function, date and relationship to adjacent features.

11.20 All trenches and any archaeological features located were planned to scale, and located via digital survey (*Trimble R8 GNSS GPS*). A written record of the archaeological features discovered was created, and a digital photographic record maintained throughout the programme of works.

### **Significance Criteria**

11.21 The present assessment is based upon the guidelines set out in *Design Manual for Roads and Bridges Volume 11, Section 3, Part 2* and also as set out in *Standards and Guidance: Desk-based Assessments* due to the Standardised significance criteria used to assist the reader greatly in understanding the assessment results. The significance of effect is derived from the importance of the resource and the magnitude of the impact upon it.

### **Assessment of the Value of Archaeological Assets**

11.22 All archaeological sites should be assessed for value, and allocated to one of the categories listed below. The allocation of a site to a category defines the value of the archaeological resource of that site.

Table 11.1: Factors for assessing the value of archaeological assets

International (Very High)	<ul style="list-style-type: none"> <li>• World Heritage Sites (including nominated sites).</li> <li>• Assets of acknowledged international importance.</li> <li>• Assets that can contribute significantly to acknowledged international research objectives. (Previously Category A)</li> </ul>
National (High)	<ul style="list-style-type: none"> <li>• Scheduled Monuments (including proposed sites).</li> <li>• Undesignated assets of schedulable quality and importance.</li> <li>• Assets that can contribute significantly to acknowledged national research objectives.</li> </ul>

	(Previously Category A)
Regional/ County (Medium)	<ul style="list-style-type: none"> <li>Designated or undesignated assets that contribute to regional research objectives.</li> </ul> <p>(Previously Category B)</p>
Local (Low)	<ul style="list-style-type: none"> <li>Designated and undesignated assets of local importance.</li> <li>Assets compromised by poor preservation and/or poor survival of contextual associations.</li> <li>Assets of limited value, but with potential to contribute to local research objectives.</li> </ul> <p>(Previously Category C)</p>
Negligible/ None	<ul style="list-style-type: none"> <li>Assets with very little or no surviving archaeological interest.</li> </ul> <p>(Previously Category D)</p>
Unknown	<ul style="list-style-type: none"> <li>The importance of the resource has not been ascertained.</li> </ul> <p>(Previously Category E)</p>

### Magnitude of impacts

11.23 The definition of impacts on the cultural heritage are defined as follows (based on DMRB Volume 11, 2007).

Table 11.2: Factors in the Assessment of Magnitude of Impacts

Magnitude	Direct Impact	Indirect Impact
High Adverse	Complete removal of an archaeological site. Complete destruction of a designated building or structure.	Radical transformation of the setting of an archaeological monument. A fundamental change in the setting of a building.
Medium Adverse	Removal of a major part of an archaeological site and loss of research potential.  Extensive alteration (but not demolition) of a historic building or feature, resulting in an appreciable adverse change.	Partial transformation of the setting of an archaeological site (e.g. the introduction of significant noise or vibration levels to an archaeological monument leading to changes to amenity use, accessibility or appreciation of an archaeological site). Partial adverse transformation of the setting of a designated building.
Low Adverse	Removal of an archaeological site where a minor part of its total area is removed but the site retains a significant future research potential.  Change to a historic building or feature resulting in a small change in the resource and its historical context and setting.	Minor change to the setting of an archaeological monument or historic building.
Negligible/ Neutral	No impact from changes in use, amenity or access. No change in the ability to understand and appreciate the resource and its historical context and setting.	No perceptible change in the setting of a building or feature.
Low Beneficial	Land use change resulting in improved conditions for the protection of archaeological remains or understanding/appreciation of a historic building or place	Decrease in visual or noise intrusion on the setting of a building, archaeological site or monument.  Improvement of the wider landscape setting of a building, archaeological site or monument.
Medium Beneficial	Land use change resulting in improved conditions for the protection of archaeological remains, or understanding/	Significant reduction or removal of visual or noise intrusion on the setting of a building, archaeological site or monument; and

	appreciation of a historic building or place, including through interpretation measures (heritage trails, etc). Removal of harmful alterations to better reveal the significance of a building or structure, with no loss of significant fabric.	Improvement of the wider landscape setting of a building, archaeological site or monument Improvement of the cultural heritage amenity, access or use of a building, archaeological site or monument.
High Beneficial	Arrest of physical damage or decay to a building or structure;	Exceptional enhancement of a building or archaeological site, its cultural heritage amenity and access or use

11.24 The value of an archaeological asset refers to both the physical remains and information inherent in the site. If a site is excavated in advance of destruction the physical remains will be destroyed but the information will have been retained. This is termed "Preservation of Archaeological Remains by Record" in Planning and the Historic Environment: Archaeology (Welsh Office Circular 60/96). It should be noted that even though this is seen as a valid mitigatory measure, preservation *in situ* is the preferred option.

### **The significance of effect**

The significance of effect is derived from the importance of the resource and the magnitude of the impact upon it. Archaeological value Unknown sites are not included because they would have been reassigned to another category by the end of the assessment and evaluation.

The significance of effect will be determined using Table 11.3, a basic matrix combining archaeological value and magnitude of impact.

Table 11.3: Determination of Significance of Effect

<b>Magnitude of Impact</b>	<b>Negligible/Neutral</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
<b>International Importance</b>	Negligible	Moderate	Moderate/Major	Major
<b>National Importance</b>	Negligible	Minor	Moderate/Major	Major
<b>Regional/County Importance</b>	Negligible	Minor	Minor/Moderate	Moderate
<b>Local Importance</b>	Negligible	Negligible	Minor	Minor/Moderate
<b>No importance</b>	Negligible	Negligible	Negligible	Negligible

### **Assumptions and Limitations**

11.25 All information regarding scheme impact is based on current information detailed in the client masterplan dated August 2012.

### **Baseline Conditions**

#### **Archaeological and Historical Background**

11.26 The following sections describe the known archaeological record within the general area of the proposed development. Sites are identified by their Primary Reference Number (PRN) which is the number by which they are identified in the Historic Environment Record (HER). The purpose of this section is to place the study area into its wider geographical and archaeological context. This helps identify the importance of sites and landscapes within the study area, and also provides an

indication of the nature and potential for the survival of buried archaeology – that is sites that survive underground, but are not recognisable from surface indications alone. Reference will be made to the extensive programme of excavations undertaken on behalf of Welsh Government within the area of land between the Cae Glas and Kingsland development zones. The site is referred to as 'Parc Cybi', and though post-excavation work is on-going, initial results have been taken from the Assessment of Potential report.

11.27 The purpose of this section is to describe the archaeology within each of the three study areas in greater detail, and in particular to examine their later history using the wide variety of historical sources available. This allows a clearer understanding of the development of the landscape, and helps explain many of the upstanding features which remain visible and are included in the gazetteer below.

### **Early prehistoric**

11.28 The earliest prehistoric archaeological sites within Anglesey post-date the last glaciation and belong to the Mesolithic period (*circa* 8000 BC to 4000 BC). During this period the settlements were seasonal, and lifestyle was based around hunting and gathering. The principal evidence for occupation comes from finds of flint and chert, either waste flakes and cores which are diagnostic of flint working, or the finished scrapers, knives and microliths. A number of significant collections of Mesolithic flint have been found on Holy Island, including over a hundred flint and chert cores from among the later prehistoric round houses by South Stack. Microliths were also found during the Parc Cybi excavations, though no identifiable settlements were found at either South Stack or Parc Cybi.

11.29 The Neolithic period is characterised by the introduction of farming, more permanent settlements, burial tombs and pottery. Stone axes, made from stone rather than flint, and usually polished to a smooth regular shape, are also characteristic of this period. Stone axes are usually derived from a specific rock source, of which the nearest to Holyhead is Graiglwyd, Penamaenmawr.

11.30 Two Neolithic tombs lie within the vicinity of the study area, the chambered tombs at Trefignath (SH 25868055; PRN 2500) and at Treaddur (SH25968004; PRN 2504). The former has been excavated and found to consist of three chambers which were used in succession from c. 3000 BC to c. 2000 BC. The Parc Cybi excavations identified a rectangular aisled Early Neolithic building, aligned on the chamber and associated with Early Neolithic pottery. Two polished Graiglwyd stone axes were found during the excavations, and these form a group with three more found in the earlier 20<sup>th</sup> century – two when excavating the pit for a new turntable at the locomotive sheds near Kingsland in 1926 (PRN 2507, SH 2504 8165), and one found at Penllech Nest (PRN 2506, SH 251 816). A number of pits and post-holes were also found to the north of the aisled building associated with Peterborough ware pottery, a form of pottery vessel which was made in the Middle Neolithic period.

11.31 The Early Bronze Age is characterised by new burial and ritual monuments, though settlement sites are rare, and do not show up well in the archaeological record. Two Bronze Age burial barrows were prominently sited on top of Holyhead Mountain (PRN 1760, SH 219 829), though little can be seen of them now. There are others at Garn (PRN 3804, SH 21408276) and Gorsedd Gwlwm (PRN 3798, SH 227 816), and a cemetery of three barrows at Porth Dafarch (PRN 1772-6, SH 234 801). A barrow was recently discovered under an early Christian cemetery at Ty Mawr (SH 2520 8135) during excavations in advance of construction of the A55, and a complex of sites from the same period was found during the Parc Cybi

excavations, consisting of a ring ditch, two adjoining circular ditched enclosures, and a group of eight cist burials.

- 11.32 Standing stones are difficult to date, but evidence suggests they were usually erected within the Early Bronze Age. The Ty Mawr standing stone is one of several such stones in this part of Holy Island. There is another to the south, next to Stanley Mill (PRN 2009, SH 2664 7888), and a rare pairing of two stones just over 3m apart, to the west at Plas Meilw (PRN 2748, SH 227 809).
- 11.33 A variety of pits with charcoal, pottery fragments and midden material were found at Parc Cybi, and though these are diagnostic of settlement, no specific associated structures were found. However the evidence suggests a flourishing population throughout the period.
- 11.34 The Later Bronze Age, from c. 1000 BC to c. 500 BC is characterised by climatic deterioration, the cessation of use of the ritual monuments of the Early Bronze Age, and the introduction of bronze weapons. It is during this period that the later prehistoric round houses are first built. Burnt mounds (mounds of burnt stone, often associated with a pit which held water), of which there were several found at Parc Cybi, also often date to this period. These are typically thought to represent seasonally occupied sites used, perhaps, during hunting expeditions.

### **Iron Age and Roman**

- 11.35 The dominant archaeological site within this period is the round house, usually found grouped in nucleated settlements, and sometimes associated with a defended enclosure on a hilltop or promontory (hillfort or promontory fort). Holyhead is dominated by its mountain, to the north-west of the town. The summit is enclosed by a stone rampart wall forming the hillfort of Caer y Twr (PRN 1760, SH 219 829). A much smaller promontory fort, Dinas on the south coast of Holy Island (PRN 807, SH 223 794), is probably also Iron Age. This promontory is surrounded by high cliffs and a low bank runs along the edge of the chasm, which separates it from the mainland. These forts were probably defensive refuges, and the population lived in more hospitable areas.
- 11.36 Towards the foot of the south-western slope of Holyhead Mountain are an extensive group of round houses with associated terraced fields and walled enclosures (PRN 1755, SH 211 820) and a similar hut group overlie the Bronze Age barrows at Porth Dafarch (PRN 2754, SH 234 801). The Parc Cybi excavations revealed a settlement of four stone-built round houses and subsidiary structures, and another settlement of two clay-walled round houses.
- 11.37 The Roman period saw little change in the nature of native settlements, and many roundhouse settlements continued to be occupied. The period is, however, clearly defined in the archaeological record by the introduction of Roman pottery and Roman coins. Military occupation of the area was controlled from the Roman fort of Segontium, Caernarfon, though towards the end of the third century AD a small fort was built in Holyhead as a naval base against Irish raiders. A Roman coin hoard was found close to Penrhos in 1710. The coins were buried in a brass vessel, and all dated to the fourth century (PRN 2503, SH 26 81). Roman pottery was found in small quantities during the Parc Cybi excavations.

### **Medieval**

- 11.38 Occupation of many of the round house settlements ceased in the 4<sup>th</sup> century AD, and there appears to have been a decline in population levels coinciding with the end of Roman military rule and another period of climatic deterioration. Settlements of this date (5<sup>th</sup> century AD to 12<sup>th</sup> century AD) are rare. There was

no native pottery produced, and no native coins, so finds are also rare. The principal archaeological sites are cemeteries, defined by east-west graves with no grave goods and often lined with stone slabs (cist graves). Several such cemeteries have been found on Holy Island, including one found during excavations in advance of the A55, and one found at Parc Cybi. Other significant cemeteries have been found at Tywyn y Capel, Trearddur Bay, and Porth Dafarch.

11.39 Christianity would have been introduced during the late Roman period through the occupants of the Roman fort, though to what extent this spread to the native population is not known. Further uptake of Christianity was encouraged during the 5<sup>th</sup> and 6<sup>th</sup> centuries. The cemeteries described above are usually thought to be Christian, though, as in Ireland, their origins may well lie within a pre-Christian era.

11.40 A clas church (a monastic church staffed by canons or *claswyr* and ruled by an Abbot) was established within the Roman fort at Holyhead in the late 5<sup>th</sup> or 6<sup>th</sup> century AD. It was of sufficient importance to attract the attention of the Vikings in 961. The development of the parochial system in the 12<sup>th</sup> century saw Holyhead church change from a clas church to a collegiate one. This included responsibility for a number of small chapels in the area, each associated with a holy well. Much of the land around the church was owned by it, and this may account for the survival of medieval open strip fields north of the church well into the 19<sup>th</sup> century (clearly visible on the tithe map). Land not held by the church was occupied by family groups (*gwelyau*) in settlements referred to in medieval documentation as townships (*trefi*) and hamlets. The occupants of these were described as either free or bond. The freeholders were largely descended from two principal family groups – the descendants of Hwfa ap Cynddelw and Llywarch ap Bran, who also had a controlling interest in the church. The settlements of these family groups are poorly represented in the archaeological record, though it is thought they largely underlie later farm houses and farmsteads. In the later medieval period and early post-medieval period these lands were slowly exchanged and purchased by ambitious landowners, who built up significant estates which dominated the area. In the case of Holy Island, the most significant estates were Tre'r Go and later Penrhos, built up by the Owen family from the mid-16<sup>th</sup> century who married into the Stanley family in the mid-18<sup>th</sup> century.

### **Post-medieval and Modern**

11.41 The post-medieval period is characterised by the development of Holyhead as a point of departure for Ireland and by the developments of land transport links, a number of which pass near the study area, to give access to the harbour.

11.42 The use of the harbour at Holyhead is already apparent in the reign of Elizabeth I, when it became the departure point for the Royal Mail to Ireland. During the Commonwealth, the town was garrisoned, and regular packet boats sailed to Ireland.

11.43 During the 17<sup>th</sup> century the road across Anglesey to Holyhead was probably just a rough track, but the forerunner to the bridge at Four Mile Bridge already joined Holy Island to Anglesey by 1578. One of the earliest maps of Anglesey, published by Speed in 1630, marks Pont-Rhydbont (the bridge at Four Mile Bridge), and just to the west of it is Llansanfraid (St Bride's or Trearddur Bay), the only place marked on Holy Island, other than Holyhead itself.

11.44 The passage of the Act of Union with Ireland in 1800-01 made Holyhead the principal port for Ireland, which in turn led to clamour from Irish MPs now obliged to sit in Westminster, about the state of the roads. The road from the Menai

ferries to Holyhead had been turnpiked in 1765 and much improved, but transport was still difficult until Telford built the new London to Holyhead road (the A5). The Stanley Embankment carries the road over the Afon Lasinwen, the tidal strait between Holy Island and Anglesey, replacing the ferries and fords. The embankment was designed by Thomas Telford, and built by Dargan, who subsequently made his name as the greatest of the railway contractors in Ireland. Work started in 1822 and it was opened in 1823, the final stage in the link between London and Holyhead.

11.45 In 1848 the Chester and Holyhead Railway was opened on an alignment which now forms the south-western boundary of the study area. The engineer was Robert Stephenson. The railway subsequently became part of the London and North Western Railway and its successors, the London Midland and Scottish and British Railways.

11.46 These developments were facilitated by the Stanley family of Penrhos, owners of most of the land within which the proposed developments falls, as well as much land elsewhere in Anglesey. The Stanleys were a family of more than local consequence; Whigs, and later Liberals, in politics, members of the family served in government and in the church, though the third baron converted to Islam. The influence of one member of the family on government was less obvious but more fraught with consequence; Venetia Stanley's liaison with Asquith was crucial in determining the development of the First World War. W.O. Stanley was a noted antiquarian who undertook archaeological work within the Penrhos area. Active 'improving' landlords, the surveys they carried out of their estate form the major source of evidence for the study area. The house and estate buildings were a dominant feature in the landscape until after the Second World War, when its influence declined, and the house was subsequently demolished. The later history of the estate is discussed under below.

11.47 The landscape is currently dominated by the Anglesey Aluminium industrial complex. This was built in the late 1960s and the 125,000 tonne per annum smelter was one of the largest suppliers of aluminium in the UK, though production stopped in 2008.

### **Statutory and non-statutory designations**

11.48 The Trefignath Burial Chamber (SH 258805, Ref: AN011) is a Scheduled Ancient Monument (SAM) within the Cae Glas study area. Three other SAMs, the Ty Mawr Standing Stone (SH 253809; Ref: AN012), Ynys Lleurad Hut Circles (SH 277790, Ref: AN035) and the Treaddur Hut Group (SH 262798, AN092) lie close to but outside the study area.

11.49 There are eight listed buildings within the Penrhos study area that are mainly associated with the Penrhos estate and home farm; these are the Stanley Gate Tollhouse (PRN 2512; SH 275804), the Penrhos Bailiff's Tower and Home Farm (PRN 11587 and 12526; SH 270814), the Penrhos Betting Stand (PRN 11588; SH 274809), the Penrhos Candle Tower and walls adjoining the remains of Penrhos House (PRN 11589; SH 271812), the Penrhos Water Tower (PRN 11590; SH 275812), the Tower (PRN 34728; SH 270813), and the Battery (PRN 7168; SH 267817).

11.50 There are twelve Listed Buildings within the vicinity of the Kingsland study area. The windmill (variously called George's mill, Melin yr Ogof or Kingsland Mill) is listed Grade II\* as an exceptionally important example of a 19th century windmill because of the retention of an almost complete set of machinery. Ebenezer

Chapel is listed Grade II, particularly for the architectural qualities of the main front.

11.51 Penrhos Estate does not appear in the Register of Historic Parks and Gardens of Historic Interest in Wales (ICOMOS & Cadw 1998), however the remains should be considered important both as individual features and as a historic landscape.

### **Baseline list of sites**

11.52 This section of the report lists the known archaeological sites and features within the three study areas. Each entry contains an assessment of importance, ranked from International (Very High) through to National (High), Regional/County (Medium), Local (Low), and None. If it is not possible to assess the importance of the site from the visible remains, then it is ranked Unknown (previously E). Mitigation is given where possible in para. 11.55, but if the site is ranked 'Unknown' then further assessment is required so that the correct status of the site can be determined. Where a second value is placed in brackets () it indicates the anticipated historic value based upon the available information, but further assessment may alter this value.

#### ***Kingsland***

<b>1. Bodwredd Farmhouse</b>	<b>NGR:</b> SH 2430 8047
<b>Value:</b> Local	<b>PRN:</b> 34717
The former farmhouse of Bodwredd, which is of 18th century or earlier date, is located at this position. The structure survives in a ruined state, with the north gable end surviving to full height, and a possible yard to the south. The farmhouse is noted on the Penrhos estate maps of 1769, 1810 and 1817 and all subsequent maps.	
<b>2. Site of former Bodwredd farmstead</b>	<b>NGR:</b> SH 2436 8065
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34718
This location is shown on the 1769 map as the main location of the farm of Bodwredd. Buildings are also noted at this location on the Penrhos estate map of 1817 and the tithe map of 1845, though the principal farmhouse is now shown to the south. The buildings are not noted on the 1889 1st edition Ordnance Survey 25 inch map, suggesting the site had been abandoned by then. No indication of the structures was noted on the field survey but evaluation trenches discovered a pit and ditch probably related to the farmstead. The latter contained a deposit of shells with some animal bones.	
<b>3. Site of former building</b>	<b>NGR:</b> SH 2507 8077
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34719
A probable cottage located adjacent to the road, noted on the Penrhos estate maps of 1810 and 1817 and the tithe map of 1845. It is not shown on the 1889 1st edition Ordnance Survey 25 inch map, suggesting that it had been abandoned by then. From the tithe map evidence it appears that it was located within a small enclosure, and was probably constructed in the early 19th century. There are no visible upstanding remains.	
<b>4. Site of Ty'n y Coed cottage</b>	<b>NGR:</b> SH 2507 8057
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34720
A cottage located adjacent to the road, noted on the Penrhos estate maps of 1810 and 1817 and the tithe map of 1845. It is not shown on the 1889 1st edition Ordnance Survey 25 inch map, suggesting that it had been abandoned by then.	

It is located just outside the study area to the east, and on the tithe map of 1845 is named as Tyn y Coed cottage, a smallholding of 36 perches, owner by the Penrhos estate and in the occupation of one William Parry. There are no visible upstanding remains.

<b>5. Site of Cae'r Ty Hen Farmhouse</b>	<b>NGR:</b> SH 2536 8035
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<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34721
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Small buildings are shown on several maps, in the corner of a rough grazing field, north of Trearddur Mews. The earliest reference is on the 1817 map. On the tithe map the field is marked as Cae'r Tyhen, and the building is shown surrounded by a small enclosure. The field was previously subdivided, but the general shape of the field has remained the same. Very vague traces may just be visible on the aerial photographs. On the ground several flat areas between the rock outcrops were inspected, but no earthworks were found. The remains of a wall noticed during field survey in the field just north of here compares well to a boundary on the 1817 map. The former farmhouse of Cae'r Ty Hen is noted on the tithe map of 1845 at this location. No remains survive above ground however a level platform approximately 12m by 7m is thought to represent the site of the former farmstead. It is likely to have an 18th century or earlier origin, and was built on an area of higher ground amidst rock outcrops to the east of the study area, above the low lying and boggy ground to the west.

<b>37. Prehistoric settlement, Kingsland</b>	<b>NGR:</b> SH 2442 8061
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<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34737
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Evaluation trenching explored a geophysical anomaly indicating a roundhouse. The trenching demonstrated that there was a probable roundhouse foundation trench as well as a possibly Bronze Age corn drier. A ditch that may form part of a prehistoric field system cut through the foundation trench. A small number of pot sherds and flint flakes were recovered.

The full extent of this settlement is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).

<b>38. Possible prehistoric field system, Kingsland</b>	<b>NGR:</b> SH 2440 8062
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<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34738
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Geophysics revealed anomalies that appeared to form part of a group of small fields. Trial trenching investigated one of the ditches and showed it to be different in character to post medieval field boundary ditches investigated. This, the size and shape of the fields and the proximity of a prehistoric settlement (feature 37) suggest that the boundaries are of a prehistoric date.

The full extent of this field system is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).

<b>39. Post-medieval field system, Kingsland</b>	<b>NGR:</b> SH 2460 8060
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<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34739
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The Penrhos estate maps dating to 1769 and 1817 show field boundaries in the Kingsland area not existing today. The geophysical survey located several of these boundaries and trial trenching demonstrated that they were generally shallow and of simple form, although several were formed by 2 parallel ditches which may have had banks between.

The full extent of this field system is unclear due to the confines of the evaluation

trenches and thus the historic value should be considered preliminary at unknown (Local).

<b>40. Possible modern pit</b>	<b>NGR:</b> SH 2474 8066
<b>Value:</b> Unknown (Negligible)	<b>PRN:</b> 34740
Several pit-like anomalies were identified by geophysical survey but on investigation these proved to be of geological origin. However a pit of probable recent date was excavated in trench 11.	
The full nature of this pit is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Negligible).	

<b>41. Pit with burnt stone, Kingsland</b>	<b>NGR:</b> SH 2477 8065
<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34741
A small shallow pit was excavated in evaluation trench 13. This was filled with burnt stone and charcoal and may be of prehistoric date.	
The full nature of this pit is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).	

### Cae Glas

<b>7. Trefignath Farm</b>	<b>NGR:</b> SH 2592 8068
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 13929
The 1769 map shows two small buildings to the north-west of the modern farm, which were in a field called Trefignedd, part of the Pen-y-Lone land. By 1817 there was a building, named as Trefignath, in a new location to the west, though the two original buildings to the north were still in use. The situation was the same in 1845 and 1853, but by 1889 the original buildings are no longer shown, although a very small structure is indicated further north near the railway. The farm's location can now be accurately located on the ground as earthworks were surveyed for the evaluation showing the outline of the area of the farmyard. The new farm of Trefignath, established c. 1817, lies outside the study area alongside the minor road to Trearddur Bay. The buildings were demolished during construction of Anglesey Aluminium in the late 1960's.	

<b>8. Trefignath Burial Chamber</b>	<b>NGR:</b> SH 2586 8055
<b>Value:</b> National SAM (AN012)	<b>PRN:</b> 2500
This Neolithic burial chamber lies outside the western edge of the study area. However, it is a scheduled ancient monument, and as the setting of the site may be impacted upon, it is necessary to include it within the gazetteer. The monument is composed of local mica schist, and situated on a natural knoll. It is surrounded by traces of a long cairn, and is best preserved at the eastern end. This site was assumed to be a gallery grave until excavation proved it to be much more complex. The site was excavated between 1977 and 1979, and was partly reconstructed in 1980. This demonstrated that the tomb had three chambers, which were built in succession from west to east, with the cairn enlarged as each new chamber was built. The earliest chamber resembled a simple passage grave. The central and eastern chambers were box-like structures with portal stones. The tomb overlay evidence of domestic occupation of the site dating to the early fourth millennium uncalibrated bc (HAR 3932 5050+/-70 BP).	

<b>9. Tyddyn Bach</b>	<b>NGR:</b> SH 2628 8055
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 31,566
Tyddyn Bach is shown as a small farmstead of probable 18 <sup>th</sup> century date, a holding of the Penrhos estate. There are no upstanding remains at this site.	

<b>10. Tidal Mill at Felin-Heli</b>	<b>NGR:</b> SH 2657 7977
<b>Value:</b> Regional/ County	<b>PRN:</b> 7212
A dam and sluice with evidence of additional structures associated with a tide mill first mentioned in 1524. The mill pond was formed from the area between the island (Ynys Wyddog, now more usually called Mill Island) and Holy Island. Dams were built at either end, and the mill was located alongside a sluice at the northern dam. The area is currently too overgrown to see if remains of the mill building survive. The water entered from the south end, presumably through sluice gates, and was then allowed to run out through the sluice at the north end, so driving the mill wheel. The mill house and former kiln lie a short distance to the north-east. The house is still occupied, and appears to lie outside the study area. The mill is one of four tide mills lying on the strait between Holy Island and Anglesey, and was the first to be developed, also pre-dating a similar tide mill in the Menai Strait, for which the earliest evidence is c. 1590.	

<b>11. Tre-Ddaniel</b>	<b>NGR:</b> SH 2618 8029
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 31,559
Tre-Daniel formed part of Lord Newborough's Glynllifon estate (a large landowner whose estate was mainly in Caernarfonshire, although he had significant holdings in Anglesey), along with the former Glan y Gors, now lost under the Anglesey Aluminium site. It consisted of a farm and garden with 74 acres 3 roods and 26 perches of mixed pasture, arable and meadow, within a patchwork of 15 small fields, some of which survive to this day (NLW Ms. Maps 97). There no surviving upstanding remains apart from slight traces of the farmyard wall.	

<b>12. Cae Glas Farm</b>	<b>NGR:</b> SH 2641 8007
<b>Value:</b> Local	<b>PRN:</b> 34722
An extensively modernised farmhouse south-west of Tre-Gof.	

<b>13. Tre'r Gof Farm</b>	<b>NGR:</b> SH 2659 8020
<b>Value:</b> Regional/ County	<b>PRN:</b> 34723
The largest farm in the Cae Glas area was Tre Gof. This was a house of some significance in the 16 <sup>th</sup> century though it became part of the Penrhos estate through marriage at the end of the 17 <sup>th</sup> century. Although now derelict the foundations of the buildings remain with walls surviving in places up to 3m high. The site is over-grown, but all the structures shown on the 1889 map can be identified on the ground. The most complete building is a stone shed with brick arches, best interpreted as a livestock shelter shed. A courtyard lies close-by, of which the farmhouse lay along the north side, whilst along the west side are remains of barns. A walled enclosure, possibly a walled garden, is entered through tall impressive round gate pillars.	

<b>14. Treaddur Burial Chamber</b>	<b>NGR:</b> SH 2596 8004
<b>Value:</b> Regional/ County	<b>PRN:</b> 2504
The site survives as a single large upright and a single recumbent orthostat on a knoll within a field close to the road. These remains, along with the location and setting, have been compared to the small Western chamber of Trefignath. The general landscape setting is very much similar to Trefignath, with the site surrounded by pastoral land, containing rocky outcrops. There has been no	

excavation on this site.

<b>33. Roman coin hoard findspot, Trearddur</b>	<b>NGR:</b> SH 2590 7999
<b>Value:</b> Unknown (Negligible)	<b>PRN:</b> 2502
In 1837 a vessel containing a 'great many Roman coins' was found at Trearddur near the Coetan Arthur cromlech. All were of the 4 <sup>th</sup> century. In 1843 four more coins were found in the same area. Their presence may reflect increased Roman activity at the time of the construction of the fort at Holyhead, but also suggests the presence of native Roman settlements in the vicinity.	
<b>34. Pill box, Trefignath, Holyhead</b>	<b>NGR:</b> SH 2591 8049
<b>Value:</b> Regional/ County	<b>PRN:</b> 34724
One of a series of pill boxes built in 1940 to defend Holyhead harbour from attack. It is located in woodland south of the Neolithic burial chamber.	
<b>35. Pill box, Stanley Embankment, Holyhead</b>	<b>NGR:</b> SH 2725 8031
<b>Value:</b> Regional/ County	<b>PRN:</b> 34725
One of a series of pill boxes built in 1940 to defend Holyhead harbour from attack. It overlooks the inland sea, and is circular with an external blast wall.	
<b>36. Pill box, Felin Heli, Holyhead</b>	<b>NGR:</b> SH 2713 7991
<b>Value:</b> Regional/ County	<b>PRN:</b> 7213
One of a series of pill boxes built in 1940 to defend Holyhead harbour from attack. It overlooks the inland sea, and is circular with an external blast wall.	
<b>42. Prehistoric Burnt Mound, Cae Glas</b>	<b>NGR:</b> SH 2640 8016
<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34742
Two adjacent anomalies were detected by the geophysics and evaluation trench 17 demonstrated that these were spreads of burnt mound material. Under one of these spreads were two substantial postholes.	
The full extent of the burnt mound and associated features is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).	
<b>43. Prehistoric Burnt Mound, Cae Glas</b>	<b>NGR:</b> SH 2643 8031
<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34743
The geophysical survey indicated an anomaly which was investigated by trench 18. This showed a thin spread of burnt mound material under which was a group of 6 shallow possible postholes and a ditch that appeared to be contemporary with the mound.	
The full extent of the burnt mound and associated features is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).	
<b>44. Culvert, Cae Glas</b>	<b>NGR:</b> SH 2668 8035
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34744
A well-built culvert with drystone sides and capstones was found in trench 21. This could be seen on the geophysical survey once its location was known. This probably dates to the mid-19th century.	
The full extent of the culvert is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Local).	

<b>45. Post-medieval field system, Cae Glas</b>	<b>NGR:</b> SH 2662 8033
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34745
The 1817 Penrhos estate map shows the former layout of fields in the farm of Tre'r Gof. The evaluation trenches and geophysical survey detected some of these but showed them to be generally shallow, slight features on the ground.	
The full extent of the field system is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Negligible).	

<b>46. Possible Roman period ditch, Cae Glas</b>	<b>NGR:</b> SH 2605 8060
<b>Value:</b> Unknown (Regional/ County)	<b>PRN:</b> 34746
A ditch 1.2m wide and 0.49m deep, with a nearly V-shaped profile was found in trench 42. It is possible that this is part of a continuation of a Roman period trackway found in Parc Cybi (PRN 31597), but this cannot yet be proved.	
The full extent of the ditch is unclear due to the confines of the evaluation trenches and thus the historic value should be considered preliminary at unknown (Regional/ County).	

### ***Penrhos***

<b>6. Stanley Gate Tollhouse</b> Grade II Listed Building	<b>NGR:</b> SH 2755 8040
<b>Value:</b> Regional/ County	<b>PRN:</b> 2512
Set back from the N side of the A5(T), directly over the northern end of the Stanley Embankment and within Penrhos Coastal Park. In 1974 the tollhouse was moved stone by stone from the edge of the A5 to its present location. Following the Act of Union in 1801 a programme to improve the roads between the two capital cities of London and Dublin was initiated. In 1811 Thomas Telford was commissioned to undertake a survey of the roads between London and Holyhead and in 1817 began work on the northern stretch of the road at Shrewsbury. Work started on Anglesey in 1818 and 5 tollhouses, designed by Telford, were built across the island. In 1895 the tollhouses were sold. Despite having been moved it remains a good example of the Anglesey style tollhouses.	

<b>15. Penrhos Bailiff's Tower and Home Farm</b> Grade II Listed Building	<b>NGR:</b> SH 2703 8145
<b>Value:</b> Regional/ County	<b>PRN:</b> 11587 and 12526
The Bailiff's Tower, which lies north of the entrance to the home farm, is a two-storey rubble tower with distinctive crenellated parapet concealing a slate roof. The interior now serves as a changing room for the cricket club. Three ranges of farm buildings lie adjacent. All are rubble-built with slate roofs. Two ranges lie north of the tower on an east-west alignment. The nearest has been converted into living accommodation, though may well have been a row of stables originally. The smaller range beyond was inaccessible, though may also have been stables or loose boxes. The roof is deteriorating on this range. Another long range lies east of the tower and is aligned north-south. These comprise a barn and cart sheds with granary over. The north wall of the granary contains an interesting range of graffiti dating from the late 19 <sup>th</sup> century through both World Wars. The buildings are in use for general storage, though some conversion to modern use has also taken place.	

<b>16. Penrhos Betting Stand</b> Grade II Listed Building	<b>NGR:</b> SH 2741 8097
<b>Value:</b> Regional/ County	<b>PRN:</b> 11588
The Betting Stand is probably contemporary with the early 19 <sup>th</sup> century remodelling of the estate, built as a point from which to view horse racing on a	

private course. Possibly originally part of the work carried out by Margaret Owen who is said to have 'planted the pleasure gardens'. It is castellated in a picturesque manner. It has a rubble structure with voussoirs and projecting crenellated parapet which is stepped up to corner beside stairs. The stairs are later which may indicate that the Betting Stand in its present form was converted from a pre-existing folly tower.

<b>17. Penrhos Candle Tower and walls adjoining remains of Penrhos House</b> Grade II Listed Building	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2714 8129 <b>PRN:</b> 11589
The Candle Tower formed part of the service courtyard of the mansion, and lies in the centre of the east side of the former house. It is probably contemporary with the remodelling of 1802-8, when turrets were known to have been added to Penrhos. It consists of a circular corner tower with high walls adjoining which screened the service courtyard from the east side of the main house. It is built of rubble masonry, with crenelated walls. The attached wall has a window with cusped gothic style tracery.		

<b>18. Penrhos Water tower</b> Grade II Listed Building	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2750 8126 <b>PRN:</b> 11590
A 4-storey square water tower designed in the manner of a church bell tower. It is located south-west of the main house, in the south-west corner of a former walled garden. The high garden walls still adjoin either side. It is constructed of local rubble with red brick voussoirs, hipped slate roof and overhanging eaves. Attached are buttressed garden walls which run N including a large rustic stone archway opening into the main transverse path.		

<b>19. Penrhos Garden</b>	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2709 8131 <b>PRN:</b> 34726
The demesne lands consisted of 161 acres 1 rood and 29 perches in 1769, and they included a garden, nursery and shippon. The layout of the demesne became more elaborate in the latter part of the 18 <sup>th</sup> century and into the 19 <sup>th</sup> . By the time of the 1 <sup>st</sup> edition Ordnance Survey Map of 1888 the estate included an elaborate garden to the east and south of the mansion, containing walled gardens with greenhouses, and kitchen gardens.		

<b>20. Footprint of Penrhos House</b>	<b>Value:</b> Unknown (Regional/ County)	<b>NGR:</b> SH 2704 8135 <b>PRN:</b> 34727
Penrhos was the home of the Owen family from the 16 <sup>th</sup> century, and their house became known as the 'Tudor' house. A new house was built c. 1720-30, and an 18 <sup>th</sup> century sketch by Lewis Morris shows the new house with the older one alongside. Sir John Thomas Stanley (1766-1850) probably had the 'Tudor' house demolished, and he made many alterations in the early 19 <sup>th</sup> century, including adding the 'gothick' turrets and new south wing, as well as many of the out-buildings. William Owen Stanley (1802-1884) built a new drawing room, large dining room and added various embellishments c. 1862. No major alterations were made to the house after the death of William Stanley in 1884. The house was largely demolished after the Second World War, and though small parts survive, such as part of the west front and parts of the north end of the house by the candle tower, the majority has been completely removed. The value of the remains is currently unknown due to the encroachment of vegetation and the possibility of remains at foundation level.		

<b>21. The Tower, Dairy, Laundry, and Gunroom Penrhos</b> Grade II Listed Building	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2703 8137 <b>PRN:</b> 34728
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The tower formed part of the service buildings off the north-west side of the main house, and is situated within a courtyard enclosed on the north by a high crenelated wall through which there is a large segmented gateway. The tower is square, and of three stories, and is thought to have included a dairy, laundry and gun room. The buildings probably belong to the remodelling of Penrhos undertaken in the early 19<sup>th</sup> century. It has been converted to domestic accommodation, and is still occupied.

<b>22. The Battery</b> Grade II Listed Building	<b>Value:</b> National	<b>NGR:</b> SH 2672 8175 <b>PRN:</b> 7168
The battery is located on the headland at the north-west edge of the park, with Penrhos Beach below to west. It was probably built between 1801 and 1808, and if so is a good example of a Napoleonic fortification. It is possible that it was in fact built as a dummy battery to provide some security by fooling invading French forces into believing that Holyhead was defended. This Battery is the subject of a pencil drawing dated 1818 by Isabella Louisa Stanley (her husband was a well know naval figure at the time). It consists of a D-shaped rubble gun battery; partly collapsed on landward side where, at each end, there were battlemented tower platforms (perhaps containing the magazines). The semi-circular firing bay has 8 square, slightly splayed, embrasures.		

<b>23. Possible Prehistoric Standing Stone</b>	<b>Value:</b> Unknown (Regional/ County)	<b>NGR:</b> SH 2682 8183 <b>PRN:</b> 7169
A standing stone, about 1.05m high, surrounded by a number of recumbent and field clearance stones, which have probably been placed there in recent times. It is probably Bronze Age in date, and may have survived cultivation improvements because of its marginal location close to the coastal edge. If it was erected in prehistoric times, there is a strong probability of further prehistoric buried archaeology in the immediate vicinity.		

<b>24. Flint finds, Penrhos Bay</b>	<b>Value:</b> Unknown (National)	<b>NGR:</b> SH 2657 8177 <b>PRN:</b> 7895
Flints and human bones were recovered off peat exposures on the beach in 1949. A visit in 2002 also recorded flints eroding from above the glacial clay on the adjoining headland west of the Napoleonic battery.		

<b>25. Boathouse, Penrhos</b>	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2704 8183 <b>PRN:</b> 7169
The remains of two boathouses alongside one another. Remains of rails are visible inside. The western building was built from large rounded boulders in picturesque style, similar to the rusticated gates in the garden. Both buildings stand to eaves height, the western one with a rounded arch in the gable wall facing the sea, the other one open to the sea.		

<b>26. Bathing house, Penrhos</b>	<b>Value:</b> Local	<b>NGR:</b> SH 2741 8147 <b>PRN:</b> 34729
Bathing house bay played a significant role in the life of the families who occupied Penrhos. Parts of the original stone bathing house and steps can be seen beneath the modern building which has been erected on top.		

<b>27. Fishweir, Cerrig yr Adar, Penrhos</b>	<b>Value:</b> Regional/ County	<b>NGR:</b> SH 2743 8172 <b>PRN:</b> 7170
A simple fish trap utilising the numerous outcrops known as Cerrig yr Adar on a sandy beach to the north of Penrhos nature reserve. Two lengths of ruinous walling, shown on early OS maps as bedrock, complete a semi-circle formed by		

the outcrops. The wall stands to a maximum height of 0.4m with occasional surviving facing stones.

<b>28. Fishweir, Penrhos</b>	<b>NGR:</b> SH 2775 8115
<b>Value:</b> Local	<b>PRN:</b> 7171

This site consists of the very fragmentary remains of a possible fishweir. The most visible feature is a low stone bank running out into the river channel. This could be natural. Three wooden posts in the vicinity do not appear to be directly associated with the trap.

<b>29. Fishweir, Penrhos</b>	<b>NGR:</b> SH 2770 8095
<b>Value:</b> Regional/ County	<b>PRN:</b> 7172

A simple rectangular weir (the wall forms an 'L' shape) marked on the 1900 OS map. The apex of the weir, about 120m from the shore, is formed by a large rock outcrop. The rest of the weir is visible as an 8m wide spread of stone bank. The outer arm also incorporates an outcrop about 60m long.

<b>30. Beddmanarch, Penrhos</b>	<b>NGR:</b> SH 2752 8087
<b>Value:</b> Local	<b>PRN:</b> 5541

Beddmanarch is clearly marked on the 1769 estate map, but may be older than that. It is situated on the coast edge, close to where the Afon Lasinwen (the Strait between Holy Island and Anglesey) was forded. The present house appears to be 19<sup>th</sup> century in date, thought it has been altered, and was the centre for the coastal park in the 1970's, and parts of the building may well be 18<sup>th</sup> century. A collection of quern stones used to lie within the building, though the present location of these is not known. The stones suggest the existence of late prehistoric or Romano-British settlement in the vicinity.

<b>31. Roman coin hoard findspot, Penrhos</b>	<b>NGR:</b> SH 2705 8139
<b>Value:</b> Unknown (Negligible)	<b>PRN:</b> 2508

Several instances of finding Roman coins within the vicinity of Penrhos have been noted. In particular 6 coins were found when 're-laying the grass in front of Penrhos' in 1852-4, whilst another 29 coins were found at 'Penrhos Isaf' in 1710. All the coins were 4<sup>th</sup> century in date. Their presence may reflect increased Roman activity at the time of the construction of the fort at Holyhead, but also suggests the presence of native Roman settlements on the Penrhos headland.

<b>32. Penrhos Lodge, Penrhos</b>	<b>NGR:</b> SH 2670 8150
<b>Value:</b> Regional/ County	<b>PRN:</b> 34730

A single-storey lodge with central chimney is located at the west end of the headland, close to Penrhos Beach. It is probably early 19<sup>th</sup> century in date

<b>47. Post-Medieval field system, Penrhos</b>	<b>NGR:</b> SH 2718 8153
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34747

The 1769 and 1817 Penrhos estate maps show changing field boundaries around Penrhos House and farmyard. Although they change over time this is clearly the development of a single field system. The geophysical survey revealed numerous boundaries not on these maps but part of an earlier phase of the field system. Evaluation trenches showed that some of these boundaries were defined by walls and some by shallow ditches. It is likely that these boundaries date to the 17th or earlier 18th century rather than much earlier.

Adjacent to a wall in trench 24 was a deep stone-filled pit, that indicates that other features might be associated with the field system.

The full extent of the field-system is unclear due to the confines of the evaluation

trenches and thus the historic value should be considered preliminary at unknown (Local).

<b>48. Site of possible barn, Penrhos</b>	<b>NGR:</b> SH 2702 8157
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34748
A building, presumably a barn, is shown on the 1769 estate map within a yard. It is also shown on the 1817 map and may be indicated by an anomaly on the geophysical survey.	
The full extent of the barn is unclear and has not been included within the evaluation trenches and thus the historic value should be considered preliminary at unknown (Local).	

<b>49. Site of possible barn, Penrhos</b>	<b>NGR:</b> SH 2686 8143
<b>Value:</b> Unknown (Local)	<b>PRN:</b> 34749
A long building, presumably a barn, is shown on the 1769 estate map. It is not marked on the 1817 map. This area has not been covered by geophysical survey as it is currently woodland. The geophysics in the field to the north show field boundaries that suggest the building may actually be located about 30m west of the coordinates given.	
The full extent of the barn is unclear and has not been included within the evaluation trenches and thus the historic value should be considered preliminary at unknown (Local).	

<b>50. Site of building and yard, Penrhos</b>	<b>NGR:</b> SH 2697 8138
<b>Value:</b> Unknown (Negligible)	<b>PRN:</b> 34750
The 1769 map shows a building and yard not indicated on the 1817 map. Most of this site must now be under the road and there has been too much recent disturbance in neighbouring fields that have been geophysically surveyed for evidence of this building to be identified.	
The full extent of the building is unclear and has not been included within the evaluation trenches and thus the historic value should be considered preliminary at unknown (Negligible).	

## Potential Impacts

11.53 This section details the potential impacts of the scheme and their significance before mitigation. Each of the sites listed in para. 11.51 will be discussed separately and account will be made of the following:

- Short term (construction phase) and long term (operational phase) impacts; and
- Indirect, direct, adverse and beneficial effects as well as consideration to spatial and temporal scope of the effects.

## Construction

11.54 Impacts during demolition and construction and assessment of significance are presented in Table 11.4.

11.55 Each feature will be discussed separately and impact during demolition and construction will be assessed based on the Assessment of the value of archaeological assets defined in Table 11.1.

Table 11.4: Construction Stage Impacts

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
<b>Kingsland</b>					
1. Bodwredd Farmhouse	Local	This area (westernmost plot of Kingsland) will not be developed, with no structures or extensive landscaping implied. There do appear to be tree plantations within the approximate location of the farmhouse.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
2. Site of former Bodwredd farmstead	Unknown (Local)	This area (westernmost plot of Kingsland) will not be developed, with no structures or extensive landscaping implied.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Unknown (Neutral)
3. Site of former building	Unknown (Local)	This feature is outside of the proposed area of development and no direct impact is proposed, so any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Unknown (Neutral)
4. Site of Ty'n y Coed cottage	Unknown (Local)	This feature is outside of the proposed area of development and therefore any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Unknown (Neutral)
5. Site of Cae'r Ty Hen Farmhouse	Unknown (Local)	This feature is outside of the proposed area of development and therefore any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Unknown (Neutral)
37. Prehistoric settlement, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Moderate Adverse)
38. Possible prehistoric field-system, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Moderate Adverse)

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
39. Post-medieval field system, Kingsland	Unknown (Local)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Minor/Moderate Adverse)
40. Possible modern pit	Unknown (Negligible)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Negligible)
41. Pit with burnt stone, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Moderate Adverse)
<b>Cae Glas</b>					
7. Trefignath Farm	Unknown (Local)	This feature is within the development zone of a proposed carpark.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Minor/Moderate Adverse)

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
8. Trefignath Burial Chamber	National	The burial chamber lies on the western edge of the Cae Glas development area. The development masterplan includes a car park for 700 vehicles c.100.0m to the east of the scheduled area incorporating the chamber. The specific location of the burial chamber is scheduled and legally protected.	Low Adverse	There will be a low indirect impact upon the significant views east and northeast during the proposed construction of the Cae Glas visitor car park, although these historic viewpoints have already been frustrated to a degree by the construction of the A55 expressway and Anglesey Aluminium.	Minor Adverse
9. Tyddyn Bach	Unknown (Local)	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
10. Tidal Mill at Felin-Heli	Regional /County	The masterplan does not show any proposed development which will impact directly on this site.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
11. Tre-Ddaniel	Unknown (Local)	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
12. Cae Glas Farm	Local	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
13. Tre'r Gof Farm	Regional /County	This site is proposed for the location of a new hotel building. This will impact directly on the built remains.	High Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>▪ There will be a high direct impact through the stabilisation of the ruins with their incorporation into a hotel complex, thus ensuring their long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact upon buried remains during the construction of the hotel.</li> <li>▪ There will be an indirect impact through the complete alteration of the monument's setting from being in an isolated rural location to a construction site.</li> <li>▪ There will be an indirect impact through the alteration of the historic land use from rural farming to a construction site.</li> </ul>	Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
14. Treaddur Burial Chamber	Regional / County	Whilst the burial chamber is not directly affected by any proposed development, a cricket pitch is proposed within close proximity of the chamber.	Low Adverse	There will be an indirect impact from the construction of the proposed lodges and cricket pitch upon the significant views northeast and south. This impact is reduced somewhat by the existing frustration upon the significant views by the A55 expressway, Anglesey Aluminium, and Treaddur Bay.	Minor Adverse
33. Roman coin hoard findspot, Trearddur	Unknown (Negligible)	A cricket pitch is proposed within close proximity of the findspot. The findspot will not be directly impacted by the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
34. Pill box, Trefignath, Holyhead	Regional / County	The pillbox appears not to be physically affected by the scheme but will be located close to the main entrance. However, the main entrance should be concealed from the pill box by existing tree plantations, according to the current masterplan. Specific design information for the main entrance is not available at the time of writing.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
35. Pill Box, Stanley Embankment, Holyhead	Regional / County	Whilst this feature is located within the development area, it is not physically affected by any development proposals.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
36. Pill box, Felin Heli, Holyhead	Regional / County	Whilst this feature is located within the development area, it is not physically affected by any development proposals.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
42. Prehistoric Burnt Mound	Unknown (Regional / County)	This feature is located within an area of proposed woodland parking. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>▪ There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>▪ There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
43. Prehistoric Burnt Mound	Unknown (Regional / County)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Moderate Adverse
44. Culvert	Unknown (Local)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Minor/Moderate Adverse
45. Post-Medieval Field System, Cae Glas	Unknown (Local)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Minor/Moderate Adverse
46. Possible Roman Period Ditch	Unknown (Regional / County)	This feature is located within an area of proposed parking. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>There will be a direct impact as a significant section of the ditch will be removed in its entirety during the construction phase.</li> <li>There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Moderate Adverse
<b>Penrhos</b>					
6. Stanley Gate Tollhouse	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. The building is outside of the development boundary.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
15. Penrhos Bailiff's Tower and Home Farm	Regional / County	<p>This structure is a listed building and any structural alterations would require listed building consent. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered. This feature will form part of The Market Place development and will be central to the new 'hub' area. The home farm buildings will be conserved and converted into small retail/food/coffee outlets. Between the home farm and the tower/dairy/house a new building will be constructed to house a significant proportion of the retail provision on the site.</p>	Medium Adverse	<p><b>Beneficial</b></p> <ul style="list-style-type: none"> <li>There will be a direct impact as the Bailiff's Tower and Home Farm will be stabilised and retained, thus ensuring their long-term survival.</li> </ul> <p><b>Adverse</b></p> <ul style="list-style-type: none"> <li>There will be an indirect impact through the loss of access for local people during the construction phase.</li> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> </ul>	Minor/ Moderate Adverse
16. Penrhos Betting Stand	Regional / County	<p>This structure is a listed building and any structural alterations would require listed building consent. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered. Current information is that the betting stand will be conserved 'as is' and interpreted.</p>	Medium Adverse	<p><b>Beneficial</b></p> <ul style="list-style-type: none"> <li>There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul> <p><b>Adverse</b></p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> <li>There will be an indirect adverse impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the construction of the Quillet Lodges and Woodland Parking Area.</li> <li>There will be an indirect adverse impact upon the visual links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings due to the construction of Quillet Lodges and Woodland Parking Area, although this is reduced by the existing frustration upon significant views due to the encroachment of the forest.</li> <li>There will be an indirect impact through the restriction of access during the construction phase.</li> </ul>	Minor/ Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
17. Penrhos Candle Tower and walls adjoining remains of Penrhos House	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. This feature will form part of The Market Place development. The candle tower and walls will be stabilised, some of the tree-growth removed, and conserved and form a garden adjoining the new spa facility. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered.	Low Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> <li>There will be an indirect impact through the restriction of access during the construction phase.</li> </ul>	Minor Adverse
18. Penrhos Water tower	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. This feature will form part of The Market Place development. Based on current information the water tower will be converted into a lodge. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered.	Medium Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> <li>There will be an indirect adverse impact upon the setting of the Listed Building through the frustration of the historic links between it and Penrhos House and outbuildings by the construction of the Estate Cottages.</li> </ul>	Minor/ Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
19. Penrhos Garden	Regional / County	This feature will form part of The Market Place development. Based on current information the gardens will be conserved where possible, and extant garden features retained, although there will be a degree of physical impact through the construction of the woodland lodges. The magnitude of impact prior to mitigation is based on the assumption that the feature will be altered.	High Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of some garden features thus ensuring their long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be a medium indirect adverse impact upon the setting of the garden through the frustration of the intimate historic character of the gardens by the construction of the Estate Cottages.</li> <li>There will be a medium indirect adverse impact through the restriction of access for local people.</li> <li>There is a plethora of unknown garden features whose significance and level of preservation is not fully understood, many of these will be directly impacted upon.</li> </ul>	Moderate Adverse
20. Footprint of Penrhos House	Unknown (Regional / County)	The house was largely demolished after the Second World War, and though small parts survive, such as part of the west front and parts of the north end of the house by the candle tower, the majority has been completely removed. This feature will form part of The Market Place development.	Unknown	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct impact through the incorporation of the upstanding remains of Penrhos House into the Spa, thus stabilising it and ensuring its long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an unknown direct adverse impact upon the surviving below ground remains, although the condition of these is currently unknown.</li> <li>There will be an indirect impact as the buried remains will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
21. The Tower, Dairy, Laundry and Gunroom, Penrhos	Regional / County	This feature will form part of The Market Place development. Specific construction detail is not available at this time. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered It has been converted to domestic accommodation, and is still occupied.	Low Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> <li>There will be an indirect impact through the restriction of access for local people.</li> </ul>	Minor Adverse
22. The Battery	National	Based on current development information, this feature will not be physically affected by the development, although it will be within the development boundary, close to the coastal path. It is a feature of national importance and suitable maintenance schedules for the vegetation and stonework should be defined.	Low Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the Listed Building will not be recorded and thus historical information may be lost.</li> <li>There will be a medium indirect adverse impact through the restriction of access for local people.</li> <li>There will be a low indirect impact upon the view southeast from the monument through the construction of the Hub and Headland Lodges.</li> </ul>	Minor Adverse
23. Possible Prehistoric Standing Stone	Unknown (Regional / County)	This feature will not be physically affected by the development, although it will be within the development boundary, close to the coastal path.	Medium Adverse	<ul style="list-style-type: none"> <li>There will be an indirect impact upon far reaching views southeast across the headland by the construction of the Headland Lodges.</li> <li>There will be an indirect impact due to the restriction of public access to the monument during construction works.</li> </ul>	Unknown (Minor/ Moderate Adverse)
24. Flint finds, Penrhos Bay	Unknown (National)	Whilst this location and environs are within the development boundary, it appears that the feature location will not be affected by any stage of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
25. Boathouse, Penrhos	Regional / County	<p>It is proposed that the Boathouse be brought back into use through the construction of a new café/restaurant building on top of the existing remains. The existing monument will be stabilised thus ensuring its long-term survival, and the new building will be of a similar size and form to resemble the original timber building. This feature is of regional/county importance and is spatially and culturally linked to the local areas and heritage through the Penrhos landscape.</p>	Medium Adverse	<p><b>Beneficial</b></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> </ul> <p><b>Adverse</b></p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the building will not be recorded and thus historical information may be lost.</li> <li>There will be a low indirect adverse impact upon views towards the Boathouse due to the construction of the new café/ restaurant.</li> <li>There will be an indirect impact through the restriction of access for local people.</li> </ul>	Minor/ Moderate Adverse
26. Bathing house, Penrhos	Local	<p>The modern building currently built upon the foundations of the Bathing House is to be demolished as part of the proposed development, and a new restaurant of a scale and form commensurate with the original building will be constructed upon the Bathing House foundations. The foundations will be stabilised thus ensuring their long-term survival, and the new building will incorporate a significant amount of glazing and a sympathetic scale and materiality to be less visually intrusive than the current modern building. The feature is spatially and culturally linked to the local areas and heritage through the Penrhos landscape.</p>	Low Adverse	<p><b>Beneficial</b></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>There will be a direct impact through the demolition of the modern building on top of the Bathing House foundations.</li> </ul> <p><b>Adverse</b></p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the modern building and monument foundations will not be recorded and thus historical information may be lost.</li> <li>There will be a low indirect adverse impact upon views towards the Boathouse due to the construction of the new restaurant.</li> <li>There will be an indirect impact through the restriction of access for local people.</li> </ul>	Negligible
27. Fishweir, Cerrig yr Adar, Penrhos	Regional / County	<p>This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.</p>	Neutral	<p>The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.</p>	Neutral
28. Fishweir, Penrhos	Local	<p>This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.</p>	Neutral	<p>The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.</p>	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
29. Fishweir, Penrhos	Regional/ County	This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
30. Beddmanarch, Penrhos	Local	This feature is outside the development boundary and it appears that the feature location will not be affected by any physical development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
31. Roman coin hoard findspot, Penrhos	Unknown (Negligible)	This location will form part of the proposed "Market Place" development. All the coins recovered were 4 <sup>th</sup> century in date and were discovered during re-turfing during maintenance on the Penrhos Estate grounds during the mid-nineteenth century. Their presence may reflect increased Roman activity at the time of the construction of the fort at Holyhead, but may also suggest the presence of native Roman settlements on the Penrhos headland. The below ground potential for similar activity is unknown.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
32. Penrhos Lodge, Penrhos	Regional / County	Whilst it is located within the development boundary, the lodge will not be impacted upon by the proposed development. A proposed car park is proposed c.50m to the east, but this should be screened from view by the existing tree plantations on the eastern boundary of the lodge.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral
47. Post-medieval field system, Penrhos	Unknown (Local)	Based on the scheme masterplan, this feature is located within an area of proposed headland lodges. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>▪ There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>▪ There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Minor/ Moderate Adverse)
48. Site of possible barn, Penrhos	Unknown (Local)	Based on the scheme masterplan, this feature is located within an area of proposed landscaping and planting. This will impact directly on the archaeological remains.	High Adverse	<ul style="list-style-type: none"> <li>▪ There will be a direct impact as the archaeological site will be removed in its entirety during the construction phase.</li> <li>▪ There will be an indirect impact as the archaeological site will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown (Minor/ Moderate Adverse)

<b>Feature</b>	<b>Importance</b>	<b>Description of Potential Impact</b>	<b>Magnitude</b>	<b>Comment</b>	<b>Significance</b>
49. Site of possible barn, Penrhos	Unknown (Local)	This feature is located within an area of woodland which it is proposed to retain and enhance via further planting.	Low Adverse	There will be a direct impact on the buried remains through the excavation of holes for saplings.	Unknown (Negligible)
50. Site of building and yard, Penrhos	Unknown (Local)	This feature is located beneath the current road which is to be retained, and will not be impacted upon.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral

### **Kingsland Areas of Unknown Archaeological Potential**

11.56 The geophysical survey and programme of evaluation trenching has confirmed the existence of a prehistoric settlement, Bronze Age corn drier, a possible prehistoric pit, and a suspected prehistoric field-system within the proposed development area. The extent of the prehistoric occupation is not currently known due to the confines of the evaluation trenches and the potential for the geophysical survey to miss some buried features due to background geological 'noise'. However, recent excavations at the Parc Cybi site, located in fields to the immediate south, uncovered stratigraphically complex areas of settlement. Although, the potential land area suitable for such occupation in Kingsland is reduced by the presence of natural rock outcrops across the site. It is possible that further prehistoric remains lie preserved underground, which will only be revealed by further intrusive excavation. This includes the possibility of Late Bronze Age burnt mounds. Environmental evidence may be preserved within waterlogged parts of the site.

11.57 The westernmost part of the site is a mixture of exposed bedrock and pasture; whilst the remaining areas are open pasture. Based on the masterplan, the main structural development will be focused on the eastern areas to the west of Kingsland Road. Associated infrastructure will include access roads throughout the estate, a "habitat area" and dense woodland planting along the southern boundary. The westernmost area will see landscape enhancement; existing heathland will be retained and enhanced. The landscaping within the westernmost areas will have below ground impact.

### **Cae Glas Areas of Unknown Archaeological Potential**

11.58 The programme of archaeological evaluation has discovered buried prehistoric archaeological remains in the form of two Bronze Age burnt mounds. Both of these mounds were visible on the geophysical survey with no others being identified, although the geological background noise in the NE part of the area could obscure such signals. On current evidence therefore no further burnt mounds might be expected in this area but they might be hidden under deeper deposits of soil or be otherwise geophysically invisible. Such archaeological remains are not usually found in proximity to prehistoric settlement although the discovery of complex prehistoric settlement archaeology at Parc Cybi to the immediate north may suggest that further unknown, buried archaeology is present within the proposed development zone.

11.59 Towards the northern part of the proposed development area, and immediately south of Parc Cybi, a ditch was discovered which is possibly part of the Roman period trackway identified during recent excavations there. Further intrusive excavation is required to determine whether this is indeed the case, and whether the trackway continues through the proposed development area.

11.60 The Cae Glas proposed development incorporates an irregular shaped area bounded to north by the A55 Expressway, to the east by the coastline, to the west by the Parc Cybi business park site and to the south by residential, camping and undeveloped land. The development is bifurcated by a local road.

11.61 A mixture of open pasture, woodland, scrubland and heathland characterises the central and western portions of the area proposed for development. Large open pasture characterises the fields south of the local road (c.25.13 ha in size). A total of four irregular shaped plots (c.30.2ha in size) are located between the local road and the A55 Expressway that are characterised by open pasture (the two plots closest to the local road also include extensive bedrock outcropping). A large

open pasture field (c.7.0ha) that includes the Trefignath Burial Chamber is located at the western end of the area proposed for development. A woodland and heathland area, c.17.58ha in size is located between the four pasture plots and the westernmost pasture plot. The western portion is characterised by a coastline environment, with scattered woodland and open heathland. 2.75ha landfill site is located within this area, to the south of the A55 Expressway and east of a local road; the landfill is surrounded by pockets of woodland and heathland.

11.62 The greatest impact from construction is expected to be within central portion of the proposed area of development, incorporating the four open plots and neighbouring woodland plot (total area c.37.2ha). A total of 300 proposed lodges, with associated infrastructure and landscaping (including a central lake) will be located across this area. Associated parking will be located to the south and the lodge/parking will be accessed via an enhanced road attached to the road network through Parc Cybi. Portions of the existing woodland at the western end will be retained and enhanced (through additional planting) and a small lake and parking area will be incorporated into the open westernmost plot that includes Trefignath burial chamber. The lodges will be constructed using helical screw piling (see chapter 6), whilst all other leisure and residential structures will be built using standard foundations. The plots south of the local road will be retained as managed heathland with physical development limited to a grass cricket pitch. A grass football pitch is proposed for the heathland north of the local road. Associated parking and a clubhouse will be located near the cricket pitch. Both the cricket pitch and football pitch are located close to Treaddur burial chamber. The parking for the area incorporating the lodges will be based on low impact *Grascrete* style parking surface.

11.63 The easternmost portion of the area proposed for development will include limited structural development and will be dedicated to the landscape enhancement through managed heathland and woodland and additional woodland plantation. The coastal area will be dedicated as a Nature Reserve (total area 40.47ha). A visitor's centre with an access footpath from the central portion of the development, will be positioned close to the landfill site. The landfill site will be landscaped through additional plantation.

### **Penrhos Areas of Unknown Archaeological Potential**

11.64 The proposed area of development at Penrhos is located to the north of *Anglesey Aluminium Metals Limited*, between the A5 Road and the coastline. The present location is characterised by large wooded areas, encompassing most of the southern and central portions of the area, followed by open pasture along the northern headland (encompassing seven irregular shaped fields). South of the headland are the remnants of the Penrhos Estate buildings.

11.65 The proposed development is mainly concentrated within the central and northern portion of the area: the central woodland will be developed to include a nexus of lodges set within the woodland; the woodland to the immediate north, and along the coastal edge to the east and southeast will be retained and enhanced for public use. The lodges will use helical screw pile foundations. The former Penrhos Estate will be developed for both leisure use as well as a lodge zone; the latter will utilise strip foundations rather than piling. The seven open fields along the headland will include low impact parking (*Grascrete* style) and a series of lodges with associated infrastructure and landscaping. The lodges will be a mix of strip foundations for larger properties (closer to the coastal path) and helical screw pile (see chapter 6) foundations for lodges further away from the coast. The northernmost portions of these fields will be retained as grazing pasture.

11.66 The Penrhos estate was the seat of the principal land and property owners on Holy Island for over 400 years, starting with John ap Owen in the 16th century, and passing into the hands of the Stanley family following the marriage of Margaret Owen to Sir John Thomas Stanley in 1763. The Penrhos proposed area for development is entirely contained within the former Demesne lands. The layout of the demesne became more elaborate in the latter part of the 18th century and into the 19th (Penrhos II 772). By the time of the 1st edition Ordnance Survey Map of 1888 the estate included elaborate gardens to the east and south of the mansion, a racecourse and a well-developed home farm. Though the house has been demolished and the gardens very overgrown there are still 7 listed buildings associated with the estate, of which three are towers. Much of the area currently forms part of the Penrhos Coastal Park. The coastal edge of the Penrhos demesne on the north east edge of Holy Island includes a number of other features of interest, that probably survive owing to their marginal position when the rest of the demesne was undergoing improvements during the 18th and 19th centuries. These include a standing stone, which is probably of prehistoric date (SH26828183; PRN 7169), and a Napoleonic era battery built to defend the port of Holyhead from possible invasion (SH26738176; PRN 7168). The significant nature of the formal estate layout requires that a full survey be carried out of all the buildings on the estate and incorporated into a Conservation Management Plan. It is considered that most of the structures could remain in situ, and that new development could be placed in such a manner that the most significant elements of the historic landscape are retained.

### **Operational Phase**

11.67 Impacts during the operational phase of the proposed development are described in Table 11.5. Each feature will be discussed separately and impact during the operational phase will be assessed based on the Assessment of the value of archaeological assets defined in Table 11.1.

Table 11.5: Operational Impacts

<b>Feature</b>	<b>Importance</b>	<b>Description of Potential Impact</b>	<b>Magnitude</b>	<b>Comment</b>	<b>Significance</b>
<b>Kingsland</b>					
1. Bodwredd Farmhouse	Local	This area (westernmost plot of Kingsland) will not be developed, with no structures or extensive landscaping implied. There do appear to be tree plantations within the approximate location of the farmhouse.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
2. Site of former Bodwredd farmstead	Unknown (Local)	This area (westernmost plot of Kingsland) will not be developed, with no structures or extensive landscaping implied.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Unknown (Neutral)
3. Site of former building	Unknown (Local)	This feature is outside of the proposed area of development and no direct impact is proposed, so any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Unknown (Neutral)
4. Site of Ty'n y Coed cottage	Unknown (Local)	This feature is outside of the proposed area of development and therefore any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Unknown (Neutral)
5. Site of Cae'r Ty Hen Farmhouse	Unknown (Local)	This feature is outside of the proposed area of development and therefore any below ground remains will not be physically affected.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Unknown (Neutral)
37. Prehistoric settlement, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
38. Possible prehistoric field-system, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
39. Post-medieval field system, Kingsland	Unknown (Local)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
40. Possible modern pit	Unknown (Negligible)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
41. Pit with burnt stone, Kingsland	Unknown (Regional/County)	This feature is within the area proposed for new housing and is likely to be physically impacted upon by the proposed development at Kingsland.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
<b>Cae Glas</b>					
7. Trefignath Farm	Unknown (Local)	This feature is within the development zone of a proposed carpark.	Neutral	The site will have been removed in its entirety during the construction phase; there will be no further anticipated impacts during the operational phase of works.	Neutral
8. Trefignath Burial Chamber	National	The burial chamber lies on the western edge of the Cae Glas development area. The development masterplan includes a car park for 700 vehicles c.100.0m to the east of the scheduled area incorporating the chamber. The specific location of the burial chamber is scheduled and legally protected.	Low Adverse	There will be a low indirect impact upon the significant views east and northeast during the operational phase of the Cae Glas visitor car park, although these historic viewpoints have already been frustrated to a degree by the construction of the A55 expressway and Anglesey Aluminium.	Minor Adverse
9. Tyddyn Bach	Unknown (Local)	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
10. Tidal Mill at Felin-Heli	Regional /County	The masterplan does not show any proposed development which will impact directly on this site.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
11. Tre-Ddaniel	Unknown (Local)	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
12. Cae Glas Farm	Local	This feature will not be impacted upon by the proposed development or during the construction phase of works.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
13. Tre'r Gof Farm	Regional /County	This site is proposed for the location of a new hotel building. This will impact directly on the built remains.	High Adverse	<p>Beneficial</p> <ul style="list-style-type: none"> <li>There will be a high direct impact through the stabilisation of the ruins with their incorporation into a hotel complex, thus ensuring their long-term survival.</li> </ul> <p>Adverse</p> <ul style="list-style-type: none"> <li>There will be an indirect impact through the complete alteration of the monument's setting from being in an isolated rural location to a hotel.</li> <li>There will be an indirect impact through the alteration of the historic landuse from rural farming to a nature village.</li> <li>There will be an indirect impact through the frustration of the key links between the farm and the fields historically associated with it.</li> </ul>	Moderate Adverse
14. Treaddur Burial Chamber	Regional / County	Whilst the burial chamber is not directly affected by any proposed development, a cricket pitch is proposed within close proximity of the chamber.	Low Adverse	There will be an indirect impact from the construction of the proposed lodges and cricket pitch upon the significant views northeast and south. This impact is reduced somewhat by the existing frustration upon the significant views by the A55 expressway, Anglesey Aluminium, and Trearddur Bay.	Minor Adverse
33. Roman coin hoard findspot, Trearddur	Unknown (Negligible)	A cricket pitch is proposed within close proximity of the findspot. The findspot will not be directly impacted by the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
34. Pill box, Trefignath, Holyhead	Regional / County	The pillbox appears not to be physically affected by the scheme but will be located close to the main entrance. However, the main entrance should be concealed from the pill box by existing tree plantations, according to the current masterplan. Specific design information for the main entrance is not available at the time of writing.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
35. Pill Box, Stanley Embankment, Holyhead	Regional / County	Whilst this feature is located within the development area, it is not physically affected by any development proposals.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
36. Pill box, Felin Heli, Holyhead	Regional / County	Whilst this feature is located within the development area, it is not physically affected by any development proposals.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
42. Prehistoric Burnt Mound	Unknown (Regional / County)	This feature is located within an area of proposed woodland parking. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
43. Prehistoric Burnt Mound	Unknown (Regional / County)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
44. Culvert	Unknown (Local)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
45. Post-Medieval Field System, Cae Glas	Unknown (Local)	This feature is located within an area of proposed woodland and lodges. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
46. Possible Roman Period Ditch	Unknown (Regional / County)	This feature is located within an area of proposed parking. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
<b>Penrhos</b>					
6. Stanley Gate Tollhouse	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. The building is outside of the development boundary.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
15. Penrhos Bailiff's Tower and Home Farm	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered. This feature will form part of The Market Place development and will be central to the new 'hub' area. The home farm buildings will be conserved and converted into small retail/food/coffee outlets. Between the home farm and the tower/dairy/house a new building will be constructed to house a significant proportion of the retail provision on the site.	Medium Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>• There will be a direct impact as the Bailiff's Tower and Home Farm will be stabilised and retained, thus ensuring its long-term survival.</li> <li>• There will be an indirect impact as the construction of the Market Place to the south will reinstate the original historic courtyard layout to the south.</li> <li>• There will be an indirect impact through increased interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>• There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>• There will be an indirect impact upon the significant view from the Bailiff's Tower towards the coastline to the north, although this is reduced through the sympathetic design of the height and scale of the Hub building, and by the existing frustration to the significant view by the modern barns to the north.</li> <li>• There will be an indirect impact through the alteration of the historic use of the Eastern Range from farm outbuildings to a bike hire and offices.</li> <li>• There will be an indirect impact through the loss of access for local people, although this is reduced as access to the interior of the buildings will be increased for guests.</li> </ul>	Minor/Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
16. Penrhos Betting Stand	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered. Current information is that the betting stand will be conserved 'as is' and interpreted.	Medium Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect impact through an increase in access by the removal of the existing barriers.</li> <li>▪ There will be an indirect impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>• There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>• There will be an indirect impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the construction of the Quillet Lodges and Woodland Parking Area.</li> <li>▪ There will be an indirect impact upon the visual links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings due to the construction of Quillet Lodges and Woodland Parking Area, although this is reduced by the existing frustration upon significant views due to the encroachment of the forest.</li> <li>▪ There will be an indirect impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the construction of the Quillet Lodges and Woodland Parking Area.</li> </ul>	Minor/Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
17. Penrhos Candle Tower and walls adjoining remains of Penrhos House	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. This feature will form part of The Market Place development. The candle tower and walls will be stabilised, some of the tree-growth removed, and conserved and form a garden adjoining the new spa facility. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered.	Low Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be a low indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>▪ There will be a medium indirect adverse impact through the reduction of access for local people to open days only.</li> </ul>	Minor Adverse
18. Penrhos Water tower	Regional / County	This structure is a listed building and any structural alterations would require listed building consent. This feature will form part of The Market Place development. Based on current information the water tower will be converted into a lodge. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered.	Medium Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through an increase in access by the removal of current vegetation overgrowth. This impact is reduced as access will not include local people.</li> <li>▪ There will be an indirect beneficial impact upon the significant view westward by the demolition of the property of Erw Deg, thus reinstating the historic view.</li> <li>▪ There will be an indirect beneficial impact upon the setting of the building through the clearing of vegetation alongside the trackway to the east, thus reinforcing the historic link between these two features.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>▪ There will be an indirect adverse impact upon the setting of the Listed Building through the frustration of the historic links between it and Penrhos House and outbuildings by the construction of the Estate Cottages.</li> </ul>	Minor/Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
19. Penrhos Garden	Regional / County	This feature will form part of The Market Place development. Based on current information the gardens will be conserved where possible, and extant garden features retained, although there will be a degree of physical impact through the construction of the woodland lodges. The magnitude of impact prior to mitigation is based on the assumption that the feature will be altered.	High Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of some garden features thus ensuring their long-term survival.</li> <li>▪ There will be a direct beneficial impact through the reinstatement of a formal garden to the immediate east of Penrhos House.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>• There will be an indirect adverse impact upon the setting of the garden through the frustration of the intimate historic character of the gardens by the construction of the Estate Cottages.</li> <li>• There will be an indirect adverse impact through the restriction of access for local people.</li> <li>• There is a plethora of unknown garden features whose significance and level of preservation is not fully understood, many of these will be directly impacted upon.</li> </ul>	Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
20. Footprint of Penrhos House	Unknown (Regional / County)	The house was largely demolished after the Second World War, and though small parts survive, such as part of the west front and parts of the north end of the house by the candle tower, the majority has been completely removed. This feature will form part of The Market Place development.	Unknown	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the incorporation of the upstanding remains of Penrhos House into the Spa, thus stabilising it and ensuring its long-term survival.</li> <li>There will be a low indirect beneficial impact through the reinstatement of the principal significant view eastward by the re-creation of the formal garden.</li> <li>There will be a low indirect beneficial impact upon the setting of Penrhos House as the Spa is located on the footprint of the house and will reinstate the historical focus of activity.</li> <li>There will be a low indirect beneficial impact through an increase in interpretation.</li> <li>There will be a medium indirect beneficial impact through the increase of access, although this will not be available to local people.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an unknown direct adverse impact upon the surviving below ground remains, although the condition of these is currently unknown.</li> <li>There will be an indirect impact as the buried remains will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
21. The Tower, Dairy, Laundry and Gunroom, Penrhos	Regional / County	This feature will form part of The Market Place development. Specific construction detail is not available at this time. The magnitude of impact prior to mitigation is based on the assumption that the building function will be altered It has been converted to domestic accommodation, and is still occupied.	Low Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through the construction of the Marketplace which will reinstate the historic courtyard layout.</li> <li>▪ There will be an indirect beneficial impact through an increase in access for guests.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>▪ There will be an indirect impact through the restriction of access for local people.</li> </ul>	Minor Adverse
22. The Battery	National	Based on current development information, this feature will not be physically affected by the development, although it will be within the development boundary, close to the coastal path. It is a feature of national importance and suitable maintenance schedules for the vegetation and stonework should be defined.	Low Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through an increase in access for guests and local people through the improvement of the coastal path.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact as the Listed Building will not have been recorded prior to alteration and thus historical information may have been lost.</li> <li>▪ There will be an indirect impact upon the view southeast from the monument through the construction of the Hub and Headland Lodges.</li> </ul>	Minor Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
23. Possible Prehistoric Standing Stone	Unknown (Regional / County)	This feature will not be physically affected by the development, although it will be within the development boundary, close to the coastal path.	Neutral	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through an increase in access for guests and local people through the improvement of the coastal path.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect adverse impact upon far reaching views southeast across the headland by the construction of the Headland Lodges. The impact has been somewhat mitigated by sympathetic design utilising simple, unadorned pitch form and natural timber boards or shingles to help the lodges blend into the landscape. More prominent lodges will also have grass roofs, further reducing visual impact.</li> </ul>	Neutral
24. Flint finds, Penrhos Bay	Unknown (National)	Whilst this location and environs are within the development boundary, it appears that the feature location will not be affected by any stage of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
25. Boathouse, Penrhos	Regional / County	It is proposed that the Boathouse be brought back into use through the construction of a new café/restaurant building on top of the existing remains. The existing monument will be stabilised thus ensuring its long-term survival, and the new building will be of a similar size and form to resemble the original timber building. This feature is of regional/county importance and is spatially and culturally linked to the local areas and heritage through the Penrhos landscape.	Medium Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>There will be an indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the building will not have been recorded and thus historical information may have been lost.</li> <li>There will be an indirect adverse impact upon views towards the Boathouse due to the construction of the new café/restaurant.</li> </ul>	Minor/Moderate Adverse

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
26. Bathing house, Penrhos	Local	The modern building currently built upon the foundations of the Bathing House is to be demolished as part of the proposed development, and a new restaurant of a scale and form commensurate with the original building will be constructed upon the Bathing House foundations. The foundations will be stabilised thus ensuring their long-term survival, and the new building will incorporate a significant amount of glazing and a sympathetic scale and materiality to be less visually intrusive than the current modern building. The feature is spatially and culturally linked to the local areas and heritage through the Penrhos landscape.	Low Adverse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>There will be a direct beneficial impact through the demolition of the existing modern building, and the construction of the new restaurant which will incorporate significant amounts of glazing and a sympathetic scale and materiality to be less visually intrusive than the current modern building.</li> <li>There will be an indirect beneficial impact through the enhancement of the historical significant view seaward through the use of large glazing panels in the new restaurant building.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect impact as the modern building and monument foundations will not have been recorded and thus historical information may have been lost.</li> <li>There will be a direct adverse impact through the addition of a plinth to the existing stonework although this will be reduced through the use of locally sourced stone.</li> </ul>	Negligible
27. Fishweir, Cerrig yr Adar, Penrhos	Regional / County	This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
28. Fishweir, Penrhos	Local	This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
29. Fishweir, Penrhos	Regional/ County	This feature is outside the development boundary and it appears that the feature location will not be affected by any part of the development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
30. Beddmanarch, Penrhos	Local	This feature is outside the development boundary and it appears that the feature location will not be affected by any physical development.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral

Feature	Importance	Description of Potential Impact	Magnitude	Comment	Significance
31. Roman coin hoard findspot, Penrhos	Unknown (Negligible)	This location will form part of the proposed "Market Place" development. All the coins recovered were 4 <sup>th</sup> century in date and were discovered during re-turfing during maintenance on the Penrhos Estate grounds during the mid-nineteenth century. Their presence may reflect increased Roman activity at the time of the construction of the fort at Holyhead, but may also suggest the presence of native Roman settlements on the Penrhos headland. The below ground potential for similar activity is unknown.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
32. Penrhos Lodge, Penrhos	Regional / County	Whilst it is located within the development boundary, the lodge will not be impacted upon by the proposed development A proposed car park is proposed c.50m to the east, but this should be screened from view by the existing tree plantations on the eastern boundary of the lodge.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral
47. Post-medieval field system, Penrhos	Unknown (Local)	Based on the scheme masterplan, this feature is located within an area of proposed headland lodges. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
48. Site of possible barn, Penrhos	Unknown (Local)	Based on the scheme masterplan, this feature is located within an area of proposed landscaping and planting. This will impact directly on the archaeological remains.	Neutral	The site will have been removed in its entirety during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral
49. Site of possible barn, Penrhos	Unknown (Local)	This feature is located within an area of woodland which it is proposed to retain and enhance via further planting.	Medium Adverse	There will be a direct impact on the buried remains from tree roots as the saplings grow into mature trees.	Unknown (Minor Adverse)
50. Site of building and yard, Penrhos	Unknown (Local)	This feature is located beneath the current road which is to be retained, and will not be impacted upon.	Neutral	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral

## Mitigation Measures

11.55 The following are the basic categories of archaeological evaluation and mitigation measures which will be used. Additional details may be added in regard to the setting of archaeological sites. The detailed recording, basic recording and watching brief options fulfil the "preservation by record" option described in Welsh Office Circular 60/96.

### ***Recommendation for Further Evaluation***

11.56 This includes the application of field techniques including geophysical survey and trial trenching as well as further assessment including *Historic Landscape Characterisation Assessment*, *Conservation Management Plan* and *Visual Impact Assessment*. These applications would determine whether additional assessment and/or specific mitigation is required. The mitigation options available are set out below.

*None*

11.57 No impact, so no requirement for mitigation measures.

### *Geophysical Survey*

11.58 This can be used, where appropriate, as an initial non-intrusive assessment technique allowing areas of archaeological activity to be recognised. Magnetometer survey is the preferred first option in most cases, because it allows large areas to be surveyed quickly and can detect a wide range of archaeological features. Resistivity may be used as a secondary option. It should be noted that not all archaeological features can be detected using geophysical survey and absence of positive results does not prove that there is no archaeology present. Geophysical survey should be followed by further evaluation, including trial trenching.

### *Trial Trenching*

11.59 This can be adopted as a staged mitigation process involving assessment and then wider excavation where necessary. A series of trenches would be excavated within a designated area in order to provide a sample of the buried archaeology. Buried archaeological deposits cannot always be detected from the surface, even with geophysics, and trial trenching allows a representative sample of the development area to be investigated. Trenches of an appropriate size can also be excavated to evaluate category E sites. These trenches typically measure between 20m and 30m long by 2m wide. The turf and topsoil is removed by mechanical excavator, and the resulting surface cleaned by hand and examined for features. Significant features would then be excavated and fully recorded. Further evaluation and/or mitigation would be recommended in response to the results

### *Avoidance*

11.60 Features which may be affected directly by the scheme, or by the construction of the scheme, should be avoided.

### *Conservation Management Plan*

11.61 When recommended, a Conservation Management Plan is usually undertaken in three linked phases, namely Understanding, Significance and Issues and Policies.

The first two phases will draw heavily on an archaeological assessment that has already been completed; the three phases are:

- Understanding: The Understanding Section will provide an account and analysis of the historical development of the site as an entity and its principle features. The following sections will be included:
  - Background
  - Location
  - Geology, morphology and landscape
  - Chronology
  - Overview of the historical development of the site as an entity
  - Enhanced gazetteer of features
  - List of garden plants of significance
  - Study of the historical development of the principle components of the site
- Significance: The significance section will provide an overview of the comparative significance of the site as both an entity and in terms of its detailed components. Significance will be considered in terms of major 'themes of importance', which will relate to both the development of the estate, the garden, its infrastructure and planting, and will also be considered in comparison with other sites of national and international importance. The assessment of significance will make use of the guidelines for assessing 'heritage values' as given in *Conservation Principles* (Cadw, 2011).
- Issues and Policies: This will consider the current and potential threats to the sites heritage assets. It will examine ways in which these assets can be interpreted and understood, and the potential they have in terms of economic, development, tourism and education.

#### *Visual impact assessment*

11.62 There is no precise definition for Visual Impact Assessment (or VIA) as a single concept. But the term describes a systematic analysis of the possible impacts of environment resulting from a proposed development and the investigation of the means available to mitigate the effects of such proposals prior to implementation. Visual impact is defined as a change in the appearance of the landscape as a result of development which can be positive (improvement) or negative (detraction). In this instance, the visual impact assessment is based upon computer generated topographic data which simulates a bare-earth model with no vegetation or building cover. Therefore the visual impact assessment contained within this report should be seen as the worst-case scenario.

11.63 The mitigation measures will advise in advance those that can be built into the scheme layout, those that can be a commitment and those that are potential options.

11.64 Each feature will be discussed separately and mitigation during demolition and construction will be assessed based on the Assessment of the value of archaeological assets defined in paragraph 11.22.

#### ***Recommendation for Mitigation Measures***

*None*

11.65 No impact so no requirement for mitigation measures.

*Strip map and sample*

11.66 This technique involves the examination of machine-stripped surfaces to identify archaeological remains. The process of machine stripping would be supervised by an archaeologist. Once stripping has been undertaken, areas of archaeological potential would be identified and cleaned by hand. Sample areas would be cleaned by hand in apparently negative areas to act as a control. Where complex archaeological deposits are identified during stripping, these would be identified at an early stage in order to formulate a defined area of work. This technique relies upon the recognition of features by plan, and excavation of features would be kept to a level required to assess the nature and importance of the remains. This would be followed by full excavation where appropriate.

*Full excavation*

11.67 This is a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design. The defined area will be determined in response to the results of evaluation stages.

*Reinstatement and/or relocation*

11.68 The feature should be reinstated with archaeological advice and supervision.

*Watching brief*

11.69 Observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers, structures or sections.

*Historic building record*

11.70 A record commensurate with English Heritage's Understanding Historic Buildings (2006) levels 1 to 4 should be taken prior to alteration. The level of record required is based upon the significance of effect.

*Detailed recording*

11.71 Requiring a photographic record, surveying and the production of a measure drawing prior to commencement of works. Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact

*Basic recording*

11.72 Recording by photograph and description requires a photographic record and written description prior to the commencement of works on site. A measured survey may be required in certain cases.

*Avoidance*

11.73 Features which may be affected directly by the scheme, or by the construction of the scheme, should be avoided.

- 11.58 The mitigation measures will advise in advance those that can be built into the scheme layout, those that can be a commitment and those that are potential options.
- 11.59 Each feature will be discussed separately and mitigation during demolition and construction will be assessed based on the Assessment of the value of archaeological assets.

### **Construction**

- 11.60 Construction stage mitigation measures are described in Table 11.6.

Table 11.6: Construction Stage Mitigation Measures

Feature	Comment	Further Assessment	Mitigation Measures
<b>Kingsland</b>			
1. Bodwredd Farmhouse	No further assessment or mitigatory measures are recommended.	None	None
2. Site of former Bodwredd farmstead	No further assessment or mitigatory measures are recommended.	None	None
3. Site of former building	No further assessment or mitigatory measures are recommended.	None	None
4. Site of Ty'n y Coed cottage	No further assessment or mitigatory measures are recommended.	None	None
5. Site of Cae'r Ty Hen Farmhouse	No further assessment or mitigatory measures are recommended.	None	None
37. Prehistoric settlement, Kingsland	A prehistoric settlement was identified by the geophysical survey and confirmed by the programme of evaluation trenching. A further programme of <i>trial trenching</i> should be implemented to be completed as part of a project commitment post outline planning. The trenches should see a wide enough area stripped of soil to fully characterise the nature of the remains. There is the potential option to preserve the remains in-situ and to build the site into the scheme layout.	Trial Trenching	Dependant on trenching results
38. Possible prehistoric field system, Kingsland	A possible prehistoric field system was identified during the programme of evaluation trenching. A further programme of <i>trial trenching</i> should be implemented to be completed as part of a project commitment post outline planning. The trenches should see a wide enough area stripped of soil to fully characterise the nature of the remains. There is the potential option to preserve the remains in-situ and to build the site into the scheme layout.	Trial Trenching	Dependant on trenching results
39. Post-medieval field system, Kingsland	A post-medieval field system was identified during the programme of trial trenching. The pattern and nature of field boundaries are an important part of the historic landscape. Their construction can provide valuable information about the landscape and its evolution. No further assessment is recommended but any further field boundaries uncovered either during further trial trenching, watching brief, or through areas of strip, map and sample should have a <i>basic record</i> taken as part of a project commitment during construction.	None	Basic record
40. Possible modern pit	A pit of probable recent date was excavated in trench 11. No further assessment or mitigatory measures are recommended.	None	None
41. Pit with burnt stone, Kingsland	A possible prehistoric pit was excavated in evaluation trench 13. A further programme of <i>trial trenching</i> should be implemented to be completed as part of a project commitment post outline planning. The trenches should see a wide enough area stripped of soil to fully characterise the nature of the remains.	Trial Trenching	Dependant on trenching results

Feature	Comment	Further Assessment	Mitigation Measures
Areas of Unknown Potential	The archaeological desk-based assessment identified the area as having a medium to high potential for the survival of buried archaeological remains. The geophysical survey and programme of evaluation trenching has confirmed that buried prehistoric archaeological remains are present. It is recommended that a further programme of <i>trial trenching</i> is undertaken at Kingsland to further characterise the buried archaeological remains, and the results of this are utilised to help inform the required level of mitigatory measures. The evaluation programme should be completed as part of a project commitment post outline planning. If significant archaeology is discovered then potential options should be explored to either incorporate the archaeological features into the proposed development or to re-bury and preserve in-situ.	Trial Trenching	Dependant on trenching results
<b>Cae Glas</b>			
7. Trefignath Farm	The nature of the buried remains is not currently understood and thus a <i>Trial trench</i> (post outline planning) should be placed across the location to determine the extent and condition of buried archaeological remains. This should be undertaken as a project commitment prior to construction. The mitigatory measures required and potential options will be determined from the results of the trial trenching stage.	Trial Trenching	Dependant on trenching results
8. Trefignath Burial Chamber	<i>Avoidance essential</i> . Every effort should be made to avoid excessive visual intrusion. It must be possible to appreciate the monument in its landscape setting. The existing guardianship area should be adequate to preserve the immediate surroundings of the monument. The view of Cadw needs to be sought on any design that affects the setting of this site, and scheduled ancient monument consent may be required. This should be undertaken as a project commitment prior to construction.	None	Avoidance
9. Tyddyn Bach	No further assessment or mitigatory measures are recommended.	None	None
10. Tidal Mill at Felin-Heli	No further assessment or mitigatory measures are recommended.	None	None
11. Tre-Ddaniel	No further assessment or mitigatory measures are recommended.	None	None
12. Cae Glas Farm	No further assessment or mitigatory measures are recommended.	None	None
13. Tre'r Gof Farm	There is the possibility of buried remains at foundation level of buildings associated with the standing remains. A programme of <i>trial trenching</i> (post outline planning) should take place to determine the full nature of the remains and thus the potential impact upon them. The mitigatory measures required will be determined from the results of the trial trenching stage. This should be undertaken as a project commitment prior to construction.	Trial Trenching	Dependant on trenching results. Historic building record.
14. Trearddur Burial Chamber	<i>Avoidance essential</i> . Every effort should be made to avoid excessive visual intrusion. It must be possible to appreciate the monument in its landscape setting. This should be undertaken as a project commitment prior to construction.	None	Avoidance
33. Roman coin hoard findspot	No further assessment or mitigatory measures are recommended.	None	None
34. Pillbox	No further assessment or mitigatory measures are recommended.	None	None
35. Pillbox	No further assessment or mitigatory measures are recommended.	None	None
36. Pillbox	No further assessment or mitigatory measures are recommended.	None	None
42. Prehistoric burnt mound	No further assessment is required. A programme of <i>strip, map and sample</i> should be implemented to be completed as part of a project commitment and in advance of any groundwork within this area to ensure that the archaeological heritage is preserved via record.	None	Strip, map and sample

Feature	Comment	Further Assessment	Mitigation Measures
43. Prehistoric burnt mound	No further assessment is required. A programme of <i>strip, map and sample</i> should be implemented to be completed as part of a project commitment and in advance of any groundwork within this area to ensure that the archaeological heritage is preserved via record.	None	Strip, map and sample
44. Culvert	No further assessment is recommended but any further culverts uncovered either during further trial trenching, watching brief, or through areas of strip, map and sample should have a <i>basic record</i> taken as part of a project commitment.	None	Basic record
45. Post-medieval field system, Cae Glas	A post-medieval field system was identified during the programme of trial trenching. The pattern and nature of field boundaries are an important part of the historic landscape. Their construction can provide valuable information about the landscape and its evolution. No further assessment is recommended but any further field boundaries uncovered either during further trial trenching, watching brief, or through areas of strip, map and sample should have a <i>basic record</i> taken as part of a project commitment.	None	Basic record
46. Possible Roman period ditch	A further programme of <i>trial trenching</i> should be implemented to be completed as part of a project commitment post outline planning. The trenches should see a wide enough area stripped of soil to fully characterise the nature of the remains.	Trial Trenching	Dependant on trenching results
Areas of unknown potential	<p>The Cae Glas area has been shown to be potentially rich in archaeological remains. It contains two Neolithic burial chambered cairns within proximity, one of which is a Scheduled Ancient Monument (AN012). The area is similar in character to Parc Cybi, where considerable remains of buried archaeology were found dating to the Neolithic, Bronze Age, Iron Age, Roman, Medieval and Post-medieval periods. The geophysical survey and evaluation trenching identified two bronze age burnt mounds and the continuation of a probable Roman ditch, possibly part of a trackway identified during the Parc Cybi excavations. Given the known quality and quantity of archaeological remains in the vicinity, the area proposed for development is thought to have a medium to high potential for the survival of archaeological remains.</p> <p>It is recommended that a further programme of trial trenching is undertaken at Cae Glas to further characterise the buried archaeological remains, and the results of this are utilised to help inform the required level of mitigatory measures. The evaluation programme should be completed as part of a project commitment post outline planning. If significant archaeology is discovered then potential options should be explored to either incorporate the archaeological features into the proposed development or to re-bury and preserve in-situ.</p> <p>A programme of targeted strip, map and sample should be implemented at the known locations of the bronze age burnt mounds to excavate the features and ensure their preservation by record. However, this programme of work should be informed through the results of the proposed trial trenching phase so that suitable zones of mitigation can be established. This should be undertaken as a project commitment prior to the start of construction.</p>	Trial Trenching	Dependant on trenching results
<b>Penrhos</b>			
6. Stanley Gate Tollhouse	No further assessment or mitigatory measures are recommended.	None	None

Feature	Comment	Further Assessment	Mitigation Measures
15. Penrhos Bailiff's Tower and Home Farm	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
16. Penrhos Betting Stand	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
17. Penrhos Candle Tower and walls adjoining Penrhos House	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
18. Penrhos Water Tower	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
19. Penrhos Garden	Further assessment of the monument is required in the form of a <i>conservation management plan</i> , the results of which should be used to help inform mitigation measures. This is required as there are a plethora of garden features within the forest encroachment which could be incorporated into the development. The Conservation Management Plan should be completed as a project commitment prior to construction; subsequent stages will be proposed as a result of the assessment.	Conservation Management Plan	Dependent upon the results of the Conservation Management Plan
20. Footprint of Penrhos House	Further assessment of the monument is required in the form of a site visit once vegetation encroachment has been carefully removed. This should be completed as part of a project commitment prior to construction. The results of the site visit may lead to a further programme of evaluation or mitigation to be completed as part of a project commitment.	Inspection after vegetation clearance	Dependent upon results of inspection
21. The Tower, Dairy, Laundry and Gunroom, Penrhos	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
22. The Battery	Listed Building consent is required from the local planning authority. No further assessment is required but a <i>historic building record</i> should be taken prior to construction and as part of a project commitment.	None	Listed Building consent; historic building record
23. Prehistoric Standing Stone	No further assessment or mitigatory measures are recommended.	None	None
24. Flint Finds, Penrhos Bay	No further assessment or mitigatory measures are recommended.	None	None
25. Boathouse	No further assessment is required but a historic building record prior to alteration should be completed as part of a project commitment prior to construction.	None	historic building record
26. Bathing House	No further assessment is required but a historic building record prior to alteration should be completed as part of a project commitment prior to construction.	None	historic building record
27. Fish Weir	No further assessment or mitigatory measures are recommended.	None	None
28. Fish Weir	No further assessment or mitigatory measures are recommended.	None	None
29. Fish Weir	No further assessment or mitigatory measures are recommended.	None	None
30. Beddmanarch	No further assessment or mitigatory measures are recommended.	None	None

<b>Feature</b>	<b>Comment</b>	<b>Further Assessment</b>	<b>Mitigation Measures</b>
31. Roman coin hoard findspot, Penrhos	No further assessment or mitigatory measures are recommended.	None	None
32. Penrhos Lodge	No further assessment or mitigatory measures are recommended.	None	None
47. Post-medieval field system, Penrhos	A post-medieval field system was identified during the programme of trial trenching. The pattern and nature of field boundaries are an important part of the historic landscape. Their construction can provide valuable information about the landscape and its evolution. No further assessment is recommended but any further field boundaries uncovered either during further trial trenching, watching brief, or through areas of strip, map and sample should have a <i>basic record</i> taken as part of a project commitment.	None	Basic record
48. Site of possible barn, Penrhos	No further assessment is required but a <i>watching brief</i> should be maintained during groundworks in this area.	None	Watching brief
49. Site of possible barn, Penrhos	No further assessment is required but a <i>watching brief</i> should be maintained during groundworks in this area.	None	Watching brief
50. Site of building and yard, Penrhos	No further assessment or mitigatory measures are recommended.	None	None

Feature	Comment	Further Assessment	Mitigation Measures
Areas of unknown potential	<p>The proposed area of development at Penrhos is located to the north of <i>Anglesey Aluminium Metal Limited</i> (AAM), between the A5 Road and the coastline. The present location is characterised by large wooded areas, encompassing most of the southern and central portions of the area, followed by open pasture along the northern headland (encompassing seven irregular shaped fields). South of the headland are the remnants of the Penrhos Estate buildings.</p> <p>The proposed development is mainly concentrated within the central and northern portion of the area: the central woodland will be developed to include a nexus of lodges set within the woodland; the woodland to the immediate north, and along the costal edge to the east and southeast will be retained and enhanced for public use. The lodges will use helical screw pile foundations. The former Penrhos Estate will be developed for both leisure use as well as a lodge zone; the latter will utilise strip foundations rather than piling. The seven open fields along the headland will include low impact parking (<i>Grascrete</i> style) and a series of lodges with associated infrastructure and landscaping. The lodges will be a mix of strip foundations for larger properties (closer to the coastal path) and helical screw pile foundations for lodges further away from the coast. The northernmost portions of these fields will be retained as grazing pasture.</p> <p>The geophysical survey and evaluation trenching has confirmed that the buried archaeological remains encountered are likely to be related to the estate, although the standing stone, flint scatters, Roman find spot, and Napoleonic battery does increase the potential for discovering buried archaeological remains from other periods within the proposed development area.</p> <p>Given the potential for archaeological remains in the vicinity it is recommended that a further programme of <i>trial trenching</i> is undertaken at Penrhos to further characterise the buried archaeological remains, and the results of this are utilised to help inform the required level of mitigatory measures. The evaluation programme should be completed as part of a project commitment post outline planning. If significant archaeology is discovered then potential options should be explored to either incorporate the archaeological features into the proposed development or to re-bury and preserve in-situ.</p>	Trial Trenching	Dependant on trenching results

## **Operational**

11.60 Once the development is complete, no further assessment or mitigatory measures are recommended for any of the sites.

## **Residual Impacts**

### **Construction**

11.61 Residual impacts after mitigation that would result from demolition and construction activities are summarised in Table 11.7, below.

**Table 11.7: Residual Construction Impacts**

<b>Site</b>	<b>Comment</b>	<b>Overall Impact</b>	<b>Overall Significance of Effect</b>
<b>Kingsland</b>			
1. Bodwredd Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
2. Site of former Bodwredd Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
3. Site of former building	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
4. Site of Ty'n y Coed cottage	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
5. Site of Cae'r Ty Hen Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
37. Prehistoric settlement, Kingsland	Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the prehistoric settlement.</li> </ul> Unknown <ul style="list-style-type: none"> <li>The magnitude of impact is unknown as the mitigatory measures will be determined by the results of the trial trenching.</li> </ul>	Unknown	Unknown
38. Possible prehistoric field-system, Kingsland	Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the prehistoric field system.</li> </ul> Unknown <ul style="list-style-type: none"> <li>The magnitude of impact is unknown as the mitigatory measures will be determined by the results of the trial trenching.</li> </ul>	Unknown	Unknown
39. Post-medieval field system, Kingsland	Beneficial <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through the preservation by record of the post-medieval field system.</li> </ul> Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the post-medieval field system.</li> </ul>	Low Adverse	Unknown (Negligible)
40. Possible modern pit	Beneficial <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through the preservation by record of the pit (completed during trial trenching phase).</li> </ul> Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the pit</li> </ul>	High Adverse	Negligible
41. Pit with burnt stone, Kingsland	Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the post-medieval field system.</li> </ul> Unknown <ul style="list-style-type: none"> <li>The magnitude of impact with mitigation is unknown as the mitigatory measures will be determined by the results of the trial trenching.</li> </ul>	Unknown	Unknown
<b>Cae Glas</b>			
7. Trefignath Farm	Adverse <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the farm remains.</li> </ul>	Unknown	Unknown

	<p><i>Unknown</i></p> <ul style="list-style-type: none"> <li>The magnitude of impact with mitigation is unknown as the mitigatory measures will be determined by the results of the trial trenching.</li> </ul>		
8. Trefignath Burial Chamber	<p><i>Negative</i></p> <ul style="list-style-type: none"> <li>There will be a low adverse indirect impact upon the significant views east and northeast through the proposed construction of the Cae Glas visitor car park. This impact is negated somewhat by the sympathetic design of the car park to incorporate newly planted trees. Furthermore, these historic viewpoints have already been frustrated to a degree by the construction of the A55 expressway and Anglesey Aluminium.</li> </ul> <p><i>Neutral</i></p> <ul style="list-style-type: none"> <li>The significant view towards, from and between the burial chamber and the Trearddur burial chamber will be retained.</li> </ul>	Low Adverse	Minor Adverse
9. Tyddyn Bach	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
10. Tidal Mill at Felin-Heli	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
11. Tre-Ddaniel	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
12. Cae Glas Farm	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
13. Tre'r Gof Farm	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through increased interpretation through information boards.</li> <li>There will be a direct beneficial impact through the stabilisation of the ruins with their incorporation into a hotel complex, thus ensuring their long-term survival.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a direct adverse impact upon buried remains through the construction of the hotel.</li> <li>There will be an indirect adverse impact through the complete alteration of the monument's setting.</li> <li>There will be an indirect adverse impact through the alteration of the historic landuse from rural farming to a hotel.</li> <li>There will be an indirect adverse impact through the frustration of the key links between the farm and the fields historically associated with it.</li> </ul>	Medium Adverse	Minor/ Moderate Adverse
14. Trearddur Burial Chamber	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact from increased interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a medium indirect impact from the proposed lodges and cricket pitch upon the significant views northeast and south. This impact is reduced somewhat by the existing frustration upon the significant views by the A55 expressway, Anglesey Aluminium, and Trearddur Bay.</li> </ul>	Low Adverse	Minor Adverse
33. Roman coin hoard findspot	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
34. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect	Neutral	Neutral

	impact upon the site.		
35. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
36. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site.	Neutral	Neutral
42. Prehistoric burnt mound	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Minor Adverse
43. Prehistoric burnt mound	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Minor Adverse
44. Culvert	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Negligible
45. Post-medieval field system, Cae Glas	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Negligible
46. Possible Roman period ditch	<p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact through the removal of the post-medieval field system.</li> </ul> <p><i>Unknown</i></p> <ul style="list-style-type: none"> <li>▪ The magnitude of impact with mitigation is unknown as the mitigatory measures will be determined by the results of the trial trenching.</li> </ul>	Unknown	Unknown
<b>Penrhos</b>			
6. Stanley Gate Tollhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
15. Penrhos Bailiff's Tower and Home Farm	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact as the Bailiff's Tower and Home Farm will be stabilised and retained, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact through the loss of access for local people during the construction phase.</li> </ul>	Low Adverse	Minor Adverse
16. Penrhos Betting Stand	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect adverse impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the</li> </ul>	Neutral	Neutral

	<ul style="list-style-type: none"> <li>construction of the Quillet Lodges and Woodland Parking Area.</li> <li>There will be an indirect adverse impact upon the visual links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings due to the construction of Quillet Lodges and Woodland Parking Area, although this is reduced by the existing frustration upon significant views due to the encroachment of the forest.</li> <li>There will be an indirect impact through the restriction of access during the construction phase.</li> </ul>		
17. Penrhos Candle Tower and walls adjoining Penrhos House	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect impact through the restriction of access during the construction phase.</li> </ul>	Medium Beneficial	Minor/ Moderate Beneficial
18. Penrhos Water Tower	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect adverse impact upon the setting of the Listed Building through the frustration of the historic links between it and Penrhos House and outbuildings by the construction of the Estate Cottages.</li> </ul>	Low Beneficial	Minor Beneficial
19. Penrhos Garden	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of some garden features thus ensuring their long-term survival.</li> <li>The conservation management plan will provide relevant management practices to ensure the long-term survivability of features.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a medium indirect adverse impact upon the setting of the garden through the frustration of the intimate historic character of the gardens by the construction of the Estate Cottages.</li> <li>There will be an indirect adverse impact through the restriction of access for local people.</li> </ul>	Low Adverse	Minor Adverse
20. Footprint of Penrhos House	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the incorporation of the upstanding remains of Penrhos House into the Spa, thus stabilising it and ensuring its long-term survival.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an unknown direct adverse impact upon the surviving below ground remains, although the condition of these is currently unknown.</li> <li>There will be an indirect impact as the buried remains will not be preserved in-situ nor through record and thus the potential knowledge will be lost.</li> </ul>	Unknown	Unknown
21. The Tower, Dairy, Laundry and Gunroom, Penrhos	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> </ul>	Low Beneficial	Minor Beneficial

	<ul style="list-style-type: none"> <li>▪ There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact through the restriction of access for local people.</li> </ul>		
22. The Battery	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect impact as the Listed Building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect adverse impact through the restriction of access for local people.</li> <li>▪ There will be a low indirect impact upon the view southeast from the monument through the construction of the Hub and Headland Lodges.</li> </ul>	Low Beneficial	Minor Beneficial
23. Prehistoric Standing Stone	<ul style="list-style-type: none"> <li>▪ There will be an indirect impact upon far reaching views southeast across the headland by the construction of the Headland Lodges.</li> <li>▪ There will be an indirect impact due to the restriction of public access to the monument during construction works.</li> </ul>	Medium Adverse	Unknown (Minor/ Moderate Adverse)
24. Flint Finds, Penrhos Bay	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
25. Boathouse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>▪ There will be an indirect impact as the building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a low indirect adverse impact upon views towards the Boathouse due to the construction of the new café/ restaurant.</li> <li>▪ There will be an indirect impact through the restriction of access for local people.</li> </ul>	Low to Medium Adverse	Minor/ Moderate Adverse
26. Bathing House	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>▪ There will be a direct impact through the demolition of the modern building on top of the Bathing House foundations.</li> <li>▪ There will be an indirect impact as the building will be recorded and thus historical information gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a low indirect adverse impact upon views towards the Boathouse due to the construction of the new restaurant.</li> <li>▪ There will be an indirect impact through the restriction of access for local people</li> </ul>	Neutral	Neutral
27. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
28. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
29. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral

30. Beddmanarch	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
31. Roman coin hoard findspot, Penrhos	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
32. Penrhos Lodge	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral
47. Post-medieval field system, Penrhos	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Neutral
48. Site of possible barn, Penrhos	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Unknown (Neutral)
49. Site of possible barn, Penrhos	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through the preservation by record.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the removal of the feature.</li> </ul>	Low Adverse	Unknown (Neutral)
50. Site of building and yard, Penrhos	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the construction phase.	Neutral	Neutral

## Operational Phase

11.62 Impacts during the operational phase of the proposed development with proposed mitigation are shown in Table 11.8. Each feature will be discussed separately and impact during the operational phase will be assessed based on the Assessment of the value of archaeological assets defined in Table 11.1.

Table 11.8: Residual Operational Impacts

Site	Comment	Overall Impact	Overall Significance of Effect
<b>Kingsland</b>			
1. Bodwredd Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
2. Site of former Bodwredd Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Unknown (Neutral)
3. Site of former building	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Unknown (Neutral)
4. Site of Ty'n y Coed cottage	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Unknown (Neutral)

Site	Comment	Overall Impact	Overall Significance of Effect
5. Site of Cae'r Ty Hen Farmhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Unknown (Neutral)
37. Prehistoric settlement, Kingsland	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
38. Possible prehistoric field-system, Kingsland	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
39. Post-medieval field system, Kingsland	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
40. Possible modern pit	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
41. Pit with burnt stone, Kingsland	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
<b>Cae Glas</b>			
7. Trefignath Farm	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
8. Trefignath Burial Chamber	There will be a low indirect impact upon the significant views east and northeast during the operational phase of the Cae Glas visitor car park, although these historic viewpoints have already been frustrated to a degree by the construction of the A55 expressway and Anglesey Aluminium.	Low Adverse	Minor Adverse
9. Tyddyn Bach	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
10. Tidal Mill at Felin-Heli	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
11. Tre-Ddaniel	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
12. Cae Glas Farm	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
13. Tre'r Gof Farm	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect beneficial impact through increased interpretation through information boards.</li> <li>▪ There will be a direct beneficial impact through the stabilisation of the ruins with their incorporation into a hotel complex, thus ensuring their long-term survival.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct adverse impact upon buried remains through the construction of the hotel.</li> <li>▪ There will be an indirect adverse impact through the complete alteration of the monument's setting.</li> <li>▪ There will be an indirect adverse impact through the alteration of the historic landuse from rural farming to a hotel.</li> <li>▪ There will be an indirect adverse impact through the frustration of the key links between the farm and the fields historically associated with it.</li> </ul>	Medium Adverse	Minor/Moderate Adverse
14. Trearddur Burial Chamber	There will be an indirect impact from the construction of the proposed lodges and cricket pitch upon the significant views northeast and south. This impact is reduced somewhat by the existing frustration upon the significant views by the A55 expressway, Anglesey Aluminium, and Trearddur Bay.	Low Adverse	Minor Adverse

Site	Comment	Overall Impact	Overall Significance of Effect
33. Roman coin hoard findspot	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
34. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
35. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
36. Pillbox	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
42. Prehistoric burnt mound	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
43. Prehistoric burnt mound	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
44. Culvert	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
45. Post-medieval field system, Cae Glas	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
46. Possible Roman period ditch	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
<b>Penrhos</b>			
6. Stanley Gate Tollhouse	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
15. Penrhos Bailiff's Tower and Home Farm	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact as the Bailiff's Tower and Home Farm will be stabilised and retained, thus ensuring its long-term survival.</li> <li>There will be an indirect impact as the construction of the Market Place to the south will reinstate the original historic courtyard layout to the south.</li> <li>There will be an indirect impact through increased interpretation.</li> <li>There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect impact upon the significant view from the Bailiff's Tower towards the coastline to the north, although this is reduced through the sympathetic design of the height and scale of the Hub building, and by the existing frustration to the significant view by the modern barns to the north.</li> <li>There will be an indirect impact through the alteration of the historic use of the Eastern Range from farm outbuildings to a bike hire and offices.</li> <li>There will be an indirect impact through the loss of access for local people, although this is reduced as access to the interior of the buildings will be increased for guests.</li> </ul>	Low Adverse	Minor Adverse

Site	Comment	Overall Impact	Overall Significance of Effect
16. Penrhos Betting Stand	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect impact through an increase in access by the removal of the existing barriers.</li> <li>▪ There will be an indirect impact through an increase in interpretation.</li> <li>▪ There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the construction of the Quillet Lodges and Woodland Parking Area.</li> <li>▪ There will be an indirect impact upon the visual links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings due to the construction of Quillet Lodges and Woodland Parking Area, although this is reduced by the existing frustration upon significant views due to the encroachment of the forest.</li> <li>▪ There will be an indirect impact through the frustration of the historic links between the Betting Stand, formal gardens, racecourse, and other Listed Buildings through the construction of the Quillet Lodges and Woodland Parking Area.</li> </ul>	Low Beneficial	Minor Beneficial
17. Penrhos Candle Tower and walls adjoining Penrhos House	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be a low indirect beneficial impact through an increase in interpretation.</li> <li>▪ There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be a medium indirect adverse impact through the reduction of access for local people to open days only.</li> </ul>	High Beneficial	Moderate Beneficial
18. Penrhos Water Tower	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct beneficial impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through an increase in access by the removal of current vegetation overgrowth. This impact is reduced as access will not include local people.</li> <li>▪ There will be an indirect beneficial impact upon the significant view westward by the demolition of the property of Erw Deg, thus reinstating the historic view.</li> <li>▪ There will be an indirect beneficial impact upon the setting of the building through the clearing of vegetation alongside the trackway to the east, thus reinforcing the historic link between these two features.</li> <li>▪ There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect adverse impact upon the setting of the Listed Building through the frustration of the historic links between it and Penrhos House and outbuildings by the construction of the Estate Cottages.</li> </ul>	Medium Beneficial	Minor/ Moderate Beneficial

Site	Comment	Overall Impact	Overall Significance of Effect
19. Penrhos Garden	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of some garden features thus ensuring their long-term survival.</li> <li>▪ There will be a direct beneficial impact through the reinstatement of a formal garden to the immediate east of Penrhos House.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect adverse impact upon the setting of the garden through the frustration of the intimate historic character of the gardens by the construction of the Estate Cottages.</li> <li>▪ There will be an indirect adverse impact through the restriction of access for local people.</li> </ul>	Neutral to Slight Adverse	Negligible to Minor Adverse
20. Footprint of Penrhos House	<ul style="list-style-type: none"> <li>▪ There will be a direct impact through the incorporation of the upstanding remains of Penrhos House into the Spa, thus stabilising it and ensuring its long-term survival.</li> <li>▪ There will be a low indirect beneficial impact through the reinstatement of the principal significant view eastward by the re-creation of the formal garden.</li> <li>▪ There will be a low indirect beneficial impact upon the setting of Penrhos House as the Spa is located on the footprint of the house and will reinstate the historical focus of activity.</li> <li>▪ There will be a low indirect beneficial impact through an increase in interpretation.</li> <li>▪ There will be a medium indirect beneficial impact through the increase of access, although this will not be available to local people.</li> </ul>	Unknown	Unknown
21. The Tower, Dairy, Laundry and Gunroom, Penrhos	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through the construction of the Marketplace which will reinstate the historic courtyard layout.</li> <li>▪ There will be an indirect beneficial impact through an increase in access for guests.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> <li>▪ There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact through the restriction of access for local people.</li> </ul>	High Beneficial	Moderate Beneficial
22. The Battery	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>▪ There will be a direct impact through the stabilisation of the building, thus ensuring its long-term survival.</li> <li>▪ There will be an indirect beneficial impact through an increase in access for guests and local people through the improvement of the coastal path.</li> <li>▪ There will be an indirect beneficial impact through an increase in interpretation.</li> <li>▪ There will be an indirect impact as the Listed Building will have been recorded prior to alteration and thus historical information will have been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>▪ There will be an indirect impact upon the view southeast from the monument through the construction of the Hub and Headland Lodges</li> </ul>	Medium to High Beneficial	Moderate to Major Beneficial

Site	Comment	Overall Impact	Overall Significance of Effect
23. Prehistoric Standing Stone	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be an indirect beneficial impact through an increase in access for guests and local people through the improvement of the coastal path.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect adverse impact upon far reaching views southeast across the headland by the construction of the Headland Lodges. The impact has been somewhat mitigated by sympathetic design utilising simple, unadorned pitch form and natural timber boards or shingles to help the lodges blend into the landscape. More prominent lodges will also have grass roofs, further reducing visual impact.</li> </ul>	Neutral	Neutral
24. Flint Finds, Penrhos Bay	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
25. Boathouse	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>There will be an indirect beneficial impact through an increase in interpretation.</li> <li>There will be an indirect impact as the building will have been recorded and thus historical information been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be an indirect adverse impact upon views towards the Boathouse due to the construction of the new café/ restaurant.</li> </ul>	Low Adverse	Minor Adverse
26. Bathing House	<p><i>Beneficial</i></p> <ul style="list-style-type: none"> <li>There will be a direct impact through the stabilisation of the monument thus preserving its long-term survival.</li> <li>There will be a direct beneficial impact through the demolition of the existing modern building, and the construction of the new restaurant which will incorporate significant amounts of glazing and a sympathetic scale and materiality to be less visually intrusive than the current modern building.</li> <li>There will be an indirect beneficial impact through the enhancement of the historical significant view seaward through the use of large glazing panels in the new restaurant building.</li> <li>There will be an indirect impact as the building will have been recorded and thus historical information been gained.</li> </ul> <p><i>Adverse</i></p> <ul style="list-style-type: none"> <li>There will be a direct adverse impact through the addition of a plinth to the existing stonework although this will be reduced through the use of locally sourced stone.</li> </ul>	Low Beneficial	Negligible
27. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
28. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
29. Fish Weir	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
30. Beddmanarch	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
31. Roman coin hoard findspot, Penrhos	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral

Site	Comment	Overall Impact	Overall Significance of Effect
32. Penrhos Lodge	The proposed development is not expected to have a beneficial or adverse, direct or indirect impact upon the site during the operational phase.	Neutral	Neutral
47. Post-medieval field system, Penrhos	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
48. Site of possible barn, Penrhos	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
49. Site of possible barn, Penrhos	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral
50. Site of building and yard, Penrhos	The site will have been mitigated for during the construction phase, there will be no further anticipated impacts during the operational phase of works.	Neutral	Neutral

## Conclusions

- 11.63 A total of 50 archaeological sites were identified within or close to the three proposed areas of development of the Penrhos Leisure Village. Recommendations include staged programmes of recording, watching brief, strip, map and sample, and preservation in-situ, as well as further assessment through a conservation management plan for the Penrhos area. The risks proposed by the discovery of significant buried archaeological sites are to be managed by liaison with project designers to try to limit impact and minimise the need for large-scale archaeological excavations. This will be completed as a staged process.
- 11.64 The principal sites within the Penrhos area are the former estate buildings, house and gardens. There are eight listed buildings in the area which form the principal remains of the estate buildings. It is recommended that these are incorporated into the proposed development wherever possible. The original house has been demolished, though small parts remain, and the gardens now form part of the Penrhos Country Park. It is recommended that a historic building record is undertaken for any building of historic importance where it is to be impacted upon, even in a beneficial way.
- 11.65 In the Cae Glas area two Neolithic burial chambers (one a scheduled ancient monument) are of particular significance, and indicate the possible presence of buried prehistoric archaeology. A parking area is proposed close to the Trefignath burial chamber and a cricket pitch is proposed close to the Trearddur Bay burial chamber. Furthermore, the geophysical survey and evaluation trenching work located two bronze age burnt mounds, and a possible Roman period ditch to the northern part of the area. The former house of Tre'r Gof within the Cae Glas site, now reduced to foundation level, is an important example of a late-medieval house.
- 11.66 In the Kingsland area the evaluation work undertaken revealed the remains of a prehistoric settlement and possible field system.
- 11.67 It is recommended that heritage assets are used positively to contribute and enhance the development, and that the potential for the development of heritage as both leisure attractions and as education facilities is examined.

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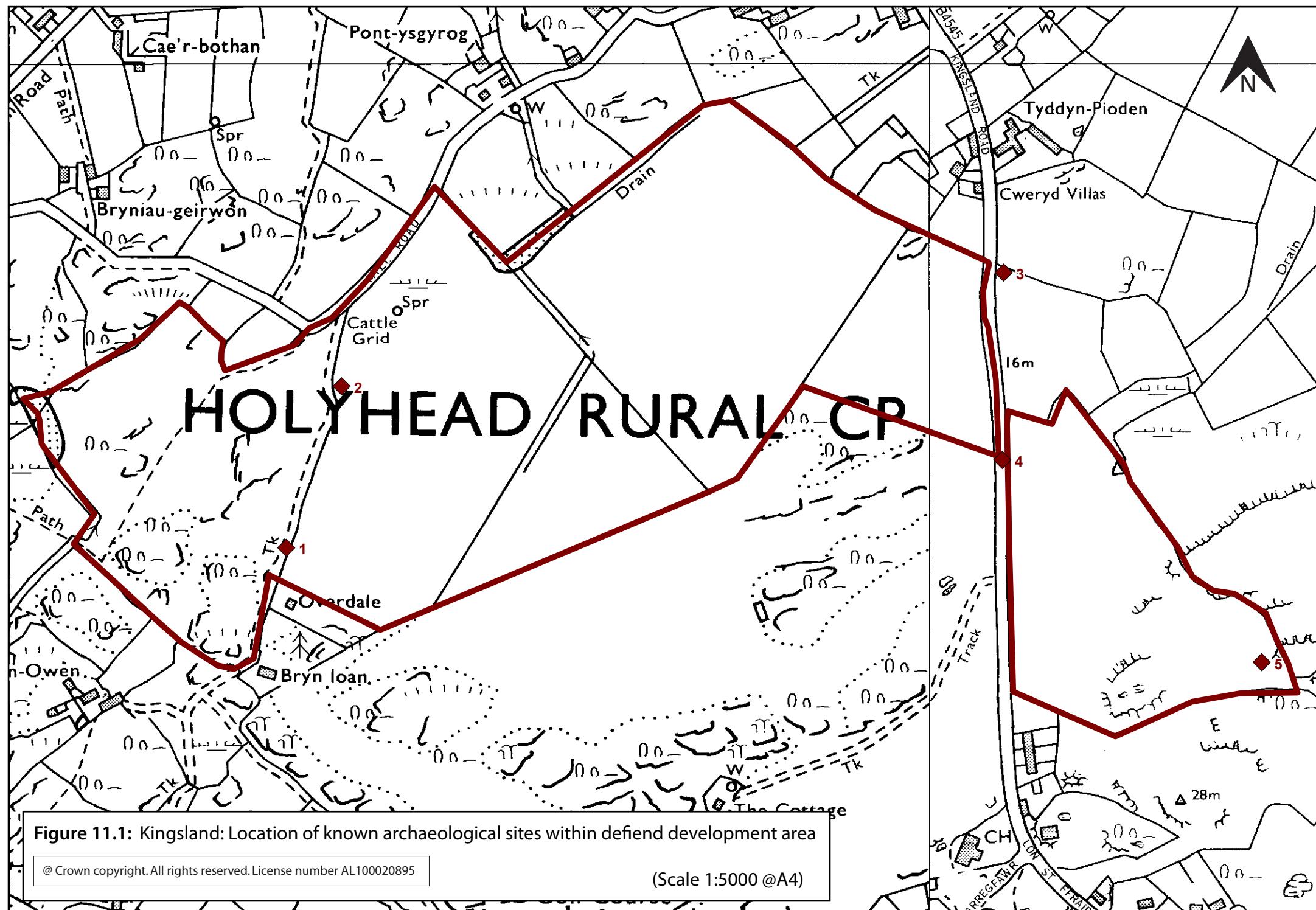
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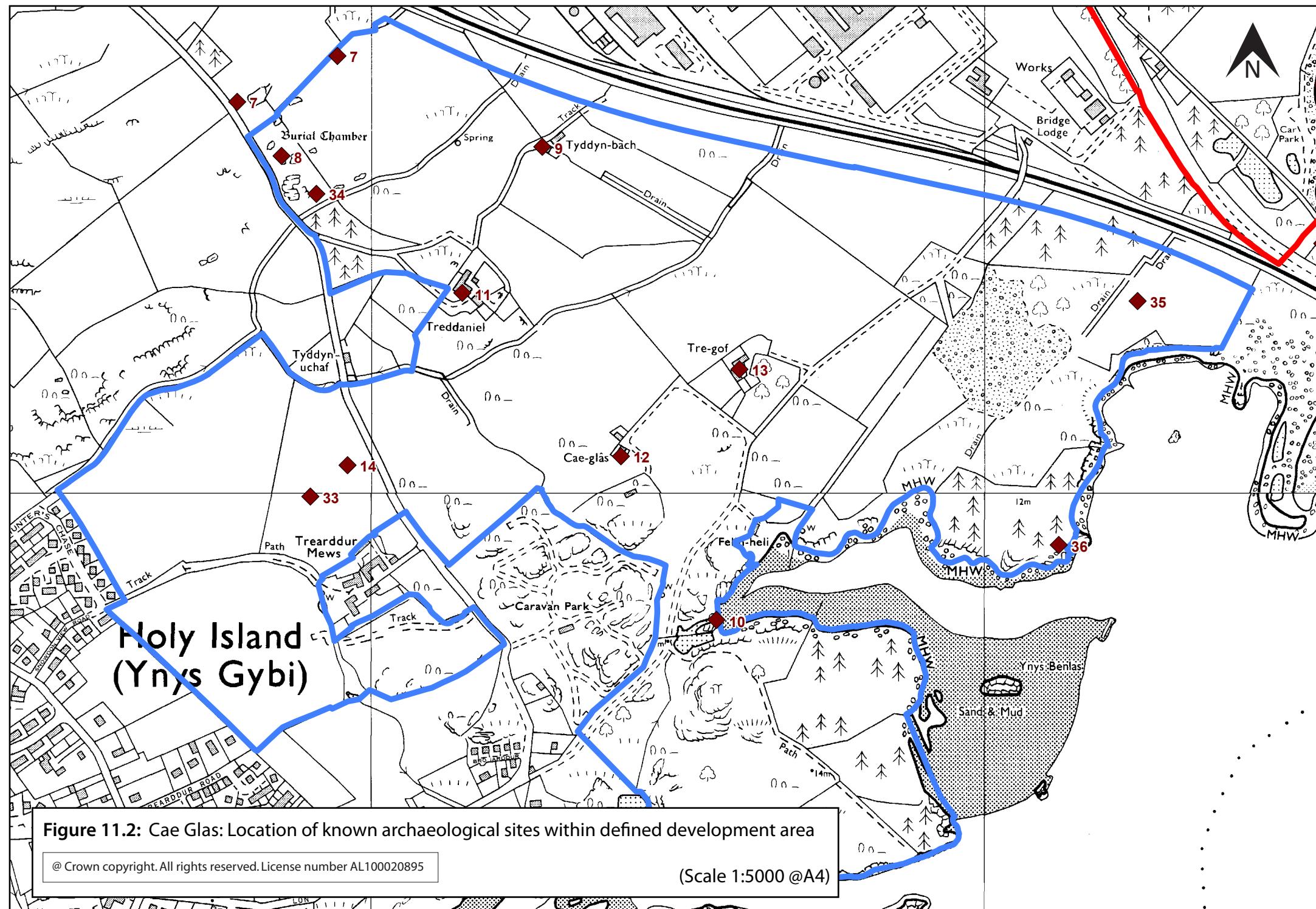
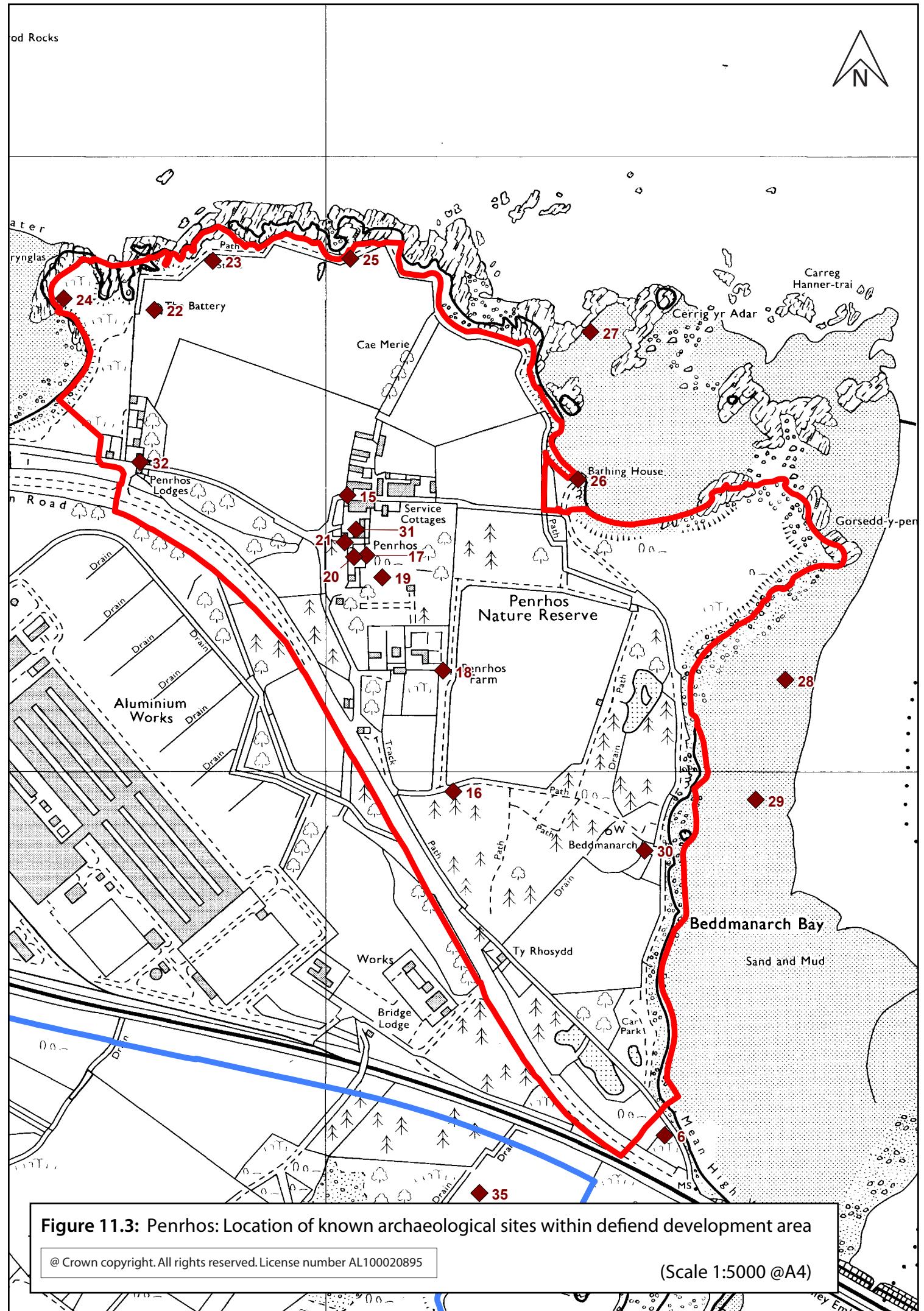


Figure 11.2: Cae Glas: Location of known archaeological sites within defined development area



**Figure 11.3:** Penrhos: Location of known archaeological sites within defiend development area