

Carlyon Bay, Cornwall
Archaeological Desk-Based Assessment

National Grid Reference Number: 206030, 52160

AB Heritage Project no: 10028

Date: 29 September 2010

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Archaeological Desk-Based Assessment

On Behalf of: Davis Langdon LLP
MidCity Place
71 High Holborn
London
WC1V 6QS

National Grid Reference (NGR): 206030, 52160

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Prepared by: Andy Buckley

Illustration by: Amy Tucker

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Author: A.K.Buckley Date: 29th September 2010

Report Stage: FINAL Signature:

Enquiries to: AB Heritage Limited
Hector's Barn,
Stathe Road, Burrowbridge,
Bridgwater,
Somerset,
TA7 0RY

Tel. 01823 698 438
e-mail. info@abheritage.co.uk



www.abheritage.co.uk

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1 INTRODUCTION

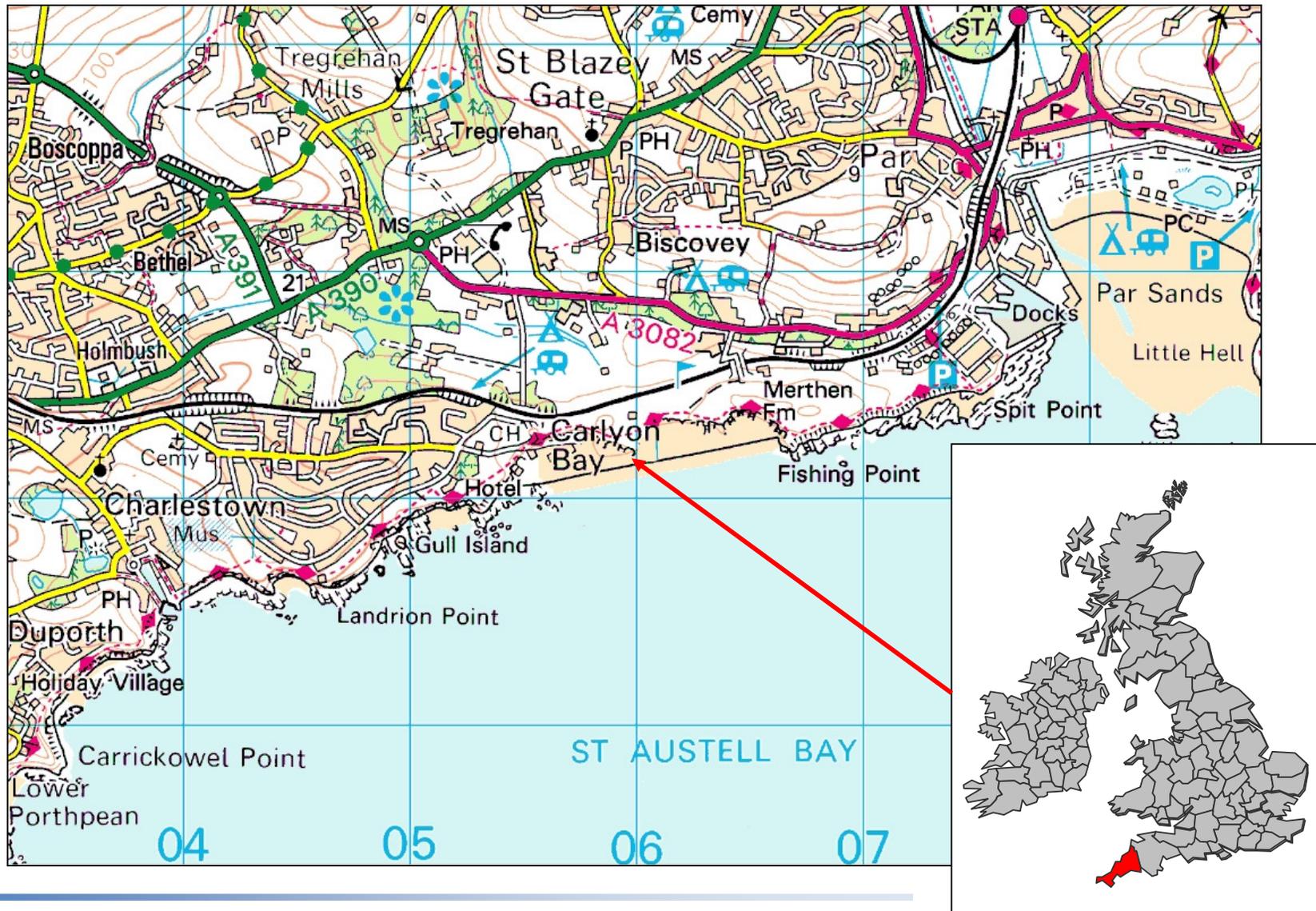
1.1 Project Background

- 1.1.1 AB Heritage Limited (herein AB Heritage) have been commissioned by Davis Langdon LLP to produce an Archaeological Desk-Based Assessment (DBA) for the proposed construction of residential properties on Carlyon Bay, near St. Austell in Cornwall.
- 1.1.2 An Environmental Impact Assessment (EIA) of the proposed scheme has been requested by Cornwall Council and this Archaeological DBA provides baseline information for the Cultural Heritage Environmental Statement Chapter (ES), which it forms a technical appendix to.
- 1.1.3 This report includes a description of the baseline conditions, examines a range of sources on the archaeological resource of the area and identifies any known and potential archaeological receptor(s) within the application site or its immediate vicinity. The scope of works included a review of a 2003 archaeological report, covering the Carlyon Bay site, produced by the Cornwall Archaeological Unit.
- 1.1.4 This report focuses primarily on the buried archaeological resource within the site of proposed development and not the above ground heritage resource built heritage resource, or designations such as Listed Buildings, Conservation Areas, Scheduled Monuments, Registered Parks & Gardens and World Heritage Sites within the site or wider area, which have been assessed by another specialist as part of the Cultural Heritage chapter.

1.2 Site Location & Project Description

- 1.2.1 The site lies c. 3 km to the south-east of St. Austell, between the harbours of Par and Charlestown (CAU, 1997), in an area known as Carlyon Bay. This is a bay and beach on the south coast of Cornwall, at the base of a line of low cliffs. It has been sub-divided into three sections to reflect its natural topography, comprising Crinnis Beach, Shorthorn Beach and Polgaver Beach.
- 1.2.2 The area surrounding the bay was a centre of the mining industry and much of the sand on the beach is actually a waste material from the china clay industry known as 'stent' (Wikipedia, 2010). The vast majority of the site area comprises these beach deposits, with blocks of past structural development works within the Crinnis Beach area of the site.
- 1.2.3 There have also been more recent groundworks within the Crinnis and Shorthorn sections of the site (within the 2 years prior to report production), to create a temporary sea defence wall, divert the flow of the river flowing from an adit [AB 8] on Shorthorn Beach and undertake early remediation works.
- 1.2.4 The main focus of development, which will be assessed in the Cultural Heritage chapter, comprises the construction of 511 units on the site.
- 1.2.5 Overall the site is centred at National Grid Reference 206030E, 52160N. The location of the project is shown on Figure 1.

Figure 1: Site Location Plan. Reproduced from the UK4 S.England and S.Wales 1:50,000. With permission of the controller of HMSO (Licence Number WL1005252)



2 AIMS & METHODOLOGY

2.1 Project Aims

- 2.1.1 Early consultation on the results of archaeological research and consideration of the implications of proposed development are the key to informing reasonable planning decisions.
- 2.1.2 The aim of this report is to facilitate such a process. It does this by examining the historic development of the site, to gain an understanding of the survival and extent of known or potential archaeological receptors that may be impacted by any future proposed development. This enables the future development of appropriate responses to quantify the precise nature of the archaeological resource, or mitigation aimed at reducing / removing adverse impacts, where necessary.

2.2 Methodology

- 2.2.1 The collation of baseline information and assessment of archaeological potential has been undertaken in-line with the Institute for Archaeologists' Standard and Guidance for Archaeological Desk-Based Assessment (2008).
- 2.2.2 This study has collated and analysed archaeological and historical information within a study area that follows the line of the cliffs forming the northern limits of Crinnis, Shorthorn and Polgaver Beach. An additional 50m buffer zone has been applied to this area to ensure that any sites immediately on top of the cliff have been taken into account as part of this study, in-case currently unknown remains from such features extend into the footprint of proposed development or the area of proposed works be of such proximity to them that there may be some form of indirect impact.
- 2.2.3 The above study area was agreed with the Cornwall Council Historic Environment Advisor (Archaeology) by telephone, on the 13th September 2010.
- 2.2.4 The Cornwall and Scilly Historic Environment Record (CSHER) is one of the primary sources of information concerning the current state of archaeological and architectural knowledge in this area. The information contained in this database was supplied for the appropriate study area on the 13th September 2010. It was supported by examination of data from a wide range of other sources, principally:
- An assessment of historical and documentary evidence held by the Cornwall Record Office at Old County Hall, Truro, on the 15th September 2010;
 - A historic map regression exercise, based on cartographic evidence collated from the Cornwall Record Office and supplied by Compass Consulting on the 17th September 2010;
 - An assessment of relevant published and unpublished archaeological sources, including local archaeological journals;
 - A site walkover on the 14th September 2010; and
 - Examination of published & unpublished sources listed in Section 11.
- 2.2.5 All archaeological features identified within the study area from the sources assessed (above) have been described and presented numerically in the Gazetteer of Archaeological Features (Appendix A) and are displayed on the Archaeological Features Mapping (Figure 13). Where identified features appear within the text, the AB Heritage reference number is given in square brackets e.g. [AB 142].

2.3 Assessment of the Archaeological Resource

Review of Archaeological Potential and Value

2.3.1 This Archaeological Desk-Based Assessment identifies the known archaeological resource of the study area. In addition, it also highlights the potential for encountering features or areas of buried archaeological evidence within the application site. Where evidence is discussed, the potential for associated buried archaeological deposits to survive will be advised according to the following scale:

- None - No recovery of features expected;
- Low - Features very unlikely to be encountered on site;
- Medium - Possibility that features may occur / be encountered on site;
- High - Remains almost certain to survive on site.

2.3.2 Where there is either a known or potential for the recovery of archaeological remains within study area, the value of this resource will be assessed.

2.3.3 There is currently no standard adopted statutory or government guidance for assessing the importance of an archaeological feature and this is instead judged upon factors such as statutory and non-statutory designations, architectural, archaeological or historical significance, and the contribution to local research agendas. Considering these criteria each identified feature can be assigned to a level of importance in accordance with a five point scale (Table 1, below).

Table 1: Assessing the Value of an Archaeological Receptor

SCALE OF HERITAGE RECEPTOR IMPORTANCE	
NATIONAL	The highest status of site, e.g. Scheduled Monuments (or undesignated assets of schedulable quality and importance). Extremely well preserved historic landscape, whether inscribed or not, with exceptional coherence, time depth, or other critical factor(s).
REGIONAL	Other designated or undesignated archaeological sites to those listed above, or assets of a reasonably defined extent and significance, or reasonable evidence of occupation / settlement, ritual, industrial activity etc. Examples may include burial sites, deserted medieval villages, Roman roads and dense scatter of finds.
LOCAL	Evidence of human activity more limited in historic value than the examples above, or compromised by poor preservation and/or survival of context associations, though which still have the potential to contribute to local research objectives. Examples include sites such as designated or undesignated structures / buildings of limited historic merit, out-of-situ archaeological findspots, historic field systems and boundaries, agricultural features such as ridge and furrow, and ephemeral archaeological evidence etc.
NEGLIGIBLE	Assets with little or no surviving archaeological interest. Examples include destroyed antiquities, structures of almost no architectural / historic merit, or relatively modern / common landscape features such as quarries, drains and ponds etc.
UNKNOWN	Insufficient information exists to assess the importance of a feature (e.g. unidentified features on aerial photographs).

2.3.4 The importance of already identified cultural heritage resources is determined by reference to existing designations. For previously unidentified sites where no designation has been assigned, an

estimate has been made of the likely importance of that resource based on professional knowledge and judgement.

Impact Assessment

This report will form the baseline assessment of a Cultural Heritage Environmental Statement, to which it will be appended. The magnitude of impact upon the Cultural Heritage resource will therefore be assessed within the ES.

2.4 Limitations

- 2.4.1 This report is solely for the use of Davis Langdon LLP and associated parties. It is prepared utilising information obtained from third party sources and AB Heritage take no responsibility for the accuracy of such information.
- 2.4.2 All work in this report is based on the professional knowledge of AB Heritage consultants and relevant (September 2010) United Kingdom standards and codes, technology and legislation. Changes in these areas may occur in the future and cause changes to the conclusions or recommendations given. AB Heritage does not accept responsibility for advising Davis Langdon LLP, or any other parties they elect to share this information with, the implications of any such changes in the future.
- 2.4.3 Measurements and distances referred to in the report should be taken as approximations only and should not be used for detailed design purposes.
- 2.4.4 This report represents an early stage of a phased approach to assessing the archaeological resource of the application site to enable the development of an appropriate mitigation strategy, should this be required. It does not comprise mitigation of impacts in itself.

3 PLANNING, LEGISLATIVE FRAMEWORK GUIDANCE

3.1 Scheduled Monuments, Listed Buildings and Conservation Areas

- 3.1.1 Current legislation, in the form of the **Ancient Monuments and Archaeological Areas Act 1979**, provides for the legal protection of important and well-preserved archaeological sites and monuments through their addition to a list, or 'schedule' of archaeological monuments by the Secretary of State for Culture, Media and Sport. This necessitates the granting of formal Scheduled Monument Consent for any work undertaken within the designated area of a Scheduled Ancient Monument.
- 3.1.2 Likewise, structures are afforded legal protection in the form of their addition to 'lists' of buildings of special architectural or historical interest. The listing of buildings is carried out by the Department of Culture, Media and Sport under the **Planning (Listed Buildings and Conservation Areas) Act, 1990**. The main purpose of the legislation is to protect buildings and their surroundings from changes that would materially alter the special historic or architectural value of the building or its setting. This necessitates the granting of formal Listed Building Consent for all works undertaken to or within the designated curtilage of a Listed Building. This legislation also allows for the creation and protection of Conservation Areas by local planning authorities to protect areas and groupings of historical significance.

3.2 Planning Policy Statement 5: Planning for the Historic Environment

- 3.2.1 In England Planning Policy Statement 5 - Planning for the Historic Environment (PPS 5), which was released on 23 March 2010, sets out the Government's planning policies on the conservation of the historic environment. This document replaces Planning Policy Guidance 15: Planning and the Historic Environment (PPG15) published on 14 September 1994; and Planning Policy Guidance 16: Archaeology and Planning (PPG16) published on 21 November 1990.
- 3.2.2 PPS 5 contains policies (HE6-HE12), which are a material consideration in managing and guiding the decision making process on progressing development works (see Appendix B). There are also a range of policies to guide local planning authorities on the preparation of local development documents (HE1-HE5).
- 3.2.3 In short, this government statement provides a framework which:
- requires applicants to provide proportionate information on heritage assets affected by the proposals and an assessment of the impact of the proposed development on the significance of the heritage asset;
 - has a presumption in favour of the conservation of Designated Heritage Assets (which include World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas);
 - protects the settings of such designated heritage assets;
 - takes into account the desirability of sustaining and enhancing the significance of heritage assets; and
 - where the loss of whole or part of a heritage asset's significance is justified, provides for the recording of assets and for publication of the resulting evidence.

- 3.2.4 In considering any planning application for development, the local planning authority is bound by the policy framework set by government guidance, in this instance PPS5, by current Development Plan Policy and by other material considerations.

3.3 Restormel Local Plan

- 3.3.1 It is through the Restormel Local Plan that specific information on the treatment of archaeology in the planning process is contained. A check of the online Restormel Local Plan (Restormel Borough Council, undated) confirmed that Carlyon Bay did not contain any specific designations, such as Areas of Great Historic Value. The saved policies in the local plan relevant to the proposed scheme are:

Policy 26 – Local Archaeological Sites

- 3.3.2 Development proposals which adversely affect locally important archaeological sites held on the county sites and monuments record or identified as a result of a prior archaeological investigation will only be permitted where:
- i. Physical preservation in-situ is not feasible and the importance of the development outweighs the case for preservation of the remains; and
 - ii. Satisfactory arrangements are made for the excavation and recording of the remains before or during development.

Policy 27 – Archaeological Assessments

- 3.3.3 Where there is evidence to suggest that significant remains may exist on the site of a proposed development the extent and importance of which are unknown, an archaeological assessment will be carried out prior to the granting of planning permission.

3.4 Local Development Framework

- 3.4.1 A topic based paper on the historic environment has been prepared to provide evidence to inform the Council's Core Strategy. The paper suggests that the Core Strategy should explore ways to provide appropriate protection and enhancement for international, national and local sites of importance as well as the wider historic environment.

4 BASELINE CONDITIONS

4.1 Key Planning Considerations

- 4.1.1 As mentioned above, the scope of this Archaeological DBA is focussed on identifying and understanding the known and potential below ground archaeological resource within the limit of proposed development. The assessment of the standing heritage resource and designations has been undertaken by another specialist, additional to this report.
- 4.1.2 However, for information purposes, it can be confirmed that, within the defined study area, there are no Scheduled Monuments, Statutory or Locally Listed Buildings, Conservation Areas, Heritage Coasts, Historic Battlefields, Registered Parks & Gardens or World Heritage Sites.
- 4.1.3 With regards to the known archaeological resource, there are a total of 11 features recorded on the Gazetteer of Archaeological Features (Appendix A) within the defined study area. Of these none predate the post-medieval period.

4.2 Consultation

- 4.2.1 As part of this assessment, telephone consultation was undertaken with Dan Ratcliffe, the Cornwall Council Historic Environment Advisor (Archaeology) on 13th September 2010. During this conversation Andy Buckley of AB Heritage explained that the focus of work was on the below ground archaeological resource and that the built heritage assessment was being undertaken by a separate specialist (who was also reviewing heritage designations, including the World Heritage Site, Scheduled Monuments, Listed Buildings, Locally Listed Buildings, Conservation Areas and Registered Parks and Gardens).
- 4.2.2 Given that the Archaeological DBA would provide information that would enable an assessment of the direct and indirect physical impacts on the archaeological resource during the production of a Cultural Heritage Environmental Statement, it was agreed that a study area would be designated which took the cliff line of Carlyon Bay as its boundaries, given the geographic separation from the surrounding land that the cliff line imposes.
- 4.2.3 Both Dan Ratcliffe and Andy Buckley agreed that this would be supported by a walkover, to examine known archaeological features identified on site, along with an examination of any readily available maps and documentary information held at the Cornwall Record Office.

5 ARCHAEOLOGICAL & HISTORIC BACKGROUND

5.1 The Prehistoric Periods (c. 750,000 BC – AD 43)

- 5.1.1 The prehistoric period was a time of significant environmental change in the British Isles, represented by the alternating warm and exceptionally cold phases and perhaps fleeting seasonal occupation of the Palaeolithic period (750,000 BC – 10,000 BC), through to climatic warming from the Mesolithic period (c. 10,000 BC – 4,000 BC) onwards, which transformed the landscape from a treeless steppe-tundra to birch and pine woodland.
- 5.1.2 It was with this warming that England witnessed more continuous occupation, in the form of mobile Mesolithic hunter-gather communities, inhabiting what was a predominately wooded environment. In common with other parts of Cornwall, evidence of human activity dating to the Mesolithic has been identified in the form of flint tool scatters and waste (CAU, 1997); however, there are no known remains of this form within the study area.
- 5.1.3 With the onset of the Neolithic (c. 4000 BC – 2000 BC) and continuing through the Bronze Age (c. 2,000 BC – 600 BC) and into the Iron Age (c. 600 BC – AD 43) there was significant change in technology and these periods are represented by, initially, the establishment of farming and, subsequently, the growth of settled and complex agricultural communities.
- 5.1.4 The dense forests of the Mesolithic were gradually cleared to create arable and pasture-based agricultural land, as well as for the construction of communal monuments. The pace of woodland clearance varied regionally depending on a wide variety of climatic, topographic, social and other factors but the overall trend was one of gradually increasing forest clearance.
- 5.1.5 By the time of the Iron Age the various regions of Britain had begun to form social and political groupings, characterised by defended settlement sites, now known as hillforts, which functioned as economic and social centres (CAU, 1997).
- 5.1.6 However, while prehistoric communities were attracted to coastal areas, the geography of the Carlyon Bay area has changed to such a significant degree over the past c. 170 years, with the area being buried in over 6m of sand deposits, washed onto the site as a result of mining activity to the north (*pers. comm.* Jacky Swain, 14th Sept 2010). This would have deeply buried any earlier land surface in this area, which is likely to have been either partially or totally submerged by the sea for much of the time prior to the post-medieval beach formation.
- 5.1.7 Ultimately there are no known remains dating to the prehistoric period within the study area and, apart from the conjectured presence of a fort, potentially dating to the Iron Age / Romano-British period, on the promontory between Crinnis Beach and Shorthorn Beach, based almost entirely on placename evidence (CAU, 2003) there are no known references to prehistoric activity in this area. For the above reasons there is considered to be no (None) potential for the recovery of complex remains dating to the prehistoric period.

5.2 The Romano-British (AD 43 – AD 410) & Early Medieval Period (AD 410 – AD 1066)

- 5.2.1 The Romans occupied Britain from AD 43; however, their influence in Cornwall was subdued than in other areas of England. This area of the country remained a very separate geographic entity and, apparently, where administration existed it was undertaken by native leaders of the *Conrnabii* tribe (the root word 'Corn' coming from the word '*Kernou*', meaning horn and possibly referring to the

shape of the region; Slaters, 1852), who carried on trade and collected taxes for the Roman but otherwise continued on much as before (CAU, 1997).

- 5.2.2 Following the abandonment of the British Isles by the Roman legions in the early 5th century AD the country fell into an extended period of socio-economic decline. It was by, or during, the early medieval period that the basic structure of the modern Cornish settlement pattern was established (CAU, 1997); however, little is known about activity within this region during the early part of this period, which is commonly referred to as the dark ages.
- 5.2.3 This paucity of information is reflected across the British Isles and reflects our lack of knowledge of events and activities at this time due to a reduction in all forms of evidence, from artefactual to first hand documentary sources.
- 5.2.4 Indeed, there is no evidence of any known activity dating to either of these periods within the study area and, given the known historic development of the beach deposits, it is concluded that there is no (None) potential for the recovery of complex archaeological deposits dating to the Romano-British or Early Medieval period within the study area.

5.3 The Later Medieval Period (AD 1066 – AD 1536)

- 5.3.1 The Norman conquest of 1066 saw the replacement of one ruling class with another. Robert of Martain, the Conqueror's half brother, acquired most of the manors in Cornwall (CAU, 1997). The earliest historical reference of this area relates to the settlement of Merthen, recorded in 1327 as *Merthin*, which derives from the Cornish *merthyn*, believed to mean 'sea fort'. Associated with this is the place-name *Crinnis* (likely to reflect settlement in the area named Crinnis on the Cassini Map of 1813; Figure 4); first recorded as *Caryhunes* in 1354, it is believed to have originally contained the Cornish element *ker*, which also meant fort.
- 5.3.2 As mentioned above, the 2003 Archaeological Report for this site did make some assumptions that such a feature, in the form of an Iron age or Romano-British 'cliff castle', may (if it existed at all) have been located on top of the promontory between Crinnis and Shorthorn Beach, based on the presence of a slight bank-shaped earthwork across this land surface, with a slight depression in central section of this feature; however, the report concluded that the earthwork feature identified could also represent a post-medieval cliff pasture boundary (for stock control) and no known evidence for a coastal fort has been identified within this area (CAU, 2003).
- 5.3.3 In the 1327 document mentioning Merthen (above), the settlement is recorded as being within the manor of *Tewynton* (Tewington), and as having two tenants, the senior of whom pays a fine of tin at Michaelmas. This is the first documentary reference to mining activity within the area (CAU, 2003).
- 5.3.4 There are, however, no archaeological sites recorded on the Cornwall & Sicily Historic Environment Record dating to the later medieval period within the study area. In addition, given that the surviving evidence is placename evidence, focused on the small settlements of Merthen and Crinnis, on top of the cliffs and away from the site of proposed development, it demonstrates that the Coves of Crinnis, Shorthorn and Polgaver Beach were geographically divorced from the focus of later medieval activity and, at most, likely to have been part of their economic hinterland, for activity such as fishing.
- 5.3.5 Overall it is concluded that there is no (None) potential for the recovery of complex below ground archaeological deposits dating to this period within the study area.

5.4 The Post-Medieval (AD 1536 – AD 1850) & Modern (AD 1850 – Present) Periods

- 5.4.1 Between the 16th and early 18th centuries the wider area, which had for the majority of the later medieval period been heavily mined, began to revert to a more agricultural based economy (CAU, 1997). However, mining did continue in places and St. Austell became a town of some importance during the early post-medieval, due to its vicinity to a number of significant mines, including one at Polgooth (which at its time was valued as one of richest to be worked in England). Indeed, a 1661 grant of rights to St. Austell to hold a market and two fairs demonstrates the town's increasing prosperity and power by the mid 17th century (Magna Britannia, 1814).
- 5.4.2 In addition to deep mining, stream working was also undertaken along the valley of the Sandy River, the course of which originally ran from Carclaze, through Bethel, issuing into the sea at Porth (modern day Par Harbour). From the mid 18th century, large scale stream working for the extraction of tin occurred in two very productive areas of this valley, at Sandrycock and Porth (CAU, 2003).
- 5.4.3 The first available map of the area of proposed development site is the 3" Ordnance Survey Drawing of 1805 (Figure 2). This was produced by the Ordnance office, as part of a national programme to map and more clearly understand the country's defensive capabilities, as well as its susceptibility to enemy invasion. While the map is no longer clear, and certainly not as precisely scaled as more modern maps, this early 19th century map is invaluable in what it tells us about the site at this date.
- 5.4.4 A number of settlements are recorded, including Porth (mentioned above). The area of proposed development, which lies to the south of Merthen, is not fully recorded though and is not shown to have any beach deposits (as Par Sands is). This suggests that the beach had either not formed by this time and the land was submerged by the daily tides, or that it was simply not perceived as of significant size and / or value to be represented on the map.
- 5.4.5 Whatever the reason, it is clear that the area of proposed development is secondary in the minds of the map authors to the surrounding land.



Figure 2: 1805 OSD Map 3" [not to scale]

- 5.4.6 The OSD Map of 1811 (Figure 3) is very faint but the names of Crinnis (Lower?) and Shorthorn can just be made out. There is a slight indication of beach deposits in the coves, just above the words

Lower (?) and Shorthorn, due to a slight difference in shading, though there is no indication whether these are substantial and / or usable areas.



Figure 3: 1811 OSD Map 2" [not to scale]

5.4.7 The Cassini Map of 1813 (Figure 4) is one of the first accurately surveyed maps available. It again does not record the presence of beach deposits between Crinnis Point and Shorthorn Point, but it does clearly show the site in its context, to the south of the settlements of Crinnis and Merthen.

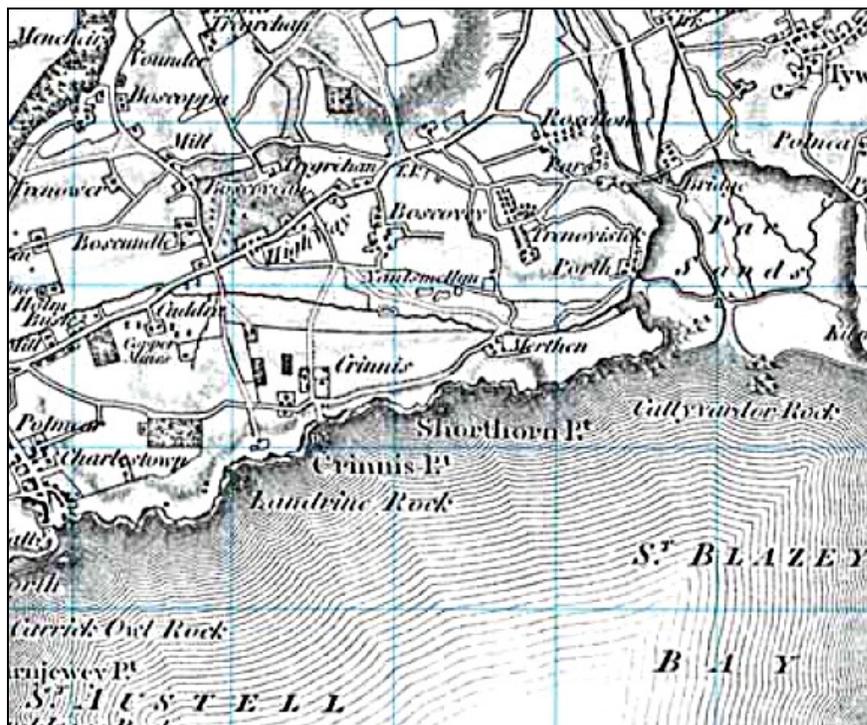


Figure 4: 1813 Cassini Map

- 5.4.8 At the same time as stream working was taking hold in the 18th century, the China Clay industry began to develop in the area. Initially involving small scale extraction the industry expanded rapidly, so that by the end of the 19th century the wider region was a patchwork of pits, conical dumps, settling pits, tanks, pan-kilns and engine houses (CAU, 1997).
- 5.4.9 At some point during the late post-medieval a basin had been cut into solid rock at Charlestown and a pier and harbour constructed, to allow export of what were enormous quantities of the China Stone and Clay to Staffordshire and other pottery making areas in the North of England and France. In 1844 nearly 40,000 tons of such material was shipped from this harbour (Piggot, 1844; CAU, 1997).
- 5.4.10 This was followed in 1829 by the construction of Par Harbour, to enable further export of mining output; however, shortly after its completion, concerns began to be raised about the excessive amounts of sediment flowing down the valley from Sandrycock and Porth mines, which threatened to fill Par harbour (CAU, 2003). This resulted in the construction of an adit in 1842, running from Pembroke House, to the west of the site, exiting at the base of the cliffs at Shorthorn Beach [AB 8].
- 5.4.11 It was this event that resulted in the formation of beach deposits in Carlyon Bay, with huge amounts of outcast material from mining and quarrying activity in the St. Austell and Par areas being washed down the adit toward Shorthorn Beach. There was a vast increase in the seaward extent of the beach in the 3 coves of Crinnis, Shorthorn and Polgaver, which moved southwards up to 200m in places (CAU, 2003). Eventually, the beach was so stable that stream working was even carried out on Carlyon Bay itself, from the end of the 19th century (CAU, 2003).
- 5.4.12 The Tithe Map of 1842 (Figure 5) is the last map to show the site without any beach deposits, with the sea extending up to the cliff line at high tide, suggesting that the extensive beach deposits did not begin to form until after the production of this map.
- 5.4.13 Of note, however, are 7 or 8 very faint circles, which run from 'Crennis Old Mine' towards the cliff line at Shorthorn Beach. These could represent the various shafts sunk to aid in the construction / ventilation of the adit [AB 8] running onto this beach.
- 5.4.14 There is also 'Pembroke Old Mine' to the south of Great Merthen, with the reference to 'Old Mine' for both this area and Crennis mine, suggesting that both features were out of use by the time of the maps production. This is confirmed by the Piggot Trade Directory of 1844, which states that the "mines of Polgooth, Crinnis and Pembroke have long since ceased operations" (Piggot, 1844).
- 5.4.15 Finally, it is noted that the settlement of Crennis is seen to be formed of two groups, 'Great Crennis' and 'Little Crennis'. A trackway is visible running from Little Crennis, northwards, to what is now the sloped entrance road into the site. It is recorded in the Apportionment document for the Tithe Map as 'Waste and Cliff', with no reference made to any form of economic use of the beach at this time, e.g. for stream working. All other areas surrounding the site are recorded as being either arable or pasture, reflecting the rural nature of the area.

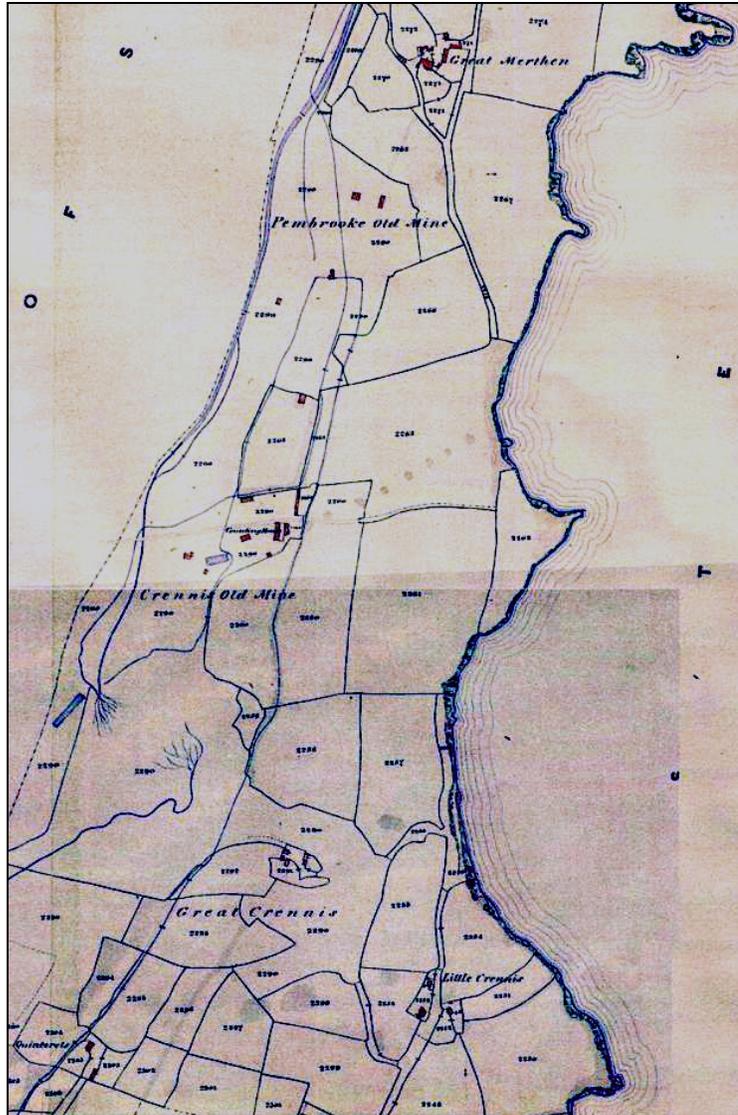


Figure 5: 1842 Tithe Map

- 5.4.16 By the 19th century the area became poorer, with even larger towns such as St. Austell described as 'a poor village' by the mid 19th century (Magna Britannia, 1814). This was a direct result of the national collapse in the price of copper and tin, which resulted in widespread deterioration and closure of mines in the region (CAU, 1997).
- 5.4.17 Stream working for tin, however, survived this economic collapse to a degree. As mentioned above, stream workings had been established on the banks of the Sandy River, to exploit the vast amounts of mining waste material washed down the Carclaze Valley. Such was the volume of material though that an additional stream working site [AB 10] was eventually established at the base of the cliffs on Shorthorn Beach, where the adit [AB 8] carrying the Sandy River exited (CAU, 2003).
- 5.4.18 The 6th OS Map of 1888 (Figure 6) shows the course of the sandy River, which can be seen flowing out of the adit [AB 8] and down the western extent of Shorthorn Beach. Immediately to the east of this is marked the site of a tin stream works (ringed) and a group of three or four large mounds and

an excavated area (some 3m in depth) [AB 10], recorded c. 30m to the east of the adit during the 2003 Archaeological Report of this site (CAU, 2003), may reflect the remains of such activity.

- 5.4.19 Immediately to the north of the stream works site the 6" OS Map of 1888 records the site of 'Old Shaft'. This is sited on top of the cliff line and was originally surrounded by a wall, though this is no longer complete. It is believed to be one of a series of ventilation shafts shown on the 6" OS Map of 1888, which tied into the adit at the base of Shorthorn Beach [AB 8].
- 5.4.20 What is significant, however, is that this map shows, for the first time, a fully formed beach extending for some distance from the cliff edges, creating Crinnis Beach, Shorthorn Beach and Polgaver Beach. The High Water Mark and Low Water Mark are marked, showing that Crinnis is the largest by area of the three beaches and, given the access from Crinnis, the most accessible. It is likely that these factors contributed to the selection of this beach for development during the 20th century, opposed to the other two beaches.

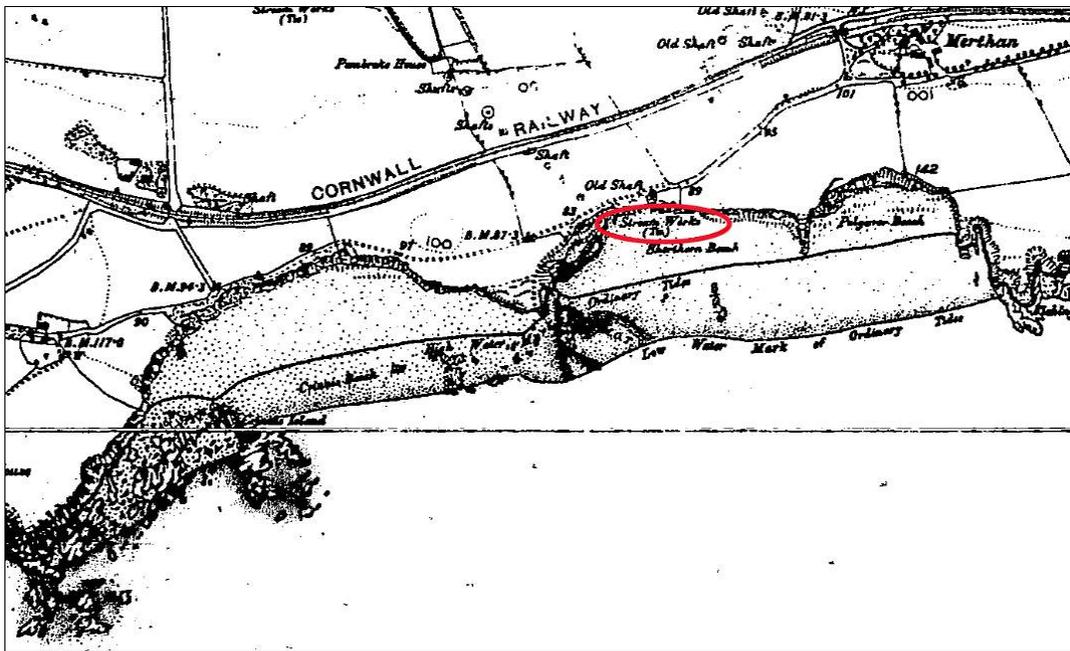


Figure 6: 1888 OS 6" Map

- 5.4.21 The Archaeological Features Mapping (Figure 13) records an area of disturbed ground at the base of the western cliff line, along Shorthorn Beach [AB 6]. This area was also identified during the 2003 Archaeological Report for the site (CAU, 2003) and is suggested to be the remains of surface mineral mining. The overall area of disturbance is currently heavily overgrown, with limited visibility but appears to comprise a low earth bank demarking an area c. 100m long by c. 10m wide, running parallel to the cliff line. Within this area the cliff has clearly been undercut and there are several mounds of debris, which may reflect the mining of a lode.
- 5.4.22 The next map examined was the 25" OS Map of 1907 (Figure 7). This contained a number of small features around the cliff edges of Crinnis Beach, including the site of two adits [AB 12] where the Crinnis River flowed from; an 'Old Shaft' on top of the western limits of the Crinnis Beach cliffs; a small structure; and, reflecting the ad-hoc use of the site for military purposes during the 20th century, the site of a Rifle Range and associated Target [AB 13]. This is likely to reflect the growing sense of tension in Europe in the build up to the First World War.

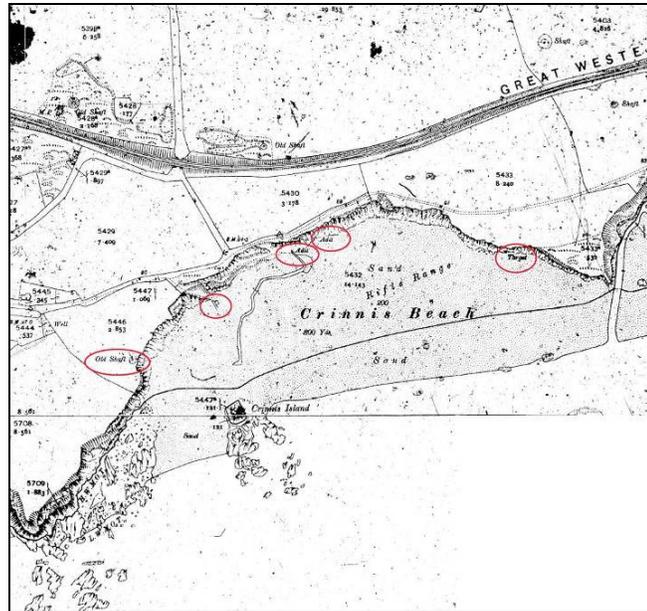


Figure 7: 1907 OS Map 25”

5.4.23 From the 1920's the relatively newly formed beaches of Carlyon Bay began to be exploited for tourism and entertainment purposes (CAU, 2003). The 1933 OS 25” Map (Figure 8) is the first to record such activity, plotting the site of the Cornish Riviera Club [AB 3] with its Tennis Courts, Bowling Green, Paddling Pool and Swimming Pool. The swimming pool, which was an Olympic sized, unheated lido (Eden Project, 2010; CAU, 2003), was eventually demolished in 2004 after it fell into disrepair and became filled with sand (*pers. comm.* Jacky Swain, 14th Sept 2010; Plate 2).

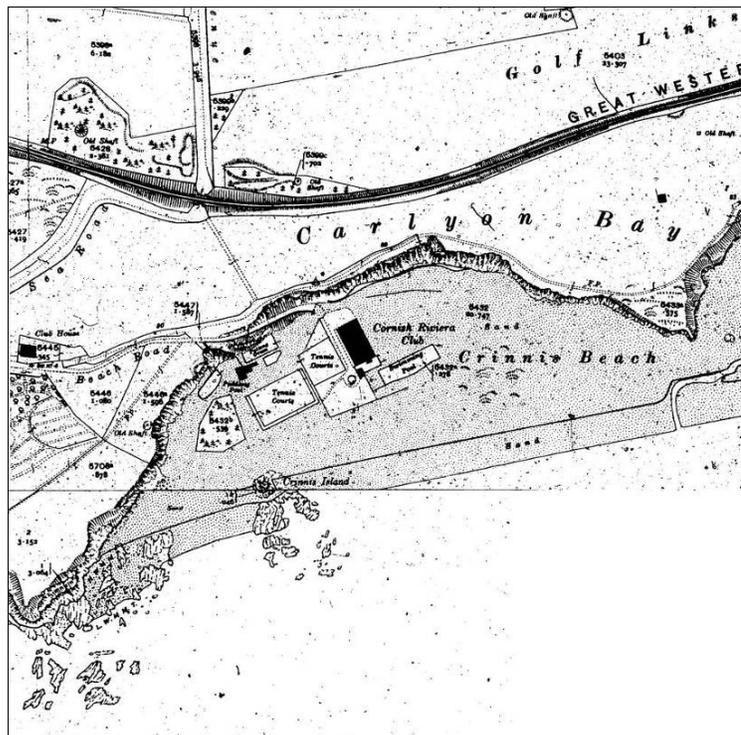


Figure 8: 1933 OS Map 25”

- 5.4.24 During World War II a range of beach defence structures were constructed [AB 1, 2, 4, 5, 7 & 11]. These lie on top of the cliffs, with excellent views overlooking Carlyon bay (e.g. Plate 10), which would have been very susceptible to enemy landings, given the extensive, flat sands and access route onto the mainland. The pillboxes surrounding Crinnis, Shorthorn and Polgaver Beaches were of a standard concrete block construction, with a concrete slab roof. They were c. 3.5 long and c. 2.5m wide, with a doorway and an opening slot, through which artillery could be fired. These structures are heavily overgrown with vegetation and, while only some 70 years old, have suffered significant deterioration.
- 5.4.25 At some point between 1938 (the last map to not show what is now the Coliseum) and 1947 (when an aerial photograph (CPE-UK-2368, 20-10-47) records the presence of such a structure) the facilities on Crinnis Beach were expanded considerably. The 6" OS Map of 1962 (Figure 9) shows this extension to the Cornish Riviera Club.
- 5.4.26 The 2003 Archaeological Survey of this site included information from a local resident, who stated that there had been a seaplane hanger constructed on Crinnis Beach during the War (CAU, 2003); it is certainly possible, given the bay like construction of the Coliseum (Plate 2 & 4), that the structure may have originated for such a function. It has also been suggested by the general public to staff on site that the Coliseum may have been used as a weapons depot, associated with training exercises undertaken in this area due to the length of the beach (*pers. comm.* Jacky Swain, 14th Sept. 2010); however, the use of this structure for military purposes is not confirmed.

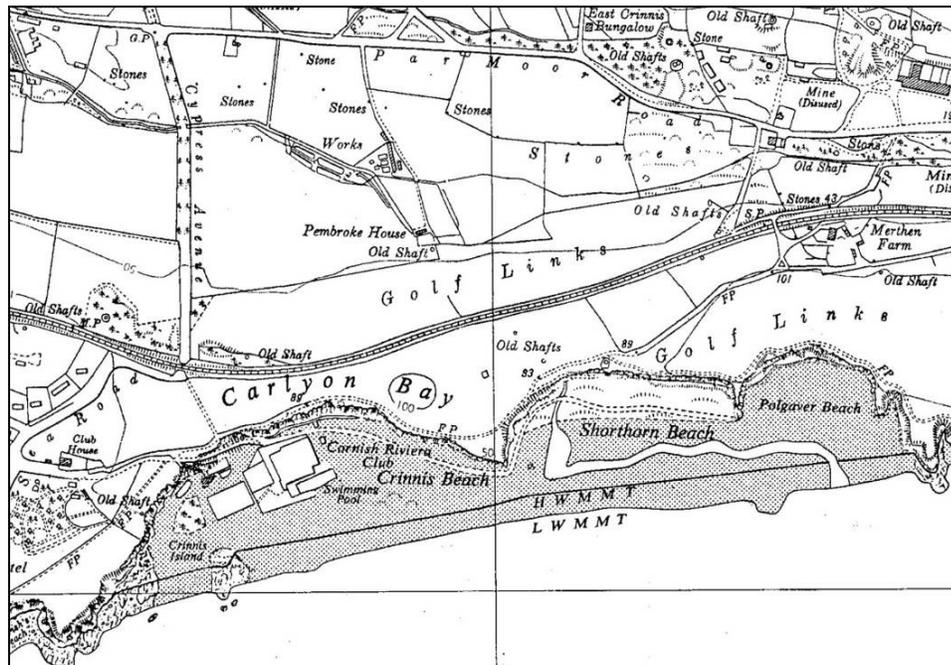


Figure 9: 1962 OS Map 6". Reproduced from the 1962 OS 6" Map of Cornwall SX05SE. With permission of the controller of Her Majesty's Stationary Office (Licence Number WL1005252)

- 5.4.27 By 1971 the complex had been renamed as the 'New Cornish Riviera Lido', prior to being renamed Cornish Leisure World sometime between 1973 and 1988. As can be seen the two large structures that previously stood to the east of the Coliseum had, by this time, being demolished (Figure 10). In their place a large tarmac Car Park was laid. South of the main Car Park is a large, rectangular area, which was mostly used as a Crazy Golf course prior to its demolition in recent years.

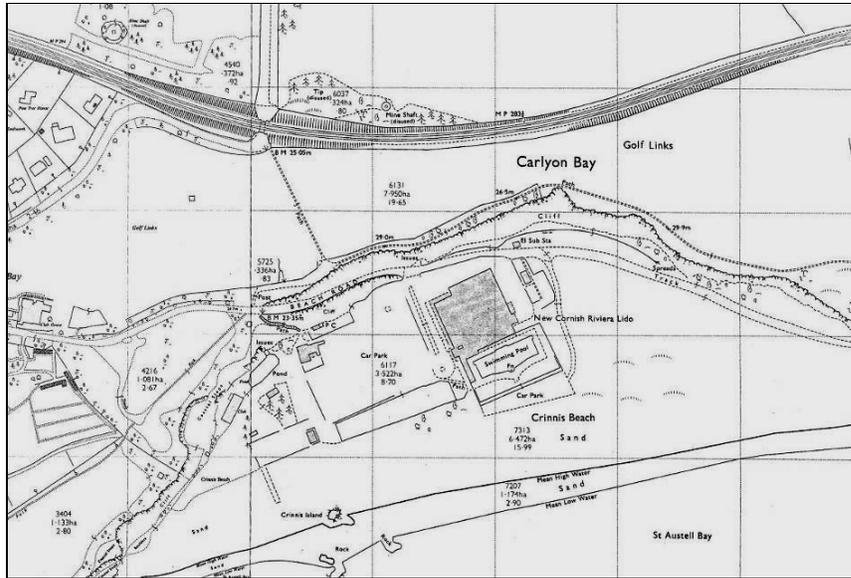


Figure 10: 1971 OS Map 1:2,500. Reproduced from the 1971 OS 1:2,500 SX0552. With permission of the controller of Her Majesty's Stationary Office (Licence Number WL1005252)

5.4.28 There is little change shown on the OS 1:10,000 Map of 1973 from that of 1971, apart from the continuing growth / maturation of woodland along the northern sections of Shorthorn and Polgaver Beaches. For this reason this map is not included in this report. Change is noted on the 1:10,000 OS Map of 1988 though, with an extension to the west of the New Cornish Riviera Lido (Figure 11).

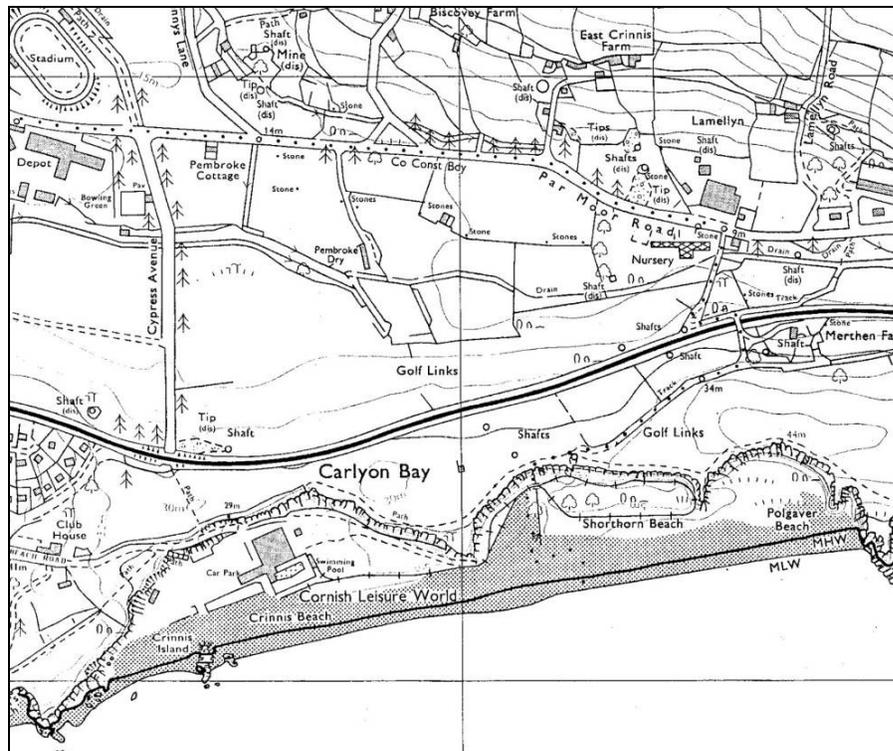


Figure 11: 1988 OS Map 1:10,000. Reproduced from the 1988 OS 1:10,000 SX05SE. With permission of the controller of Her Majesty's Stationary Office (Licence Number WL1005252)

- 5.4.29 The last map of relevance is the 1989 map (Figure 12). It shows the site as it finished its working life. The entertainment complex functioned as a bustling entertainment resort for some 40 - 50 years from its original construction. The various buildings of Cornish Leisure World, consisting of the regionally famous auditorium (the seventh largest indoor venue in the UK in the 1980's), Gossip's nightclub (which was originally badminton courts during the 1930's, prior to becoming Bentleys, then Quasars and ultimately Gossips), the Ocean Suite, a clubhouse and the Waterfront / Burger Bar building, all probably date to a combination of construction / renovation events in the 1970's.
- 5.4.30 By the end of the 1970's the site was a significant part of the regions entertainment facilities. Famous bands such as Thin Lizzy, Genesis, Duran Duran, Ultravox, The Jam all played there, as did comedians such as Jethro and Billy Connolly (Eden Project, 2010). Outside of the buildings the beach was used for shooting of a scene in the 1979 film 'Dracula', while Alison Moyet's 1986 music video 'Is This Love?' was also filmed there (Wikipedia, 2010).
- 5.4.31 However, by the mid 1980's, cheap package holidays abroad were becoming increasingly common, heralding a national decline in British seaside holidays (*pers. comm.* Jacky Swain, 14th Sept. 2010) and the end of the complexes heyday (Eden Project, 2010). Ever decreasing numbers of visitors from the late 1980's onwards eventually made the site unworkable and it closed to the public in the late 1990's. Recent works have removed a number of structures, such as the Lido Pool and Crazy Golf Course, while the remaining buildings on site are now in very poor and hazardous condition.

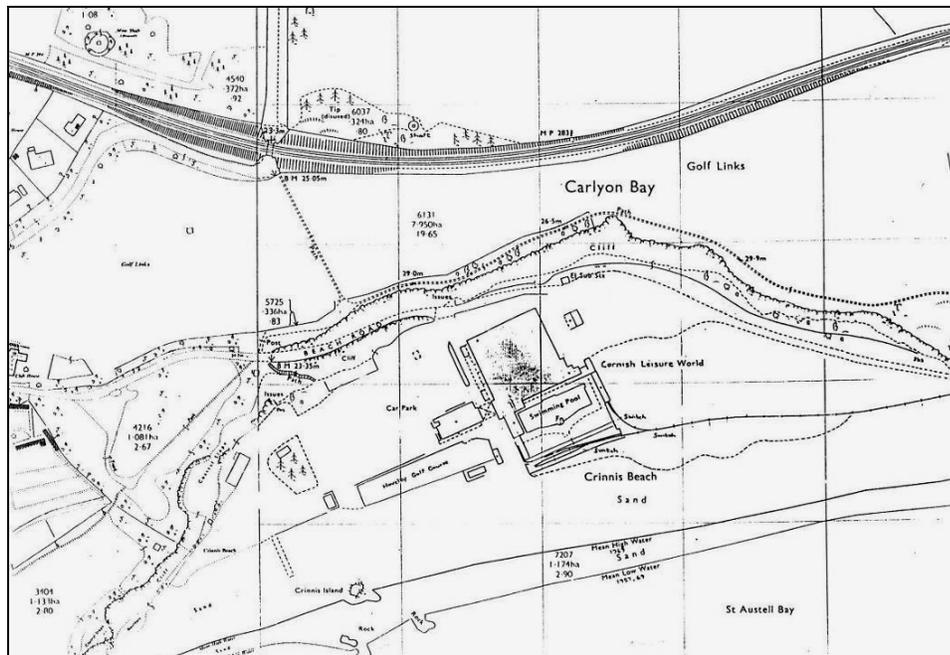


Figure 12: 1989 OS Map 1:2,500. Reproduced from the 1989 OS 1:2,500 SX0552. With permission of the controller of Her Majesty's Stationary Office (Licence Number WL1005252)

- 5.4.32 In many ways, the value of the site is in its changing use from 19th century industrial site, through 20th century recreational facility, along with the scattering of evidence for 20th century defence and military uses. It is not the physical remains that have been left behind that provide any intrinsic value to the site, but the more intangible contribution Carlyon Bay has made to the social history of the region and the lives of countless thousands who have worked, defended, holidayed and relaxed on the Beaches of Crinnis, Shorthorn and Polgaver.

6 ADDITIONAL HERITAGE INFORMATION

6.1 Previous Site Investigations

- 6.1.1 An Archaeological Report was produced by Cornwall Archaeological Unit in 2003 (CAU, 2003). This comprised a review of the Cornwall and Sicily Historic Environment Record, as well as a detailed site walkover, which identified a number of previously unknown archaeological features.
- 6.1.2 This report also examined the potential for palaeoenvironmental deposits to survive within the limits of proposed development. The report concluded that it was possible deposits containing materials suitable for palaeoenvironmental analysis may exist to the north of the barrier beaches of Shorthorn and Polgaver, though this was not confirmed.
- 6.1.3 The report explained that such deposits could inform on the beach formation and shed light on the stream working activities in this area, with potential evidence dating throughout the Holocene (over the last 10,000 years).
- 6.1.4 This assumption for the survival of palaeoenvironmental remains appears unlikely however, with the majority of the beach having only been formed over the last c. 170 years, meaning this thin strip of land would have either not been present (representing a modern formation) or being a slim, marginal piece of land subject to periodic tidal flooding, until it was surrounded and protected by the extensive flood of out-wash materials from the adit at the base of Shorthorn Beach.
- 6.1.5 Based on this it is concluded that there is a **low** potential for the survival of significant palaeoenvironmental remains within the limits of proposed development. This assumption would require testing though and, should any intrusive ground works be progressed in the strip of land running parallel to the northern cliff faces of Shorthorn and Polgaver Beaches, it would be appropriate to undertake limited sampling to add to the archaeological record of this area.

6.2 Site Visit

- 6.2.1 This assessment included a site visit, which was carried out on Tuesday 14th September 2010, in order to gain a better understanding of the site, the existing land use and to provide further information on areas of past ground disturbance and general archaeological potential. Observations made on the site visit have been incorporated into this report. A number of photos are shown below to provide some context on the layout of the site.
- 6.2.2 The first photo (Plate 1) it taken from the western edge of Crinnis Beach. The temporary sea-wall can be seen to the north of Crinnis Rock, leaving a large shore front.
- 6.2.3 The second photo (Plate 2) has been constructed from two joined photos showing the facilities of Cornish Leisure World [AB 3]. The photo is taken facing northwards from the location of what would have been the Lido, to the south of this structure. The large beige / yellow colour structure known as the Coliseum, which was built at some point between 1938 and 1947, has a number of bays, though these have been obscured by later construction to the south of this feature.
- 6.2.4 It was suggested above that this structure may have been constructed for military purposes during World War II, including possible use for munitions storage or as a sea-plane hanger. This possibility is not unfeasible and the building could reasonably have been constructed, or certainly commandeered, by the military for such use. This does not detract from the primary use of the buildings after World War II until the end of the 20th century though, which was as a large entertainment facility.



Plate 1: Facing East along Crinnis Beach



Plate 2: Facing North Viewing Dilapidated Cornish Leisure World [AB 3]

- 6.2.5 Plate 3 shows the area where the Lido used to stand. This is believed to have originally been constructed in the 1920's and, as mentioned above, was an unheated Olympic sized swimming pool.
- 6.2.6 After the closure of Cornish Leisure World at the end of the 20th century, the abandoned pool site soon filled with wind blown sands and was recorded as such in the 2003 Archaeological Report of this area.
- 6.2.7 Following the start of advance site works in 2004 the lido was demolished and no traces of the structure were visible during the site visit, although scatterings of material such as tile, wiring, glass and concrete did attest to the presence and demolition of this feature.



Plate 3: Facing East Looking Towards Removed Lido

- 6.2.8 Plate 4 is a general area shot showing the eastern elevation of Cornish Leisure World. This shows the differentiation between the area of sands on the beach and the area on which the old entertainment facilities now stand, which have capped / disturbed the underlying beach deposits.



Plate 4: Facing North-West Looking towards Cornish Leisure World

- 6.2.9 Plate 5 is taken along the eastern elevation of the cliffs on the western side of Shorthorn Beach, which form part of the promontory between Crinnis and Shorthorn Beaches. A range of recent works have been undertaken in this area, including the construction of a bank road and the placement of sea defences (rust coloured metal beams on right of photo). The heavily overgrown nature of the vegetation along the cliff edges should also be noted. It is in this area that areas of mining into the base of the cliffs was recorded [AB 6] along with potential areas of stream working [AB 10].



Plate 5: Facing North along Eastern Flank of Cliff Dividing Crinnis and Shorthorn Beach

6.2.10 Plate 6 is a site shot eastwards along Shorthorn Beach. It shows the extensive beach deposits and the modern diversion to the Sandy River, which flows out of the adit [AB 8] on the north-western cliff face of this beach. Apart from this and the modern dumps of stone to the north of the beach, the photo demonstrates that this area is largely absent of any modern development.



Plate 6: General View Facing East from Eastern Side of Shorthorn Beach

6.2.11 Plate 7 is an area where the western cliff line of Shorthorn Beach has been undercut [AB 6] and a low earth bank of c. 100m by c. 10m formed, in which several mounds of debris are present. The

2003 Archaeological Report for the site (CAU, 2003) suggested this may represent the mining of a lode in this area, though this has not been confirmed.



Plate 7: Undercutting of Cliff Line [AB 6] along Eastern Edge of Shorthorn Beach

6.2.12 To demonstrate the excellent views the cliff tops offer Plate 9 was taken a short distance to the south of a World War II pillbox that was identified just on the promontory defining the eastern limits of Polgaver Beach. As mentioned above, Carlyon Bay would have been extremely susceptible to enemy landings, given the extensive flat sands and easy access onto the mainland.



Plate 8: General Site Shot Facing West From Top of Cliff at Western Edge of Polgaver Beach

- 6.2.13 The final shot shows the interior of the World War II pillbox [AB 11] on the eastern promontory of Polgaver beach. As can be seen the structure was heavily overgrown with vegetation, limiting the opportunity for a decent photo to be taken. What is visible is the floor of the pillbox (darker brown leaf litter covers this). On the far side of the photo is the horizontal concrete block wall, while in the centre (heavily covered with ivy) is the roof of the pillbox, which has deteriorated to such a degree from exposure to the elements it has collapsed into the structure
- 6.2.14 The structure had 2 or possibly 3 steps down into it and rough measurements taken during the visit showed it to be around 3.5 long and c. 2.5m wide. The opening slot, through which artillery could be fired, appeared to face in a South-South-East to South-East direction. This also likely due to providing a direct viewpoint over Polgaver Beach.



Plate 9: Shot into World War II Pill Box [AB 11] on Western Cliff Along Polgaver Beach

7 ASSESSMENT OF EVIDENCE

7.1 Known Archaeological Value

- 7.1.1 This assessment identified a small number of historic remnants on Carlyon Bay. These include:
- i. An adit [**AB 8**] in the base of the north-western cliff wall of Shorthorn Beach, running from Pembroke House. This engineering event was ultimately responsible for the formation of beach deposits in Carlyon Bay, with huge amounts of outcast material from mining and quarrying activity in the St. Austell and Par areas being washed into the three coves of Crinnis, Shorthorn and Polgaver;
 - ii. Cartographic and possible earthwork evidence of tin stream working [**AB 10**], c. 30m to the east of the adit [**AB 8**] on Shorthorn Beach;
 - iii. Possible evidence of surface mining [**AB 6**] along the western cliff wall of Shorthorn Beach, which has resulted in undercutting of the cliff wall and piles of waste debris;
 - iv. Two adits [**AB 13**] at the base of the northern cliff line of Crinnis Beach, which were identified on historic OS maps of the area. The more westerly of the two was examined during the site walkover and is still visible as a small fissure, from which a stream flows out staining the course of the river rust-coloured; and
 - v. The heavily dilapidated remains of Cornish Leisure World [**AB 3**], which was first constructed as the Cornish Riviera Club in the 1920's, with facilities such as Tennis Courts, Bowling Green, Paddling Pool and an unheated, Olympic sized Lido Swimming Pool. This feature was concentrated on Crinnis Beach, eventually taking up a large area, as shown on the series of historic maps examined. The site was expanded and modified over time, including the construction of the Coliseum, which it is suggested may have originally been built (or requisitioned) during World War II for munitions storage or as a sea-plane hanger. The auditorium, which had a range of supporting venues such as Gossip's nightclub, the Ocean Suite, a clubhouse and the Waterfront / Burger Bar building, is better known for its subsequent use as a entertainment venue, hosting a large number of famous acts it became the seventh largest indoor venue in the UK in the 1980's.
- 7.1.2 Overall these survivors of Carlyon Bay's recent past tell only a limited aspect of its historic development from a 19th century industrial site through to a 20th century recreational facility, along with evidence for 20th century military uses. The historic value of the site is not predominately contained within those few remaining, rundown or ephemeral features, scattered in various parts of the beach or cliff walls, but in the actual story of the site itself.
- 7.1.3 In many ways, the archaeological value of Carlyon Bay is more about the intangible contribution the site has made to the social history of the region and the lives of the countless thousands who have worked, defended, holidayed and relaxed on the Beaches of Crinnis, Shorthorn and Polgaver.
- 7.1.4 A small but important range of information has been built up by the present owners of Carlyon Bay, ranging from electronic copies of Pathe News Reels covering the site, to old advertising posters of the Cornish Riviera Club and the later Cornish Leisure World. In addition, people such as Jacky Swain, who have worked for a number of years on the Carlyon Bay development and had contact with visitors to the public information centre, have collated a breadth of knowledge on the site. Where future mitigation is sought it would be advisable to consider this resource as the true archaeological value of the site and seek its curation for future posterity.

7.2 Past Impacts within the Site Boundary

- 7.2.1 Cartographic analysis and the site walkover showed a range of impacts across the site. These include various construction activities associated with the Cornish Riviera Club and the later Cornish Leisure World on Crinnis Beach.
- 7.2.2 In addition, on Crinnis and Shorthorn Beaches, a range of recent works have been undertaken. These include the construction of a bank road to facilitate plant movement, the diversion of the river flowing from the adit [AB 8] on the north-western face of Shorthorn beach, placement of sea defences (along with their later extraction in certain locations) and the pinning of the cliff face in places, to minimise the risk of rock collapse.

7.3 Assessment of Archaeological Potential

- 7.3.1 Given the absence of known finds within the study area and surrounding area, with the site lying mostly on a beach with few archaeological features, which largely did not begin to be deposited until at least the mid 19th century, there is assessed to be a **low** potential for the recovery of complex archaeological material within the limits of proposed development.
- 7.3.2 At most, only ephemeral remains of 19th century mining or stream workings are likely to be present in areas close to the northern cliff line of Crinnis and Shorthorn Beaches, along with more modern evidence associated with the use of the site in the 20th century for entertainment purposes, including foundations of now demolished features of the Cornish Riviera Club.
- 7.3.3 Any such remains that do survive within this site are concluded to be of local value, at most, though more likely the value of such remains is likely to be negligible, where these are uncovered.

8 CONCLUSIONS

8.1 Project Conclusion

- 1.1.2 AB Heritage Limited (herein AB Heritage) have been commissioned by Davis Langdon LLP to produce an Archaeological Desk-Based Assessment (DBA) for the proposed construction of residential properties on Carlyon Bay, near St. Austell in Cornwall.
- 1.2.2 This report includes a description of the baseline conditions, examines a range of sources on the archaeological resource of the area and identifies any known and potential archaeological receptor(s) within the application site or its immediate vicinity.
- 8.1.1 Overall it was concluded that, while there are a small number of rundown or ephemeral survivors in the site, associated with the 19th century industrial and the 20th century recreational and military uses of Carlyon Bay, that it was actually the more intangible 'story' of the site that was of value.
- 8.1.2 It may be necessary to undertake minimal mitigation works, in areas of the site where proposed development impacts known or potential archaeological features. It was concluded, however, that a small but important range of documentary and oral information has been collated over time by the current owners of Carlyon Bay and their staff, such as Jacky Swain, and it is advised that consideration be given to the curation of this resource for future posterity.
- 8.1.1 This archaeological desk-based assessment will be used to inform a full impact assessment, undertaken in the schemes Cultural Heritage Environmental Statement, which this document will be appended to.

8.2 Acknowledgements

- 8.2.1 AB Heritage would like to thank Adrian Boyce of Davis Langdon LLP and Peter Baird of Nathaniel, Lichfield and Partners for their help and assistance in providing background information, proposed development plans and pertinent information on the scheme.
- 8.2.2 Thanks are also extended to Jacky Swain of Commercial Estates Group for her kind and valuable assistance during the site visit, as well as the range of documentary information and personal knowledge she supplied on the historic development of the site.
- 8.2.3 The author would also like to acknowledge Dan Ratcliffe, the Cornwall Historic Environment Advisor (Archaeology), as well as Jane Powning, of the Cornwall Historic Environment Service, for their helpful input in the compilation of this report.

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1882_OS 25inch_Cornwall 51.6_1 of 2

1882_OS 25inch_Cornwall 51.10_2 of 2

1888p_1880-1s_OS 6inch_Cornwall 51 NW

1888p_1881s_OS 6inch_Cornwall 51SW

1907_OS 25inch_Cornwall 51.6

1907_OS 25inch_Cornwall 51.10_2 of 2

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1908p_1906r_1881s_OS 6inch_Cornwall 51SW

1933_OS 25inch_Cornwall 51.6_1 of 2

1933r&p_1880-1_OS 6inch_Cornwall 51NW

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1938p.w.add_1906r_1881s_OS 6inch_Cornwall 51SW

1938p.w.add_1933r_1880-1s_OS 6inch_Cornwall 51NW

1962p_1930-45r_OS 6inch_SX05SE
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9.4 Consultation

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Email consultation between Andy Buckley (AB Heritage) and Dan Ratcliffe (Cornwall Council Historic Environment Advisor (Archaeology)), 15th September 2010

Personal Communication between Andy Buckley (AB Heritage) and Jacky Swain (Commercial Estates Group), 14th September 2010

Appendices

Appendix A

Gazetteer of Archaeological Features

This gazetteer incorporates all archaeological features identified on the Cornwall and Scilly Historic Environment Record and other sources within a study area designed in consultation with the Cornwall County Council Archaeologist (Dan Ratcliffe), which predominately follows the top edge of the cliff line within which works will take place, plus a 50m buffer zone.

Abbreviations:

AB No: AB Heritage Reference Number.

REF: Reference number assigned by source examined

MCO: Cornwall and Sicily Historic Environment Record reference number.

NGR: National Grid Reference.

AB No.	PERIOD	TYPE	NAME & DESCRIPTION	NGR	REF	STATUS
1	Modern	Defence Structure	A small building or structure, c. 5m x 4m, is visible on air photographs and was plotted as part of the English Heritage funded National Mapping Programme (NMP). It is likely to be part of the WW2 beach defences for Carlyon Bay, although its precise function is not certain.	SX 05427 52084	MCO41836	
2	Modern	Defence Structure	A WW2 pillbox is visible on air photographs and was plotted as part of the NMP. It forms part of the beach defences at Carlyon Bay.	SX 05499 52208	MCO41819	
3	Modern	Recreation Centre	The large multi-purpose entertainment complex of Cornish Leisure World.	SX 0570 5226	MCO42204	
4	Modern	Defence Structure	A small building, likely to be a WW2 pillbox, is visible on air photographs and was plotted as part of the NMP. It is part of the beach defences at Carlyon Bay and gives a full sweep of Polgaver beach. It is one of a pair of pillboxes on Shorthorn Point, this one facing west and the other [5] facing east.	SX 05995 52218	MCO41818	
5	Modern	Defence Structure	One of two pill boxes on Shorthorn Point, one facing west [4] and this one facing east. Both still survive, though the latter is practically invisible as it is sunk into the ground and very overgrown with vegetation.	SX 06015 52235	MCO50725	

6	Post-Medieval	Industrial Activity	An area of disturbed ground at the base of the cliff noted during a 2003 Archaeological DBA of the Carolyn Bay site, it possibly represents the remains of surface mineral workings. A low earth bank separates an area approximately 100m x 10m from the rest of the beach. The base of the cliff is frequently undercut and may represent the location of a lode being mined. There are also a number of mounds and, based on historic mapping, it is possible this area may represent the remains of stream working. During the site walkover as part of the AB Heritage Archaeological DBA of this site, the mounds created by mining / stream working was clearly evident.	SX 06060 52284	MCO46529	
7	Modern	Defence Structure	A small building, likely to be a WW2 pillbox, is visible on air photographs and was plotted as part of the NMP. It is part of the beach defences at Carlyon Bay.	SX 06095 52336	MCO41817	
8	Post-Medieval	Industrial Activity	An adit exits at the base of the cliffs at the top of Shorthorn Beach, through an opening 1.8m high and c. 0.5m wide. A larger cement-lined culvert that carries the Crinnis River beneath the golf course exits the cliff immediately to the west of this adit. Both have large iron grills to prevent access.	SX 0612 5235	MCO46527	
9	Post-Medieval	Industrial Activity	A mine shaft is shown on the OS 1st Edition 1:2500 map of c.1880 as 'Old Shaft' and surrounded by a wall. During a walkover of the Carolyn Bay site as part of the 2003 Archaeological DBA for this site it was confirmed that the wall is no longer complete and only two short sections survive, to a height of 1.4m. A large circular pit c. 4m in diameter and c. 2m deep lies between these two sections of wall.	SX 06182 52369	MCO46528	
10	Post-Medieval	Industrial Activity	Streamworks were recorded on the OS 1st Edition 1:2500 map of c.1880 in this location and, during a site walkover as part of the 2003 Archaeological DBA for this site, a group of three or four large mounds were identified in this area. The mounds were partially water-filled, excavated up to 3m deep and stretched from this point to the end of Shorthorn beach. It was suggested that these are likely to be the remains of surface mineral workings through stream working.	SX 0624 5232	MCO29737	
11	Modern	Defence Structure	A small building, likely to be a WW2 pillbox, is visible on a 1947 air photograph and was plotted as part of the NMP. This structure was visited during the AB Heritage site walkover, undertaken as part of this archaeological desk-based assessment. This revealed a concrete block construction, roughly oval / circular in shape and measuring c. 4m diameter. The roof has collapsed into the structure and the site is heavily overgrown with vegetation. It can be confirmed though that this structure would have formed part of the beach defences at Carlyon Bay.	SX 06659 52255	MCO41816	
12	Modern	Industrial Activity	Two Adits, first recorded on the 25" OS Map of 1907 at the base of the northern cliff line of Crinnis Beach. The more westerly of the two is still visible as a small fissure from which a stream flows out; it has stained its course rust-coloured.	SX 0565 5226 & SX 0568 5228	CAU (2003), 1907 OS 25" Map & Site Walkover	
13	Modern	Defence Structure	Rifle Range and target on the north-eastern cliff line of Crinnis Beach. Shown on the 25" OS Map of 1907, no traces of this feature were identified during the site visit.	SX 0591 5225	1907 OS 25" Map	

Figure 13: Archaeological Features Mapping

Appendix B

Planning Policy Statement 5 – Policies of Material Consideration in Guiding Planning Decision.

POLICY HE6: Information requirements for applications for consent affecting heritage assets

Local planning authorities should require an applicant to provide a description of the significance of the heritage assets affected and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum the relevant historic environment record should have been consulted and the heritage assets themselves should have been assessed using appropriate expertise where necessary given the application's impact. Where an application site includes, or is considered to have the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where desk-based research is insufficient to properly assess the interest, a field evaluation.

This information together with an assessment of the impact of the proposal should be set out in the application (within the design and access statement when this is required) as part of the explanation of the design concept. It should detail the sources that have been considered and the expertise that has been consulted.

Local planning authorities should not validate applications where the extent of the impact of the proposal on the significance of any heritage assets affected cannot

POLICY HE7: Policy principles guiding the determination of applications for consent relating to all heritage assets

In decision-making local planning authorities should seek to identify and assess the particular significance of any element of the historic environment that may be affected by the relevant proposal (including by development affecting the setting of a heritage asset) taking account of:

- (i) evidence provided with the application;
- (ii) any designation records;
- (iii) the historic environment record and similar sources of information;
- (iv) the heritage assets themselves;
- (v) the outcome of the usual consultations with interested parties; and
- (vi) where appropriate and when the need to understand the significance of the heritage asset demands it, expert advice (from in-house experts, experts available through agreement with other authorities, or consultants, and complemented as appropriate by advice from heritage amenity societies).

In considering the impact of a proposal on any heritage asset, local planning authorities should take into account the particular nature of the significance of the heritage asset and the value that it holds for this and future generations. This understanding should be used by the local planning authority to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposals.

If the evidence suggests that the heritage asset may have a special significance to a particular community that may not be fully understood from the usual process of consultation and assessment, then the local planning authority should take reasonable steps to seek the views of that community.

Local planning authorities should take into account:

- the desirability of sustaining and enhancing the significance of heritage assets, and of utilising their positive role in place-shaping; and
- the positive contribution that conservation of heritage assets and the historic environment generally can make to the establishment and maintenance of sustainable communities and economic vitality by virtue of the factors set out in HE3.1

Local planning authorities should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.

Where there is evidence of deliberate neglect of or damage to a heritage asset in the hope of obtaining consent, the resultant deteriorated state of the heritage asset should not be a factor taken into account in any decision.

Where loss of significance is justified on the merits of new development, local planning authorities should not permit the new development without taking all reasonable steps to ensure the new development will proceed after the loss has occurred by imposing appropriate planning conditions or securing obligations by agreement.

POLICY HE8: Additional policy principle guiding the consideration of applications for consent relating to heritage assets that are not covered by policy HE9

The effect of an application on the significance of such a heritage asset or its setting is a material consideration in determining the application. When identifying such heritage assets during the planning process, a local planning authority should be clear that the asset meets the heritage asset criteria set out in Annex 2.

Where a development proposal is subject to detailed pre-application discussions (including, where appropriate, archaeological evaluation (see HE6.1)) with the local planning authority, there is a general presumption that identification of any previously unidentified heritage assets will take place during this pre-application stage. Otherwise the local planning authority should assist applicants in identifying such assets at the earliest opportunity.

POLICY HE9: Additional policy principles guiding the consideration of applications for consent relating to designated heritage assets

There should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost, heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact.

Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, including scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings and grade I and II* registered parks and gardens, World Heritage Sites, should be wholly exceptional.

Where the application will lead to substantial harm to or total loss of significance local planning authorities should refuse consent unless it can be demonstrated that:

- (i) the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that harm or loss; or
- (ii) the nature of the heritage asset prevents all reasonable uses of the site; and
- (iib) no viable use of the heritage asset itself can be found in the medium term that will enable its conservation; and
- (iic) conservation through grant-funding or some form of charitable or public ownership is not possible; and
- (iid) the harm to or loss of the heritage asset is outweighed by the benefits of bringing the site back into use.

To be confident that no appropriate and viable use of the heritage asset can be found under policy HE9.2(ii) local planning authorities should require the applicant to provide evidence that other potential owners or users of the site have been sought through appropriate marketing and that reasonable endeavours have been made to seek grant funding for the heritage asset's conservation and to find charitable or public authorities willing to take on the heritage asset.

Where a proposal has a harmful impact on the significance of a designated heritage asset which is less than substantial harm, in all cases local planning authorities should:

- (i) weigh the public benefit of the proposal (for example, that it helps to secure the optimum viable use of the heritage asset in the interests of its long-term conservation) against the harm; and
- (ii) recognise that the greater the harm to the significance of the heritage asset the greater the justification will be needed for any loss.

Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. The policies in HE9.1 to HE9.4 and HE10 apply to those elements that do contribute to the significance. When considering proposals, local planning authorities should take into account the relative significance of the element affected and its contribution to the significance of the World Heritage Site or Conservation Area as a whole. Where an element does not positively contribute to its significance, local planning authorities should take into account the desirability of enhancing or better revealing the significance of the World Heritage Site or Conservation Area, including, where appropriate, through development of that element. This should be seen as part of the process of place-shaping.

There are many heritage assets with archaeological interest that are not currently designated as scheduled monuments, but which are demonstrably of equivalent significance. These include heritage assets:

- that have yet to be formally assessed for designation
- that have been assessed as being designatable, but which the Secretary of State has decided not to designate; or
- that are incapable of being designated by virtue of being outside the scope of the Ancient Monuments and Archaeological Areas Act 1979. The absence of designation for such heritage assets does not indicate lower significance and they should be considered subject to the policies in HE9.1 to HE9.4 and HE10.15

POLICY HE10: Additional policy principles guiding the consideration of applications for development affecting the setting of a designated heritage asset

When considering applications for development that affect the setting of a heritage asset, local planning authorities should treat favourably applications that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset. When considering applications that do not do this, local planning authorities should weigh any such harm against the wider benefits of the application. The greater the negative impact on the significance of the heritage asset, the greater the benefits that will be needed to justify approval.

Local planning authorities should identify opportunities for changes in the setting to enhance or better reveal the significance of a heritage asset. Taking such opportunities should be seen as a public benefit and part of the process of place shaping.

POLICY HE12: Policy principles guiding the recording of information related to heritage assets

A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of our past should not be a factor in deciding whether a proposal that would result in a heritage asset's destruction should be given consent.

The process of investigating the significance of the historic environment, as part of plan-making or development management, should add to the evidence base for future planning and further the understanding of our past. Local planning authorities should make this information publicly available, including through the relevant historic environment record.

Where the loss of the whole or a material part of a heritage asset's significance is justified, local planning authorities should require the developer to record and advance understanding of the significance of the heritage asset before it is lost, using planning conditions or obligations as appropriate. The extent of the requirement should be proportionate to the nature and level of the asset's significance. Developers should publish this evidence and deposit copies of the reports with the relevant historic environment record. Local planning authorities should require any archive generated to be deposited with a local museum or other public depository willing to receive it. Local planning authorities should impose planning conditions or obligations to ensure such work is carried out in a timely manner and that the completion of the exercise is properly secured.



AB Heritage Limited, Hector's Barn, Stathe Road, Burrowbridge, Bridgwater, Somerset, TA7 0RY
tel: 01823 698 438 | fax: 01823 698 438 | e-mail: info@abheritage.co.uk