

Corran Resort and Spa, Laugharne, Carmarthenshire

Environmental Statement Chapter 2 Cultural Heritage Impact Assessment



By Philip Poucher

Report No: 1452

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Environmental Statement Chapter 2 Cultural Heritage Impact Assessment Prepared For: Corran Resort & Spa

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Chapter 2.4 ARCHAEOLOGY AND CULTURAL HERITAGE

1 INTRODUCTION & METHODOLOGY

1.1 Introduction

- 1.1.1 In July 2015 Archaeology Wales (AW) was commissioned by Pennaf Premier Group to prepare a Cultural Heritage Impact Assessment as part of an Environmental Statement, in order to provide a detailed Assessment of the potential effects of a proposed development at the Corran Resort & Spa, East Marsh, Laugharne, Carmarthenshire (Planning Reference: W/31936).
- 1.1.2 The Assessment has collated details of the known archaeological and historic sites and features, or 'heritage assets', and considered the potential for the presence of unknown or unrecorded heritage assets. This information was used to produce an assessment of the historic environment of the area within which the Proposed Development lies.
- 1.1.3 The Assessment considers the likely significant effects of the Proposed Development on all of these heritage assets, including archaeological sites, features and finds, historic buildings and historic landscapes. Both potential 'direct' and 'indirect' effects on the historic environment are considered. Where likely significant adverse effects are identified, mitigation measures to prevent, reduce, or offset them are proposed, and likely residual effects remaining after mitigation are determined
- 1.1.4 The proposed development consists of the erection of 200 two, three and four bedroom lodges, a swimming pool and reception, a restaurant forming an extension to the existing hotel, the creation of ponds and winter wetlands and potential improvements to the local highway network.

1.2 Planning Policy Context

- 1.2.1 National Policies relating to archaeology and cultural heritage include the following:
 - Ancient Monuments and Archaeological Areas Act 1979.
 - Planning (Listed Buildings and Conservation Areas) Act 1990.
 - Welsh Office Circular 60/96: Planning & the Historic Environment: Archaeology.
 - Welsh Office Circular 61/96: Planning & the Historic Environment: Historic Buildings and Conservation Areas.
 - Welsh Office Circular 1/98: Planning and the historic environment: directions by the Secretary of State for Wales.
- 1.2.2 In December 2014 Carmarthenshire County Council adopted the Local Development Plan (LDP) for the County, excluding the area of the Brecon Beacons National Park. The relevant sections of these are laid out within the Planning Report (Hayston Developments & Planning Ltd 2015), but of particular reference to Cultural Heritage are:

• SP13 Protection and Enhancement of the Built and Historic Environment, which states that development proposals should preserve or enhance the built and historic environment of the County, its cultural, townscape and landscape assets, and, where appropriate, their setting. Proposals relating to the following will be considered in accordance with national guidance and legislation. These assets include

a) Sites and features of recognised Historical and Cultural Importance;

b) Listed buildings and their setting;

c) Conservation Areas and their setting;

d) Scheduled Ancient Monuments and other sites of recognised archaeological importance.

Proposals will be expected to promote high quality design that reinforces local character and respects and enhances the local setting and the cultural and historic qualities of the plan area.

 Policy EQ1 Protection of Buildings, Landscapes and Features of Historic Importance, which states that proposals for development affecting landscapes, townscapes buildings and sites or features of historic or archaeological interest which by virtue of their historic importance, character or significance within a group of features make an important contribution to the local character and the interests of the area will only be permitted where it preserves or enhances the built and historic environment.

1.3 Impact Assessment Methodology

- 1.3.1 The primary objective is to assess the impact of the development proposals on the historic environment. The aim is to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.
- 1.3.2 The work includes a comprehensive assessment of regional context within which the archaeological evidence rests and aims to highlight any relevant research issues within national and regional research frameworks. This Assessment provides information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* has been advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record has been recommended.
- 1.3.3 Following consultations with Dyfed Archaeological Trust Planning Services (archaeological advisors to the Local Planning Authority), Cadw and the Conservation Officer to the Local Planning Authority this assessment considers the following:

a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area through assessment of various readily available primary sources:

- Collation and assessment of all relevant information held in the regional HER at Llandeilo within a 2km radius of the development site;
- Collation and assessment of all Designated archaeological sites with a 5km radius of the development site;
- Assessment of all available excavation report and archives including unpublished and unprocessed material affecting the site and its setting.
- Assessment of aerial photographic (AP) evidence;
- Assessment of archive records held at the County Archive and at the National Library of Wales (NLW);
- Records held by the developer e.g. bore-hole logs, geological/geomorphological information, aerial photographs, maps, plans;
- Map regression analysis using all relevant cartographic sources e.g. all editions of the Ordnance Survey County Series, Tithe and early estate maps (as available);
- Place-name evidence;
- Internet sourced satellite imagery;
- Historic documents (e.g. charters, registers, estate papers).

b) The significance of any remains in their context both regionally and nationally, and in light of the findings of the desk based study.

c) The history of the site.

d) The potential visual impact of any proposed development on the setting of known sites of archaeological importance.

e) The potential for further work, with recommendations where appropriate for a suitable investigative and/or mitigation methodology.

- 1.3.4 The scoring system for assessing the magnitude of impact of the proposed development is based on the Design Manual for Roads and Bridges (DMRB) (Volume 11 Environmental Assessment, Section 3 Environmental Topics, Part 2, Cultural Heritage) (Ref. 9-2), which is published by the UK Government on behalf of the Highways Agency, Transport Scotland, Welsh Assembly Government (Llywodraeth Cynulliad Cymru) and the Department For Regional Development Northern Ireland.
- 1.3.5 DMRB is the established good practice guidance for assessing the impact of the effects of the Proposed Development on the cultural heritage resource, which it divides into three sub-topics: Archaeological Remains, Historic Buildings and Historic Landscapes.

Archaeological Remains

1.3.6 Archaeological Remains are the materials created or modified by past human activities that contribute to the study and understanding of past human societies and behaviour. Archaeology can include the study of a wide range of artefacts, field monuments, structures and landscape features, both visible and buried. For the purposes of the [DMRB] guidance the sub-topic generally excludes historic buildings

and historic landscapes, always accepting there may be important archaeological aspects to these sub-topics.

- 1.3.7 The following scale of values are used in assessing the value/sensitivity of archaeological remains. For each value, the asset types relevant to the definition are listed in brackets afterwards. Where the definition of the asset type is ambiguous (for example 'sites of international importance'), the assessing archaeologist will use his or her professional judgement in deciding whether to allocate particular remains to it.
 - Very High (World Heritage Sites and other sites of international importance);
 - High (Scheduled Monuments, undesignated assets of schedulable quality, assets of National importance that can contribute significantly to acknowledged national research objectives);
 - Medium (Designated or undesignated assets of Regional importance that contribute to regional research objectives);
 - Low (assets of local importance, assets compromised by poor preservation or poor survival of contextual associations);
 - Negligible (assets with little or no surviving archaeological interest);
 - Unknown (the importance of the resource has not been ascertained).
- 1.3.8 An 'Unknown' value may sometimes be all that can be determined, particularly in the early stages of a project. In these cases, an estimate of the risk of there being valuable archaeological remains that could be affected will be made together with an indication of how this risk is to be managed.
- 1.3.9 Magnitude of effect is assessed using the guidelines set out in the DMRB. This assessment is made without regard to the value of the resource, so the total destruction of a low value site is considered as the same magnitude of effect as the destruction of a Scheduled Ancient Monument. The effect can be either 'direct' or 'indirect'. A direct effect is where there is a physical impact on a heritage asset, typically during the construction phase. Indirect is when there is a visual effect on the asset or its setting. In the broadest terms, the setting of an asset comprises the objects and conditions around it, and within which it is perceived; and in this sense all assets have settings. Not all settings, however, contribute to the value of the assets they encompass. The setting will be a combination of views, other historic features and their relationships to the asset, ambience (topography, vegetation, sound, and other sensual experiences) and context (what is known or thought about the asset, but not immediately experienced through the senses).
- 1.3.10 The following scales of values will be used in assessing the magnitude of impacts:
 - Major (change to most or all key archaeological materials, such that the resource is totally altered; comprehensive changes to setting);
 - Moderate (changes to many key archaeological materials, such that the resource is clearly modified; considerable changes to setting that affect the character of the asset);

- Minor (changes to key archaeological materials, such that the asset is slightly altered; slight changes to setting);
- Negligible (very minor changes to archaeological materials, or setting);
- No Change

Historic Buildings

- 1.3.10 Historic buildings are architectural or designed or other structures with a significant historical value. These may include structures that have no aesthetic appeal, and the sub-topic includes, in addition to great houses, churches and vernacular buildings, some relatively modern structures, such as WWII and Cold War military structures, early motorway service stations, industrial buildings, and sometimes other structures not usually thought of as 'buildings', such as milestones or bridges.
- 1.3.11 The following scale of values will be used in assessing the value/sensitivity of historic buildings and structural remains. For each value, the asset types relevant to the definition are listed in brackets afterwards. Where the definition of the asset type is ambiguous (for example 'sites of international importance'), the assessing archaeologist will use his or her professional judgement in deciding whether to allocate particular historic buildings and structural remains to it.
 - Very High (World Heritage Sites and other sites of international importance);
 - High (Scheduled Monuments with standing remains, Grade I and Grade II* Listed Buildings, other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade, conservation Areas containing very important buildings, undesignated structures of clear national importance);
 - Medium (Grade II listed buildings, unlisted buildings that have exceptional qualities in their fabric or historical associations, Conservation Areas that contain buildings that contribute significantly to its historic character, Historic Townscape or built-up areas with important historic integrity in their buildings, or built settings);
 - Low (locally Listed buildings, historic buildings of modest quality, Historic Townscape or built areas of limited historic integrity in their buildings or built settings);
 - Negligible (buildings of no architectural or historical note);
 - Unknown (buildings with some hidden potential for historic significance).
- 1.3.12 An 'Unknown' value may sometimes be all that can be determined, particularly in the early stages of a project. In these cases, an estimate of the risk of there being valuable archaeological remains that could be affected will be made with an indication of how this risk is to be managed.
- 1.3.13 The following scales of values will be used to assess the magnitude of impacts:
 - Major (change to key historic building elements, such that the resource is totally altered, comprehensive changes to the setting);

- Moderate (Change to many key historic building elements, such that the resource is significantly modified; changes to the setting of an historic building, such that it is significantly modified); considerable (changes to setting that affect the character of the asset);
- Minor (Change to key historic building elements, such that the asset is slightly different, change to setting of an historic building, such that it is noticeably changed);
- Negligible (Slight changes to historic buildings elements or setting that hardly affect it);
- No Change (No change to fabric or setting).

Historic Landscapes

- 1.3.14 Historic Landscapes are defined by perceptions that emphasise the evidence of the past and its significance in shaping the present landscape. The definition encompasses all landscapes, including the countryside, townscapes and industrial landscapes as well as designed landscapes, such as gardens and parks. As the whole of the UK's (and most of the world's) landscape has been modified by past human activities, it all has an historic character. However, just as all old materials are not necessarily archaeologically significant merely by virtue of their age, so not all landscapes are equally historically significant.
- 1.3.15 In Wales some historic landscapes are considered particularly significant and/ or wellpreserved, and have been recorded in a Register of Landscapes of Historic Interest in Wales, issued in two parts in 1998 and 2001. These landscapes are classed as either of outstanding or special interest. The guidance related to these is advisory and nonstatutory, but Historic Landscapes on the Register need to be taken into account when considering the implications of developments that will have more than a local impact.
- 1.3.16 The following scale of values will be used in assessing the value/sensitivity of historic landscapes. For each value, the asset types relevant to the definition are listed in brackets afterwards. Where the definition of the asset type is ambiguous (for example 'Historic Landscapes of international value), the assessing archaeologist will use his or her professional judgement in deciding whether to allocate particular landscape to it.
 - Very High (World Heritage Sites & historic landscapes associated with them);
 - High (designated and undesignated historic landscapes of outstanding interest, designated special historic landscapes, undesignated landscapes of high quality and importance, and of demonstrable national value, well preserved historic landscapes, exhibiting considerable coherence, timedepth or other critical factor(s));
 - Medium (landscapes of regional value, averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s));
 - Low (robust undesignated historic landscapes, historic landscapes with importance to local interest groups, Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations);

- Negligible (landscapes with little or no surviving archaeological interest);
- 1.3.17 The following scale of values will be used to assess the magnitude of impacts:
 - Major (Change to most or all key historic landscape elements, parcels or components; extreme visual, effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character area);
 - Moderate (Changes to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic landscape character);
 - Minor (Changes to few key historic landscape elements, parcels or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access: resulting in limited changes to historic landscape character);
 - Negligible (Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character);
 - No Change (No change to elements, parcels or components; no visual or audible changes; no changes arising from in amenity or community factors).
- 1.3.18 The area lies within the Taf & Tywi Estuary Landscape of Outstanding Historic Interest (HLW (D) 9) and as such the effect on the Historic Landscapes is assessed as part of an ASIDOHL2 study, which is included as an appendix. ASIDOHL2 studies use a different set of assessment categories to those recommended within the DMRB, therefore summaries of the ASIDOHL2 study will be provided within this Assessment and the ASIDOHL2 results will be cross-referenced with the DMRB categorises illustrated above.

Judging the Overall Significance of Effect

1.3.14 Significance of effect is assessed by combining the value of the resource and the predicted magnitude of change/ effect likely to arise, as per the matrix provided below, which is extracted from the DMRB (Vol.II, Sect.3, Pt.2, Chap.5 – table 5.1).

	Very High	Neutral	Slight	Moderate/ Large	Large or Very Large	Very Large
VALUE/SENSITIVITY	High	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large or Very Large
	Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate / Large
VALUE/	Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate

Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	
	No Change	Negligible	Minor	Moderate	Major	
	MAGNITUDE OF EFFECT					

2 BASELINE CONDITIONS

2.1 Site Description

- 2.1.1 The site lies on flat reclaimed saltmarsh located at *c*.4m AOD on land on the western side of the Towy and Taf Estuary and 1.9km south-southwest of Laugharne, Carmarthenshire (Figure 1, SN 296 086). The land consists of regularly shaped pasture fields with some unimproved land, divided by drainage ditches with little or no woodland. Pendine sand dunes and burrows are located 0.6km to the south of the site's southern boundary.
- 2.1.2 The proposed development is based around the existing Corran resort and spa. The site incorporates Grade II listed former farmhouse and farm buildings, converted into the hotel and spa complex at Hurst House, and further converted buildings at the Malthouse Farm a short distance to the north. The proposed development area incorporates several surrounding fields, currently used as improved pasture grazing, bounded by ditches with some hedgerow planting.
- 2.1.3 The bedrock geology consists of Devonian and Silurian sedimentary Sandstone and Conglomerate underlying superficial tidal flat deposits characterized by sand, silt and clayey soils with high ground water (BGS 2015).
- 2.1.4 Sedimentary analysis at various points within Pendine Marsh has apparently recorded sub-surface peat deposits (Walley 1996, K.Murphy pers.comm.), however ground investigation undertaken by Geotechnology Ltd (2015) for the Corran Resort recorded topsoil deposits 0.2m in depth overlying 1m to 1.6m of brown sandy-silt to clayey-sandy-silt with several layers of estuarine alluvium below this. This alluvium consisted of largely grey silts and sandy-silts to a depth of at least 10m to 15m below current ground levels, 7.3mOD to 11mOD, with no peat deposits or bedrock recorded. Some gravel deposits were recorded in one of the borehole samples (to the east of Malthouse Farm) at a depth of 12.7m below current ground levels (8.75mOD).

2.2 Previous archaeological studies

2.2.1 The area is included in the Taf and Tywi Estuary Area of Outstanding Historic Interest (HLW (D) 9) within the Register of Landscapes of Outstanding Historic Interest, published by Cadw, CCW and ICOMOS UK in 1998. The site and the area around it have been assessed as they sit within Historic Landscape Character Area 146 Laugharne and Pendine Marsh. The area has also been assessed as part of LANDMAP, which includes

an assessment of the Historic Landscape (Laugharne and Pendine Marsh - CRMRTHL40175), based around the same boundaries and reasoning as the HLCA.

- 2.2.2 Studies have been undertaken in association with the planning application as previously submitted, included in the Planning Report with Design and Access Statement (Hayston Developments & Planning Ltd 2015). These include an assessment was also undertaken on the impact of the proposed development on the setting of the Listed Buildings that form part of the Corran complex (Scourfield 2015).
- 2.2.3 Recently, an archaeological Appraisal of the proposed development site was undertaken, following a request from DAT-HM on behalf of Carmarthenshire Council (Jones 2015). The decision to undertake an EIA was taken subsequently. The results of the Appraisal have been used to inform this ES Chapter.
- 2.2.4 In addition, an ASIDOHL2 study (Poucher 2015) was undertaken following a preplanning recommendation from Cadw. This study examined the impact on the Historic Landscapes, and is included as an appendix to this ES Chapter.
- 2.2.5 Other archaeological assessments undertaken in the area include an Archaeological Desk-based Assessment for a proposed ragworm farm at Pendine to the southwest (Ramsey 2005) and archaeological surveys of Salthouse Farm and Causeway Farm (Murphy 1999) as part of the Tir Gofal agri-environmental scheme.

2.3 Site, Monument, Building and Landscape Designations (Figures 2.1 – 2.3)

- 2.3.1 In order to assess the historic environment, Scheduled Ancient Monuments (SAMs), Historic Parks and Gardens, Registered Historic Landscapes, Conservation Areas, and Listed Buildings were examined within 5km around the proposed development. This was subsequently reduced by utilising a Zone of Theoretical Visibility (ZTV) to assess the impact on these assets.
- 2.3.2 Within the 5km search area eleven Scheduled Ancient Monuments were identified. None of these sites lie within the area of proposed development, and none of these sites lie within the ZTV.
- 2.3.3 Within the 5km search area 82 Listed Buildings were identified, including two Grade I listed buildings and six Grade II* listed buildings, the remainder being Grade II listed buildings. However, only two Grade II listed buildings lie within the proposed development area (Hurst House LB 9676 & Farm Square at Hurst House LB 9677), and six Grade II listed buildings lie within the ZTV (East House Farm barn range LB 81182, cowhouse range LB 81183 and east farm-range LB 81184, Limekilns LB 27083, Llanmiloe House LB 18870 and the Church of St Sadwrnen LB 25849).
- 2.3.4 There are two Grade II listed historic Parks & Gardens within the 5km search area. Neither lie within the proposed development area, one lies within the ZTV (Llanmiloe House PGW (Dy) 1 (CAM)).
- 2.3.5 Laugharne Conservation Area lies within the 5km search area, but this lies outside both the proposed development area and the ZTV.
- 2.3.6 The proposed development area lies within the Taf and Tywi Estuary Landscape of Outstanding Historic Interest (HLW (D) 9). This area is divided into many individual

Historic Landscape Character Areas (HLCA), which also encompass areas lying outside the limits of the registered Historic Landscape. The proposed development lies within HLCA 143 Laugharne and Pendine Marsh. These landscape areas are fully assessed within the accompanying ASIDOHL2 study.

2.3.7 Within 2km of the proposed development there are 232 unregistered sites listed within the regional Historic Environment Record (HER). Five of these sites lie wholly or partly within the proposed development area (Malthouse Farm pond PRN 10499, Hurst House farmhouse PRN 25294, Hurst House farmstead PRN 25295, Coygan Tramway PRN 29943 and Pendine Marsh Field System PRN 39280. In addition to this The Malthouse Farm has also been identified as an archaeological asset (TCL01) as part of this study.

2.4 *Historical Development*

Prehistoric

- 2.4.1 Throughout much of the Prehistoric period this area would have dominated by activity at Coygan, a limestone promontory jutting out into Pendine Marsh and now largely occupied by extensive quarrying activity. A natural cave on the southeast face of the promontory has been investigated in a series of excavations from the mid-19th century through to the 1960s which recovered significant evidence of occupation by Neanderthal groups dating to the Middle Palaeolithic period (64,000 BC – 50,000 BC) (PRN 3426). Also recovered from this cave were evidence of occupation, in the form of flint tools (PRNs 3427), from the Mesolithic (c. 10,000 – 4400 BC) and Neolithic (c.4400 - 2300 BC) periods. The density of tools and other material recovered from these periods would suggest the cave acted as a temporary shelter for groups of hunter-gathers moving through the landscape. Further Mesolithic (PRN 3853) and Neolithic (PRN 3854) material was recovered from the surface of the promontory itself however, which may be an indication that the promontory was used repeatedly as a camp over significant periods of time. During the Palaeolithic the landscape would have been markedly different, with lower sea-levels resulting in an area of fertile lowlands stretching out in front of Coygan. Even during the Mesolithic and Neolithic periods the landscape is likely to have been markedly different before the establishment of salt marshes across the area from the later prehistoric period onwards. The discovery of further Mesolithic (PRN 12234) and Neolithic (PRNs 2173, 3916, 11078 & 11644) flint tools from around the Laugharne/Roche Castle area as well as from shell-middens on Laugharne Burrows (PRN 3845) indicates something of a concentration of activity in the area.
- 2.4.2 During the Bronze Age (c.2300 700 BC) Coygan is recorded as the site of a possible open settlement (PRN 7450) and at least one fine flint knife (PRN 3852) and a possible burial (PRN 3851) have been recovered from the site. A nearby potential round barrow (PRN 3859) also suggests some funerary and ritual activity in the immediate area of Coygan. The presence of the open settlement would suggest more permanent settlement in the area, and a possible intensification of activity in its immediate environs during this period, although recorded finds of this date are actually relatively scarce.

2.4.3 By the later Iron Age (c.700 BC – AD 43) the potential open settlement had become a defended settlement (PRN 7451). Excavation of this defended settlement in the 1960s revealed at least two huts contemporary with the defensive bank and ditch and finds suggesting occupation from the Iron Age deep into the Romano-British period. Further settlement evidence included a rectangular enclosure, midden and possible burial. By this period salt marsh deposits are likely to have spread across Pendine Marsh, interspersed with brackish lagoons and areas of rough pasture on higher ground, encompassing the proposed development area. Further Iron Age activity is indicated around Laugharne to the north (PRNs 2158 & 11643) and on Pendine Sands to the south (PRN 3846), all of which are likely to have exploited the natural resources of the salt marshes as seasonal hunting and pasture.

Roman & Medieval

- 2.4.4 As previously mentioned evidence was recovered from the excavation of the defended enclosure on Coygan (PRNs 3850, 3855 & 7451) that indicated the site was occupied from the Iron Age into the Romano-British period (AD43 - AD410), with a significant quantity of pottery recovered dating to the late 3rd century AD that appeared to be associated with the huts recorded within the settlement. The style of occupation suggests a continuation of a traditional way of life deep into the Romano-British period, with little evidence of a more 'Romanized' style of settlement and activity in the area. However, antiquarian records of the discovery of a coin hoard (PRN 2157) and associated finds (PRN 3860) near Laugharne Castle indicate a concentration of more traditional 'Roman' finds in the area which may suggest a more Romanized settlement may yet be discovered. Romano-British finds (PRN 3847) recovered from shell-middens on Laugharne Burrows to the south has led to the suggestion of further Romano-British settlement in the area (PRN 3846) as well as an indication of a continued exploitation of maritime resources which is likely to have included seasonal hunting and pasture across the salt marshes of Pendine Marsh.
- 2.4.5 Coygan camp continued in occupation into the Early Medieval period (*c*. AD 410 AD 1066), and as evidence of activity from this period is generally scarce, this would appear to be a site of some significance. Imported sixth-century material suggests that it continued to be a high status site beyond the Roman period (Campbell 1988).
- 2.4.6 A 6th century inscribed stone (PRN 3911) lies within Llansadwrnen church to the north. The site itself may have early medieval origins as an ecclesiastical establishment, although it is considered to potentially be an outlying burial site (PRN 49304) of the more important secular settlement on Coygan. A more likely early medieval ecclesiastical site is suggested at Laugharne Church where a cist grave cemetery (PRN 11610) has been recorded.
- 2.4.7 Llansadwrnen church (PRN 3910) occupies part of what appears to be a planned medieval settlement. Further small-scale medieval settlement is also suggest at King Gaddle (PRN 9690), to the north of Pendine Marsh. Laugharne was the main medieval settlement in the area throughout the medieval period, and home to the Lords of Laugharne. A castle was established by the mid-12th century (PRN 2156) and town defences are also recorded (PRN 13282). Roche Castle (PRN 5070) which lies to the southwest of Laugharne, is a fortified manor house built in the late-13th century.

2.4.8 The earliest historical references to Pendine Marsh, in the later thirteenth-century, suggest that the marsh below Coygan was referred to as 'Menecors' and owned by Sir Guy de Brian who granted rights to the Burgesses of Talacharn (Laugharne). The greater part of the marsh appears to have remained in the hands of Sir Guy de Brian's as his Inquisition Post Mortem, dated 1307, notes one thousand acres of pasture in 'le Marcis'. Following Guy's death it is likely that most of the marsh was used as seasonal sheep pasture by Sir John Perrott, Lord of Laugharne, who may have allowed the Burgesses of Laugharne to operate a strip field cultivation system in a part of the marsh called 'The Lees', which lies immediately to the north of the proposed development area.

Post-medieval (Figures 2.4 – 2.7)

- 2.4.9 It is possible that settlement spread onto the marsh during the medieval period, concentrated on the periphery and on raised areas above the saltmarsh. The first record of settlement however comes from a survey of 1595, which records the 'dairies' of Hurst House (PRNs 25294 & 25295), East House (PRNs 48176, 48177, 61565 & 61566) and Brook House. Although the term 'dairy' suggests pasture surrounding these farms, this may have been grazed on a seasonal basis as it is likely the marsh would have still been subject to flooding and tidal inundation during the winter months.
- 2.4.10 A scheme of drainage and sea wall enclosure were constructed once Sir Sackville Crow had come into possession of the marsh in 1660. By the late 18th century this was considered to be the best farmland in the county, with the land being made more productive by the creation of distinctive ridge and furrow/drain across the fields. It is possible part of the area immediately to the north of the proposed development area was also engaged in salt production, as suggested by the name of the Salt House farm. The ruins of a cottage (PRN 29940) lie to the north-east of the proposed development boundary which is named as 'Salthouse' on the Ordnance Survey map of 1831. There is no indication that salt production was occurring at the time of the tithe map of 1846 but similar areas of salt production are noted on the coast of Gower from the 16th century into the 19th century.
- 2.4.11 There appears to have been major investment into the marsh when it was part of the Broadway estate in the early 19th century. A new large sea-wall (PRN 29945) and quay (PRN 29949) were constructed at the east end of the marsh in 1800-1810 by George Watkins of Broadway. A tramway (PRN 29943) was constructed across the marsh to link the quarry that now occupied the Coygan promontory to the coast to facilitate the construction of the sea wall and quay, with the tramway embankment itself also acting as a sea wall. Many of the farms, including Hurst House, were rebuilt in a Georgian style as 'Model Farms' in the 1810s and 1820s by the Broadway estate and the drainage and layout of fields across the marsh was also probably completed during this period. The Malthouse farm (TCL01) to the north may also date to this period, the history of the site is not well-researched but it appears on historic map sources from the 1830s onwards. These complexes still exist, with Hurst House farmhouse and farm buildings Grade II listed. These buildings have been converted to form a Resort and Spa complex but retain much of their early nineteenth century Model Farm character Surrounding reclaimed and improved pasture farmland is still extant, with distinctive ridge, drain and furrow cultivation marks identified in many of the surrounding fields.

The former early-19th century tramway also crosses the area of proposed development to the north of Malthouse Farm.

3 Potential Impacts

3.1 Sources of potential direct effects

- 3.1.1 The working practices during site preparation and construction that have the potential to generate direct effects on heritage assets, and which have been considered in the Assessment, include:
 - Enabling works, such as installation of contractor's compound, construction of access roads, parking areas, storage areas, borrow pits and associated services;
 - Landscaping and terracing works, specifically in the creation of numerous ponds and wetland areas;
 - Topsoil stripping;
 - Foundation excavation;
 - Construction of roads and infrastructure;
 - Service installation;
 - Changes to ground hydrology
- **3.1.2** Without mitigation, the direct effects from these working practices would be permanent and irreversible.

3.2 Sources of potential indirect effects

- 3.2.1 Operational effects that have the potential to generate indirect effects on heritage assets, and which have been considered in this Assessment, include:
 - Alteration to the visual setting or tranquillity of heritage assets; and
 - Alteration to the visual setting or tranquillity of the more holistic 'historic landscapes'.

3.3 Archaeological Remains

- 3.3.1 Within the proposed development area three assets have been identified as Archaeological Remains, along with a more general area of archaeological potential that may be directly affected as a result of the proposed development. These assets are all undesignated sites. No designated assets considered under the Archaeological Remains category (Scheduled Ancient Monuments) will be effected either directly or indirectly (visually) by the proposed development.
- 3.3.2 These assets consist of the field system itself (PRN 39280), a series of ditch-bounded fields containing surface remains of distinctive ridge and furrow/drain agriculture.

Although much of the land was drained and enclosed subsequent to the establishment of a sea wall to the east in the 1660s, this area lies around a farmstead with known earlier origins and may therefore also incorporate fields that were initially established prior to the main period of enclosure and drainage from the mid-17th century onwards. As part of the wider evidence of land reclamation in the area this asset is considered to be of *Medium* value.

- 3.3.3 The northern end of the proposed development area is crossed by the Coygan Tramway (PRN 22943), a tramway established between 1800 and 1810 by George Watkins of Broadway. The raised embankment of the former tramway is still visible as an above-ground feature and trackway crossing the site. This feature forms an essential part of the early 19th century Broadway estate reorganisation and reclamation of the marsh and is therefore also considered to be of *Medium* value.
- 3.3.4 The HER also records a small pond (PRN 10499) close to Malthouse Farm, presumably a post-medieval agricultural feature. This feature is considered to be of *Low* value.
- 3.3.5 Due to the proximity of what was formerly a prehistoric site of national importance at Coygan camp and cave there is a general potential for Prehistoric and early medieval activity in the area that may be enhanced due to the palaeo-environmental potential of the low-lying marshland location. The value of any such archaeological remains is currently *Unknown*, but due to the significance of activity at the Coygan camp site and the potential for paleo-environmental associations any such asset that may exist could be of *High* value.
- 3.3.6 The field system (PRN 39280) within the proposed development will be largely removed, in that surface ridge and drain remains will be removed and some field boundaries also removed by the establishment of the ponds and lodges and wetland areas. This is considered to be a *Major* impact.
- 3.3.7 The Coygan Tramway route (PRN 22943) will be maintained, although the construction of wetland areas on both sides of the Tramway route will inevitably result in the movement of heavy machinery across the feature and the excavation and movement of material in very close proximity which has the potential to damage the feature. This is considered to be a *Moderate* impact.
- 3.3.8 The pond will be removed as part of the proposed development, albeit replaced by further ponds but of a different character, i.e. not agricultural in character. This is considered to be a *Major* impact.
- 3.3.9 The establishment of ponds and wetlands across large areas of the proposed development, as well as foundation excavations for the new swimming pool building and other associated groundworks, has the potential to expose, damage and destroy any potential subsurface remains. As this general potential is currently unknown the magnitude of the impact is also unknown, but the scale of works indicated in the proposed development plans may have a *Major* impact should remains exist.

3.4 Historic Buildings

3.4.1 Three archaeological assets have been identified as Historic Buildings within the area of proposed development that may be both directly and indirectly affected. Six further

assets have been identified outside the area of proposed development that may be indirectly affected.

- 3.4.2 The Hurst House farmstead complex includes two Grade II listed buildings. The farmhouse itself (PRN 25294, LB 9676) is a three-storey house, dated 1797 and constructed by the Broadway estate in a formal Late Georgian style. The farmstead buildings to the south (PRN 25295, LB 9677) were built in 1828 arranged around a courtyard in a 'model farm' style, built to reflect the latest improvements in farming. The farmhouse, together with the remainder of the farmstead complex to its south, was clearly intended to impress, and was built as part of the large-scale reorganisation and reclamation of the saltmarshes undertaken by George Watkins of the Broadway estate in the late 18th and early 19th century. As such the improved field system surrounding the farmstead form part of the setting of the listed buildings. As Grade II listed buildings they are considered to be of *Medium* value within the DMRB criterion. These buildings have also been converted and form the core of the current Corran resort and spa complex.
- 3.4.3 To the north lies Malthouse Farm (TCL01). This site contains upstanding traditional farm buildings, 19th century in date. These buildings also form part of the general late 18th and early 19th century redevelopment of the area, but are not considered to be of the same status and importance as Hurst House and are therefore considered to be of *Low* value. These buildings already form part of the resort complex and have been converted as such.
- 3.4.4 Although lying within the proposed development area the Hurst House farmstead complex and the Malthouse Farm complex will not be directly affected by the proposed development as they have already been converted to form the core of The Corran Resort and Spa complex, these buildings will be retained within the development proposals. The proposed development will affect the setting of the Hurst House listed buildings, and indeed the Malthouse too. Both sites are currently lie in a setting of improved agricultural land, and have done since their establishment. The development of ponds, lodges and a wetland landscape surrounding the buildings is markedly different, and separates the buildings from their agricultural setting. Due to the flat and relatively open nature of the marsh this will be visible from several points on the marsh, as well as from higher ground of Sir John's Hill to the north and around Llansadwrnen to the northeast. Views from both Hurst House farmhouse (PRN 25294, LB 9676) and the Malthouse Farm (TCL01) will similarly be affected, with the views of the farmland with which they were intended to be connected with, interrupted by a new wetland landscape. The new swimming pool building to the south of the Hurst House farmstead complex is of a modern design with a circular mono-pitched roof and in materials with a neutral palette including timber cladding and zinc roofs. It also extends the building complex southwards and will be visible in many of the views of the former farmstead complex. It does however lie in an area that, were the farmstead to remain in agricultural use, may reasonably be assumed to have seen the development of large agricultural buildings in modern materials as can be seen in other working farmstead complexes across the marsh area. In terms of views from the buildings the new swimming pool building will have little impact as the Malthouse Farm (TCL01) lies on the opposite side of the Hurst House complex, the main views from Hurst House itself (PRN 25294, LB 9676) do not encompass the location of the

new building, and the farmstead complex (PRN 25295, LB 9677) is largely inward facing. However, the changes to the setting of these three assets is considered to have a *Moderate* impact.

- 3.4.5 Further afield six Grade II listed buildings have been identified within the ZTV that may be indirectly (visually) affected by the proposed development.
- 3.4.6 1km to the southeast lies the East House farmstead complex, currently unoccupied and undergoing renovations. This complex includes three listed buildings (LB 81182, LB 81183 & LB 81184). Similar to the Hurst House complex the East House complex was constructed by George Watkins of the Broadway estate in 1810, laid out as a 'model farm' around a central courtyard. The complex is Grade II listed as an exceptionally well-preserved example of a model farmstead with a precise historical context in ambitious agricultural improvements of the early 19th century. As Grade II Listed Buildings all three buildings in the East House complex are considered to be of Medium value. The landscape of reclaimed improved farmland on the marsh is therefore also part of the setting of these Listed Buildings, and the establishment of the ponds and wetland landscape will therefore affect this setting. However, despite being the closest complex of Listed buildings outside the area of proposed development visibility of the area is diminished by vegetation. Generally the landscape is relatively open, with most hedgerows being low and scrubby but several hedgerows between the two sites (Hurst House and East House) are noticeably higher and thicker reducing the visual impact, although clearly visibility will improve with reduced vegetation in winter months. This is considered to have a *Minor* impact.
- 3.4.7 1.6km to the northwest of the proposed development lies the church of Llansadwrnen (LB 25849). The current structure is Grade II listed and was rebuilt in 1859, with a north vestry added in 1919. The church has a medieval predecessor and may retain some elements of the medieval church in its current fabric. It is located within a planned medieval settlement, but the presence of early medieval inscribed stones at the site may indicate the site has early medieval ecclesiastical origins. The church is considered to be of *Medium* value. The church occupies a prominent hilltop location with generally extensive southerly views over the reclaimed marsh landscape and beyond. The church tower is clearly visible from the proposed development site, however, from the churchyard itself the view of the development itself will be largely blocked by the row of houses to the south of the church and therefore the proposed development is considered to have a *Negligible* impact.
- 3.4.8 Nearly 3km to the east lies a set of three Grade II listed limekilns (LB 27082) on Craig Ddu. The limekilns are likely to be early to mid-19th century in date, and part of the former widespread regional lime industry of that period. These kilns are considered to be of *Medium* value. The kilns lie within the ZTV, however they also lie on wooded slopes, with generally southward facing views that do not encompass the development site. Due to the distance, tree cover and general views of the site the proposed developed is considered to have *No Change* on this site.
- 3.4.9 Over 4km to the west lies Llanmiloe House (LB 18870). This is a Grade II listed country house originally built in 1720, rebuilt in the mid-19th century, with late 19th and early 20th century extensions. The site is associated with prominent local families of the 17th to 19th centuries. The house is considered to be of *Medium* importance. The house lies

within the ZTV, however, the accumulation of woodland and hedgerow cover in the intervening distance means that the proposed development is considered to have *No Change* on this site.

3.5 Historic Landscapes

3.5.1 The proposed development lies within the Taf & Tywi Estuary Landscape of Outstanding Historic Interest (HLW (D) 9). This landscape is divided into a large number of Historic Landscape Character Areas (HLCAs). The proposed development lies within, and will have a direct impact on, HLCA 146 Laugharne and Pendine Marsh. This area represents a landscape of land reclamation from the former salt marsh, which began in the mid-17th and continued through into the 19th century. It is described as a very distinct character area with clear boundaries between it and its neighbours. The area is characterised largely by regularly-shaped fields of pasture, divided by drainage ditches. The ditches are typically accompanied by wire fences, with some low hedges also apparent. Fields become slightly less regular towards the eastern end of the area, including the north-eastern part of the proposed development area, more representative of the pre-drainage salt marsh. Pasture is the main land use, largely improved, also characterised by the distinctive ridge and furrow/drain visible within the fields. The settlement pattern is one of dispersed farms, characterised by the Georgian style of the farmhouses with large ranges, often formally arranged around a central yard. Most of these farms now have modern agricultural buildings in association with them. The direct impact of the proposed development is described and assessed in the accompanying ASIDOHL2 study (Stage 2), which has six grades of impacts, ranging from Very Slight to Very Severe. These grades of impact do not necessarily equate with those used in the DMRB, so should not be considered as having values corresponding to similar terms used elsewhere in this ES (see 3.5.3 below).

The proposed development is graded as having a 'Moderate' direct impact. The indirect (visual) impact on the same HLCA is described and assessed in Stage 3, and is graded as having a 'Considerable' impact. The value of the HLCA is described and assessed in Stage 4, again based on a six-point scale from Very Low to Very High, and is considered to have be of 'High' value.

- 3.5.2 The proposed development is considered to have an indirect (visual) impact on a further nine HLCAs. These include;
 - HLCA 144 Laugharne & Pendine Burrows ('Considerable' value), graded as a 'Slight' impact
 - HLCA 136 Laugharne Saltmarsh ('Considerable' value), graded as a 'Slight' impact
 - HLCA 138 Sir John's Hill ('Considerable' value), graded as a 'Slight' impact
 - HLCA 151 Coygan ('Considerable' value), graded as a 'Slight' impact
 - HLCA 147 Laugharne Parish, Pendine and Llanddowror ('Considerable' value), graded as a 'Slight' impact
 - HLCA 140 Westmead Wood ('Moderate' value), graded as a 'Very Slight' impact

- HLCA 152 Lacques ('Considerable' value), graded as a 'Slight' impact
- HLCA 142 Black Scar ('Considerable' value), graded as a 'Very Slight' impact
- HLCA 173 St Ismael ('Considerable' value), graded as a 'Slight' impact
- 3.5.3 Converting the ASIDOHL2 study grades to those used in the DMRB guidance is not straightforward, as the ASIDOHL2 study uses calculations based on a wide range of criteria to determine the value of each individual HLCA. The DMRB provides more simplified criteria, with all but HLCA 140 being considered to be of *High* value as they lie within the registered Historic Landscape. HLCA 140 lies outside this Historic Landscape and would therefore be considered to be of *Medium* value. In terms of the magnitude of impact the ASIDOHL2 study utilises six different grades of impact, based on a scoring system between 0 to 28. The DMRB effectively uses four different grades of impact (the fifth being No Change), which when divided into an equivalent scoring system suggests that the impact on all HLCAs would be considered to be *Negligible* with the exception of HLCA 138 which would be considered *Minor*, and HLCA 146 which would be considered *Moderate*.
- 3.5.4 Aside from the historic landscape character areas and registered Historic Landscape, one historic park and garden has also been identified as lying within the ZTV of the proposed development. Llanmiloe House (PGW (Dy) 1 (CAM)) is a Grade II listed historic garden, listed as a well-preserved Edwardian garden with much of its original planting, and associated with the Grade II listed Llanmiloe House. This garden is considered to be of *Medium* value. As with the house however the distance and intervening vegetation and topographical covers means that the proposed development will result in *No Change* to this garden or its setting.

4 Impact Significance

4.1 Archaeological Remains

Table 1: Summary of significance of impact on Archaeological Remains

Asset	Value	Magnitude of impact	Significance of impact
Field System PRN 39280	Medium	Major	Moderate/Large
Coygan Tramway PRN 22943	Medium	Moderate	Moderate
Pond PRN 10499	Low	Major	Slight/Moderate
Archaeological Potential	Unknown (High)	Major	Large

4.2 Historic Buildings

Table 2: Summary of significance of impact on Historic Buildings

Asset	Value	Magnitude of impact	Significance of impact
Hurst House Farmhouse PRN 25294, LB 9676	Medium	Moderate	Moderate

Hurst House farmstead PRN 25295, LB 9677	Medium	Moderate	Moderate
Malthouse Farm TCL01	Low	Moderate	Slight
East House Farm barn range PRN 61565, LB 81182	Medium	Minor	Slight
East House Farm cowhouse range PRN 61566, LB 81183	Medium	Minor	Slight
East House Farm east-farm range PRN 48177, LB 81184	Medium	Minor	Slight
Llansadwrnen Church PRN 3910, LB 25849	Medium	Negligible	Neutral/Slight
Craig Ddu limekilns LB 27082	Medium	No Change	Neutral
Llanmiloe House LB 18870	Medium	No Change	Neutral

4.3 Historic Landscapes

Table 3: Summary of significance of impact on HLCAs within the registered Historic Landscape

Historic	Value		Magnitude of impact Significance of Imp			ce of Impact
Landscape Character Area	ASIDOH L	Equivalent DMRB	ASIDOHL	Equivalent DMRB	ASIDOHL	Equivalent DMRB
HLCA143 - Laugharne and Pendine Marsh	High	High	Moderate - Considera ble	Moderate	Fairly Severe	Moderate/ Large
HLCA 144 – Laugharne and Pendine Burrows	Conside rable	High	Slight	Negligible	Slight	Slight
HLCA 136 – Laugharne saltmarsh	Conside rable	High	Slight	Negligible	Slight	Slight
HLCA 138 – Sir John's Hill	Conside rable	High	Slight	Minor	Moderat e	Moderate/ Slight
HLCA 151 – Coygan	Conside rable	High	Slight	Negligible	Slight	Slight
HLCA 147 – Laugharne Parish,	Conside rable	High	Slight	Negligible	Slight	Slight

Pendine and Llanddowror						
HLCA 140 – Westmead Wood	Modera te	Medium	Very Slight	Negligible	Slight	Neutral/Sli ght
HLCA 152 – Lacques	Conside rable	High	Slight	Negligible	Slight	Slight
HLCA 142 – Black Scar	Conside rable	High	Very Slight	Negligible	Slight	Slight
HLCA 173 – St Ismael	Conside rable	High	Slight	Negligible	Slight	Slight

Table 4: Summary of significance of impact on registered Parks & Garden of Historic Interest

Asset	Value	Magnitude of impact	Significance of impact
Llanmiloe House Historic Garden, PGW (Dy) 1 (CAM)	Medium	No Change	Neutral

5 Mitigation

5.1 Overview

Some mitigation measures for the proposed development have been incorporated into the scheme design. These measures include a planting strategy including establishing narrow belts of trees and shrubs and building on existing hedgerow and ditch field boundaries. Some existing hedgerows will be allowed to grow to heights of over 5m, 'gapped up' with appropriate native species, with extra width of planting in some field corners to create small copses. The aim is to provide some visual screening of the development whilst reinforcing existing field boundaries to help retain the rectilinear character of the landscape, but also attempting to achieve a balance within the planting to maintain the open characteristics of the levels, as well as providing wildlife corridors through the site.

5.2 Archaeological Remains

- 5.2.1 Preservation *in situ* is not considered possible within the design proposals for either the Field System PRN 39280 or the Pond PRN 10499, therefore preservation by record may be appropriate, requiring further archaeological recording works.
- 5.2.2 The route and remains of Coygan Tramway (PRN 22943) may be preserved within the proposed development, although changes to construction practices may be required which may include the choice of vehicles and equipment, use of protective mats and

demarcation of the tramway remains to avoid the removal of the tramway embankment, reducing the impact to *Minor*.

5.2.3 The current below ground archaeological potential across the proposed development is unknown but may be significant. This potential could be assessed and recorded during groundworks associated with the proposed development by means of an archaeological watching brief.

5.3 *Historic Buildings*

5.3.1 The proposed planting strategy will have limited success in reducing the visual impact on many of the assets discussed, as large hedgerows and areas of planting are not currently part of the historic character of the area which forms the settings of many of the historic buildings. The one exception will be the impact on the East House complex of Listed Buildings to the southeast (LB 81182, LB 81183 & LB 81184), as intervening hedgerow cover does exist and the proposed 'gapping up' will serve to maintain the cover through the winter months, reducing the visual impact to *Negligible*.

5.4 *Historic Landscapes*

5.4.1 Due to the current historic landscape setting consisting of a relatively open landscape of reclaimed farmland there are no suggested mitigation measures that could effectively reduce the visual impact of the proposed development on the historic landscape.

6 Residual Impacts

Heritage Asset	Mitigation	Residual effects
Archaeological Remains		
Field System PRN 39280	Preservation by record	Unchanged (Moderate/La rge)
Coygan Tramway PRN 22943	 Changes to construction practices in area of tramway to avoid/reduce damage 	Neutral/Slight
Pond PRN 10499	Preservation by record	Unchanged (Slight/Moder ate)

Table 5: Residual impacts

Archaeological Potential	 Archaeological watching brief during any groundworks 	Slight
Building Remains		
Hurst House Farmhouse PRN 25294, LB 9676	No effective mitigation suggested	Unchanged (Moderate)
Hurst House farmstead PRN 25295, LB 9677	No effective mitigation suggested	Unchanged (Moderate)
Malthouse Farm TCL01	No effective mitigation suggested	Unchanged (Slight)
East House Farm barn range PRN 61565, LB 81182	 Planting strategy incorporated into design scheme, including a 'gapping up' of existing hedgerows 	Negligible
East House Farm cowhouse range PRN 61566, LB 81183	 Planting strategy incorporated into design scheme, including a 'gapping up' of existing hedgerows 	Negligible
East House Farm east-farm range PRN 48177, LB 81184	 Planting strategy incorporated into design scheme, including a 'gapping up' of existing hedgerows 	Negligible
Llansadwrnen Church PRN 3910, LB 25849	 No effective mitigation suggested 	Unchanged (Neutral/Sligh t)
Craig Ddu limekilns LB 27082	No mitigation required	Neutral
Llanmiloe House LB 18870	No mitigation required	Neutral
Historic Landscapes		
HLCA143 - Laugharne and Pendine Marsh	No effective mitigation suggested	Unchanged (Moderate/La rge)
HLCA 144 – Laugharne and Pendine Burrows	No effective mitigation suggested	Unchanged (Slight)
HLCA 136 – Laugharne saltmarsh	 No effective mitigation suggested 	Unchanged (Slight)
HLCA 138 – Sir John's Hill	 No effective mitigation suggested 	Unchanged (Moderate/Sli ght)

HLCA 151 – Coygan	 No effective mitigation suggested 	Unchanged (Slight)
HLCA 147 – Laugharne Parish, Pendine and Llanddowror	 No effective mitigation suggested 	Unchanged (Slight)
HLCA 140 – Westmead Wood	 No effective mitigation suggested 	Unchanged (Neutral/Sligh t)
HLCA 152 – Lacques	 No effective mitigation suggested 	Unchanged (Slight)
HLCA 142 – Black Scar	 No effective mitigation suggested 	Unchanged (Slight)
HLCA 173 – St Ismael	 No effective mitigation suggested 	Unchanged (Slight)
Llanmiloe House Historic Garden, PGW (Dy) 1 (CAM)	 No mitigation required 	Neutral

7 Summary

- 7.1 In July 2015 Archaeology Wales was commissioned to provide a Cultural Heritage Impact Assessment as part of an Environmental Statement on the proposed development at the Corran Resort & Spa, East Marsh, Laugharne, Carmarthenshire.
- 7.2 This assessment was undertaken using the scoring system for assessing the magnitude of impact based on the Design Manual for Roads and Bridges (DMRB) (Volume 11 Environmental Assessment, Section 3 Environmental Topics, Part 2, Cultural Heritage) (Ref. 9-2). This divides the cultural heritage resources into three sub-topics: Archaeological Remains, Historic Buildings and Historic Landscapes.
- 7.3 Four assets were identified within the Archaeological Remains category that may be affected by the proposed development, namely;
 - Field system PRN 39280;
 - Tramway PRN 22943;
 - Pond PRN 39280;
 - Prehistoric and early-medieval Archaeological Potential.

The proposed development will have a Major impact on the field system PRN 39280, of Medium value, as this asset covers much of the development area and large areas will be removed as part of the development. This is considered to be a significant impact of Moderate/Large which may require preservation by record.

The proposed development may also have a Major impact on the Pond PRN 10499 through its removal, and on potential below-ground archaeological remains across the site. The low value of the pond reduces the significance of the impact to slight/moderate, and a proposed archaeological watching brief on associated groundworks would also reduce the significance of the impact on the archaeological potential to slight.

The development may have a Minor impact on the Tramway PRN 22943, of Medium value. Changes to construction practices in the immediate vicinity of the tramway should ensure its survival and reduce the significance of the impact to neutral/slight.

- 7.4 Nine assets were identified within the Historic Buildings category that may be affected by the proposed development, namely;
 - Hurst House farmhouse PRN 25294, LB 9676, Grade II listed;
 - Hurst House farm-range PRN 25295, LB 9677, Grade II listed;
 - Malthouse Farm TCL01, unlisted;
 - East House Farm barn range PRN 61565, LB 81182, Grade II listed;
 - East House Farm cowhouse range PRN 61566, LB 81183, Grade II listed;
 - East House Farm east-farm range PRN 48177, LB 81184, Grade II listed;
 - Llansadwrnen Church PRN 3910, LB 25849, Grade II listed;
 - Craig Ddu limekilns LB 27082, Grade II listed;
 - Llanmiloe House LB 18870, Grade II listed;

Hurst House farmhouse PRN 25294, LB 9676 and Hurst House farm-range PRN 25295, LB 9677 and Malthouse Farm TCL01 all lie within the proposed development area and already form the core of the Corran Resort & Spa complex. The structures will not be directly affected by the proposed development but it is considered to have a Moderate impact on the setting of these buildings by replacing the associated reclaimed farmland landscape around them. The significance of this impact is considered to be Moderate on the two listed buildings, Slight on the Malthouse due to its lower value. No effective proposals can be suggested to mitigate the impact of the proposed development on the setting.

The remaining assets lie within the Zone of Theoretical Visibility and may therefore be indirectly affected, this was however dismissed for Craig Ddu limekilns LB 27082 and Llanmiloe House LB 18870. The significance of the impact on Llansadwrnen Church PRN 3910, LB 25849 is considered to be neutral/slight due to intervening cover, and the impact on the East House complex is considered to be Slight, which can be reduced to Negligible with the proposed planting regime mitigation proposals.

- 7.5 The proposed development area lies within the Taf & Tywi Estuary Landscape of Outstanding Historic Interest (HLW (D) 9). Ten individual Historic Landscape Character Areas were identified within that landscape that may potentially be affected by the proposed development, namely;
 - HLCA143 Laugharne and Pendine Marsh;
 - HLCA 144 Laugharne and Pendine Burrows;
 - HLCA 136 Laugharne saltmarsh;
 - HLCA 138 Sir John's Hill;
 - HLCA 151 Coygan;

- HLCA 147 Laugharne Parish, Pendine and Llanddowror;
- HLCA 140 Westmead Wood;
- HLCA 152 Lacques;
- HLCA 142 Black Scar;
- HLCA 173 St Ismael

These areas are fully described and assessed in an accompanying ASIDOHL2 study, but in summary the significance of the impact of the proposed development on eight of the HLCAs is considered to be slight. The indirect impact on HLCA 138 Sir John's Hill is considered to be moderate/slight. The combined direct and indirect impact on HLCA 143 Laugharne and Pendine Marsh is considered to be Moderate/Large. Due to the characteristics of the historic landscape no effective mitigation can be proposed to reduce the significance of this impact.

- 7.6 One Historic Park & Garden was also identified that may potential be affected, namely;
 - Llanmiloe House Historic Garden, PGW (Dy) 1 (CAM)

This site lies within the ZTV of the proposed development, but this was dismissed after a site visit.

- 7.7 After mitigation proposals, which are limited due to the nature of the historic landscape within which the proposed development lies, significant impacts remains on several assets, namely;
 - Field System PRN 39280;
 - Hurst House Farmhouse PRN 25294, LB 9676
 - Hurst House farmstead PRN 25295, LB 9677
 - HLCA143 Laugharne and Pendine Marsh

8 Bibliography

BGS Geology Viewer

http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html (accessed 01/06/15)

Cadw & CCW	2007	Guide	to Good	Practice on	Using The Reg	ister Of La	ndscapes	s Of
		Historic Interest In Wales In The Planning And Development Process						
	(Revis	ed 2 nd E	dition)					
		4000	- · ·	<i>c</i> , ,	60.00			

Cadw, CCW & ICOMOS 1998 Register of Landscapes of Outstanding Historic Interest

Cambria Archaeology 2004 Prehistoric Undefended Settlements Project, Southwest Wales: A review of the evidence from the regional SMR Cambria Archaeology Report No. 2004/53

- Campbell, E 1988 'Coygan Camp' in *Early Medieval Settlements in Wales AD400-1100*, Edwards, N & Lane, A (Eds) Cardiff
- Curtis, M 1880 The Antiquities of Laugharne, Pendine and their Neighbourhoods, 2nd ed.
- Gale, A 1995 Between Tides: Coastal Survey of Carmarthen Bay RCAHMW & DAT

Geotechnology Ltd				augharne: Preliminary Ground rt No. 1416r1v1d0615	
Hayston Developments & Planning Ltd 2015 Planning Report with Design and Acces. Statement					
Highways Agency	2007	Design Manua	al for Ro	oads and Bridges, Vol.II	
Jones, F	1987	Historic Carm	arthens	shire Homes	
Jones, l	2015 Land Adjacent to Corran Resort and Spa, Laugharne, Carmarthenshire: Archaeological Appraisal, Archaeology Wales Report No. 1351				
Murphy, K		<i>Tir Gofal Farm</i> Cambria Arch		Report: Causeway Farm W/12/1384 y PRN 39283	
Murphy, K	1999 Archaeo	-	n Visit R	Report: Salthouse W/12/710 Cambria	
Page, N	1998 Lougho		·	-98, Carmarthen Bay Ginst Point to naeology	
Poucher, P	2015 ASIDOH			oa, Laugharne, Carmarthenshire – Wales Report No.1358	
Ramsey, R		Proposed Rag Assessment		Farm at Pendine, Carmarthenshire: Desk- oria Archaeology Report No.2005/116	
Scourfield, R			-	ct on Setting of Listed Buildings at The ments & Planning Ltd 2015	
Wainwright, GJ		ʻCoygan Camp arian Vol 5) Excava	ration Report' in Carmarthenshire	

Map Sources

Anon	1846	Laugharne Parish tithe map & apportionments
Ordnance Survey	1831	'Old Series' map, Carmarthenshire Sheet 41
Ordnance Survey	1889	1 st edition 1;2500 map Carmarthenshire
Ordnance Survey	1908	2 nd edition 1;2500 map Carmarthenshire
Ordnance Survey	1913	3 rd edition 1;2500 map Carmarthenshire

Aerial Photographs

1946	RAF image (Reference: 106G-UK-1629) frame 3073-4. Black and white
1955	Vertical Meridian Airmaps SN20NE 220-200, 37598-37600, Black and white
1966	RAF image (Reference: 58 RAF 7509) 18/08/1966. Black and white
1993	RAF image (Reference: 39 RAF 6152) 04/05/1993. Black and white
2009	Google Earth image. Colour







lashualt. . Fall Hours: Railsgald s King Gaddle Couseway B House Lower Rail Road Sime Rock Marsh Mall Honse H MGHurst House Main Delve Little Burrows Brill Upper Ma. Green arches Brandy-bank 5 Long ridge New Hou. AUGHARNE Tillegene Pil East House BURROW 1km 0

Figure 2.4

1831 First Edition OS map of area

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Figure 2.5: Extract from the Laugharne parish tithe map of 1846 showing proposed development boundary.

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