MILFORD POWER
ENVIRONMENTAL IMPACT ASSESSMENT

ARCHAEOLOGICALDESK-BASED ASSESSMENT

Paratowyd gan Archaeoleg Cambria
Ar gyfer Haskoning UK Ltd
Prepared by Cambria Archaeology
For Haskining UK Ltd

REGISTERED IFA ORGANISATION

ARCHAEOLEG CAMBRIA ARCHAEOLOGY

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Ionawr 2005
January 2005

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Gan / By

Duncan Schlee

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Paratowyd yr adroddiad hwn gan / This report has been prepared by Paul Sambrook

Swydd / Position: Archaeologist

Llofnod / Signature ..... Dyddiad / Date 27/01/2005

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
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Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

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1.0 SUMMARY

This archaeological report was undertaken as part of an environmental impact assessment for the proposed development of the Milford CCGT Power Station at Waterston, Milford Haven. The study is concerned with the potential impact of the proposals upon the historic landscape, archaeological, and cultural heritage aspects of the site. In addition to redeveloping the existing redundant oil refinery and storage facility, the laying of a cable route from the Power Station, across the Milford Haven waterway to the NGT supply network substation located on the former Pembroke Power Station site, and of a temporary route for site traffic to the Power Station site (bypassing the village of Waterston to the east), will impact upon previously undisturbed areas.

2.0 INTRODUCTION

This section outlines the background to the proposed development and the scope focus of the Archaeological and Cultural Historical aspects of the Environmental Impact Assessment.

2.1 Outline of the development proposals

The proposed CCGT (Combined Cycle Gas Turbine) power station is planned to be located on part of the Petroplus site at Waterston, Pembrokeshire. This site was previously the Gulf Oil Refinery, part of which is currently used as a bulk oil and LNG storage facility. Cables will run from the new power station, beneath the Haven Waterway, to link with the NGT (Natural Gas Turbine) main substation on the south side of the Haven Waterway (the site of the former Pembroke Power Station).

2.2 Project scope and commission

Cambria Archaeology were commissioned by Haskoning UK Ltd. to undertake a desk based archaeological assessment as part of the Environmental Impact Assessment for the proposed CCGT Power Station at Waterston, Milford Haven. The assessment combines, updates and expands upon the initial statements made in the 'Historic Environment' and 'Archaeology and Cultural Heritage' sections of the 'Scoping and Preliminary Environmental Assessment' document (9PO466/R01/John Clark/King). This document outlined the likely impact of the proposed development upon the archaeological resource within the area. It identified some of the more obvious archaeological issues but required better evaluation of these in relation to historic landscape issues and more detailed consideration of other possible impacts of archaeological significance.

This Assessment is compiled with reference to the *Standards and Guidance for Archaeological Desk-based Assessments* (Institute of Field Archaeologists, 1999); Appendix 10 of *The Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment: A Good Practice Guide* (DoE 1995); Welsh Office Circular 60/96, *Planning and the Historic Environment: Archaeology; Planning Policy Wales* (NAW 2002).

Cambria Archaeology Field Operations is an IFA registered archaeological organisation with considerable experience of this type of project and always operates to best professional practice. The conclusions will be based on a considered assessment of the collated data. Due to the small size of the areas requiring investigation, and the short notice given, this work did not require a full desk-top study. Reference to other available sources, such as aerial photographs and exhaustive documentary and cartographic research, were deemed unnecessary for the purposes of this report. It instead draws upon a previous desk-top study (Cambria Archaeology Report No. 2002/62) and other documents, with limited additional research where required.

2.3 Report outline

This report describes the physical environment of the study area in Section 3, before summarising the archaeological resource in Section 4, and the proposed scheme in Section 5. The impact of the proposals on the archaeological resource is assessed in Section 6, and recommendations and suggested mitigation measures are given in Section 7.

2.4 Abbreviations used in this report

Sites recorded on the county Sites and Monuments Record (SMR) are identified by their Primary Record Number (PRN) or (National Primary Record Number (NPRN. Abbreviated organisations include: The Institute of Field Archaeologists (IFA) and The Royal Commission on Ancient and Historic Monuments in Wales (RCAHMW). Other abbreviations are explained in the text.

3.0 THE STUDY AREA

3.1 Landscape character

The proposed power station is located on the site of the former Gulf Oil Refinery and its associated facilities. This refinery was developed in the 1960s and 70s. Much of the site was terraced into the natural slopes, and valleys were in-filled to create a level area for the construction of the refinery and storage tank areas.

The main areas under consideration in this study are to the southeast of the main development site on the north side of Milford Haven, and at the Pembroke Power Station on the south side of the Haven (figure 1). Also included is the route of a temporary road to the north of the site, in order for works traffic to avoid the centre of Waterston. The old refinery site is also included in the desktop survey. The site location is just outside the Pembrokeshire Coast National Park but lies within the Cadw/ICOMOS 'Register of Historic Landscapes' Milford Haven Waterway (Cadw 1998).

The study area lies within three Historic Landscape Character Areas (322, 310, 313) (Murphy and Ludlow 2002) and forms part of the Milford Haven Waterway which is included in the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw 1998). The relevant character area descriptions, which provide useful general historic background, are included in this report as Appendix 1. These designations identify and define the particular characteristics that make each area distinctive and help to define local historic character. The inclusion of the project area within an area of Outstanding Historic interest may require an ASIDOHL (Assessment of the Significance of the Impact of Development on the Historic Landscape) to be undertaken for the proposed development.

The Milford Haven Waterway is a classic example of a river valley flooded by rising sea levels after the last ice age. The landscape encapsulates the whole chronological range of maritime conquest, settlement, boat building and maritime transport, fishing and defence, from the 11th century to the present day, exhibiting both continuity and adaptation. These influences are reflected in the nature and character of the local built environment and vary according to the local coastal topography.

The sheltered waterways and deep, steep sided channels, which are ideal for the reception of bulk cargoes from the sea, have led to the development of large-scale oil refining and related industries that dominate the skyline in certain areas. The scale of the operations and the functional nature of the plant ensure that these industries are the dominant built form in the vicinity of Milford Haven. There are two operational refineries, Texaco on the south side of the Haven and Elf on the north. The Petroplus Tank Storage Terminal (formerly the Copybush storage facility) and the former Gulf Refinery are also situated on the north side of the estuary.

The landscape character of the area is a balance between the coastal influence, rural landscape features and strong industrial influences provided by the oil refineries, jetties and shipping. The agricultural hinterland and natural, rural landscape has a distinct topography supporting low intensity agriculture with isolated settlements, pockets of woodland/copse, sea views and coastal cliffs. There are small-scale enclosed fields, predominantly under rough grazing and defined by irregular boundaries consisting mainly of trimmed, continuous hedgerows. Its overall setting and range of features makes it unique in Wales, if not in Britain.

4.0 THE ARCHAEOLOGICAL RESOURCE

4.1 Known sites within the study area

The following sites or features are recorded within the study area:

PRN 7929
Location: SM942057
Site name: Castle Meadow/Castle Park
Site type: Iron Age Hillfort?
Description: A possible circular earthwork identified from aerial photographs and place name evidence suggesting the location of a hillfort.

PRN 4503
Location: SM94050560
Site name: Church Park
Site type: Place name
Description: The place name possibly indicates that this land belonged to the church.

PRN 34844
Location: SM94000439
Site name: Newton Wear
Site type: Cottage
Description: A terrace cut on a steep slope in dense woodland contains earthwork and rubble and stone walls. The remains of a cottage set within a system of paddocks and enclosures.

PRN 34843
Location: SM9406304395
Site name: Newton Wear
Site type: Deserted Rural Settlement
Description: Two-celled rectangular building foundation of mortared stone approximately 15m by 5m, terraced into the slope, standing up to 2m high, with further foundations of smaller buildings and stone revetments upslope. All set in a complex of small paddocks and enclosures, now within dense woodland.

PRN 34845
Location: SM94000434
Site name: Newton Wear
Site type: Sea defences
Description: A length of stone-built sea wall approximately 20m long, 4m high, possibly protecting building PRN34529.

PRN 34846
Location: SM 94050434
Site name: Unknown
Site type: Pipeline
Description: Cut through bedrock approximately 2.0m wide. Infilled with shattered rock. There is a concrete wall with a sign on the shoreline warning of the pipeline.

PRN 34529
Location: SM93980436
Site name: Unknown
Site type: Cottage?
Description: Building identified from the 1st edition Ordnance Survey map. All that appears to remain is a length of wall built on bedrock approximately 8.0m long and 5.0m high.

NPRN 300012
Location: SM9330002600
Site name: Pembroke Power Station
Site type: Industrial
Description: None available. The site has been decommissioned and dismantled

NPRN 308937
Location: SM9350005100
Site name: Copybush Oil Storage facility
Site type: Industrial
Description: Taken to include the former Gulf oil refinery

PRN 30151
Location: SM9280002500
Site name: Unknown
Site type: Peat bog
Description: Identified from Ordnance Survey maps. Now reclaimed and covered by the former power station (NPRN 300012)

Other unrecognized and unrecorded archaeological sites may exist within the study area but more detailed documentary and field survey would be required to ascertain this. Buried archaeological features may exist without any surface indications. The presence of such features cannot be ruled out without excavation.

4.2 Assessment of archaeological significance

The archaeology of the proposal area is classified according to its perceived significance (Table 1). The categories, with the exception of Category E, are based on those given in the Department of Environment, Transport and Regions' *Design Manual for Roads and Bridges* Volume 11 Section 3 Part 2 (1993).

Category A sites are those believed to be of primary significance, either potentially of national importance or already designated by CADW: Welsh Historic Monuments as being of scheduled ancient monument status.

Category B sites are sites of regional importance. These sites are not of sufficient importance to justify scheduling, but are nevertheless important in aiding the understanding and interpretation of the archaeology of the region.

Category C sites are sites of local importance. These sites are of lesser importance, but are nevertheless useful in aiding the understanding and interpretation of the archaeology of the local area. Field boundaries within the project area that are likely to be impacted upon to some degree by the proposals are included in this category.

Category D sites are either sites of minor importance or those which are so badly damaged that too little now remains to justify their inclusion in a higher grade.

Category E sites are sites which have been identified, but whose importance cannot be assessed from fieldwork and desk-top study alone. An archaeological evaluation would be required to categorise such a site more accurately if the proposal was likely to affect it in any way. While sites in this category may no be identified in the project area, this does not preclude the possibility that such sites might exist.

PRN	NGR	Site type	Period	Category
7929	SM9420005700	Hillfort?	Iron Age	B
4503	SM9405005600	Place name	Post medieval	E
34844	SM9400004390	Cottage	Post medieval	B
34843	SM9406304395	Deserted Rural Settlement	Post medieval	B
34845	SM9400004340	Sea defences	Post medieval	C
34846	SM9405004340	Pipeline	Post medieval	D
34529	SM9398004360	Cottage?	Post medieval	B
nprn 300012	SM9330002600	Pembroke Power Station	Post medieval	C
nprn 308937	SM9350005100	Copybush Oil Storage	Post medieval	C
30151	SM9280002500	Peat bog	Unknown	B

Table 1: Assessment of significance of archaeological features

In addition to these known and recorded sites there are other aspects of the historic environment that need to be considered in assessing the potential impact of the development proposals these are outlined below.

Prehistoric archaeology

In Wales, the evidence of Palaeolithic activity is generally restricted to worked stone artefacts found on the present land surface in secondary contexts, associated with river gravels or as isolated finds. Such evidence has usually been disturbed by rivers or mass land movement. During glacial periods sea levels were low and river channels had to cut down to reach the sea. Such locations can produce evidence of Palaeolithic presence. During interglacial periods the sea levels rose, flooding the river channels and scouring out pre-glacial river deposits. Where conditions have allowed, Sediments have subsequently built up within the Haven, either washed into from the surrounding landscape, or deposited by tidal action. The Milford Haven Waterway was formed in the last main glacial period (Devensian).

Despite this potential, there are no known Palaeolithic sites within the Milford Haven area, and no deposits considered to be of high potential have been identified to date. There is little probability of sites of this period being impacted upon by the proposed development.

During recent excavations at Newton, to the west of the present study area, which were commissioned by Petroplus LNG, the remains of a Bronze Age roundhouse were recovered during topsoil stripping (Crane 2004). This was a chance find of a previously unknown site. Of the development proposals discussed in this document, only the eastern bypass route has any potential to reveal any previously unknown sites of this period.

PRN 7929 is the site of a possible Iron Age hillfort located to the west of the proposed eastern bypass route. The presence of this feature may suggest the possibility of other Iron Age features in the vicinity that might be impacted upon by the proposed bypass route.

The Roman period

There are no known Roman period sites or finds within the study area. From the available evidence, chance discoveries of previously unknown sites cannot be ruled out. Of the development proposals discussed in this document, only the eastern bypass route has any potential to reveal any previously unknown sites of this period.

The medieval period

There are no known Medieval sites or finds within the study area. From the available evidence, chance discoveries of previously unknown sites cannot be ruled out. Of the development proposals discussed in this document, only the eastern bypass route and the cable trench have any potential to reveal any previously unknown sites of this period.

The Post-medieval period

There is plentiful evidence of Post-medieval settlement and activity in the Milford Haven area. Following an archaeological excavation the physical remains of settlement at Newton Demesne have been recently been destroyed by development of the Petroplus industrial complex (Crane 2004). With the exception of Newton Weir (see section 4.1), no other Post-medieval sites are known within the study area. Of the development proposals discussed in this document, only the eastern bypass route has any potential to reveal any previously unknown sites of this period. The current proposals will however, have a significant impact on the Newton Weir site.

4.3 Hedgerows

Hedgerows are a significant landscape feature. Their form can be regionally distinctive and contribute to the character of a landscape. They can also reflect changes in land management, property divisions and other aspects of human impact upon the landscape.

4.4 Maritime archaeology

The NMR at RCAHMW in Aberystwyth, has no records of known shipwrecks in the area of the waterway between the two sites. Often however, such wreck sites are not accurately located. The presence or absence of potentially significant wrecks or other archaeological features, deposits or objects cannot therefore be ascertained with any degree of certainty.

4.5 Industrial archaeology

The old Gulf Oil Refinery, although of relatively recent origin, is representative of a significant episode in the recent history of the Milford Haven Waterway and its environs. It has also been identified as a defining landscape feature for the Area of Outstanding Historic Interest. As such it is considered as a significant example of industrial archaeology in the wider area.

The former power station on the south side of the Haven Waterway has already been demolished.

4.6 Environmental Archaeology

Under suitable conditions, peat deposits and saltmarsh can develop on the sediment deposits. Such deposits often have the potential to contain valuable evidence for the past environmental characteristics of an area in the form of pollen and diatoms. A record of environmental change over time can be preserved as new layers of soil or sediment are deposited. Such evidence is only preserved under certain conditions and their interpretive value depends on the nature of their deposition.

The site of the former Pembroke Power Station is constructed on an area of reclaimed saltmarsh or peat bog (PRN 30151). Such deposits often date from the Bronze Age and can be a source of environmental evidence from this period. The presence, survival or current condition of these deposits and their potential for providing significant environmental evidence is not known.

5.0 PROPOSED GROUNDWORKS

5.1 The temporary eastern bypass route

The bypass route Running from SM9391005940 to SM93870205420 via SM9409005820, will be a temporary road to divert works traffic from the heart of Waterston village. The proposed route mostly follows existing field boundaries, but will also cross some.

The road construction will require the stripping of topsoil and the laying down of hardcore, with the intention of restoring the affected route following the current development. The road is expected to be approximately 7.0m wide within a 12m wide easement (see figs 1 and 2).

5.2 The cable route area

The cable route is expected to run close to the route of a pipeline laid in 1969 (see figs 1 and 2). The developers have defined the area for investigation as an area 100m wide, following the earlier pipeline (40m to the west and 60m to the east). Since the cable line will cross to the south side of the Milford Haven waterway, that portion of the channel is also included in the study area.

The construction phase would involve the physical disturbance to the ground along the cable corridor. This would involve the stripping of topsoil over the working and trench widths. It is estimated that three circuits, each comprising three cables, will need to be laid in the ground, requiring a work width of 20m with three trenches, each 1.2m wide, separated by three meters. For security reasons it is possible that one circuit would be laid away from the other two. In this case the working widths would be 15m and 18m respectively.

5.3 The existing refinery and storage terminal

The existing area of the Oil refinery and storage facility is also included in this study area. Although the likelihood of survival for any features pre-dating the construction of the terminal is minimal, the refinery complex itself is a significant feature of the historic landscape that will be impacted upon by the proposed development.

6.0 Predicted impact of the proposed scheme on the archaeological resource

The following terms have been used to define the significance of potential physical impact of the development upon the archaeological resource. The significance of the impact is NOT related to the importance of the feature.

Category A: (Major significance): Fundamental change to an archaeological site.

Category B: (Moderate significance): Material but non-fundamental change to a location or archaeological site.

Category C: (Minor significance): Detectable but non-material change to a location or archaeological site.

Category D: (Uncertain significance): Unquantifiable or unqualifiable change to a location or archaeological site.

Category E: (No significance): No physical impact at all upon a location or archaeological site.

PRN	NGR	Site type	Period	Category
7929	SM9420005700	Place name	Post medieval	D
4503	SM9405005600	Place name	Post medieval	D
34844	SM9400004390	Cottage	Post medieval	A
34843	SM9406304395	Deserted Rural Settlement	Post medieval	A
34845	SM9400004340	Sea defences	Post medieval	A
34846	SM9405004340	Pipeline	Post medieval	E
34529	SM9398004360	Cottage?	Post medieval	A
nprn 300012	SM9330002600	Former Pembroke Power Station	Post medieval	E
nprn 308937	SM9350005100	Former Gulf Oil Refinery	Post medieval	B
30151	SM9280002500	Peat bog	Unknown	E

Table 2: Assessment of severity of impact on the archaeological resource

6.1 Physical Impacts

6.1.1 *The eastern bypass*

The proposed route for a temporary road to divert works traffic away from the centre of Waterston (see fig 2) is designed where possible to follow rather than to cross existing boundaries, and to make use of areas of previously disturbed ground.

No known archaeological sites have been identified within the proposed road corridor. Nearby field names may suggest the possibility of significant archaeological features within the vicinity, but this is by no means a probability.

There may be an appreciable impact from the road construction upon some field boundaries.

6.1.2 *The cable route*

The cable route extends from the north side of the Haven Waterway beneath the channel and into the former power station site on reclaimed land to the east of the NGT substation. It is intended that it will follow close to the course of a pipeline on a similar course that was laid down in 1969 (see figs 1 and 2).

The route proposed at present is likely to involve a 20m corridor running through the deserted coastal rural settlement of Newton Weir (PRNs 34843, 34844, 24529). Depending on its exact location, this scheme has the potential to cause considerable damage and destruction to this site. The location, period and condition of the site imbue it with local and regional significance. The 'A' impact rating reflects the potential of the scheme to cause fundamental change to the remains of the Newton Weir settlement. This rating can however, be reduced through mitigation.

6.1.3 *The former refinery*

The new development is unlikely to impact upon buried archaeological features since it will be constructed on the site of the old oil refinery. The scale and depth of this earlier construction phase is highly likely to have destroyed any earlier archaeological features since the site was terraced into the underlying bedrock to create level areas.

The old oil refinery itself will, however, be impacted upon, since the development proposal involves its removal. Although of no great antiquity, the old refinery has significance as a landscape feature and is representative of the more recent industrial and economic activities in the area. It therefore has historic landscape and cultural significance.

The site has been given a 'B' impact rating because by dismantling the former refinery, the new development will have a material affect on the site. Considering the nature of the site, however, this impact is considered to be non-fundamental. Mitigation can reduce the impact of the proposals.

6.1.4 *The former power station*

The former Power station site has already been dismantled, although the substation has been retained and remains in use. The current proposal is to connect the new power station on the north side of the Haven to the substation via the proposed cable route. The laying and connection of the cable is unlikely to have an impact upon any known archaeological sites on the southern side of the Haven. It has therefore been given an impact rating of 'E'.

6.2 Visual impacts

The redevelopment of the refinery site will inevitably alter the visual impact of the complex in the wider landscape, since it will be dismantled. It will, however, be replaced by another large industrial complex, possibly with equally significant visual impact in the landscape.

7.0 Recommendations and suggested mitigation

The eastern bypass

This temporary road route is unlikely to impact upon any known archaeological sites. There is however, a possibility that previously unrecorded sites may be revealed if the road is constructed. In order to ensure that any features that may be revealed can be dealt with appropriately, it is suggested that an archaeological watching brief be carried out during topsoil stripping. This would allow any unforeseen archaeologically significant features to be recorded.

The cable route

The cable route extends from the north side of the Haven Waterway beneath the channel and into the former power station. It appears that the cable route will run through at least part of the deserted rural settlement of Newton Wear. The proposals involve a linear corridor 20m wide, which, depending on its exact location will cause considerable damage and destruction to this site.

Mitigation would involve close consultation in the field with archaeologists to ascertain either (and preferably) an alternative course that would avoid the site entirely, or the least destructive route. If an alternative route is not feasible then a programme of survey and building recording should be undertaken in advance of the development to achieve 'preservation by record'. Some degree of hand excavation along the route may be required in order to recover as much information as possible before the site is damaged.

Some form of land restoration may be necessary to leave the surviving parts of the settlement in an appropriate condition. It should be noted that this settlement lies close to the Pembrokeshire Coastal Path, and if treated sensitively its potential as a feature of interest to the public could be maximised to the benefit of all.

The remainder of the cable route, beneath the waterway and up to the power station is considered unlikely to impact upon archaeologically sensitive features or deposits, so no mitigation for this part of the route is required.

The former refinery

The former refinery site is to be dismantled as part of the proposed development. Some degree of photographic and documentary record of the complex would be desirable, whether from new or existing sources. Such a record should be undertaken in collaboration with a person or organisation that has some understanding of how the refinery functioned.

The former power station

The former Power station site has already been dismantled. The substation remains. The connection of the proposed development to the substation via the proposed cable route redevelopment is thought unlikely to have an impact upon any known archaeological sites on the south side of the Haven. No mitigation is envisaged to be required, unless in conjunction with the recording undertaken for the refinery site.

Visual impacts

Developments within a landscape of outstanding historic interest might normally be expected to undergo an ASIDOHL. It is understood that there has been consultation between Cambria Archaeology (Heritage Management) and CCW, and that due to the nature of the development (which to some extent is replacing like with like), no ASIDOHL will be required.

8.0 Bibliography

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HISTORIC LANDSCAPE CHARACTER AREA:
310 GULF OIL REFINERY

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 – labeled 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.

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.

Conservation priorities
Some consideration will need to be given to the nature of land restoration following decommissioning of the refinery. It may also be appropriate to record the refinery prior to decommissioning and its removal.

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

MILFORD HAVEN WATERWAY

HISTORIC LANDSCAPE CHARACTER AREA:
313 PEMBROKE POWER STATION

GRID REFERENCE: SM 932025
AREA IN HECTARES: 91

Historic Background
This historic landscape character area is entirely occupied by Pembroke Power Station. It lies within the eastern half of Pwllcrochan parish, whose church in the medieval period was a possession of the Benedictine Monkton Priory, at Pembroke. However, it did not form a manorial centre, and lands in this part of the parish may have been part of the greater Manor of Castlemartin, a *demesne* manor of the Lordship of Pembroke, and the most important holding appurtenant to Pembroke Castle. Prior to the construction of the power station much of the area was occupied by an inlet and was intertidal, comprising mudflats and saltmarsh. The coastline of this inlet appears to have remained stable throughout the historic period. The remainder of the area comprised farms with regularly shaped fields. The power station was commissioned in the early 1960s and decommissioned in the l990s. It is currently being demolished.

Description and essential historic landscape components
This historic landscape character area comprises the partially demolished oil-fired power station. In order to build the station a large platform was constructed by excavating a deep scoop into farmland and dumping the resulting waste over the head of a small tidal inlet of the Pembroke River. The resulting platform was large enough to accommodate two stations, should a second one have been required. The platform will remain after demolition.

Even after total demolition, this area will contrast sharply with neighbouring farmland.

Conservation priorities
This area has been designated for continuing industrial use. Consideration should be given to improving public access to the periphery of the area, particularly for the users of the Pembrokeshire Coast Path.

Sources: Jones 1987; Laws 1909; Ludlow 1998; Murphy 1995; Owen 1918; Pwllcrochan Parish Tithe Map 1840; PRO D/ANGLE/92; PRO HDX/198/2

HISTORIC LANDSCAPE CHARACTER AREA:
322 SCOVESTON - BURTON

GRID REFERENCE: SM 926082
AREA IN HECTARES: 2550

Historic Background
A large character area lying 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.

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.

Conservation priorities
The majority of the historic landscape components in this area are well managed and in good condition. However, the condition of field boundaries should be monitored to ensure no deterioration takes place. Currently the boundary between this area and the neighbouring urban areas is precise. Careful management of this urban fringe should continue to maintain the present distinction. Some consideration should be given to the possible re-used of those historic farm buildings that may be coming to the end of their agricultural life.

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

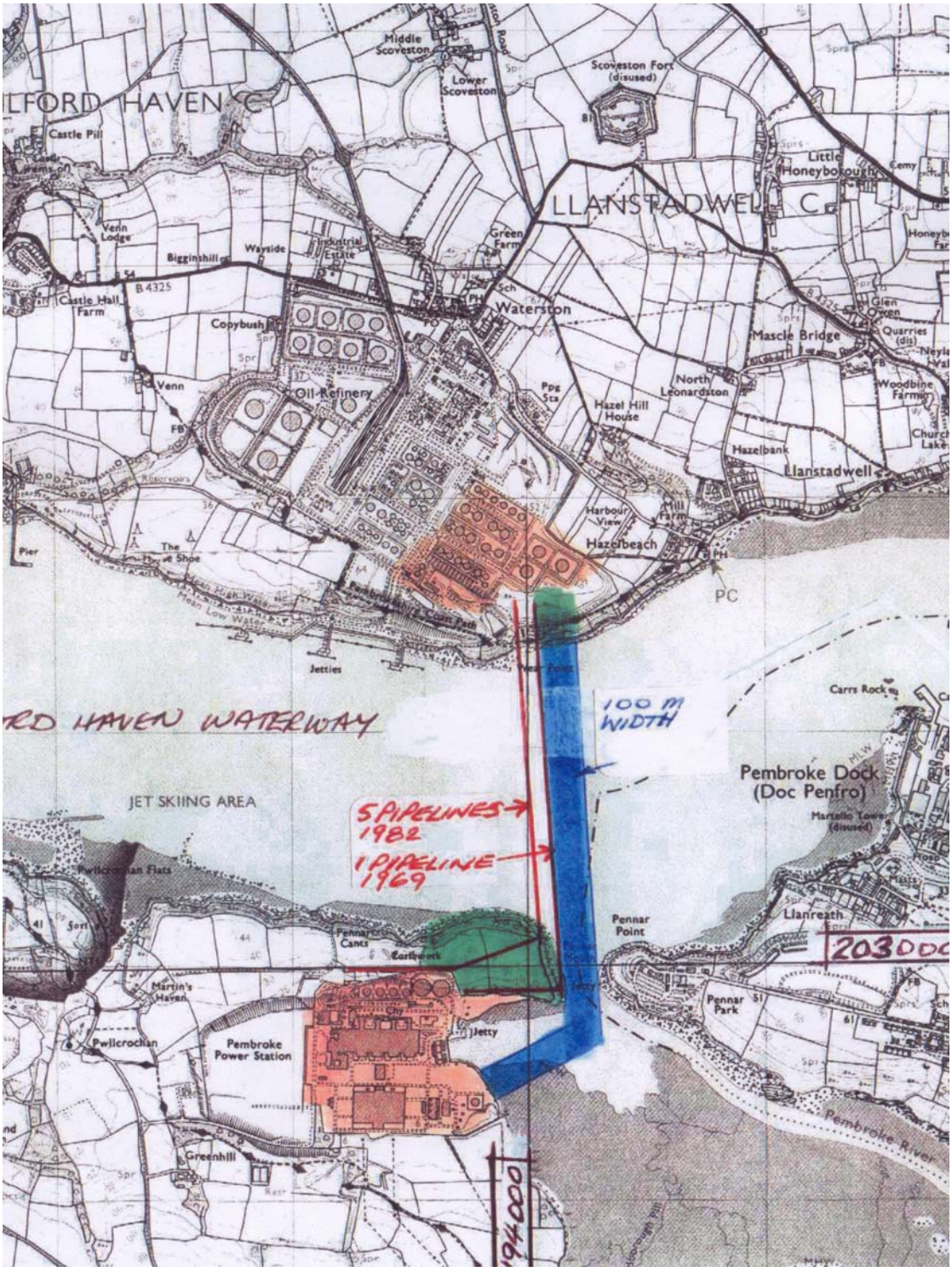

Figure 1: Plan showing approximate area within which cable route will occur

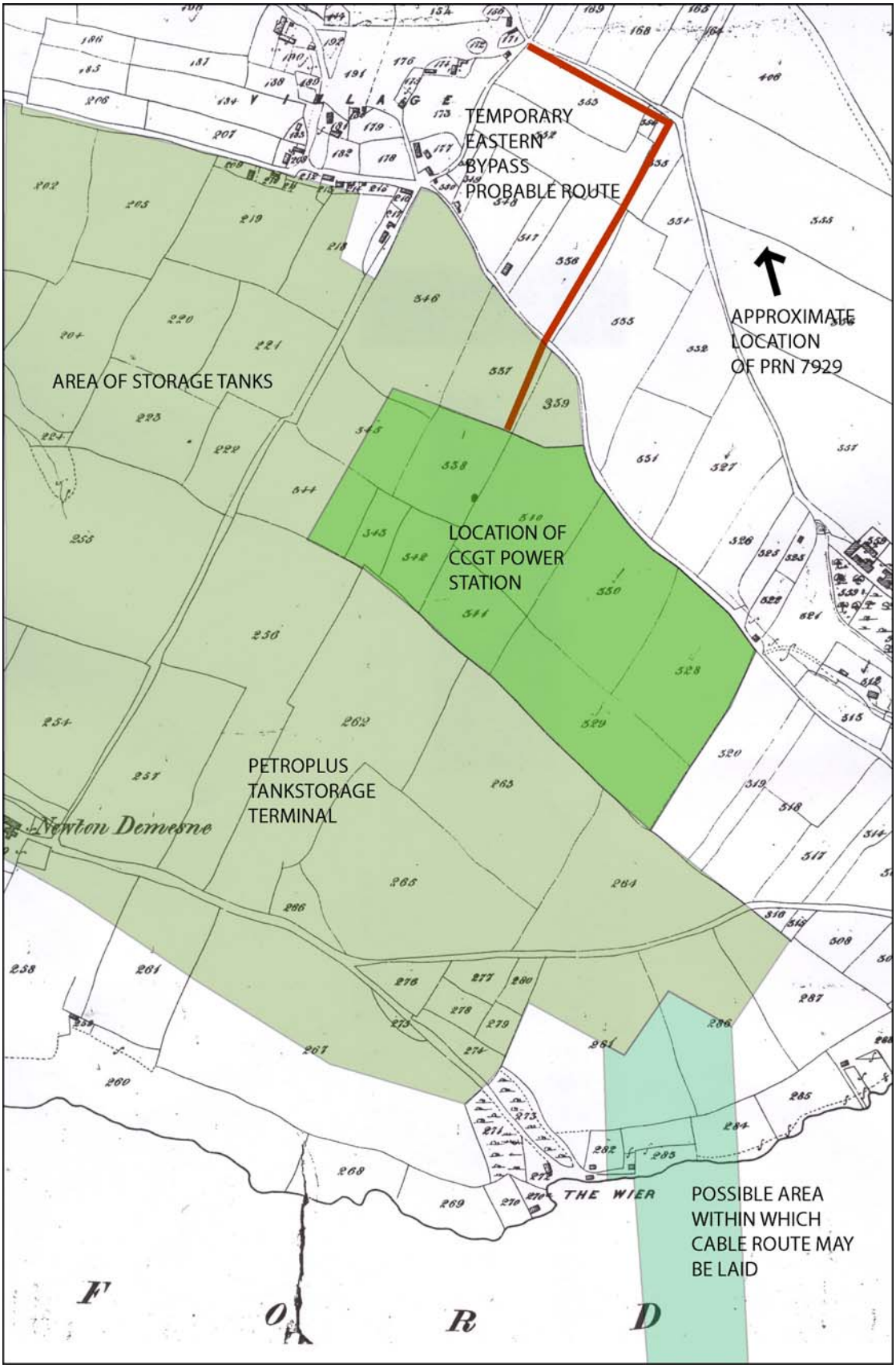

Figure 2: Part of the Llanstadwell tithe map of c.1849 with approximate areas of the proposed development superimposed