

Archaeology Wales

Blackbridge & Waterson, Milford Haven, Pembrokeshire

ASIDOHL



By Philip Poucher

Report No: 1426

Archaeology Wales Limited,
Rhos Helyg, Cwm Belan,
Llanidloes, Powys SY18 6QF
Telephone: 01686 440371
E-mail: admin@arch-wales.co.uk

Archaeology Wales

Blackbridge & Waterston, Milford Haven, Pembrokeshire

ASIDOHL

Prepared For: Egnedol Wales Ltd

Edited by: Mark Houliston

Signed: 

Position: Managing Director

Date: 7/1/16

Authorised by: Mark Houliston

Signed: 

Position: Managing Director

Date: 7/1/16

By
Philip Poucher

Report No: 1426

January 2016

Contents

Summary	1
1. Introduction	2
2. ASIDOHL Stage 1	3
2.1 The Proposed Development	3
2.2 The Site	4
2.3 Previous Assessments	6
2.4 Planning Policy Context	7
2.5 Limitations	7
3. ASIDOHL Stage 2	9
3.1 Introduction	9
3.2 Impact Assessment	9
4. ASIDOHL Stage 3	18
4.1 Introduction	18
4.2 Impact Assessment	19
5. ASIDOHL Stage 4	33
5.1 Introduction	33
5.2 Evaluation of relative importance of part of HCA	33
5.3 Evaluation of relative importance of HCA	41
6. ASIDOHL Stage 5	42
6.1 Introduction	42
7 Conclusion	42
8 Bibliography	44

List of illustrations

Figure 1	Location of proposed development
Figure 2	Location plan of proposed development elements
Figure 3	Details of proposed development at Blackbridge
Figure 4	Details of proposed development at Waterston
Figure 4	Location of proposed development and HLCAs effected

Photos

- Photos 1-15 General views of the existing Blackbridge RNAD site
- Photos 16-19 Views from within the Blackbridge development site towards Milford Haven, Hakin and Pill within HLCA 307
- Photos 20-28 Views of proposed development from within HLCA 307
- Photos 29-30 Views of proposed development from within HLCA 310
- Photos 31-32 Views of proposed development from within HLCA 348
- Photo 33 View of proposed development from within HLCA 322
- Photo 34-37 Views of proposed development to and from HLCAs 314 and 341
- Photo 38-40 Views of proposed development to and from HLCA 306

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright Designs and Patents Act 1988, and have granted a licence to Egnedol Wales Ltd to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey

Summary

In December 2015 Archaeology Wales was commissioned to carry out an ASIDOHL2 study to determine the potential impact of the proposed development of a gasification and power generating plant at the former Royal Navy Armaments Depot (RNAD) at Blackbridge, along with an inter-linked proposed development of a Fish, Algae and Prawn farm, Research Centre, Cheese and Packing factory and car-park within and adjacent to the former Gulf Oil Refinery site at Waterston, both near Milford Haven, Pembrokeshire. The proposed development lies within the Milford Haven Waterway Landscape of Outstanding Historic Interest (HLW (D) 3). The proposed development sites currently comprise the derelict remains of the RNAD depot, which include several large standing buildings of mid-20th century date, along with a partially-cleared area within the former Oil Refinery and adjacent dis-used car park and agricultural land.

The ASIDOHL2 has been carried out in five stages. Stage 1, the introduction, identifies contextual information regarding the site. It describes the proposed development in more detail, the current appearance of the proposed development areas and the planning policy context.

Stage 2, considers the direct, physical impact of the proposed development, assessed in absolute, relative terms and landscape terms. This is considered in terms of its impact on HLCA 307, HLCA 310 and HLCA 348. The overall magnitude of the direct physical impact is considered to be Slight on HLCA 307 and HLCA 310, and Moderate on HLCA 348.

Stage 3, assesses the indirect impacts of the proposed development, in terms of indirect, physical impacts, and indirect (non-physical) visual impacts. These indirect impacts affect a wider area and several surrounding HLCAs are considered. Due to views to and from the site the development could have a potential visual impact on seven HLCAs, although this is considered to be Slight on five of the HLCAs. The main potential impact is concentrated on HLCA 307 Milford Haven and HLCA 310 Gulf Oil Refinery. The overall magnitude of indirect impact on these two areas is scored as Moderate.

Stage 4, forms an evaluation of the relative importance of the HLCA, and the parts within them that are affected by the proposed development. This considers the overall value of HLCA 307 Milford Haven to be High. The remaining HLCAs are graded as Considerable.

Stage 5, forms an assessment of the overall significance of the impact. This is scored as Moderate on HLCA 307 Milford Haven and HLCA 310 Gulf Oil Refinery, due largely to the greater direct and indirect impacts of the development on these areas and the higher value of HLCA 307 in particular. The impact on the remaining HLCAs are scored as Slight.

1. INTRODUCTION

- 1.1 In December 2015 Archaeology Wales Ltd (AW) was commissioned to carry out an ASIDOHL2 study to investigate the possible impact on the historic environment of a proposed development at Blackridge, Milford Haven and at the former Gulf Oil Refinery at Waterston, Pembrokeshire. The sites lie within the Milford Haven Waterway (HLW (D) 3), as listed in the Register of Landscapes of Historic Interest in Wales (Cadw et al 1998). As such an ASIDOHL2 (Assessment of the Significance of the Impact of Development On the Historic Landscape) was required to help inform the planning decision on the proposed development. AW was commissioned by Egnedol Wales Ltd. The AW project number is 2403.

ASIDOHL Layout

- 1.2 In assessing the impact of the proposed development, guidelines are laid out in 'Guide to Good Practice on Using The Register Of Landscapes Of Historic Interest In Wales In The Planning And Development Process' (Revised 2nd Edition) which includes revisions to the assessment process (ASIDOHL2). This guidance lays out a process for assessing the impacts, based on five stages.
- **Stage 1** consists of gathering the contextual information and provides the introduction to the report.
 - **Stage 2** is an assessment of the direct physical impacts of the proposed development, in absolute terms, relative terms and landscape terms. Within this tables are provided to quantify these impacts and their magnitude.
 - **Stage 3** is an assessment of the indirect impacts of the development, in terms of both indirect, physical impacts and also indirect (non-physical) visual impacts. Again tables are provided to quantify these impacts and their magnitude.
 - **Stage 4** is an evaluation of the relative importance of the Historic Character Area directly and/or indirectly affected by the proposed development. This is done in relation to the whole of the Historic Character Area concerned and the whole of the historic landscape area on the Register, followed by an evaluation of the relative importance of the Historic Character Area concerned in the national context.
 - **Stage 5** is an assessment of the overall significance of the impact. This combines stages 2 and 4 to produce an assessment of the overall significance of the impact of the proposed development and the affect that altering the Historic Character Area has on the whole of the historic landscape area on the Register. This stage also includes an examination of mitigation or positive benefits and a concluding statement.

ASIDOHL STAGE 1

2.1 The Proposed Development (Figures 2 - 4)

- 2.1.1 The proposed development consists of the creation of a series of inter-connected developments on former industrial sites, spread largely over two main sites, namely the former Royal Navy Armaments Depot at Blackridge, Milford Haven and within and adjacent to the former Gulf Oil Refinery at Waterston.
- 2.1.2 At Blackridge (SM 9165 0515), plans comprise the redevelopment of the site as a gasification and power generating plant, utilising and enlarging some of the existing buildings on the site. The main site currently comprises four large former mid-20th century industrial buildings, along with a collection of smaller standing structures and a detached former office building. All buildings are currently derelict, and are described in more detail below (see 2.2). Other features on the site have either been cleared or lie within thick undergrowth. The gasification and power generating plant would include a Pyrolyser House that would extend an existing building by 60m, a Grinding Hall re-using an existing building, a Control Room reusing an existing building, and the demolition of an unsafe structure to be replaced by a new Engine House. Several further new builds are also planned, comprising a storage building, chimney stack, gas turbines, re-ox building and dryer hall. These buildings will be of varying sizes (see Figure 3). Heights are not given for all buildings. Those that are, suggest the buildings are mainly between 8m and 14.2m in height, but it is also understood some buildings may reach 24m.
- 2.1.3 Also included in the development at the Blackbridge site is the refurbishment of the associated jetty as a primary supply link, and the establishment of a series of greenhouses on the cliff top overlooking the site for the production of high value crops. Information regarding the size and extent of the greenhouses is not yet available.
- 2.1.4 At Waterston (SM 9385 0522), plans comprise the redevelopment of an area within the former Gulf Oil Refinery that has largely been cleared of its later-20th century industrial structures to create a Fish Farm, Prawn Farm, Algae Farm and Research Area. To accommodate this activity a series of Aquaculture Units are proposed, comprising rectangular brick and concrete buildings, part clad in aluminium panels with roofs covered with pv panels. Two sizes of building are proposed: a row of saddle-roofed buildings approximately 75m by 20m and 9m high, and a row of M-type roof buildings approximately 140m by 39m and 9m high. The research area comprises two rows of greenhouses, with 12 in total, and each unit measuring 48m by 24m. In addition to this development, there are also plans to refurbish and reopen the rail access to the site.
- 2.1.5 Just outside the boundaries of the former Gulf Oil Refinery site, opposite the entrance to the development within the refinery boundaries and adjacent to Waterston village (SM 9395 0563), the planned development includes the site of a car park along with a Cheese Factory and Packing Factory. The car park area has until recently been in use as a car park for the refinery site. The packing factory building is approximately 25m by 40m, with the cheese factory being slightly longer. Heights are not given.

- 2.1.6 The development will occupy c.9 hectares of land for the gasification and power generating plant at Blackbridge, along with c.3.8 hectares for the greenhouses and c.16.5 hectares for the Prawn, Fish and Algae Farms and Research Area within the former Gulf Oil refinery, along with c.2 hectares for the Cheese and Packing Factory and Car Park at Waterston.
- 2.1.7 A planning application is in the process of submission. The Local Planning Authority is Pembrokeshire County Council.

2.2 The Site

- 2.2.1 The Blackbridge site (Photos 1 – 15) occupies an area of mid-20th century development at c.8 - 9mOD on the northern edge of the Cleddau to the east of the town of Milford Haven, Pembrokeshire (Figures 2 & 3, SM 9165 0515). The site comprises the former Royal Naval Armaments Depot (RNAD) and consists of several large brick and concrete buildings. The site is located at the confluence of Castle Pill and the Cleddau, where a large levelled terrace approximately 700m by 550m has been created for the construction of the RNAD depot. This is fronted to the south by a large concrete sea wall to the Cleddau itself, and to the north by a steep quarried and scrub-covered cliff face. An open area also extends back into the mainland, where a small stream valley to the northeast has been artificially enlarged as part of the RNAD site. The terrace narrows to the east, beyond the location of an associated jetty, with a concrete and tarmac track running along the seawall and in front of the cliff, giving access to various tunnels to the east.
- 2.2.2 Four main large derelict industrial buildings comprise the main depot site, set in two rows, and all largely stripped of internal fixtures and fittings. To the rear lies a steel-framed concrete building approximately 180m by 45m with a corrugated iron saw-toothed roof. It was built in 1939 as a bulk store, and has more recently been converted with the insertion of an internal tarmac racing track at the eastern end. This building will be utilised and enlarged as the Pyrolyser House. Attached to the eastern end of this building is a rectangular steel-framed building with brick wall inserts and a curved asbestos roof, measuring 45m by 62m. This was originally constructed in 1939 as a large component store and will be converted into the Grinding Hall. The 2nd row of buildings on the seaward side of the complex includes a square triple pile steel-framed building with brick walls and corrugated asbestos saw-toothed roof. This was originally built in 1939 as a workshop block, and is to be converted into the Control Room. Detached to the east is a brick-built, triple pile building with a corrugated asbestos saw-tooth roof. This was originally built in 1939 as an assembly shop for buoyant mines, but due to structural problems it will be demolished and replaced by an Engine House, contained within a slightly longer building. To the west of these two rows of larger buildings stands a rectangular single-storey brick built structure with a pitched gable roof on steel trusses. The building is now roofless with vegetation build-up internally. This was originally constructed in 1939 as a timber store. Adjacent to this building is a small brick-built, flat-roofed former latrine built c.1970 and now only

partly roofed with semi-tumbled walls. Towards the eastern end of the site lies a rectangular two-storey brick-built building with a dutch-gable slate roof and a later attached pitched gable-roofed brick-building on its rear eastern side. The interior is stripped but wood-block flooring survives. This was originally built in 1939 as an office and medical centre.

- 2.2.3 The remainder of the site consists of hardstanding and levelled rubble, having been cleared of other standing buildings. Rail lines are visible set into the ground surface along the northern edge of the site. Further substantial concrete walling and tunnel entrances exist to the east and northeast, but these are largely covered in scrub with areas of rubble also visible. This area formerly comprised numerous store houses, laboratories, workshops, substations and bomb stores associated with the RNAD site. To the south lies an 'L' plan steel-pile jetty with a masonry pier. It was originally built in 1872 and is to be refurbished within the proposed development plans.
- 2.2.4 The Blackbridge site also includes an area of land on top of the cliffs that back the main depot site. This area includes former semi-buried reservoirs, built as emergency water supplies in 1939, with the surface comprising enclosed pasture with an extensive area of scrub along the cliff top immediately above the development site. This land rises from c.23mOD along its southern edge to 35mOD along its northern edge, and land continues to rise gradually to the north to a ridge at c.58mOD along which the B4325 runs, before falling away slightly again.
- 2.2.5 The southern boundary to the Blackbridge site is formed by the Cleddau River, a wide coastal Ria. The western boundary of the site is formed by Castle Pill, a wide tidal inlet, beyond which lies the settlement of Milford Haven. To the north, beyond the cliff face and the scrub and pasture topping the cliff, further agricultural land extends. To the east lies a small former coastal stream valley that runs off to the northeast, with development also continuing along the sea cliff face. The former Gulf Oil refinery lies further to the east, and the Texaco Oil refinery (acquired by Valero in 2011) lies on the opposite banks of the Cleddau to the south.
- 2.2.6 The Waterston site is spread over two main areas. The proposed Fish, Prawn and Algae Farms and Research Centre are located in the northeast corner of the former Gulf Oil Refinery (Figures 2 & 4, SM 9385 0522). Construction work began on the refinery in 1966. It was closed down as a refinery in 1997 and is now subdivided, with part of the site operating as the Dragon LNG terminal and part as the SEMLogistics Chemicals storage facility. The area of proposed development has now largely been cleared of buildings and is derelict, although some large rectangular units remain. The use and former layout of this area is not fully understood. Mapping would indicate that the Prawn Farm area, as labelled on Figure 2, was intensively developed with buildings, tanks and pipes; the remaining area less intensively so.
- 2.2.7 The site is surrounded to the south and west by tanks and industrial buildings, and to the north by administrative buildings and car parking within the refinery complex. A

high embankment and security fencing surround the northeast and eastern sides of the site, beyond which lies the Hazelbeach/Waterston Road and agricultural land.

- 2.2.8 The Cheese and Packing Factory lies just to the north of the boundary of the former Gulf Oil Refinery, immediately to the east of the village of Waterston (Figures 2 & 4, SM 9395 0563). The site is largely occupied by a former car park, bounded by hedgerows, with agricultural land to the north and east. This agricultural land is currently in use as pasture.
- 2.2.9 The bedrock geology consists of interbedded argillaceous rocks and sandstone of the Milford Haven Group which extends across both the Blackbridge and Waterston areas, with a coastal outcropping of sandstone of the Cosheston Group also encompassing the eastern part of the Blackbridge site (BGS 2015).

2.3 Previous Assessments

- 2.3.1 The area is included in the Milford Haven Waterway Area of Outstanding Historic Interest (HLW (D) 3) within the Register of Landscapes of Historic Interest in Wales, published by Cadw, CCW and ICOMOS UK in 1998. Further historic landscape characterisation work has subdivided this landscape into numerous Historic Landscape Character Areas (Murphy & Ludlow 2002). The sites and the areas around them have been assessed as they sit within Historic Landscape Character Area 307 Milford Haven (Blackbridge site) along with 310 Gulf Oil Refinery and 348 Waterston - Honeyborough (Waterston site). The area has also been assessed as part of LANDMAP, which includes an assessment of the Historic Landscape (Milford Haven PMBRKHL43876, Gulf Oil Refinery PMBRKHL43879 and Waterston – Honeyborough PMBRKHL43895) based around the same boundaries and reasoning as the HLCA.
- 2.3.2 In 1994, Roger Thomas undertook an assessment of disused military buildings in the area that included a comprehensive survey of all standing remains on the Blackbridge site (Thomas 1994). In 2002, Dyfed Archaeological Trust (then Cambria Archaeology) undertook a desk-based assessment as part of an Environmental Impact Report on the development of the Petroplus LNG site (Crane 2002), which identified numerous sites of interest, some of which were subsequently excavated, but all lying outside the current areas of proposed development. In 2015, Dyfed Archaeological Trust undertook a Cadw-funded project examining WWI remains throughout Southwest Wales, which included several sites located on and around the Waterston site (Pyper 2015). These reports were largely site-specific, examining and recording archaeological sites within these areas, but not addressing the implications of the wider historic landscapes.
- 2.3.3 Two wide-ranging studies have also been undertaken encompassing the Milford Haven Waterway and including the areas of proposed development. In 1997-8 Dyfed Archaeological Trust undertook a Cadw-funded coastal survey of the lower Milford Haven Waterway area (Murphy & Allen 1998). A study was also undertaken on the Milford Haven Waterway area by Dyfed Archaeological Trust in 2008 (Poucher 2008). This study examined the general history and development of the waterway, focusing

largely on maritime links and the archaeological potential of the area. Again however, the studies did not particularly address the wider historic landscapes.

2.4 Planning Policy Context

2.4.1 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.

2.4.2 In 2013, Pembrokeshire County Council adopted the Local Development Plan (LDP) for the County, excluding the area of the Pembrokeshire Coast National Park. Within the LDP, **Policy GN.38** 'Protection and Enhancement of the Historic Environment' is of specific relevance to the historic landscape. This policy states:

'Development that affects sites and landscapes of architectural and/or historical merit or archaeological importance, or their setting, will only be permitted where it can be demonstrated that it would protect or enhance their character and integrity.'

2.4.3 The development within the boundary of the former Gulf Oil Refinery lies within an area covered by **Policy SP2**, 'Port and Energy Related Development'. Development within this area will be permitted for port related facilities and infrastructure, including energy related development.

2.4.4 Development at the Blackbridge site lies within an area covered by **Policy SP3**, 'Strategic Employment Allocation'. This site is one of four in the area that has been identified as a site in a sustainable location suitable for development for enterprise and employment purposes, to help support the future development of port and energy related activities in proximity to Milford Haven.

2.5 Limitations

2.5.1 This ASIDOHL2 study was carried out by Philip Poucher, Project Manager at Archaeology Wales, using the guidelines and methodology set out in the *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process Revised 2nd edition* (Cadw and CCW 2007).

2.5.2 The development proposals and other documents used within the production of this report have been supplied by the client. The physical form and appearance of the development is largely understood, although not all development details of the

various proposed elements have been finalised, and in particular the final appearance and heights of development at the Blackbridge site have not yet been fully defined.

- 2.5.3 Proposed development sites are not accessible to the public. Site visits were made in the company of part of the development team in December 2015. Open access was available to the majority of relevant locations and viewpoints within the affected HLCAs, which were also visited in December 2015, with the exception of the Texaco Oil Refinery HLCA to the south, where access is restricted. No Zone of Theoretically Visibility has been produced.
- 2.5.4 The Historic Landscape is described in the Register of Landscapes of Historic Interest in Wales, published by Cadw, CCW and ICOMOS UK in 1998, and the relevant HLCAs have been subject to a detailed characterisation exercise, described in detail by Dyfed Archaeological Trust at the following website:
<http://www.dyfedarchaeology.org.uk/projects/HistoricLandscapeCharacterisation.htm>
- 2.5.5 Confidence levels for this ASIDOHL are therefore high in most respects.

ASIDOHL STAGE 2 – ASSESSMENT OF DIRECT, PHYSICAL IMPACTS OF DEVELOPMENT

3.1 Introduction

- 3.1.1 This section comprises a description and quantification of the direct physical impacts of development on the Historic Character Area(s) affected by the proposed development.
- 3.1.2 The description and quantification is considered in three ways:
- a) In absolute terms, i.e. the proportion of the surface area of the HCA affected
 - b) In relative terms, i.e. the proportion of each of the key historic landscape characteristics (as identified in the Historic Landscape Characterisation report) that will be permanently lost or removed by the proposed development.
 - c) In landscape terms, the contribution that the affected elements of the key historic landscape characteristics make to the value of the Historic Character Area as a whole.
- 3.1.3 In each case, the physical impacts are assigned a score, and the overall scores for the impacts on the individual Historic Character Area are used to produce a quantified expression of the overall magnitude of direct impact on a 24 point scale. For each Historic Character Area these are presented as a table; each table is supplemented with qualifying statements and background information.

3.2 Impact Assessment

HISTORIC LANDSCAPE CHARACTER AREA 307 – MILFORD HAVEN

- 3.2.1 The Blackridge site is contained entirely within the HLCA 307 – Milford Haven. This area (Figure 5) represents a largely urban landscape centred on the late-18th century grid-pattern planned town and associated 19th century docks. Large 20th century housing estates and light industrial developments surround the older core of the town.
- 3.2.2 This area lies within the former medieval manor of Pill, a large and important manor with its focal point at the head of Castle Pill. The Pill itself forms the western boundary to the development. The Haven was of strategic military importance, which was recognised as early as 1538 when Thomas Cromwell recommended that forts should be built for its defence. Naval, trading and passenger ships were frequent visitors to the Haven, but the lack of a major settlement in the area to supply these ships was a major concern by the mid-18th century. The nearest major settlement at that time was Pembroke, which lacked piers, adequate quays and hotels. Numerous smaller settlements had grown up around some of the more sheltered Pills and alongside existing fishing villages such as Hubberston. From the 1760s, the local major landowner, William Hamilton, developed plans to develop a major settlement. In 1790 he was granted an act of parliament to 'make and provide Quays, Docks, Piers and other erections and establish Market with proper Roads and Avenues', which paved the way for the establishment of the town of Milford Haven. In 1796 the Navy Board

located a dockyard at the mouth of Hubberston Pill, where several ships were built, before it was relocated to Pembroke Dock. The town also briefly housed a successful whaling industry. However, in the early 19th century, as a result of a decline in the whaling industry, the removal of several important maritime services to sites on the south side of the Haven, and a lack of investment, the town was soon in decline. Attempts to revive the town lead to the Milford Improvement Bill of 1857, which included the construction of a pier and Black Bridge adjacent to the development site. In 1872, the cast-iron pier of Newton Noyes was built and a railway was constructed connecting the site to Milford Haven, running across the development area. In 1934 the Admiralty acquired Blackbridge and Newton Noyes, which was developed as a mine depot. Milford Haven dock opened in 1888 and the site subsequently developed as a successful fishing port, going into severe decline in the 1950s. Throughout the later 19th and 20th centuries, urban development has spread across the former farms and fields that once surrounded the town. Little development occurred to the east of Castle Pill, other than the large mine depot at Blackbridge itself, until the late 20th century, when houses were built on former parkland at Castle Hall.

3.2.3 **A – In Absolute Terms**

The proposed development at the Blackridge site will have a direct physical impact on one HLCA, that of HLCA307-Milford Haven. The entire development area consists of 2.6% (c.13 hectares) of the area of the HLCA (492 hectares). The proposed development comprises a gasification and power generating plant utilising and enlarging some of the existing buildings on site, demolishing and replacing one of the buildings and establishing several new builds including a storage building, chimney stack, gas turbines, re-ox building and dryer hall. An area of greenhouses will also be established in enclosed pasture on the clifftop above the site. Given the re-use and adaption of existing structures then it is difficult to establish an accurate limit for the current visible landscape features that will be replaced, but as the overall area covered by the main buildings, both new and adapted, consists of c.13 hectares in total, even including existing structures that will be maintained, at most c.2.6% of the entire Historic Character Area HLCA 307 may be permanently lost or removed by the proposed development. This is considered to be a *Very Slight* absolute impact.

3.2.4 **B – In Relative Terms**

The main characteristics of the HLCA consists largely of an urban area, including a late 18th century planned town surrounded by later 19th and 20th century urban expansion, which has subsumed some earlier village settlements at Priory, Hubberston and Steynton. Also included in the main characteristics are docks and light industrial units. The large buildings of the former Blackbridge RNAD site are also mentioned in the HLCA description.

The development area does not include any of the typical characteristics that form the main urban development of Milford Haven. It does, however, clearly affect the remains of the Blackbridge RNAD site that defines this area of the HLCA. There are many individual elements to this depot, but for the purposes of this report the

collection of upstanding buildings that currently form the core of the depot area are considered as one element. These buildings include a former bulk store (PRN 26001) and attached component store (PRN 26010), with a workshop block (PRN 26003) and a mine assembly shop (PRN 26006). To the west of these large brick and concrete buildings, all constructed in 1939 for the RNAD site, are the remains of an office and medical centre (PRN 26078), a (now roofless) timber store (PRN 26002) and a later (c.1970s) latrine block (PRN 26062). Although derelict, stripped of all internal fixtures and fittings, and in some cases part-converted into leisure facilities, the outer appearance of the buildings remains largely unchanged. These buildings are considered to be features of Local Importance (Category C) helping to define the character of this particular part of the whole character area. Together, these buildings cover c.6% of the full extent of the former RNAD site, but they will also be partly retained, with only one of the buildings fully demolished. Therefore, the loss or removal of one building constitutes less than 1%, which is graded as a *Very Slight* relative impact.

The full RNAD site covered a relatively large area, probably in excess of 26 hectares. A large number of buildings have since been cleared from site although some associated building remains survive, such as the tunnels containing the fan houses and magazine and other part-demolished walls, along with surface and sub-surface remains of the site, many of which are currently hidden from view by vegetation. These associated features also form part of the historic character of this area, but less visibly so. These features are also considered sites of Local Importance (Category C), the extent of their survival will also depend on the extent of groundworks associated with the development, it is likely that some standing elements may see some demolition but it is also understood that features such as the tunnels will be retained. The proposed development as illustrated in Figure 3 constitutes c.20% of the whole RNAD site, even if all RNAD features were permanently lost or removed in this area this would be considered to be a *Moderate* relative impact on the RNAD site.

There are only two other recorded archaeological sites within the proposed development area that are not related to the RNAD site. The route of a pre-existing mineral railway (PRN 34525) is recorded running across the site. It originally ran from the Newton Noyes jetty into Milford Haven, apparently the platform and some rails are still visible although to a large extent the remains of this feature may already have been removed. This is a feature of Local Importance (Category C). The extent of its survival will depend on the extent of groundworks required as part of the development and therefore the impact is difficult to quantify, but given the limited remains and original line of the whole railway the relative impact is considered to be *Very Slight*.

The other feature is not previously recorded within the regional Historic Environment Record but consists of a standing stone located on the headland overlooking the RNAD site at SM 91875 05314. The provenance of the stone is unknown, similar standing stones are believed to be Bronze Age in origin, although drill marks clearly indicate this stone has been used as a gatepost at some point in its past and the fact the site is unrecorded may suggest its antiquity has been dismissed. If this did represent a Bronze Age standing stone then it could be considered a site of Regional Importance

(Category B), however it lies in an area of the site that will be undeveloped and therefore the relative impact is graded as *Very Slight*.

The area of pasture and scrub on the cliff top lies within the character area and development area. This area of land-use is considered to be feature of Minor importance (Category D). It covers approximately 13 hectares in total, of which c.3.8 hectares is marked as an area of greenhouse development, or c.13%, which is graded as a *Slight* relative impact.

3.2.5 C – In Landscape terms

The RNAD site is a somewhat unusual element of the HLCA, which is largely characterised by urban development and former dockyards, but is nevertheless a distinctive feature on the edge of the HLCA. The distinctiveness is largely confined to the standing buildings, which may be considered to be of *Considerable* landscape importance. The less visible remainder of the RNAD is perhaps of more *Medium* importance. The redevelopment of the site would *Slightly Reduce* the landscape value of these elements to the HLCA as the RNAD would be somewhat obscured and have a different function, but the distinctive buildings will be largely retained.

The remaining archaeological sites are both of *Low* landscape importance. The area of pasture and scrub is not a defining feature of this HLCA, and is considered to be of *Very Low* landscape importance. The loss of some of these features will only *Very Slightly Reduce* their landscape value to the HLCA.

Table 1.

A - ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA HLCA307 MILFORD HAVEN	
ABSOLUTE IMPACT (LOSS OF AREA)	MAGNITUDE & SCORE
c.13ha, 2.6% area	Very Slight – 1

Table 2.

B - RELATIVE AND LANDSCAPE IMPACTS (LOSS OF KNOWN ELEMENTS OR CHARACTERISTICS) & SCORES				
Element / % Loss	Magnitude	Category	Landscape Value	Landscape Value Effect
Large RNAD upstanding buildings – <1%	Very Slight – 1	C – 2	Considerable – 4	Slightly Reduced – 2
Remaining, less visible features of the RNAD site - ?20%	Moderate – 3	C – 2	Medium – 3	Slightly Reduced – 2
Railway PRN 34525	Very Slight – 1	C – 2	Low – 2	Very Slightly Reduced – 1
Standing Stone	Very Slight – 1	B – 3	Low – 2	Very Slightly Reduced – 1
Pasture	Slight – 2	D – 1	Very Low – 1	Very Slightly Reduced – 1
Average score $(1+2+4+2) + (3+2+3+2) + (1+2+2+1) + (1+3+2+1) + (2+1+1+1) \div 5 = 7.4$				

Calculations to determine overall magnitude

Average score for absolute, relative and landscape impacts: $7.4 + 1 = 8$ (rounded off)

Table 3.

OVERALL MAGNITUDE OF DIRECT PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 307 MILFORD HAVEN	
Score	Grading
8	Slight

HISTORIC LANDSCAPE CHARACTER AREA 310 – GULF OIL REFINERY

- 3.2.6 The development of the Fish, Prawn and Algae Farm along with the Research Centre is contained within HLCA 310 – Gulf Oil Refinery. This area (Figure 5) is drawn specifically around the late 20th century industrial complex of the former Gulf Oil Refinery and a small industrial estate.
- 3.2.7 Prior to its development this was an agricultural landscape, and once contained enclosed strip fields, typical of fossilised medieval open field agricultural systems, associated with the settlement and manor of Waterston. Elsewhere more regular

fields were associated with the now removed Newton Farm. Some wartime defensive features are noted in the area on old maps (PRNs 107715 & 107716). Construction began on the Gulf Refinery in 1966 with the first tanker unloading crude oil in 1968. This development removed all traces of the former agricultural and military defensive landscape.

- 3.2.8 The site of the former oil refinery forms a very distinctive industrial character area. The refinery itself closed down in 1997 and the site was subdivided, partly operating as the Dragon LNG terminal and SEMLogistics Chemical storage facility, with areas also now under Egnedol ownership. Although some intensive development is noted on historic mapping at the western end of the proposed development area, the area has now largely been cleared of buildings and is derelict, although some large rectangular units remain.

3.2.9 **A – In Absolute Terms**

The proposed development of the Fish, Prawn and Algae Farm along with the research centre will have a direct physical impact on one HLCA, that of HLCA310-Gulf Oil Refinery. The entire development area consists of 8.3% (c.16.5 hectares) of the area of the HLCA (199 hectares). The proposed development is for a series of Aquaculture Units, comprising rectangular brick and concrete buildings, part clad in aluminium panels with roofs covered with pv panels. Two sizes of building are proposed: a row of saddle-roofed buildings approximately 75m by 20m and 9m high, and a row of M-type roof buildings approximately 140m by 39m and 9m high. The research area comprises two rows of greenhouses, 12 in total, with each unit measuring 48m by 24m. In addition to this development, there are also plans to refurbish and reopen the rail access to the site. The area given over to this development has already largely been cleared of buildings, reducing the area of physical remains that will be impacted upon. Only a small number of buildings remain. Therefore, the proposed development will only result in the permanent loss of removal of less than 4% of the entire Historic Character Area HLCA310. This is considered to be a *Very Slight* absolute impact.

3.2.10 **B – In Relative Terms**

The main characteristics of the HLCA consists of remains of the late 20th century Oil Refinery site.

The development area is largely cleared of any features, with the remaining features not considered to be particularly characteristic elements of the former Oil Refinery site. These few remaining standing structures are considered to be sites of Minor Importance (Category D). The loss or removal of these buildings is graded as *Very Slight*.

3.2.11 C – In Landscape terms

The remaining buildings have a low landscape importance to the whole HLCA, and their removal will therefore result in only a *Very Slight Reduction* in the landscape value.

Table 4.

A - ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA HLCA310 GULF OIL REFINERY	
ABSOLUTE IMPACT (LOSS OF AREA)	MAGNITUDE & SCORE
<4% area	Very Slight – 1

Table 5.

B - RELATIVE AND LANDSCAPE IMPACTS (LOSS OF KNOWN ELEMENTS OR CHARACTERISTICS) & SCORES				
Element / % Loss	Magnitude	Category	Landscape Value	Landscape Value Effect
Upstanding buildings – <4%	Very Slight – 1	D – 1	Low – 2	Very Slightly Reduced – 1
Average score (1+1+2+1) = 5				

Calculations to determine overall magnitude

Average score for relative and landscape impacts add absolute impact score: 5 + 1 = 6

Table 6.

OVERALL MAGNITUDE OF DIRECT PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 310 GULF OIL REFINERY	
Score	Grading
6	Slight

HISTORIC LANDSCAPE CHARACTER AREA 348 – WATERSTON-HONEYBOROUGH

3.2.12 The Cheese and Packing factory, and adjacent car park, located to the north of the former Gulf Oil Refinery, is contained within HLCA 348 – Waterston-Honeyborough (Figure 5). This is a largely agricultural landscape with dispersed farms and strip fields, but includes the village of Waterston and hamlet of Honeyborough.

3.2.13 Both Waterston and Honerborough were the centre of medieval manors and it is likely open field agriculture was established around these centres during the medieval period that may have persisted well into the post-medieval period. These open fields were later fossilised as strip fields, which are a characteristic element of this HLCA. These survive largely to the north of Neyland but also around the village of Waterston, although large areas of the former agricultural land associated with medieval Waterston will have disappeared beneath the adjacent former Gulf Oil Refinery. The village itself is largely 19th century, with later development around its periphery.

3.2.14 **A – In Absolute Terms**

The Cheese and Packing factory, and adjacent car park will have a direct physical impact on one HLCA, that of HLCA377 – Waterston-Honeyborough. The entire development area consists of 0.5% (c.2 hectares) of the area of the HLCA (377 hectares). The proposed development includes the site of a car park along with a Cheese Factory and Packing Factory. The car park area has until recently been in use as a car park for the refinery site, the cheese and packing factory areas will therefore be the only area affected, which covers approximately 0.65 hectares (0.2% of the entire HLCA). This is considered to be a *Very Slight* absolute impact.

3.2.15 **B – In Relative Terms**

The main characteristics of the HLCA consists of agricultural land, with fossilised strip fields being the most distinctive elements, along with the dispersed farms and small settlements of Waterston and Honeyborough.

The car park area, although dilapidated and no doubt requiring reinstatement works, already exists. The Factory area appears, however, to extend partly into an area of agricultural land, and may include the removal of a field boundary. This boundary is marked on the tithe map of c.1849. This boundary and surrounding agricultural land is considered to be site of Minor Importance (Category D). Traditional field boundaries survive throughout the HLCA. The loss or removal of this boundary is graded as *Very Slight* relative impact.

3.2.16 **C – In Landscape terms**

In landscape terms field boundaries are of *High* landscape importance, although the potential loss of this small section of field boundary and small area of agricultural land adjacent to a pre-existing car park is considered to *Very Slightly Reduce* the landscape value.

Table 7.

A - ASSESSMENT OF DIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA HLCA 377 WATERSTON - HONEYBOROUGH	
ABSOLUTE IMPACT (LOSS OF AREA)	MAGNITUDE & SCORE
Factory area = c.0.65ha, 0.2% area	Very Slight – 1

Table 8.

B - RELATIVE AND LANDSCAPE IMPACTS (LOSS OF KNOWN ELEMENTS OR CHARACTERISTICS) & SCORES				
Element / % Loss	Magnitude	Category	Landscape Value	Landscape Value Effect
Field Boundary & agricultural land – < 4%	Very Slight – 1	D – 1	High – 5	Very Slightly Reduced – 1
Score (1+1+5+1) = 8				

Calculations to determine overall magnitude

Average score for absolute, relative and landscape impacts: 8 + 1 = 9

Table 9.

OVERALL MAGNITUDE OF DIRECT PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 377 WATERSTON - HONEYBOROUGH	
Score	Grading
9	Moderate

ASIDOHL STAGE 3 – ASSESSMENT OF INDIRECT IMPACTS OF DEVELOPMENT

4.1 Introduction

4.1.1 This section comprises a description and quantification of the indirect impacts of development on all the Historic Character Area(s) affected (Figure 5).

4.1.2 A clearly defined area will be directly or physically affected by the development, but a much greater area could be indirectly affected due to fragmentation or changes to the setting of features in the landscape. Changes to views of, or views from, a landscape feature are also important potential impacts. This stage is divided into two categories: the first (A) assesses the indirect physical impacts, the second (B) the indirect (non-physical) visual impacts.

4.1.3 A – indirect, physical impacts

The principal types of indirect physical impact listed in the Guide to Good Practice are:

- (i) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements, during or consequent to development.
- (ii) Related to (i), the likelihood of increased management needs to maintain elements as, for example, through altered habitats, water levels, increased erosion, new access provision etc., during or consequent to development.
- (iii) The severance, fragmentation, dislocation or alteration of the functional connections between related elements, for example, a field system becomes ‘severed’ from its parent farmstead by an intervening development.
- (iv) The frustration or cessation of historic land use practices, for example, it becomes more difficult or impossible to manage an area in a traditional manner as a result of development.
- (v) The frustration of access leading to decreased opportunities for education, understanding or enjoying the amenity of elements, during or consequent to development.

4.1.4 B – indirect (non-physical) visual impacts

The principal types of indirect (non-physical) visual impact listed in the Guide to Good Practice are:

- (i) Visual impacts on elements from which a development can be seen (considered up to its maximum height). The impact might be on ‘views to’ or ‘views from’ these elements, and it should be assessed with reference to key historic viewpoints and essential settings. These should be considered in relation to a site’s original character and function, as well as to the vantage points and visual experience of a visitor today.
- (ii) Impact on the visual connections between related elements, by occlusion, obstruction, etc.

- (iii) Conversely, the creation of inappropriate visual connections between elements not intended to be inter-visible originally.
- (iv) Visual impact of the development itself in relation to the existing historic character of the area considering:
 - its form — the scale, number, density, massing, distribution etc.
 - its appearance — the size, shape, colour, fabric etc. of its constituent features

4.1.5 There are 48 HLCAs within the Registered Landscape. These cover a wide area all along the Milford Haven Waterway from Dale to Haverfordwest, but as far as can be ascertained from the information available, the proposed development will impact in either a physical or non-physical (visual) way on only seven Character Areas at most; these are described below.

4.2 Impact Assessment

HISTORIC CHARACTER AREA 307 MILFORD HAVEN

4.2.1 This Character Area comprises a largely urban landscape that is centred on the late 18th century planned town of Milford Haven, with subsequent 19th and 20th century urban expansion that has encompassed some earlier village centre. The urban development includes the former docks and light industrial units. The former Blackbridge RNAD site forms part of the eastern limit of the Character Area, which at the time the area was recorded had been partly converted for leisure uses (Photos 1 - 28).

4.2.2 The proposed development at Blackbridge is contained within this HLCA. Direct impacts on this HLCA are discussed in Stage 2. The following indirect physical impacts are laid in relation to the references given in 4.1.3 above:

A (i): As the site currently stands in a state of dereliction the re-use of the site retaining elements of the existing buildings is considered to reduce the risk of further decay and dereliction to the site. However, it is also possible that general landscaping works and construction activity may erode further traces at the former RNAD site during the development. Passage of construction vehicles, access routes and foundation and service excavations increases the risk of disturbance to any remaining features.

The reuse and intensification of activity within and around the 'traditional' buildings, both during construction works and the subsequent use of the site, increases the risk of disturbance to the structures, although clearly the development implies the continued maintenance of these structures.

A (ii): Increased management of existing standing structures related to the RNAD site is implied through bringing them into use as part of the gasification and power generating plant.

A (iii): The RNAD will not be broken up into smaller units. The site will be redeveloped as a whole and, therefore, will not be fragmented, however there are elements that will be left undeveloped, for example the tunnels. These elements may be

seen as an alteration of the functional connections, although they will be retained and therefore this is not seen as a major impact.

A (iv): As a derelict and enclosed site, there is not currently considered to be active historic land-use practices.

A (v): The site has been fenced-off and access prevented. Although clearly people have managed to gain access to the site, this has not been done in any official capacity and, therefore, better maintenance of these boundaries is not considered to be frustrating access.

Table 10.

ASSESSMENT OF INDIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 307 – MILFORD HAVEN		
Impacts	Category & Score	Magnitude & Score
Increased risk of disturbance to associated RNAD features	C – 2	Moderate – 3
Increased risk of disturbance to ‘traditional’ buildings	C – 2	Slight – 2
Functional connection between elements of the RNAD disrupted	C – 2	Slight – 2
Average Score $(2+3) + (2+2) + (2+2) \div 3 = 4$ (rounded off)		

4.2.3 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

B (i): The site occupies quite a prominent waterfront location at the eastern end of the Character Area. There will be relatively open views from waterfront locations within Milford Haven and Hakin that encompass the site. The site currently comprises large derelict buildings and, although these buildings will be maintained, the further development of the site will be a distinct change in appearance in terms of the height and, to a lesser extent, scale. Activity will also increase on what is currently an abandoned area. Industrial development of this nature is not uncommon on the Milford Haven Waterway, so in that respect it is not considered an unusual site. Although it could also be argued to add to the accumulative impact of industrial development. It should perhaps be borne in mind, however, that this area was a site of intensive industrial activity until the later 20th century.

From Milford Haven, the site is clearly visible from vantage points along Pier Road and The Rath and on public footpaths between the two. It can also be clearly seen from development around the southern end of Castle Pill, such as on Vicary Crescent and Beach Hill. The historic core of Milford Haven, which includes the vast majority of its Listed Buildings, is focused on the parallel roads of Hamilton Terrace, Charles Street and Robert Street, and the proposed development will not impact in a visual way on these areas.

Visual impact on development at Castle Hall to the north, which includes a Grade II* area of Parkland (PGW (Dy) 16 (PEM)) and several Listed Buildings, will also be very limited by rising intervening topography and woodland cover that lies both to the south of Castle Hall and along the east bank of Castle Pill. Part of this woodland lies within the property boundaries of the development but also forms part for the essential setting of the Listed parkland. On the information currently provided, it is assumed that this woodland will be retained within the development.

The site is not clearly visible from the marina, although it is from the Port Authority buildings along the western side of Hubberston Pill and also provides a backdrop to the marina as viewed from the west. Much of the urban development in the southeast tip of Hakin will also have clear views, including the King Arms, a Grade II listed building.

These viewpoints are illustrated from several points:

- SM91010556 (Photo 20) – public coastal footpath in Milford Haven, demonstrating good visibility.
- SM90800562 (Photo 22) – from the bandstand on The Rath, south side of Milford Haven, demonstrating good visibility
- SM90930561 (Photo 23) – from a viewpoint along The Rath, south side of Milford Haven, demonstrating good visibility
- SM90740579 (Photo 24) – from Hamilton Terrace within Milford Haven, demonstrating general poor visibility from centre of town and location of most Listed Buildings
- SM91370567 (Photo 26) – from landing point at the end of Beach Hill, Castle Pill, demonstrating reasonable visibility
- SM89850579 (Photo 27) – from Lower Hill Street, southern Hakin, across the marina, demonstrating good visibility
- SM90070550 (Photo 28) – from in front of the King's Arms, Point St, Hakin (Grade II listed building), demonstrating good visibility

The Waterston developments will not be visible from this HLCA

B (ii) & (iii): The Blackbridge RNAD site is a relatively self-contained element of the HLCA, and located on the periphery of the HLCA. Therefore the redevelopment of this site is not considered to disrupt any visual connections between related elements or create any inappropriate new connections. There is the potential that, as the development is linking sites in Waterston and Blackbridge, it may be seen as an extension of the former refinery site that is visible on the horizon, as viewed from the west.

B (iv): The stated historic character of this area is an urban one, with some maritime and light industrial activity also noted. The development of a gasification and power generating plant is an industrial element not currently part of the characteristics of this particular HLCA. The former RNAD site at Blackbridge, however, was an industrial area until the later 20th century. Therefore, the form of this development can be seen as maintaining the historic character of this element of the HLCA, and also, in reusing existing buildings, it goes

someway to maintain the appearance and historical connections with the former use of the site.

Table 11.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 307 – MILFORD HAVEN		
Impacts	Category & Score	Magnitude & Score
Change to general views of the Blackbridge RNAD site from the coastal periphery of Milford Haven, Pill and Hakin to the west.	C – 2	Considerable – 4
Visual connection linking the former refinery site to the RNAD site.	C – 2	Slight – 2
Changes to the form of the development	2	Moderate – 3
Changes to the appearance of the development	2	Moderate – 3
Average Score $(2+4) + (2+2) + (2+3) + (2+3) \div 4 = 5$		

Calculations

Indirect, physical impacts + indirect, non-physical (visual impact): $4 + 5 = 9$

To create number on a 28-point scale - $(9 \times 28) \div 20 = 13$ (rounded off)

Table 12.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 307 – MILFORD HAVEN	
Score	Grading
13	Moderate

HISTORIC CHARACTER AREA 310 GULF OIL REFINERY

- 4.2.4 The HLCA is drawn up around the former Gulf Oil refinery and a small industrial estate. It comprises a former medieval and post-medieval agricultural landscape that was replaced by the construction of the Gulf Oil refinery that commenced in 1966. The site has since reduced in scale, with areas within the bounds of the refinery now being redeveloped.
- 4.2.5 The proposed development at Waterston is contained within this HLCA (developments at the Blackbridge site will have no impact on this HLCA). Direct impacts on this HLCA are discussed in Stage 2. The following indirect physical impacts are laid in relation to the references given in 4.1.3 above:

- A (i): The site will be redeveloped. The previous function of this area within the former refinery is not fully understood, although many of the buildings that formerly occupied this site have since been cleared. The remaining structures will also be cleared and buried elements to these features may be further disturbed or removed through the establishment of the aquaculture units and associated developments.
- A (ii): The clearance and redevelopment of the site is unlikely to increase management needs for other elements of the HLCA as these will remain in operation.
- A (iii): This area of the former refinery will clearly no longer operate as such. However, this fragmentation has already occurred, as the refinery site has reduced in size and many of the buildings that form the visual link on the site with the remainder of the refinery have also been cleared. Therefore, the further redevelopment is not considered likely to cause this fragmentation.
- A (iv): As a derelict and enclosed site, there are not currently considered to be any active historic land-use practices in operation.
- A (v): The site lies within a fenced area with no public access.

Table 13.

ASSESSMENT OF INDIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 310 – GULF OIL REFINERY		
Impacts	Category & Score	Magnitude & Score
Clearance of remaining structures and disturbance of any other surviving refinery elements	D – 1	Moderate – 3
Score (1+3) = 4		

4.2.6 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

- B (i): Due to security fencing, existing buildings and surrounding embankments, there is no external public viewpoint of this area. Views within the refinery will clearly change, but the site will no doubt form part of the operational activities within the confines of the former refinery.

These viewpoints, or rather lack of them, are illustrated from two points:

- SM93750573 (Photo 29) – View from southern edge of Waterston village, showing lack of visibility
- SM93880554 (Photo 30) – View from road around northern edge of site, showing lack of visibility

B (ii) & (iii): As it lies on a relatively outlying area of the refinery site that is not visible from external viewpoints, it is not considered to either impact on visual connections or create inappropriate connections.

B (iv): The scale and extent (form) of the proposed development will be more extensive than was previously in place in this area, and the appearance of the Aquaculture Units will be a new feature not currently part of the former refinery developments.

Table 14.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 310 GULF OIL REFINERY		
Impacts	Category & Score	Magnitude & Score
Changes to internal views within the refinery	D - 1	Slight – 2
Development Form	1	Moderate - 3
Development Appearance	1	Moderate - 3
Average Score $(1+2) + (1+3) + (1+3) \div 3 = 3.67$		

Calculations

Indirect, physical impacts + indirect, non-physical (visual impact): $4 + 3.67 = 7.67$

To create number on a 28-point scale - $(7.67 \times 28) \div 20 = 11$ (rounded off)

Table 15.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 310 GULF OIL REFINERY	
Score	Grading
11	Moderate

HISTORIC CHARACTER AREA 348 WATERSTON - HONEYBOROUGH

4.2.7 This comprises a predominantly agricultural landscape that includes former strip field agriculture, with a settlement pattern of dispersed farmsteads, along with the village of Waterston and the hamlet of Honeyborough. Both Waterston and Honeyborough were the centre of medieval manors and it is likely open field agriculture was established around these centres during the medieval period that may have persisted well into the post-medieval period. These open fields were later fossilised as strip fields, which are a characteristic element of this HLCA. Much of the strip fields associated with Waterston have since disappeared beneath the adjacent former Gulf

Oil Refinery. The village itself is largely 19th century with later development around its periphery.

4.2.8 Part of the proposed development at Waterston is contained within this HLCA. Direct impacts on this HLCA are discussed in Stage 2. The following indirect physical impacts are laid in relation to the references given in 4.1.3 above:

- A (i): The proposals contained within this HLCA include a car park and cheese and packing factory. The car park will be reinstating an area previously used for car parking. The form and appearance of the packing factories are not currently understood however. The site they occupy includes part agricultural land, and as it appears to extend beyond the current field boundaries this may have an impact on the agricultural land immediately surrounding the site in terms of allowing vegetation and disturbance from construction activity to encroach.
- A (ii): Increased management needs may depend on the final extent and form of the packing factories and it is possible further management will be required to maintain agricultural land surrounding the site if it is taken out of agricultural use.
- A (iii): As this would appear to be only a relatively minor encroachment into the agricultural land, it is not considered to further fragment the agricultural landscape.
- A (iv): As previously stated, the factories would appear to encroach onto agricultural land, which is the traditional historic land use practice within this HLCA, however it would appear this encroachment is relatively minor.
- A (v): The proposed development is unlikely to lead to any significant frustration of access.

Table 16.

ASSESSMENT OF INDIRECT, PHYSICAL IMPACTS ON HISTORIC CHARACTER AREA 348 – WATERSTON - HONEYBOROUGH		
Impacts	Category & Score	Magnitude & Score
Potential loss of agricultural land and historic field boundary	D – 1	Slight – 2
Potential increased management needs	D – 1	Slight – 2
Loss of historic land-use practices	D – 1	Slight – 2
Average Score $(1+2) + (1+2) + (1+2) \div 3 = 3$		

4.2.9 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

- B (i): The height of the packing factories is not known and, therefore, the full visual impact cannot be assessed. It is assumed that the main historic viewpoint that will be affected is that from the village of Waterston itself, as views from the

north and east are limited. Views from Waterston, however, are also fairly limited and confined to modern residential development on the eastern edge of the village, which will be screened by vegetation growth, and by traffic along the Hazelbeach Road approach to the village.

These viewpoints are illustrated from two points:

- SM93890557 (Photo 31) – view from southern edge of proposed development area indicating view from adjacent road, demonstrating reasonable visibility
- SM93890557 (Photo 32) – view from proposed development site towards Waterston, demonstrating poor visibility

The remaining development areas will not be visible from this HLCA

B (ii) & (iii): The development occurs in an area between the settlement of Waterston and its agricultural hinterland. However, these two areas have already become fragmented by the modern, non-agricultural, urban development along the eastern side of Waterston and by the pre-existing children's playground and car park. Therefore, the development is not considered to further separate these formerly related elements, neither does it establish any new connections that could not be seen as existing with the presence of the pre-existing car park.

B (iv): The stated historic character of this area is largely agricultural with dispersed settlement. Therefore, industrial units are an introduced element, although their form and appearance is not yet fully understood.

Table 17.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 348 – WATERSTON-HONEYBOROUGH		
Impacts	Category & Score	Magnitude & Score
General landscape views from Waterston village and Hazelbeach Road	D – 1	Slight – 2
Development form	1	Slight – 2
Development Appearance	1	Slight – 2
Average Score $(1+2) + (1+2) + (1+2) \div 3 = 3$		

Calculations

Indirect, physical impacts + indirect, non-physical (visual impact): $3 + 3 = 6$

To create number on a 28-point scale - $(6 \times 28) \div 20 = 8$ (rounded off)

Table 18.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 348 – WATERSTON-HONEYBOROUGH	
Score	Grading
8	Slight

HISTORIC CHARACTER AREA 322 SCOVESTON - BURTON

4.2.10 This comprises an extensive area of agricultural land along the northern side of the Waterway, spread across several ecclesiastical parishes. It consists mainly of fields, generally large and regular, divided by banks and hedges, with a settlement pattern of several mansions, large farms, a scattering of smaller farms and some dispersed modern settlement. The settlement and enclosure pattern appears largely post-medieval in date, although may include earlier elements. However, this appears to have been largely an agricultural area throughout this period. There has been some military development at Castle Pill and Scoveston Fort, and railways were built crossing the area in the mid-19th century. Industrial and urban development clearly defines much of the southern limit of the HLCA.

4.2.11 This area lies to the north of both the proposed Blackbridge and Waterston development sites; there will be no indirect, physical impact on this Character Area.

4.2.12 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

B (i): Despite the increased height of the Blackbridge site (considered up to 24m) it is located on a lower lying waterfront site, with the ground then rising to the north, which means it will have a relatively limited visual impact upon this HLCA. The gasification and power generating plant and proposed greenhouses situated on the overlooking high ground immediately to the north will only be visible from the agricultural land at the southern edge of this HLCA, in the Venn Farm area. The area is crossed by a public footpath, but views from these publically accessible areas are limited. There will also be no views from many of the specific historical features mentioned in the HLCA description.

This viewpoint is illustrated from the boundary of HLCA 322 and 307:

- SM91660539 (Photo 33) – taken from the southern limit of HLCA 322, demonstrating good visibility but this soon declines as ground rises to the north

Views that take in both the Blackbridge development and elements of this HLCA are also very limited. The Blackbridge development may interrupt views of some of the farmland in distant views from the south, but these are limited.

The Waterston site will not be visible from this HLCA.

B (ii) & (iii): There will be no changes to any visual connections in relation to this HLCA.

- B (iv): In their current form, the buildings at the Blackbridge site are only partially visible from the very edge of this HLCA. The proposed development will greatly increase the height of some of these buildings, which will, therefore, have a greater impact, Although, as stated above, the visual impact is limited by rising topography.

Table 19.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 322 SCOVESTON - BURTON		
Impacts	Category & Score	Magnitude & Score
Visual impact on historic landscape from within this HLCA	D - 1	Very Slight – 1
Development form	1	Very Slight – 1
Development appearance	1	Moderate – 3
Average Score $(1+1) + (1+1) + (1+3) \div 3 = 2.67$		

Calculations

To create number on a 28-point scale - $(2.67 \times 28) \div 20 = 4$ (rounded off)

Table 20.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 322 SCOVESTON - BURTON	
Score	Grading
4	Slight

HISTORIC CHARACTER AREA 314 TEXACO OIL REFINERY AND BP JETTY

- 4.2.13 This area largely comprises large-scale late-20th century industrial development along the southern side of the Waterway. Aside from a short section of sea cliff and cliff top, the earliest element in this area is a mid-19th century fort, Fort Popton, built in conjunction with Fort Hubberston on the opposite side of the Waterway. In 1961, BP built a jetty below the fort and a pumping installation to pump oil to its refinery in Llandarcy, Swansea. In 1963, work began on constructing the large Texaco oil refinery to the east of the jetty, which opened the following year. The pumping station was decommissioned in 1985. This area is in stark contrast to the surrounding agricultural landscape.
- 4.2.14 This area lies on the southern banks of the Waterway, opposite the Blackbridge development site, therefore there will be no direct or indirect, physical impact on this area.

4.2.15 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

B (i): The proposed Blackbridge development occupies a prominent waterfront position that will be clearly visible from the elevated northern edge of this HLCA across the Waterway. However, as a working and extensive industrial site, the development is not considered to affect the setting of this site, nor is it considered to have key historic viewpoints. The exceptions to this would be the views from Fort Popton and the Pembrokeshire Coast Footpath that runs along the northern edge of this HLCA. Fort Popton was not visited. However, the development will clearly be visible, but interrupted, by the jetty and the main views from the fort are considered to be both westward along the Waterway and across to Fort Hubberston, neither of which will be affected. Views from the Coastal path within this area are also severely limited by activity along the jetty. These further, less significant, viewpoints are, however, illustrated at:

- SM91610516 (Photos 34 & 35) – views from the Blackbridge development towards this HLCA, indicating reasonable visibility.
- SM91490334 (Photo 36) – from the northern edge of the HLCA, indicating limited visibility.

Views of the Waterston development will be indistinguishable at this distance.

B (ii) & (iii): Views from this HLCA will take in both the Blackbridge site and the former Gulf Oil refinery. It is possible that by linking the Blackbridge and Waterston developments, a visual link between the two will be established that did not previously exist.

B (iv): The gasification and power generating plant at Blackbridge, along with the greenhouses along the ridgetop, will be the main visual features from within this HLCA. Increasing the height and scale of development at Blackbridge will, therefore, make this a more visible development.

Table 21.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 314 TEXACO OIL REFINERY AND BP JETTY		
Impacts	Category & Score	Magnitude & Score
Impact to views from the main oil refinery	D - 1	Slight – 2
Impact to views from Fort Popton and the Coastal Path	C - 2	Very Slight - 1
Creating a visual link between Waterston and Blackbridge	D - 1	Slight – 2
Development form	1	Moderate – 3
Development appearance	1	Moderate – 3
Average Score $(1+2) + (2+1) + (1+2) + (1+3) + (1+3) \div 5 = 3.4$		

Calculations

To create number on a 28-point scale - $(3.4 \times 28) \div 20 = 5$ (rounded off)

Table 22.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 314 TEXACO OIL REFINERY	
Score	Grading
5	Slight

HISTORIC CHARACTER AREA 341 RHOSCROWTHER

4.2.16 This comprises a large agricultural landscape on the southern side of the Waterway, consisting largely of regularly shaped fields surrounded by hedgerows with some stone walling, and with a settlement pattern of dispersed farms and buildings that range in date from the medieval to the modern. The area includes some important archaeological sites, many focused along the Ridgeway, but also includes some coastal prehistoric enclosures, as well as a number of listed buildings in the former villages of Rhoscrowther and Pwllcrochan.

4.2.17 There will be no direct or indirect, physical impact on this area.

4.2.18 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:

B (i): Views of the proposed development are confined to the Blackbridge site, which is only visible from the very northern coastal fringe of this HLCA. Although there are clear views of the former Gulf Oil refinery site, there are no clear views of the proposed developments within it. The views from the northern fringe are in publically accessible areas, though are limited by vegetation and landform. The site will be visible, but will not interrupt more extensive views, and as a development on a pre-existing former industrial site at this distance, it is not considered to have a significant impact.

These views are illustrated from two points:

- SM91490334 (Photo 36) – View from raised coastal ground at northern edge of HLCA, demonstrating limited visibility
- SM92220313 (Photo 37) – View from Martins Haven at northern edge of HLCA, demonstrating poor visibility

B (ii) & (iii): Views from this HLCA will take in both the Blackbridge site and the former Gulf Oil refinery. It is possible that by linking the Blackbridge and Waterston developments, a visual link between the two will be established that did not previously exist.

B (iv): Increasing the scale, density and height of the current appearance of the Blackbridge site will increase its visibility, although this is not considered to have a significant impact on this HLCA.

Table 23.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 341 RHOSCROWTHER		
Impacts	Category & Score	Magnitude & Score
Impact to views from northern edge of HLCA, inc. Prehistoric enclosures	C - 2	Very Slight – 1
Creating a visual link between Waterston and Blackbridge	D - 1	Very Slight – 1
Development form	1.5	Very Slight – 1
Development appearance	1.5	Very Slight – 1
Average Score $(2+1) + (1+1) + (1.5+1) + (1.5+1) \div 4 = 2.5$		

Calculations

To create number on a 28-point scale - $(2.5 \times 28) \div \text{by } 20 = 4$ (rounded off)

Table 24.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 341 RHOSCROWTHER	
Score	Grading
4	Slight

HISTORIC CHARACTER AREA 306 PEMBROKE DOCK

- 4.2.19 Pembroke Dock is a settlement on the south side of the Waterway to the southeast of the proposed development area. The main characteristics of this HLCA comprise the 19th century naval dockyard and the 19th century planned, grid-pattern, town that lies adjacent to it. This core area has since been surrounded by 20th century expansion. Large parts of the former Royal Navy dockyard are now given over to modern industry, but the site is still surrounded by a high defensive wall flanked by 19th century gun towers and includes many Georgian-style buildings. The planned town also has a strong architectural signature.
- 4.2.20 There will be no direct or indirect physical impact on this Character Area by this proposed development.
- 4.2.21 The following indirect non-physical (visual) impacts are laid in relation to the references given in 4.1.4 above:
- B (i): The HLCA includes coastal areas with extensive views down the Waterway towards the areas of proposed development. However, only the gasification and power generating plant at the Blackbridge site will be visible, and this will

only be distantly visible from modern development on Pennar Park and possibly also from the site of a 19th century Martello Tower at the western end of Fort Road. These views are illustrated:

- SM95540362 (Photo 39) – View from the Martello Tower, showing very limited visibility
- SM94430301 (Photo 40) – View from Pennar Park, showing limited distant visibility.

B (i) & (ii): At these distances it is unlikely that the proposed development will form any visual connections between related or unrelated elements.

B (iv): Again, at this distance the visual impact is likely to be limited although the scale of the Blackbridge site is likely to make it a more prominent feature on the coastline.

Table 25.

ASSESSMENT OF INDIRECT (NON-PHYSICAL) VISUAL IMPACTS ON HISTORIC CHARACTER AREA 306 PEMBROKE DOCK		
Impacts	Category & Score	Magnitude & Score
Impact to views from Martello Tower	B - 3	Very Slight – 1
Impact to views from Pennar Park	D - 1	Slight - 2
Development form	2	Very Slight – 1
Development appearance	2	Very Slight – 1
Average Score $(3+1) + (1+2) + (2+1) + (2+1) \div 4 = 3.25$		

Calculations

To create number on a 28-point scale - $(3.25 \times 28) \div 20 = 5$ (rounded off)

Table 26.

OVERALL MAGNITUDE OF INDIRECT IMPACTS ON HISTORIC CHARACTER AREA 1306 PEMBROKE DOCK	
Score	Grading
5	Slight

ASIDOHL STAGE 4 - EVALUATION OF RELATIVE IMPORTANCE

5.1 Introduction

- 5.1.1 The following section comprises an evaluation of the relative importance of the Historic Character Area(s) (or part(s) thereof) directly and/or indirectly affected by development in relation to:
- (a) the whole of the Historic Character Area(s) concerned, and/or
 - (b) the whole of the historic landscape area on the Register, followed by
 - (c) an evaluation of the relative importance of the Historic Character Area(s) concerned in the national context, and a determination of the average overall value of all the Historic Character Areas (or parts thereof) affected.
- 5.1.2 The section (Stage 4) will be completed with a determination of the average, overall value of all the Historic Character Areas (or part(s) thereof) affected.
- 5.1.3 The evaluation criteria used is that suggested within the *Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process* (Cadw and CCW 2007).

5.2 Evaluation of the relative importance of the part of Historic Landscape Character Areas directly and/or indirectly affected by development.

- 5.2.1 **HLCA 307 Milford Haven:** The affected part of the HLCA is not a common feature of this specific HLCA. Therefore, rarity is high but representativeness is low, as this is a largely urban landscape. Large-scale WWII sites are more common and representative within the whole Historic Landscape. The Blackbridge RNAD site is relatively extensive, with a variety of standing buildings, ruinous structures and other sites hidden by vegetation. The group value of these elements is high both for the site itself and in terms of WWII sites spread throughout the whole Historic Landscape. The survival of these elements is also high, and in good condition (as evidenced by the ability to re-use many of the structures), although in the wider landscape many such WWII sites have been redeveloped. This survival also presents an area of relatively high coherence, although as all buildings are stripped of internal fixtures and fittings the integrity of the site is lower. There is the moderate potential for further study of the site in terms of the structures still present, both visible and hidden. By their survival, the site probably offers moderate scope to be developed as a public educational and recreational amenity, although no doubt this would be costly and impractical to implement. There are few known associations with this site.

Table 25.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity		x							x	
Representativeness				x				x		
Documentation			x					x		
Group Value		x					x			
Survival		x							x	
Condition		x					x			
Coherence		x					x			
Integrity			x					x		
Potential			x					x		
Amenity			x					x		
Associations				x						x

Calculations for the relative importance of the HLCA for:

Step A: (5 x High @ 4) + (4 x Moderate @ 3) + (2 x Low @ 2) = 36

Step B: (3 x High @ 4) + (5 x Moderate @ 3) + (2 x Low @ 2) + (1 x V Low @ 1) = 32

5.2.2 HLCA 310 – Gulf Oil Refinery: The affected area of the HLCA is currently relatively clear of buildings and does not appear to have seen the same intensity of development as other areas of the former refinery. Therefore rarity, representativeness and group value are all moderate to low. As stated, elements within the affected area have largely been cleared. Therefore, survival is low, although the condition of those that do remain, as modern structures, is relatively good. The area also gives little indication as to how the site functioned as a whole, so coherence and integrity are low. Potential for this area is low, both in terms of surviving elements of the refinery and in terms of potential surviving archaeological deposits. Due to its location within the bounds of the former refinery and the limited access, there is very little scope to develop it as a public amenity. There are no known associations.

Table 26.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity			x						x	
Representativeness				x					x	
Documentation			x						x	
Group Value				x					x	
Survival				x					x	
Condition		x						x		
Coherence				x						x
Integrity				x						x
Potential					x				x	
Amenity					x					x
Associations					x					x

Calculations for the relative importance of the HLCA for:

Step A: (1 x High @ 4) + (2 x Moderate @ 3) + (5 x Low @ 2) + (3 x V Low @ 1) = 23

Step B: (1 x Moderate @ 3) + (6 x Low @ 2) + (4 x V Low @ 1) = 19

5.2.3 HLCA 348 – Waterston-Honeyborough: The effected part of this HLCA consists mainly of a car park and part of an agricultural area. The agricultural land is common and very representative, the car parks less so. Group value of this small area is low and the elements within it survive to a moderate extent in moderate condition. Historic themes are present in the traditional field boundaries, and although their integrity is high, generally the area is of relatively low articulation both for the HLCA itself and the Historic Landscape as a whole. The affected area offers little scope for future study, or as a public amenity. The land is known as ‘Church Park’, therefore there may be some associations with the church although these are unauthenticated.

Table 27.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity				x					x	
Representativeness		x							x	
Documentation				x					x	
Group Value				x						x
Survival			x						x	
Condition			x						x	
Coherence				x					x	
Integrity		x						x		
Potential				x					x	
Amenity				x						x
Associations				x					x	

Calculations for the relative importance of the HLCA for:

Step A: (2 x High @ 4) + (2 x Moderate @ 3) + (7 x Low @ 2) = 28

Step B: (1 x Moderate @ 3) + (8 x Low @ 2) + (2 x V Low @ 1) = 21

5.2.4 **HLCA 322 – Scoveston-Burton:** The views of the Blackbridge development affect a relatively small part of this HLCA, largely comprising agricultural land. Therefore, rarity is low but representativeness is high. There are few effected elements, so group value is low. The agricultural land is in relatively good condition, but coherence and integrity are moderate. It offers little potential or amenity and there are no known associations.

Table 28.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity				x					x	
Representativeness		x					x			
Documentation				x						x
Group Value				x					x	
Survival		x						x		
Condition		x						x		
Coherence			x						x	
Integrity			x						x	
Potential				x					x	
Amenity				x						x
Associations					x					x

Calculations for the relative importance of the HLCA for:

Step A: (3 x High @ 4) + (2 x Moderate @ 3) + (5 x Low @ 2) + (1 x V Low @ 1) = 29

Step B: (1 x High @ 4) + (2 x Moderate @ 3) + (5 x Low @ 2) + (3 x V Low @ 1) = 23

5.2.5 HLCA 314 – Texaco Oil Refinery and BP Jetty: The affected area of this HLCA is largely limited to the northern limits of the refinery and parts of the coastal strip beyond. These areas are of moderate rarity and group value, but of low representativeness. As a functioning refinery with an undeveloped coastal strip, survival is high and condition of elements is good and it provides a landscape of moderate articulation, which also means it is a relatively coherent landscape. The industrial use of this area limits potential and amenity.

Table 29.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity			x						x	
Representativeness				x					x	
Documentation			x					x		
Group Value			x					x		
Survival			x					x		
Condition			x						x	
Coherence			x					x		
Integrity				x					x	
Potential				x					x	
Amenity					x					x
Associations				x					x	

Calculations for the relative importance of the HLCA for:

Step A: (6 x Moderate @ 3) + (4 x Low @ 2) + (1 x V Low @ 1) = 27

Step B: (4 x Moderate @ 3) + (6 x Low @ 2) + (1 x V Low @ 1) = 25

5.2.6 HLCA 341 – Rhoscrowther: Only a small area of this HLCA is affected, although it contains a number of archaeological sites such as prehistoric enclosures. These elements are relatively rare, but of low representativeness and group value. This area, which lies outside the main industrial sites to the west and east, is relatively undeveloped and survival is high, although the condition of the elements is moderate. The affected area is a landscape of moderate articulation, although the elements are not always readily identifiable and can be difficult to understand. There is some scope for future historic landscape study and analysis in this area, with some potential to develop it as a public amenity, with the public amenities set up at nearby Pwllcrochan.

Table 30.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity		x							x	
Representativeness				x					x	
Documentation			x						x	
Group Value				x					x	
Survival		x						x		
Condition			x					x		
Coherence			x						x	
Integrity				x					x	
Potential			x						x	
Amenity			x						x	
Associations					x					x

Calculations for the relative importance of the HLCA for:

Step A: (2 x High @ 4) + (5 x Moderate @ 3) + (3 x Low @ 2) + (1 x V Low @ 1) = 30

Step B: (2 x Moderate @ 3) + (8 x Low @ 2) + (1 x V Low @ 1) = 23

5.2.7 HLCA 306 – Pembroke Dock: The affected area of this HLCA is limited largely to Pennar Park, once a military barracks, but now largely consisting of modern housing development. As the site is now modern in appearance, rarity is low; representativeness and group value is also low. The survival of historical elements is poor, and as a result coherence and integrity are also low. There is, however, still some potential for further study in this area, although the potential to develop it as an amenity is probably low.

Table 31.

Value	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor	V High/ V Good	High/ Good	Mod/ Med	Low	V Low/ Poor
In relation to:	(a) Whole of Historic Character Area					(b) Whole of Historic Landscape Area on the Register				
Criterion:										
Rarity				x					x	
Representativeness				x					x	
Documentation			x					x		
Group Value				x					x	
Survival				x						x
Condition					x					x
Coherence				x					x	
Integrity				x					x	
Potential			x						x	
Amenity				x						x
Associations				x					x	

Calculations for the relative importance of the HLCA for:

Step A: (2 x Moderate @ 3) + (8 x Low @ 2) + (1 X V Low @ 1) = 23

Step B: (1 x Moderate @ 3) + (7 x Low @ 2) + (3 x V Low @ 1) = 20

5.3 Evaluation of the relative importance in the national context, of the Historic Character Areas directly and/or indirectly affected by the proposed development (Step C)

5.3.1 To a large extent, an evaluation of the relative importance of these HLCAs has already been undertaken. They are laid out in the LANDMAP descriptions, as these correlate to the boundaries of the HLCAs.

5.3.2 The overall value of the HLCAs in the national context is calculated using the same criterion as laid out in Tables 25 to 31, but applied nationally. The scores are summarised below:

- HLCA 307 – Milford Haven = 44
- HLCA 310 – Gulf Oil Refinery = 26
- HLCA 348 – Waterston-Honeyborough = 29
- HLCA 322 – Scoveston & Burton = 40
- HLCA 314 – Texaco Oil Refinery = 30
- HLCA 341 – Rhoscrowther = 40
- HLCA 306 – Pembroke Dock = 40

5.3.3 In order to determine an average overall value for the HLCA on a scale of 1 – 100 the results of each individual step was divided by 55, then multiplied by 100. This was then divided by 3 (the number of steps) and the average overall value is then rounded off and is presented in the table below:

Table 35.

Average, overall value of all the Historic Character Areas (or part(s) thereof) affected	
	Grading
HLCA 307 – Milford Haven	68 – High
HLCA 310 – Gulf Oil Refinery	41 - Considerable
HLCA 348 – Waterston-Honeyborough	47 - Considerable
HLCA 322 – Scoveston & Burton	56 - Considerable
HLCA 314 – Texaco Oil Refinery	50 - Considerable
HLCA 341 – Rhoscrowther	57 - Considerable
HLCA 306 – Pembroke Dock	50 - Considerable

ASIDOHL STAGE 5 - ASSESSMENT OF OVERALL SIGNIFICANCE OF IMPACT

6.1 Introduction

6.1.1 This section comprises an assessment of the overall significance of impact of development, and the effects that altering the Historic Character Area(s) concerned has on the whole of the historic landscape area on the Register.

Table 36.

SUMMARY OF THE OVERALL SIGNIFICANCE OF THE IMPACT OF DEVELOPMENT ON MILFORD HAVEN WATERWAT LANDSCAPE OF HISTORIC INTEREST (HLW (D) 3)				
Historic Character Area	Value of Historic Character Area (based on Stage 4 results)	Impact of Development (based on Stages 2 & 3 results)	Reduction of Value of the Historic Landscape Area on Register	Overall Significance of Impact
HLCA 307 – Milford Haven	High – 8	Medium – 4	Low – 3	8+4+3=15 Moderate
HLCA 310 – Gulf Oil Refinery	Medium – 6	Low – 3	Low - 2	6+3+2=11 Moderate
HLCA 348 – Waterston-Honeyborough	Medium – 5	Low – 2	Low - 2	5+2+2=9 Slight
HLCA 322 – Scoveston & Burton	Medium – 6	Very Low – 1	Very Low - 1	6+1+1=8 Slight
HLCA 314 – Texaco Oil Refinery	Medium – 5	Very Low – 1	Very Low - 1	5+1+1=7 Slight
HLCA 341 – Rhoscrowther	Medium – 6	Very Low – 1	Very Low - 1	6+1+1=8 Slight
HLCA 306 – Pembroke Dock	Medium – 5	Very Low – 1	Very Low - 1	5+1+1=7 Slight

7 CONCLUSION

7.1 An Assessment of the Significance of Impact of Development on the Historic Landscape (ASIDOHL2) has been undertaken on a proposed development at sites in Blackbridge and Waterston, Milford Haven, Pembrokeshire. The proposed development consists of the creation of a series of inter-connected developments on former industrial sites. On the site of a former Royal Navy Armaments Depot (RNAD) at Blackbridge, plans comprise the development of a gasification and power generating plant utilising and enlarging some of the existing buildings on the site alongside the erection of new builds and the refurbishment of an associated jetty. At

Waterston, plans comprise the development of Fish, Algae and Prawn Farms along with a Research Centre on an area of semi-derelict land within the former Gulf Oil Refinery. The re-establishment of a car park and the construction of a Cheese Factory and Packing factory are also proposed on a nearby site adjacent to Waterston village. The proposed development lies within the Milford Haven Waterway Landscape of Outstanding Historic Interest (HLW (D) 3). This Landscape of Historic Interest is further subdivided into individual Historic Landscape Character Areas (HLCAs).

- 7.2 The ASIDOHL2 is laid out in five stages. Stage 1, the introduction, identified the contextual information regarding the site. Details of the proposed development are provided here, as well as the planning policy context. The Blackbridge site contains remnants of the former RNAD site that includes several large standing buildings, although derelict. It is proposed that many of these buildings are retained within the scheme, although converted to new uses. The Waterston site has largely been cleared of modern refinery buildings, with the adjacent village site consisting of a dis-used car park and adjacent agricultural land.
- 7.3 Stage 2 assessed the direct, physical impact of the proposed development, assessed in absolute, relative terms and landscape terms. This was considered in terms of its impact on HLCA 307, HLCA 310 and HLCA 348. The overall magnitude of the direct physical impact on HLCA 307, due largely to the Blackbridge development, is considered to be Slight. The overall magnitude of the direct physical impact on both HLCA 310 and HLCA 348, due largely to the Waterston development, is considered to be Slight to Moderate.
- 7.4 Stage 3 assessed the indirect impacts of the proposed development, in terms of indirect, physical impacts, and indirect (non-physical) visual impacts. These indirect impacts affect a wider area and several surrounding HLCAs were considered. Due to views to and from the site the development could have a potential visual impact on seven HLCAs, although this is considered to be Slight on five of the HLCAs. The main potential impact is concentrated on HLCA 307 Milford Haven and HLCA 310 Gulf Oil Refinery. The overall magnitude of indirect impact on these two areas is scored as Moderate.
- 7.5 Stage 4 formed an evaluation of the relative importance of the HLCA, and the parts within them that were affected by the proposed development. This considered the overall value of HLCA 307 Milford Haven to be High. The remaining HLCAs were graded as Considerable.
- 7.6 Stage 5 formed an assessment of the overall significance of the impact. For HLCA 307 Milford Haven and HLCA 310 Gulf Oil Refinery the overall significance of the impact was scored as Moderate, due largely to the greater direct and indirect impacts of the development and higher value of HLCA 307 in particular. The impact on the remaining HLCAs were scored as Slight.

8. Bibliography

BGS Geology Viewer

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> (accessed 18/12/15)

Cadw & CCW 2007 *Guide to Good Practice on Using The Register Of Landscapes Of Historic Interest In Wales In The Planning And Development Process (Revised 2nd Edition)*

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

Crane, P 2002 *Petroplus LNG Development – Environmental Impact Assessment: Archaeological Desk Based Assessment* Cambria Archaeology (now Dyfed Archaeological Trust) Report No.2002/62

Dyfed Archaeological Trust Historic Environment Record

Highways Agency 2007 *Design Manual for Roads and Bridges, Vol.II*

Murphy, K & Allen, B 1998 *Coastal Survey 1997-8: Lower Milford Haven Pembrokeshire*
Cambria Archaeology (now Dyfed Archaeological Trust) Report

Murphy, K & Ludlow, N 2002 *Historic Landscape Characterisation of the Milford Haven Waterway* Cambria Archaeology (now Dyfed Archaeological Trust) Report No.2002/02

Poucher, P 2008 *Milford Haven Waterway Ports & Harbours Project* Dyfed Archaeological Trust Report No.2008/38

Thomas, RJC 1994 *Survey of 19th and 20th Century Military Buildings of Pembrokeshire* Unpublished report on behalf of PCNP, Welsh Development Agency and Cadw



- Registered Historic Landscape Area
- Areas of proposed development

Figure 1: Location plan, 1:75,000 @ A4.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey

350MW green energy generation area
Greenhouse area

Prawn farm area
Fish farm area
Algae farm area
Research area

Car park
Cheese factory
Packing factory

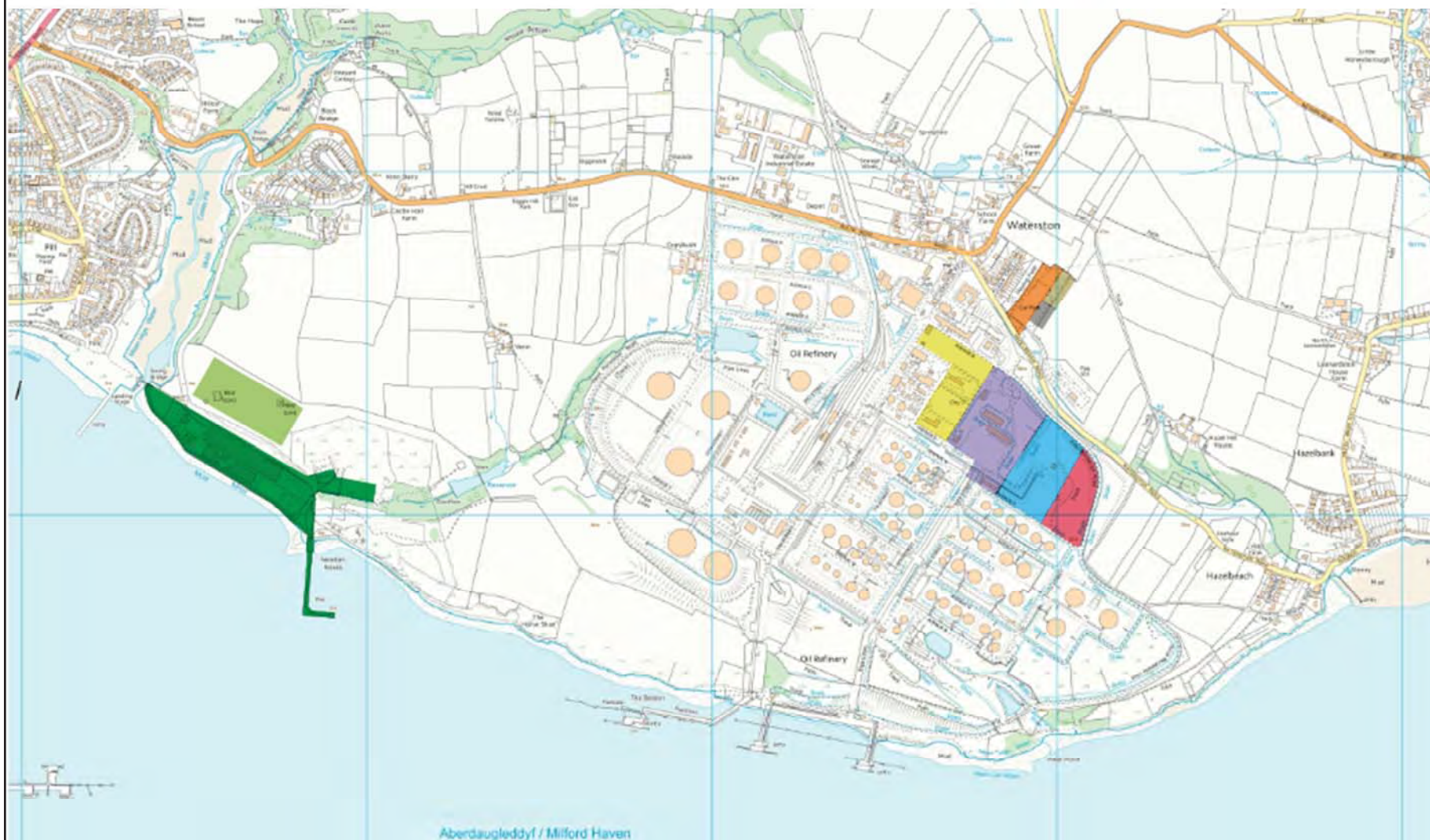


Figure 2: Areas of proposed development, original plan provided by Egnedol.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey



- Notes:
- 1 Pyrolyser House (Extension of Existing Building) - (240m x 45m Total) - 180m x 45m Current Building)
 - 2 Residue Storage - TBC (temporarily in Pyrolyser House)
 - 3 Grinding Hall - (45m x 62m - Existing Building)
 - 4 Storage Building - (150m x 50m Total)
 - 5 Engine House (80.2m x 33m x 14.2m Tall - New Building)
 - 6 Stack (10m Diameter) - Exact Location TBC
 - 7 Gas Storage (48m x 49.5m No building required)
 - 8 Gas Turbines - 62.5m x 33m and 105m x 33m buildings 13m Tall
 - 9 Re-Ox - (63.2m x 108m x 8m)
 - 10 Dryer Hall - (52m x 96m)
 - 11 Jetty
 - 12 Control Room - Existing

Figure 3: Proposed development layout at the Blackbridge site. Reduced from original scale.

Job: Milford Haven Ecopower

Title: Proposed Blackbridge Layout

Date: December 2014

Scale: NTS

Drawn by: AP

Checked by: RMP



Drawing No: 246-01-01-15.D03

Revision No: 10 | Date: 08-12-2015

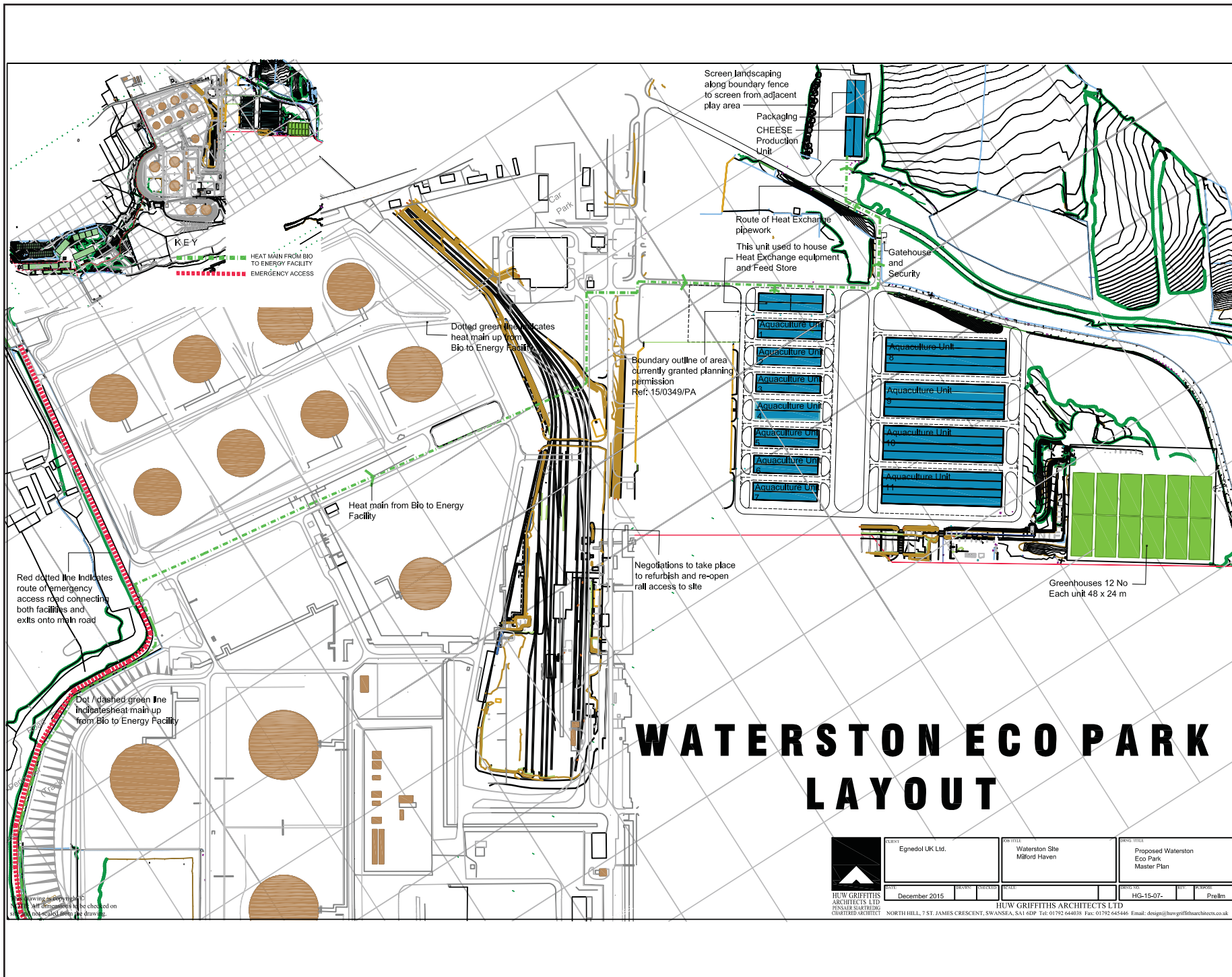


Figure 4: Proposed development layout at the Waterston site. Reduced from original scale.



Registered
Historic
Landscape
Area

Historic
Landscape
Character
Area (HLCA)

Scheduled
Ancient
Monument

Listed
Building

Proposed
development
areas

Figure 5: Registered Historic Landscape, HLCAs, SAMs and Listed Buildings in the vicinity of the proposed development.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey

ARCHAEOLOGY WALES
Revealing the past, informing the future.



Photo 1: General view of the Blackbridge RNAD site looking SE, showing the concrete former Bulk Store on the left, which will be utilised and enlarged as the Pyrolyser House, and the brick-built former Assembly House on the right, which will be replaced by the Engine House.



Photo 2: SW facing shot of the Blackbridge RNAD site, showing the former Component Store, which will be utilised and converted into the Grinding Hall, with the former Bulk Store beyond.



Photo 3: Interior of the former Bulk Store looking NW, showing the later insertion of a racing track.



Photo 4: Interior of the former Component Store looking SE.



Photo 5: General view of the Blackbridge RNAD site, looking NW, showing the former Component Store on the right and former Assembly Shop on the left.



Photo 6: Part of the Blackbridge RNAD site looking W, showing the former Assembly Shop, which will be replaced by the Engine House.



Photo 7: View of the interior of the former Assembly Shop, looking NW.



Photo 8: View of the Blackbridge RNAD site, showing the former Workshop Block, which will be utilised and converted into the Control Room. The open space in the foreground will also house the Gas Storage area.



Photo 9: View SE of the former Workshop Block.



Photo 10: View NW of the former Timber Store (left) and Latrine Block within the Blackbridge RNAD site.



Photo 11: View NNE of the former Office and Medical Centre within the Blackbridge RNAD site.



Photo 12: View NE of the Blackbridge RNAD site, showing the area to the rear (north) of the main buildings with surviving rail lines and also showing the rising cliff-face to the rear of the site.



Photo 13: General view SE of the Blackbridge RNAD site, showing the open area to the SE of the main building complex.



Photo 14: View SE along the waterfront beyond Newton Noyes pier showing further surviving remnants of the Blackbridge RNAD site.



Photo 15: Standing stone on higher ground to the northeast of the main development complex but within the general site boundary. View SSE, 1m scale.



Photo 16: View NW from the western edge of the development area, looking at the urban settlement of Pill and Milford Haven within HLCA 307.



Photo 17: Close up view from the western edge of the development area showing settlement in Milford Haven. The tower of St Katherine's church can be seen in the centre, Grade II* listed building.



Photo 18: View west from the western edge of the development area looking along the coastline, showing the settlement of Hakin within HLCA 307.



Photo 19: View NW from the high ground to the north of the main Blackbridge development complex. Shows a former sentry post with Milford Haven in the background, within HLCA 307.



Photo 20: View SE of Blackbridge development site (arrow) taken from a coastal public footpath at SM 9101 0556 within HLCA 307.



Photo 21: As above, showing a closer view of the Blackbridge complex.



Photo 22: View SE from Bandstand on The Rath at SM 9080 0562 within HLCA 307, showing the Blackbridge development site (arrow).



Photo 23: View SE taken from a vantage point along The Rath at SM 9093 0561 within HLCA 307, showing Blackbridge development site (arrow).



Photo 24: View SW taken from Hamilton Terrace at SM 9074 0579, showing St Katherine's Church (Grade II* Listed Building) and demonstrating the general lack of view of the proposed development site from the centre of Milford Haven.



Photo 25: View from the western edge of the proposed Blackbridge development site looking north up Castle Pill within HLCA 307.



Photo 26: View SE in the opposite direction from a landing point at the end of Beach Hill in Castle Pill, showing the former Office Block within the Blackbridge development site (arrow).



Photo 27: View ESE from Lower Hill Street within Hakin at SM 8985 0579, within HLCA 307. Shows view across the Marina with the Blackbridge development site beyond (arrow) and the LNG site on the hilltop in the distance (the Waterston development is not visible).



Photo 28: View east from The King's Arms (Grade II Listed building) on Point Street within HLCA 307, looking towards the Blackbridge development site (arrow)



Photo 29: View south from Waterston village at SM 9375 0573 towards the Fish, Algae and Prawn farm development within the former Gulf Oil Refinery HLCA 310. The site is hidden by buildings in the foreground.



Photo 30: View SSW towards the Fish, Algae and Prawn farm development within HLCA 310 from SM 9388 0554, showing the site hidden by large embankment.



Photo 31: View NE of the car park area adjacent to Waterston in HLCA 348, taken from SM 9389 0557.



Photo 32: View NW from above point, looking across car park area towards the rooftops of Waterston village.



Photo 33: General view from close to the southern edge of HLCA 322 at SM 9166 0539 looking across the high ground to the north of the main Blackbridge development with the rooftops of the current buildings visible.



Photo 34: View SW from the Blackbridge development site looking at HLCA 314 on the opposite banks of the Waterway.



Photo 35: View SSW from the Blackbridge development site looking towards HLCA 314 and 341 on the opposite banks of the Waterway.



Photo 36: View NNW from the northern edge of HLCA 314 and HLCA 341 at SM 9149 0334 across the Waterway towards the Blackbridge development site (arrow). Photo taken in poor light conditions.



Photo 37: View NNE from Martins Haven in HLCA 341 at SM 9222 0313 looking towards the Waterston development site within the former Gulf Oil Refinery. Photo taken in poor light but the development site itself is not visible.



Photo 38: View SE from within the Blackbridge development site, showing Newton Noyes Pier and looking towards HLCA 306. The stacks of Pembroke Power Station are visible on the horizon.



Photo 39: View WNW from the Martello Tower at the end of Fort Road, Pembroke Dock HLCA 306 (SM 9554 0362). The proposed development site at Blackbridge is largely hidden by the promontory on the right, with the Waterston development relatively indistinguishable on the promontory.



Photo 40: View NW from the tip of Pennar Park at SM 9443 0301 within HLCA 306 showing the Blackbridge development site (arrow) and the Waterston development site which is not visible amongst the LNG development to the right.

Archaeology *Wales*

APPENDIX I:

307 Milford Haven 307

Milford Haven historic landscape character area is a late 18th century grid-pattern planned town with docks dating to the late 19th century. Large 20th century housing estates and light industrial developments surround the town's older core

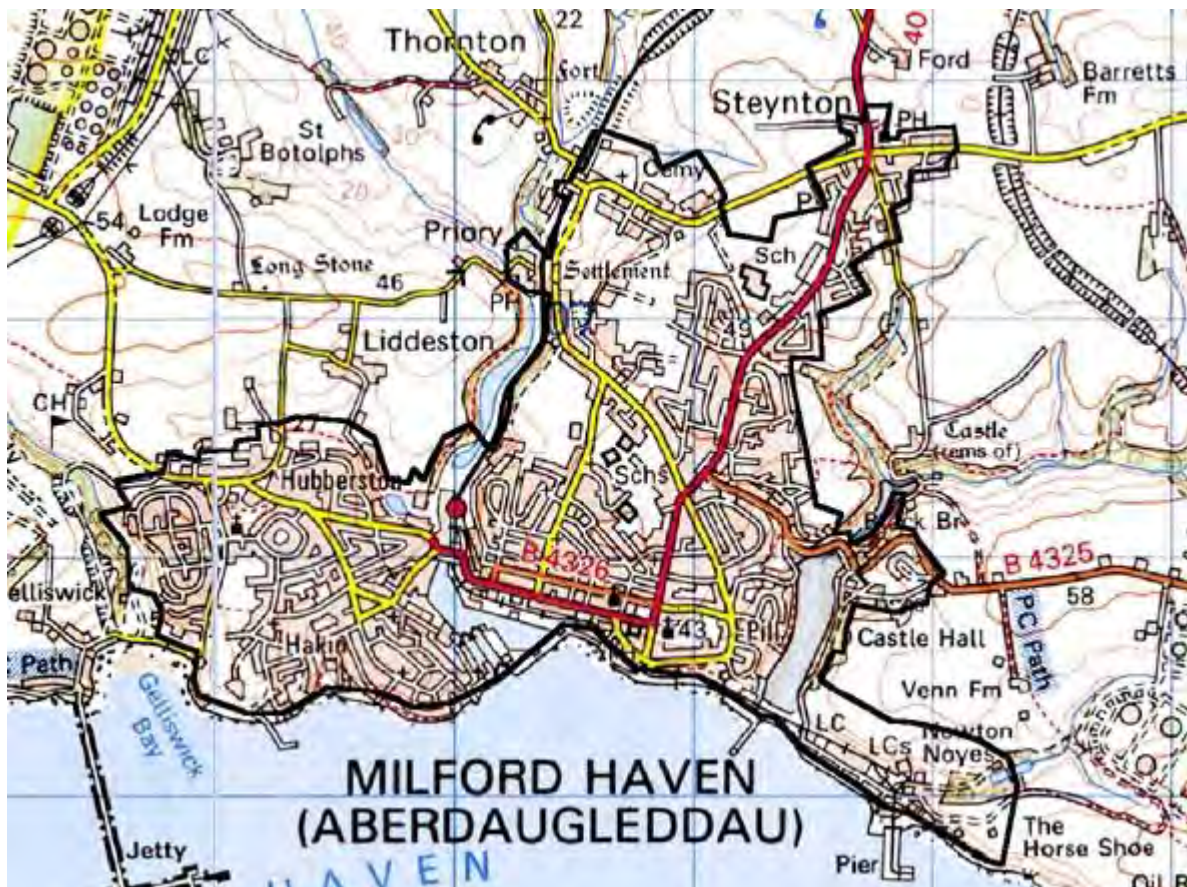
GRID REFERENCE: SM 904063

AREA IN HECTARES: 492

Historic Background

This is an urban area. Until recently this area lay mainly within the parishes of Steynton and Hubberston. It occupied the medieval Manor of Pill, part of the larger Manor of Pill and Roch which was created between 1100 and 1130. Its relationship with the Lordship of Haverford, within which it lay, was always a matter of dispute. Pill was a large and important manor, encompassing the modern town of Milford Haven. The Tironian Pill Priory was founded, at the head of Hubberston Pill (pill is a local term for a tidal inlet), by the lord of Pill and Roch in the late 12th century. Both Hubberston church and the former St Catherine's chapel, beneath modern Milford Haven, were dependencies. At the dissolution the area was acquired, with the priory, by the Barlows of Slebech, in whose hands it remained until 1758 when Catherine Barlow married Sir William Hamilton, founder of the 'proprietary town' of Milford Haven in 1790. Documentary sources prior to this date clearly indicate an increase in economic activity in and around the Milford Haven waterway from the 16th century. The strategic military importance of the Milford Haven waterway had been recognised as early as 1538 when Thomas Cromwell recommended that forts should be constructed for its defence. Naval ships were frequent visitors to the Haven's sheltered waters, as a painting by J R Attwood of 1776 in the National Museum of Wales showing the British fleet at anchor in Hubberston Road testifies. The absence of a major settlement to supply not just these naval ships but also coastal and long-distance traders was of serious concern by the mid 18th-century. The nearest customs house was at Pembroke and there were no piers, quays or hotels close to deep-water anchorages. The lack of hotels was a particular problem for the passengers of the packet service that was running on a regular basis between Hubberston and Waterford in Ireland. Up to the late 18th-century Hubberston was a village where fishing was probably its major economic activity. Smaller settlements developed around other sheltered creeks, such as Castle Pill and Neyland Pill. With this level of naval and economic activity it is hardly surprising that from 1764 William Hamilton was formulating development plans. In 1790 an Act of Parliament granted him permission to: 'make and provide Quays, Docks, Piers and other erections and establish Market with proper Roads and Avenues'. In 1796, the Navy Board located a dockyard near the entrance of Hubberston Pill; seven ships were built here before it was relocated to Pembroke Dock. Two small forts built to protect the dockyards continued in use into the early years of the 19th century. Jean Louise Barrallier, the man responsible for the ship building-programme, probably designed the grid pattern of Milford Haven town. In 1792, a small community of Nantucket whalers were persuaded to settle in the new town, and for a short time, until a collapse of the price of sperm whale oil in 1819, a successful whaling industry operated. No evidence of the dockyards or of the whaling industry survives. Several plans were proposed for the construction of quays, piers and all weather docks in the first half of the 19th century, but nothing was done. The transference of the Irish steam packet service from Milford Haven to Hobbs Point on the opposite side of the waterway depressed the struggling town, as did the construction of a railway to Neyland in 1856, although a spur line was opened to Milford Haven in 1863. In an attempt to kick start the town to life the Milford Improvement Bill of 1857 led to the construction of a pier and two wooden bridges: Black Bridge and Hakin Bridge, both now replaced by modern structures. Small shipbuilding yards operated in Hubberston Pill and on the site of the earlier naval dockyards in the mid-to-late 19th century, 13 ships being built between 1867-74. In 1872, the cast iron pier of Newton Noyes was opened, linked by a railway. In 1934, the Admiralty acquired the pier as part of their mine depot at Blackbridge. Finally, after many false starts, Milford Haven Docks were opened in 1888, with dry-dock facilities

in Castle Pill. The docks were intended for the transatlantic passenger trade, but only one liner ever called, and this was too large to use the docks. Instead a successful fishing fleet developed. Sheds designed for the transatlantic trade were converted to a fish market in 1890, and these were extended in the 1930s. Ice factories were constructed in 1890 and 1901. A mackerel quay and market were built in the early 1900s. All these structures have now gone. By 1922 there were five herring smoking houses in and around the docks. One of these survives. The fishing industry survived World War 2, but went into severe decline in the later 1950s. There are now no locally-owned fishing boats operating out of Milford Haven. The majority of the old dockside buildings have been demolished and the docks converted to a marina. During the 19th century and 20th century, the increase in population in conjunction with greater economic activity contributed to the spread of housing and other development across what had been fields and farms on the outskirts of the town. For instance early 19th century maps show a regular pattern of fields to the east of Hubberston Pill with the small settlement at Hubberston called the 'Town of Hakin'. Large-scale housing development now lies across these former fields. Similar patterns of housing and infrastructure developments lie to the north and east of the town centre. To the east of Castle Pill little development, apart from the massive mine depot at Blackbridge, took place until the late 20th century when houses were constructed on former parkland at Castle Hall.



Base map reproduced from the OS map with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, © Crown Copyright 2001. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD272221

Description and essential historic landscape components

The town of Milford Haven lies on the north bank of the Milford Haven waterway. The historic late 18th century and 19th century core of the town which is based on a grid pattern is located between Hubberston Pill and Castle Pill and inland for no more than

500m. However, the town expanded during the second half of the 20th century and now includes the older settlements of Priory (Pill Priory), Hubberston and Steynton. The latter is centred on a medieval church, but the village character of the settlement is now lost under extensive housing development. At Hubberston a loose collection of late 18th century and 19th century houses (including Georgian houses) and commercial buildings and quays and jetties testify to the pre Milford Haven town importance of the settlement. Priory, with the remains of the Tironian church, a pub and 19th century stone built cottages retains a rural village atmosphere despite its proximity to the town. Stone, generally cement rendered, and slate for roofs are the chief building materials of the older buildings. These include three storey domestic and commercial properties, mainly in the Georgian style, set along the northern side of the main road through the town and overlooking the harbour and waterway. Other 19th century houses in the historic core are more modest, generally two storey. The traditional commercial centre of the town was extensively rebuilt in the mid-to-late 20th century, although it retains the earlier grid pattern. A shopping complex built over the in-filled Hubberston Pill, close to the railway station, has supplemented it. The imposing structure of the Torch Theatre, a late 20th century building, dominates the western end of the town. A large part of the docks has been converted to a marina. Many of the late 19th and early 20th century buildings associated with the original docks have been demolished, although a few survive particularly at the western end, which still retains its commercial function. A museum is housed in one of these older buildings and other tourist facilities are located within the docks. Later 19th century and early 20th century housing – mostly stone built terrace houses – and other developments **lie to the north of the town's core. Extensive** later 20th century housing estates to the west at Hakin are prominent components of the landscape. Infrastructure development such as schools, a leisure centre and industrial estates accompany the 20th century population expansion. It is only in recent years that housing development has spilled across farmland to the eastern side of Castle Pill. Here some of the larger buildings of the now closed Blackbridge mine depot have been converted for leisure uses. Milford Haven has 122 listed buildings. Most of these are accounted for in the domestic and commercial properties described above, but also included is the massive mid 19th century structure of Fort Hubbeston and minor industrial remains such as limekilns. Close to Fort Hubbeston is the headquarters and jetty of the Milford Haven Port Authority.

Milford Haven is a well-defined historic landscape character area and contrasts with neighbouring farmland.

Sources: Ludlow 2002; McKay n.d.; Rees 1957; Hubberston Tithe Map 1840; Stainton Tithe Map 1843; PRO D/RKL/1194/13; PRO D/RKL/1194/9

310 GULF OIL REFINERY

historic landscape character area comprises the massive structure of this late 20th century industrial complex including railways and jetties.

GRID REFERENCE: SM 933052

AREA IN HECTARES: 199

Historic Background

Apart from a very narrow strip of land comprising sea cliffs and cliff top, this historic landscape character area is entirely taken up by an oil refinery and a small industrial estate. Prior to construction of the oil refinery this was an agricultural landscape, almost entirely lying within Llanstadwell parish. It occupied the medieval manor of Waterston, **which was a 'mesne' lordship of the Lordship of Haverford. On the tithe map of 1849 a** very distinct landscape of enclosed strip fields surrounded Waterston village, including the area to the south of the village now occupied by the refinery. These strip fields were clearly the enclosed remnants of the open fields of Waterston manor and township. Later maps

show the strip fields, but during the later 19th century and the 20th century some had been merged into larger, squarer enclosures. Elsewhere the pre refinery landscape comprised regularly-shaped fields associated with Newton Farm – labelled Newton Demesne on the tithe map. These fields and farm no longer exist. Construction began on the Gulf refinery in 1966, and the first tanker unloaded crude oil in 1968.



Base map reproduced from the OS map with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, © Crown Copyright 2001. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD272221

Description and essential historic landscape components

This historic landscape area comprises a late 20th century oil refinery. It includes all the installations, including jetties for the unloading of crude oil and a mainline railway. Also included in this area is a small industrial estate. A short section of sea cliff and cliff top between the refinery and the sea is the only component of the landscape not built upon.

This is a very distinct area with clear boundaries. It stands in sharp contrast to the surrounding farms and villages.

Sources: McKay 1993; Llanstadwell Parish Tithe Map, 1849; Ordnance Survey 6" to 1 mile 1st Ed. XXXIII, XXXIX, 1874; Richards 1969

348 WATERSTON - HONEYBOROUGH

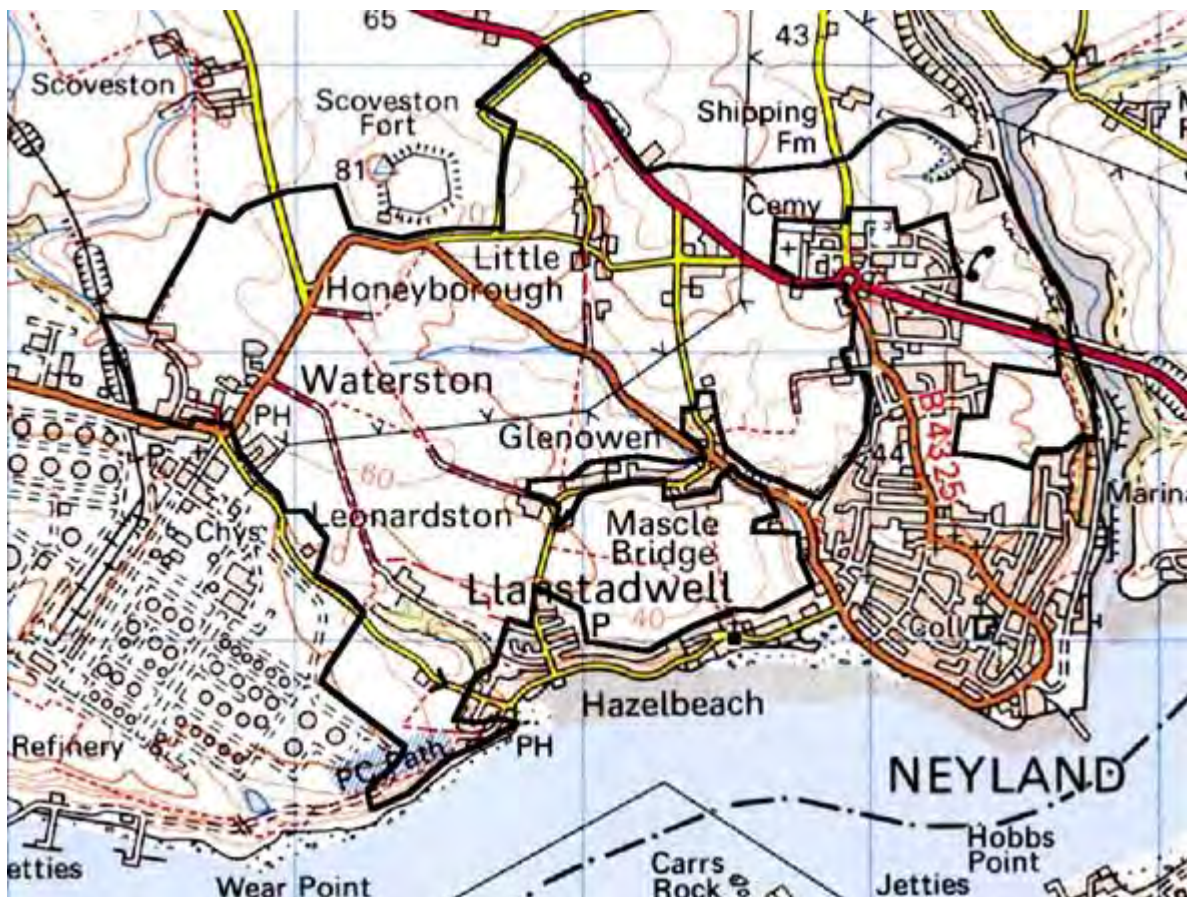
Waterston – Honeyborough is predominantly an agricultural historic landscape character area of dispersed farms and strip fields, but includes the village of Waterston and the hamlet of Honeyborough. The strip fields – enclosed open fields of the communities – were formerly more extensive but have been encroached upon by industry and housing.

GRID REFERENCE: SM 950057

AREA IN HECTARES: 377

Historic Background

This area lies on the north side of the Milford Haven waterway, within Llanstadwell parish. It comprises two main land-holdings: Waterston and Honeyborough. The medieval manor of Waterston was a mesne lordship of the Lordship of Haverford, now represented by the **village of Waterston**. The **Manor of Honeyborough** comprised one knight's fee directly held of the Earls of Pembroke as their share of the Lordship of Haverford, and 2½ carucates held of the Barony of Walwyn's Castle 'by homage'. Its manorial centre was at Great Honeyborough farm, located in a neighbouring landscape character area. In c.1600 this manor was shared between the Perrot, Bowen and Scourfield families, and then by the Batemans and the Taskers. After 1810, farming tenants held it. Part of this area includes the former open fields of Great Honeyborough which are shown in operation on late 18th century estate maps. Enclosed strip fields, evidence of a former open field system, are also shown on tithe maps at Little Honeyborough and at Waterston. It is likely, that as at Great Honeyborough, open fields were in use at these locations up to the 18th century. On the tithe maps, Little Honeyborough is shown as a hamlet and Waterston as a small nucleated village. Since the tithe survey Neyland has expanded across the former open fields of Great Honeyborough incorporating the village into the town. A narrow band of fields to the north of the town is all that is left. In the 20th century the construction of an oil refinery removed all the fields to the south of Waterston village.



Description and essential historic landscape components

This small historic landscape character area consists of the remains of enclosed strip fields that survive to the north of Neyland and to the north of a large oil refinery, together with the village of Waterston and the hamlet of Little Honeyborough. Enclosed strip fields (former open fields) characterise the agricultural landscape of this area. These are best preserved to the north and east of Neyland and to the north of Waterston. Boundaries are earth banks topped with hedges. Hedges are generally in a good condition, but a few are derelict and some are becoming overgrown. There are a few trees, but apart from on steeper slopes woodland is not a strong characteristic of this area. Land-use is mainly improved pasture with a little arable. Waterston is a nucleated village with mainly 19th century, two storey, stone built houses and terraces in the vernacular tradition. Modern dwellings are also present. An oil refinery lies immediately against the southern edge of the village, and an industrial estate lies to the west. Little Honeyborough is a very small settlement comprising 19th century two storey houses in the vernacular tradition, single storey 19th century cottages and a chapel. The few farms dispersed across the area and within the village and hamlet are relatively small, with 19th century houses, one or two ranges of 19th century stone-built outbuildings and a collection of modern outbuildings. Archaeological sites are limited and consist of a bronze age standing stone, a bronze age burnt mound and some small post-medieval quarries. There are no listed buildings.

To the west, east and south against an oil refinery and the town of Neyland this area has very well defined boundaries. To the north boundary definition is not clear, and there is a gradual merging of this area with its neighbour.

Sources: Jones 1996; Llanstadwell Parish tithe map 1849; Llanstadwell Third Part tithe map 1830; NLW PICTON CASTLE VOL 1; NLW MORGAN-RICHARDSON DEPOSIT NO 1; Owen 1911; Owen 1918

322 SCOVESTON - BURTON

is predominantly an agricultural historic landscape character area containing several mansions, many large farms, a scattering of smaller farms and dispersed modern settlement. Burton is the only village. Fields in this area are large and are divided by banks and hedges. Woodland is not a major component of the landscape.

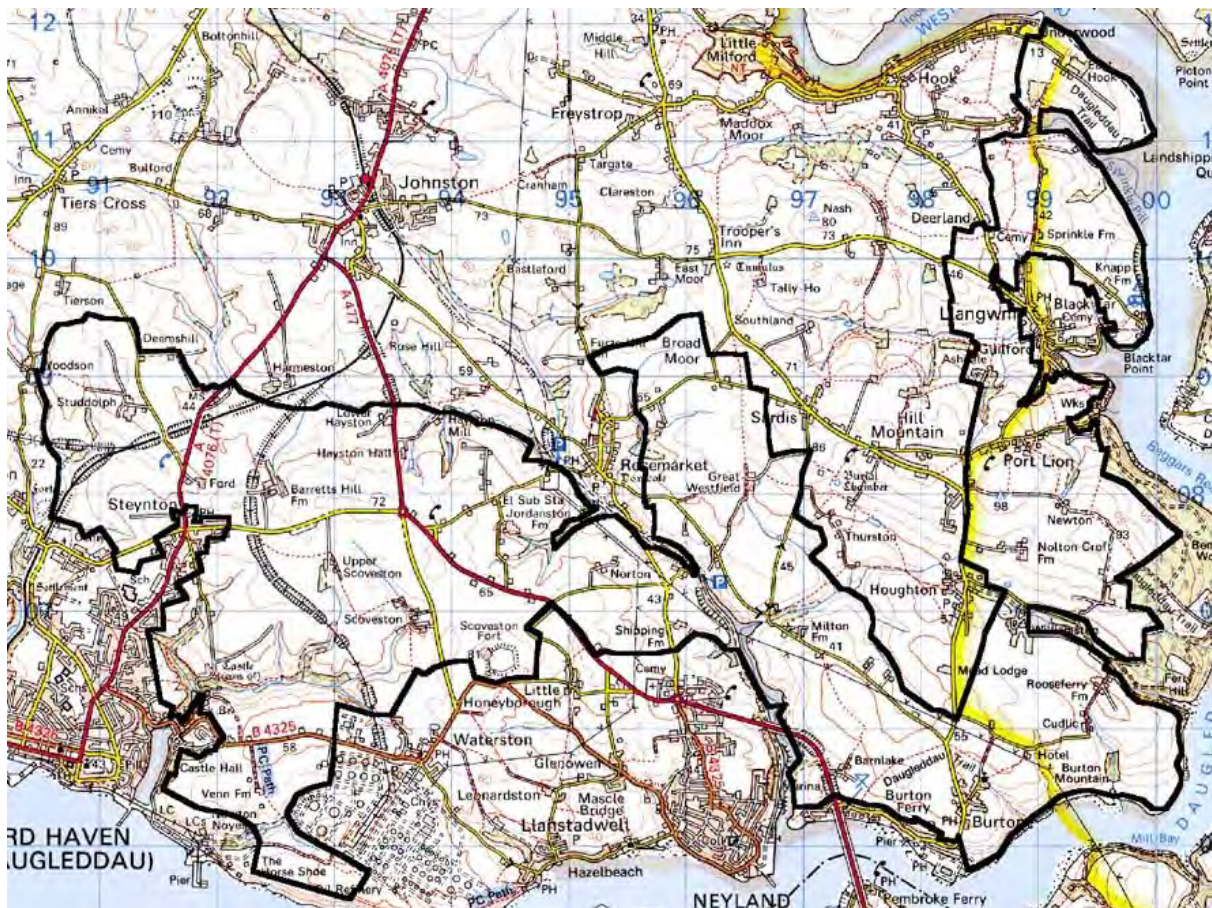
GRID REFERENCE: SM 926082

AREA IN HECTARES: 2550

Historic Background

A large character area lying to the north of the Milford Haven waterway, within the ecclesiastical parishes of Llangwm, Llanstadwell, Rosemarket and Steynton. Much of the area formed part of the medieval Manor of Pill, part of the larger Manor (or Sublordship) of Pill and Roch, which was created under the de Roches between 1100 and 1130. Its relationship with the Lordship of Haverford, of which it was notionally a member, was always a matter of dispute. Pill was a large and important manor with a caput at the head of Castle Pill (pill is a local term for a tidal inlet) at the west end of the area – possibly on the site of an iron age hillfort and later a Civil War defence. The southeast end of this area lies within the parish of Burton, which represented a detached portion of the Lordship of Pembroke. Burton parish church was present by 1291. The Manor (and parish) of Llangwm, to the north, was a holding of the de Vales until a Roche kinsman, Gilbert de la Roche,

acquired it in the late 13th century. The Roches granted 'six bovates of land in Studdolph, and five acres of land with half a carucate of land in the same township' to the Tironian Pill Priory in its late 12th century foundation charter. Hayston was present in the 14th century. The present settlement pattern appears to be of relatively late origin as only a few of today's farms and landholdings can be identified with medieval manors and townships. Scoveston is not recorded until the mid 15th century, while the remainder – Jordanston, Norton, Milton, Westfield etc – were not recorded until the 16th- and 17th-centuries. Some, such as Oxland, are 18th century in origin. Nevertheless, these different periods of origin are not reflected in any differing tenurial arrangements, and a homogenous pattern of enclosure has resulted. By the time of the first estate maps in the late 18th century and the tithe survey in the 1840s the landscape of today had been established. There are hints that at least parts of the area had evolved from open field systems. For instance, enclosed strip fields are shown on estate maps on the east side of Castle Pill and close to the very small village of Burton. No traces of these strips now remain. The area has remained primarily agricultural but its military potential has long been apparent. Castle Pill was fortified by Royalist forces in 1643, with an 18 gun fort garrisoned by 300 men. The massive inland Scoveston Fort was the only defensive work to be constructed after the 1860 Royal Commission report on defence proposed a ring of forts around the Milford Haven waterway to prevent it from landward attack. Railways also crossed the area, to Neyland in 1856 and Milford Haven in 1859.



Base map reproduced from the OS map with the permission of Ordnance Survey on behalf of Her Majesty's Stationery Office, © Crown Copyright 2001. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD272221

Description and essential historic landscape components

This very extensive historic landscape character area extends from the town of Milford Haven in the west, along the northern shore of the waterway past Neyland and up to and past the village of Llangwm. Despite its size it is a remarkably coherent landscape consisting of large farms, dispersed houses and large, regular fields. Although it lies close to Milford Haven waterway, this area only directly borders the sea at a few locations near Burton and Llangwm. Pasture is the dominant land-use, with a little arable land particularly in the western part of the area. There is virtually no rough or waste ground. Apart from deciduous trees on steep valley sides, such as at Castle Pill and Barnwell Pill, in some sheltered hollows, and on the banks of the Milford Haven waterway, this is not a landscape characterised by woodland. Occasional trees are also present in some hedgerows. Earth banks topped with hedges are the main boundary type. Hedges are generally well-maintained, although in the northern part of the area some are becoming overgrown and a few are derelict. Burton Mountain and Williamston Mountain, once one of the few open areas on the Milford Haven waterway is divided into large fields by banks and hedges. Apart from Burton village the settlement pattern is one of dispersed farms and houses. There are several mansions and large farms within this area, including Jordanston Farm, Williamston, East Hook and Studdolph Hall. Some of these houses are of some antiquity, such as East Hook, a 17th century and 18th century house next to the ruins of a 16th century house, and others indicate the minor gentry origins of the larger farms, such as the three storey Georgian house of Jordanston. Some of the larger houses, Castle Hall for example, have been demolished. Attached to most of these large houses are ranges of stone-built, 19th century, and sometimes earlier, outbuildings, often arranged around a courtyard, and sometimes set some distance from the dwelling. The wide range of buildings at Castle Hall Farm are a good example of this type. Gardens and parkland survive at some of these larger houses. Interspersed across the landscape are smaller farms. The houses take a variety of forms, but in the main they date to the 19th century, and are stone-built, rendered, slate-roofed, and broadly in the Georgian tradition. Many have been modernised. Older farmhouses and modern farmhouses are also present, presumably replacements of earlier structures. Old outbuildings are also stone-built, but usually of just one or two ranges. Most farms of this size have large ranges of modern steel and concrete outbuildings. Dispersed modern houses are present in this area, but are not a defining characteristic, apart from west and north of Jordanston. Here mid 20th century semi-detached houses in a fairly dense scatter are a distinct feature of the landscape. At Burton, the only village within this area, the medieval parish church of St Mary together with a cluster of late 18th century and 19th century dwellings is surrounded by late 20th century housing, including a small estate. Other buildings include the massive remains of Scoveston Fort, an element of the mid 19th century military defence of the Milford Haven waterway. Given the large extent of this area it is not surprising that there are a large number and variety of archaeological sites. However, these do not greatly characterise the landscape. Of interest are: several prehistoric funerary and ritual sites, including standing stones, chambered tombs and round barrows, an iron age fort with the slight remains of a Civil War fort, several prehistoric find spots, medieval mill and windmill sites, and World War 2 defensive features.

To the south and east the boundary of this area is very well-defined against the Milford Haven waterway, the town of Milford Haven, the town of Neyland, an Oil Refinery and a large tract of woodland. On other sides this area is very difficult to define, and any boundary should be considered a zone of change rather than hard-edged.

Sources: Burton Parish tithe map 1840; Charles 1992; Jones 1996; Llangwm Parish tithe map 1841; Llanstadwell Parish tithe map 1849, Llanstadwell Third Part tithe map 1830; Ludlow 2002; NLW PICTON CASTLE VOL 1; NLW R .K. LUCAS NO. 17, 19 & 25; Page 2001; Price 1986; Pritchard 1907; PRO D/RKL/1194/4; PRO RKL/841; Rees 1975; Rosemarket Parish tithe map 1843; Saunders 1964; Stainton Parish tithe map 1843

314 TEXACO OIL REFINERY AND BP JETTY

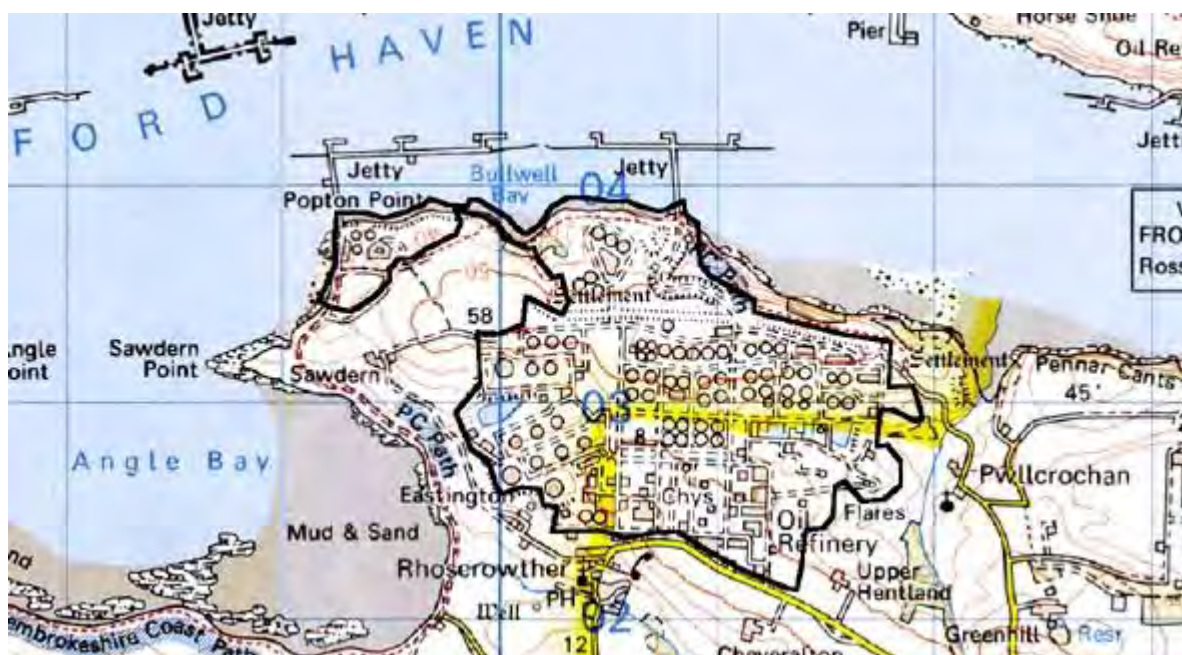
historic landscape character area includes the massive late 20th century industrial complex, the old BP oil pumping station located in Fort Popton, a 19th century defensive structure, and a short length of sea-cliff top.

GRID REFERENCE: SM 905030

AREA IN HECTARES: 237

Historic Background

Apart from Fort Popton and a narrow strip of sea cliff/cliff top this entire area comprises an oil refinery and oil pumping station. It occupies part of Rhoscrowther parish, which represented the medieval Manor of Popton, and the west half of Pwllcrochan parish. This **comprised half a knight's fee held directly of the Lordship of Pembroke. It had an annual value of 10 marks in 1324** after it had been acquired, from the Popton family, by the Perrots who later rose to great prominence in southwest Wales. Eastington, which lies south of this area, is a large, semi-fortified hall-house built by the Perrots in the late 14th century. The Meares acquired the manor in the 17th century. Prior to the construction of oil industry installations the landscape consisted of farms and regularly shaped fields – little change had occurred to this agricultural landscape since the early 19th century – with a fort situated on the cliff tops. This fort, Fort Popton, was built 1859-64 to act in conjunction with Fort Hubberston on the opposite shore of the Milford Haven waterway. It comprised a casemated battery of 31 guns and included a defended barracks with accommodation for 10 officers and 240 men. It was redesigned in 1900. In 1961, BP constructed a jetty below the fort and a pumping installation within and close to the fort in order to pump oil to Llandarcy, near Swansea. The pumping station closed in 1985. The Field Studies Council now uses part of the fort as a research centre. To the east of the fort Texaco constructed an oil refinery in 1963. It opened in 1964.



Base map reproduced from the OS map with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, © Crown Copyright 2001. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD272221

Description and essential historic landscape components

Most of this historic landscape character area consists of the massive industrial complex of the Texaco oil refinery and the decommissioned BP jetty and oil storage tanks, but it

also includes Fort Popton which was altered to accommodate **part of BP's pumping** installation, a small amount of farmland, steep wooded coastal slopes below the refinery and mooring jetties. It lies on an undulating plateau at approximately 50m above sea level on the south side of the Milford Haven waterway.

This is a distinct historic landscape character area and contrasts with neighbouring farmland.

Sources: Mckay 1993; Pwllcrochan Parish Tithe Map 1840; Rhoscrowther Parish Tithe Map 1838; PRO D/ANGLE/5; PRO D/ANGLE/92; PRO HDX/198/2; Saunders 1964; Smith 1988

RHOSCROWTHER 341

is a large agricultural historic landscape character area typified by large dispersed farms with regularly shaped fields. Hedges on banks are the most common boundary type, but towards the windswept western part of the area mortared stonewalls are present. There is a great variety in domestic building type, ranging in date from the medieval to the 20th century.

GRID REFERENCE: SM 901014

AREA IN HECTARES: 2017

Historic Background

This large character area lies on the south side of the Milford Haven waterway. It lies within the parishes of Angle, Hundleton, Pwllcrochan and Rhoscrowther. The landscape features a large number of prehistoric elements. The present B4320 is traditionally thought **to follow the line of a prehistoric trackway, known as 'The Ridgeway', that runs along the** main east-west ridge across south Pembrokeshire. The amount of prehistoric archaeology surviving within the immediate environs lends credence to the tradition of this being an ancient trackway. Neighbouring this area Kilpaison Burrows dune slacks overlie a well-known complex of bronze age round barrows, and a neolithic burial chamber, the 'Devil's Quoit'. Further groups of prominent barrows lie just south of Wallaston Farm, and at the Dry Burrows near Hundleton, while Corston Beacon round barrow is still a prominent landmark. Straight, north-south field boundaries that characterise much of south Pembrokeshire are co-axial upon the east-west Ridgeway and are possibly prehistoric in origin. The Ridgeway remains a prominent landscape feature and appears to have formed the boundary between the early medieval commotes, of Manorbier – within which this area lay - and Coedrath, both in Cantref Penfro. An ecclesiastical centre lay at Rhoscrowther **itself, which was the site of a 'Bishop house', a quasi-collegiate foundation of St Davids.** Much of the area lay within the later medieval Manor of Castlemartin which was the demesne manor of the Lordship of Pembroke, and a castle-guard fee. Rhoscrowther and Pwllcrochan appear to have been more loosely tied to the manor and by the later medieval period a separate gentry-house had been established in Rhoscrowther parish at Eastington. Hundleton parish was created out of part of Monkton parish in the 1840s and **lay within the borough liberty of Pembroke. Angle, comprising 2 knight's fees, was held as** a mesne lordship of Pembroke. Many of the farms in the area began as villas mentioned in accounts of the 13th century to the 15th century. Orielson and Kilpaison represented one **knight's fee held of Pembroke by Richard Wryot in 1353, Moreston represented ½** knights's fee held of Pembroke, Rhoscrowther, with the parish church and glebe were also held of Pembroke, and Corston, Neath and Wallaston, were members of the Manor of Castlemartin from the 13th century onwards. Pwllcrochan parish church was a possession of the Benedictines of Monkton Priory, Pembroke. However, there is little evidence for open-field farming within the area, but strips were still held collectively within the fields of Newton Farm in 1824, and are shown on a map of that year. Windmills appear to have formed a prominent feature of the landscape and at least three appear to have occupied

the area during the medieval or early post-medieval period. The Herbert Earls of Pembroke held Castlemartin manor from 1551 until 1598 when it was sold to the Lords of Stackpole. In 1698, Alexander Campbell acquired it through marriage. Many of the farms, and major houses such as Bangeston – possibly the site of a moated medieval manor - were in direct Campbell ownership. Rhoscrowther and Pwllcrochan had become a holding distinct from **the Castlemartin estate, the 'Rosecrowther and Pulcrogan Estate' which comprises most** of the central part of this area. In 1824 the estate was sold to Sir John Owen of Orielton, an estate that included the easternmost part of this area, and the Mirehouses of Angle eventually acquired much of it. The present system of large, irregular fields and dispersed settlement, is apparent by 1787, when it is shown on an estate map of that year, as are the villages of Rhoscrowther and the hamlet of Pwllcrochan. Both these settlements were abandoned as a result of the construction of an oil refinery and power station in neighbouring areas in the 1960s. There are also limestone quarries in this area.



Base map reproduced from the OS map with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, © Crown Copyright 2001. All rights reserved. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD272221

Description and essential historic landscape components

Rhoscrowther is a large historic landscape area that stretches along the southern banks of the Milford Haven waterway from Hundleton in the east to the far west of the Castlemartin Peninsula. Although it includes the mud, marsh and rocks along the foreshore of the waterway, the main bulk of this area comprises an agricultural landscape lying across gently undulating hills that rise to 60m to 70m above sea level. Apart from the loosely clustered and now abandoned hamlet of Rhoscrowther and the former cluster of dwellings at Pwllcrochan there are no villages, and the settlement pattern comprises dispersed farms and other dwellings. Rhoscrowther and Pwllcrochan were abandoned during or after the construction of the Texaco oil refinery and Pembroke Power Station. There are a large number of listed buildings most of them farm buildings. Farms tend towards the large size. Stone is the main building material, with houses usually cement rendered and outbuildings left bare, and slate the roofing material. Farmhouses date in the main to the 19th century, but there is great variety in this area, with more examples in the polite Georgian style than in the vernacular tradition. Although the latter tradition is apparent in some of the smaller examples, such as the 17th century or 18th century house at Hilton with its massive chimney, and the remains of 18th century Bangeston House. Other older examples include the late medieval tower house at Eastington with its neighbouring 18th century house, and an old 16th or 17th century mansion at Henllan now used as a barn.

Modern housing is not a strong component of the landscape, but new single dwellings constructed close to farms are present. Most farms have substantial ranges of 19th century outbuildings, often set in a formal arrangement around a yard, and large collections of modern steel, concrete and asbestos agricultural structures. Included in this area are two medieval churches, each with a substantial tower, St Decumanus at Rhoscrowther and St Mary's at Pwllcrochan. Land-use is a mixture of improved pasture and arable. There is very little rough pasture or under-used farmland apart from pockets of marsh close to the coast. Deciduous woodland is common on the steeper valley sides and on the coastal slopes – indeed in the latter location it is very prominent – but across the more gently sloping farmland it does not constitute a major landscape component. Fields are large. Hedges on banks are by far the most common type of boundary, but towards the western part of the area mortared walls form a small but significant element. Hedges are generally well maintained. Mortared stone cylindrical gateposts are a feature of the landscape, particularly towards the area's western end. Non-agricultural landscape components are not numerous, but included small reservoirs, sites of dismantled oil storage tanks and telecommunication masts. There are numerous archaeological sites within this area, but they are not prominent landscape features and therefore do not form major components of the historic landscape. Nevertheless they include: several bronze age burial mounds, bronze age standing stones, bronze age burnt mounds, many prehistoric flintworking sites, sites of medieval settlements, old cottages and sites of houses at Pwllcrochan, limekilns and quarries, and 20th century defensive structures.

Definition of this area to the north where it borders the waterway or an oil refinery and power station is very good. To the east and west definition is less clear, and to the south where the character area has yet to be delineated boundary definition is poor, with no hard-edged border but rather a wide zone of change.

Sources: Angle parish tithe map 1842; Hundleton Parish tithe map 1841; Jones 1987; Kisson 1993; Lockley 1977; Ludlow 1993; Ludlow 1998; Nash 1986; NLW VOL. 1; NMR Cawdor Map Book, 1787; Owen 1918; PRO D/EE/7/338; PRO D/LLC/674; PRO D/ANGLE/5; PRO D/ANGLE/92; PRO HDX/198/2; PRO D/BUSH/6142 & 144; Pwllcrochan Parish tithe map 1840; Ramsey 1999; Rhoscrowther Parish tithe map; Walker 1950

PEMBROKE DOCK 306

Pembroke Dock historic landscape character area comprises the 19th century naval dockyards and the 19th century grid-pattern planned town. Included in this area are many 19th century worker and town houses, with 20th century housing and light industrial development on its outskirts.

GRID REFERENCE: SM 963034

AREA IN HECTARES: 455

Historic Background

During the medieval period this area, a small peninsula situated in St. Mary's Parish, Pembroke, lay within the Manor of Kingswood with Golden, which was a demesne manor of the lordship of Pembroke. Arable land-use is recorded in detailed accounts from the 14th century and 15th century, with issues from wheat, beans, peas, barley and oats. However, meadowland, sheep and wool are also recorded, along with profits from cloth-processing – two fulling-mills were established during the 15th century. Income was also derived from the ferry that crossed the waterway to Burton. This was not replaced by a bridge until the later 20th century. During the post-medieval period the area became part of the Bush estate. The partial construction of a fort at Paterchurch in 1758 did not alter this area's agricultural aspect, as shown on estate maps of 1772 and 1813, although it would seem that as with most inlets on the Haven small-scale ship building was being carried out at Bentlass on the Pembroke River and at Pembroke Ferry. The Admiralty's

Description and essential historic landscape components

Pembroke Dock is an urban historic landscape character area. It is centred on the 19th century and early 20th century naval dockyards, and smaller private shipbuilding yards. The naval dockyards are surrounded by a high defensive wall and flanked by two 19th century gun towers. Large parts of the yard are now given over to modern industry, including the Irish ferry port, but several large stone buildings in the Georgian tradition **close to the dock's entrance provide a strong architectural signature. Several of the original** docks also survive as do a collection of 20th century military structures, including two large hangars built for flying boats. Pembroke fort, originally constructed on an open hillside overlooking the dockyards is now surrounded by development. The 19th century town is built in a grid pattern, and this, together with the survival of many wide streets of contemporaneous houses and other buildings, provides a strong architectural signature. The combination of a planned street pattern and high survival rate of contemporaneous houses and other buildings provides Pembroke Dock with a coherent historic character that is rarely matched in other Welsh town. These 19th century dockyard worker houses are generally of two storey terraces, cement rendered, and broadly in the Georgian tradition. The social and economic landscape of the town is manifest in details such as the **larger 'foreman' houses that stand at the ends of** terraces. Three storey houses on some street corners in the commercial centre emphasise the importance of certain road intersections. At Pennar overlooking the dockyards to the south the grid pattern of wide streets is maintained, but here terraces of single-storey cottages provide a very distinctive, if not unique, aspect to the town. In all there are 125 listed buildings within the town. There is not a great deal of later 19th century and early to mid 20th century housing, but later 20th century housing and other buildings testify to intensifying growth in this period. Several of the 20th century military installations have been redeveloped into offices and light industrial estates; many have been demolished and the land restored. The Cleddau Bridge, which replaced a ferry, has rejuvenated the northern side of the town. It is here that much of the light industry is located. A golf course lies within this area.

This historic landscape character area is defined to the west, north and east by the sea. On the other side it neighbours farmland. However, it is likely that Pembroke Dock will soon merge with Pembroke as only a few fields separate them.

Sources: Carradice 1991; Findley 1875; Jack 1981; Owen 1918; Peters 1905; Price 1986; **St Mary's Pembroke Tithe Map** 1841; PRO D/BUSH/6/26; PRO D/BUSH/6/27; PRO D/BUSH/6/40;

Archaeology Wales

Archaeology Wales Limited

Rhos Helyg, Cwm Belan, Llanidloes, Powys SY18 6QF

Tel: +44 (0) 1686 440371

Email: admin@arch-wales.co.uk

Company Directors: Mark Houlston MIFA & Jill Houlston

Company Registered No. 7440770 (England & Wales).

Registered office: Morgan Griffiths LLP, Cross Chambers,
9 High Street, Newtown, Powys, SY16 2NY