



æon archaeology

ASIDOHL - Proposed New BESS Site, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR

November 2023 v1.0



ASIDOHL
Project Code: A0453.2
Report no. 0437
Event PRN: 130135



æon archaeology

Proposed New BESS Site, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR

November 2023 v1.0

Report no. 0437

Assessment of the Significance of the Impact
of Development On Historic Landscapes (ASIDOHL)

**Aeon Archaeology
Obsidian Offices
Chantry Court
Chester
CH1 4QN**

Written by: Richard Cooke BA MA MCIfA

Checked by: Josh Dean BA



Project Code: A0453.2
Date: 08/11/2023
Client: Sirius Planning Ltd
info@aeonarchaeology.co.uk



Proposed New BESS Site, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR

November 2023 v1.0

Copyright Declaration:

Aeon Archaeology grants permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although Aeon Archaeology retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

Disclaimer:

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of Aeon Archaeology. Aeon Archaeology accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. The entitlement to rely upon this Report rests solely with the person/party which commissioned it and does not extend to any other person/party. Aeon Archaeology accepts no responsibility or liability for any use of or reliance upon this Report by any person/party other than the commissioning person/party.

Figures

Figure 01: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:20,000 at A4.

Figure 02: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:10,000 at A4.

Figure 03: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:5,000 at A4.

Figure 04: Proposed Site Layout. Scale 1:2,500 at A4.

Figure 05: Location of the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest (HLW (D) 3). Scale 1:125,000 at A4.

Figure 06: Location of non-designated monument points from the Dyfed Historic Environment Record. Scale 1:15,000 at A4.

Figure 07: Location of non-designated monument points from the National Monument Record within 1km. Scale 1:15,000 at A4.

Figure 08: Location of Listed Buildings. Scale 1:15,000 at A4.

Figure 09: Location of Scheduled Monuments. Scale 1:20,000 at A4.

Figure 10: Location of the Rhoscrowther HLCA 341 (DAT PRN 43920). Scale 1:50,000 at A4.

Figure 11: Location of the Rhoscrowther HLCA; Pembroke Dock HLCA, Gulf Oil Refinery HLCA; Pembroke Power Station HLCA; Texaco Oil Refinery HLCA; Carew, Milton and Nash HLCA; Hundleton and Maiden Wells HLCA. Scale 1:70,000 at A4.

Figure 12: Location of archaeological features within the Site boundary as identified in the archaeological assessment (Aeon report 0436). Scale 1:5,000 at A4.

Figure 13: 5km Zone of Theoretical Visibility (ZTV) overlaid on the Rhoscrowther HLCA; Pembroke Dock HLCA; Gulf Oil Refinery HLCA; Pembroke Power Station HLCA; Texaco Oil Refinery HLCA; Carew, Milton and Nash HLCA; Hundleton and Maiden Wells HLCA. Scale 1:70,000 at A4.

Plates

Plate 01: View from Pembroke Dock HLCA 306 across the Rhoscrowther HLCA 341 with the proposed development site shaded red.

Plate 02: View from Gulf Oil Refinery HLCA 310 across the Rhoscrowther HLCA 341 with the proposed development site shaded red.

Plate 03: View from Pembroke Power Station HLCA 313 across the Rhoscrowther HLCA 341.

Plate 04: View from Texaco Oil Refinery HLCA 314 across the Rhoscrowther HLCA 341.

Plate 05: View from Carew, Milton and Nash HLCA 338 across the Rhoscrowther HLCA 341.

Plate 06: View from Hundleton and Maiden Wells HLCA 340 across the Rhoscrowther HLCA 341.

Plate 07: View across the Rhoscrowther HLCA 341 towards the proposed development Site.

1.0 NON-TECHNICAL SUMMARY	2
2.0 SECTION A.....	3
2.1 Introduction	3
2.2 Statutory and Non-Statutory Designations (Summary).....	3
2.3 Summary of the Milford Haven Waterway HLA	4
3.0 ASIDOHL STAGE 1: CONTEXTUAL INFORMATION	7
3.1 Historical background	7
3.2 Summary description of the proposed development	10
3.3 Context for ASIDOHL assessment	10
3.4 Planning history of the proposed development site	10
3.5 Summary of the planning policy context.....	11
3.6 Assessment constraints.....	12
3.7 Assessment methodology	12
4.0 ASIDOHL STAGE 2: ASSESSMENT OF DIRECT, PHYSICAL IMPACTS OF DEVELOPMENT	13
4.1 Introduction	13
5.0 ASIDOHL STAGE 3: ASSESSMENT OF INDIRECT IMPACTS OF DEVELOPMENT	16
5.1 Introduction	16
5.2 Stage 3 (a) Indirect, physical impacts	16
5.3 Stage 3 (b) Indirect (non-physical) impacts.....	16
5.4 Pembroke Dock HLCA 306 (DAT PRN 43875)	17
5.5 Assessment of Indirect, visual impacts on Historic Landscape Character Area Pembroke Dock HLCA 306 (DAT PRN 43875)	18
5.6 Gulf Oil Refinery HLCA 310 (DAT PRN 43879).....	19
5.7 Assessment of Indirect, visual impacts on Historic Landscape Character Area Gulf Oil Refinery HLCA 310 (DAT PRN 43879)	19
5.8 Pembroke Power Station HLCA 313 (DAT PRN 43882).....	20
5.9 Assessment of Indirect, visual impacts on Historic Landscape Character Area Pembroke Power Station HLCA 313 (DAT PRN 43882)	20
5.10 Texaco Oil Refinery HLCA 314 (DAT PRN 43916).....	21
5.11 Carew, Milton and Nash HLCA 338 (DAT PRN 43914)	22
5.12 Assessment of Indirect, visual impacts on Historic Landscape Character Area Carew, Milton and Nash HLCA 338 (DAT PRN 43914).....	22
5.13 Hundleton and Maiden Wells HLCA 340 (DAT PRN 43915).....	23
5.14 Assessment of Indirect, visual impacts on Historic Landscape Character Area Hundleton and Maiden Wells HLCA 340 (DAT PRN 43915).....	23
5.15 Rhoscrowther HLCA 341 (DAT PRN 43920).....	24
5.16 Assessment of Indirect, physical impacts on Historic Landscape Character Area Rhoscrowther HLCA 341 (DAT PRN 43920)	24
5.17 Assessment of Indirect, visual impacts on Historic Landscape Character Area Rhoscrowther HLCA 341 (DAT PRN 43920)	25
5.18 ASIDOHL Stage 3: Summary of Overall Magnitude of Indirect Impacts on Historic Character Areas	26
6.0 ASIDOHL STAGE 4: EVALUATION OF RELATIVE IMPORTANCE.....	27
6.1 Introduction	27
6.2 Pembroke Dock HLCA 306	28
6.3 Gulf Oil Refinery HLCA 310	29
6.4 Pembroke Power Station HLCA 313	30
6.5 Texaco Oil Refinery HLCA 314.....	31
6.6 Carew, Milton and Nash HLCA 338.....	32
6.7 Hundleton and Maiden Wells HLCA 340	33
6.8 Rhoscrowther HLCA 341.....	0

6.9 ASIDOHL Stage 4: Grade of overall value of relative importance of the HLCA's (or parts thereof) affected by development.....	0
7.0 ASIDOHL STAGE 5: ASSESSMENT OF OVERALL SIGNIFICANCE OF IMPACT OF DEVELOPMENT	1
7.1 Introduction	1
7.2 Overall Significance of Impact.....	1
7.3 ASIDOHL Stage 5: Summary of the overall significance of impact of the proposed development at Lambeeth, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR, on the Milford Haven Waterway Historic Landscape Area (HLA) (Based on Guide to Good Practice, Table 13, p.29)	2
7.4 Concluding Statement	4
8.0 SOURCES	6

1.0 NON-TECHNICAL SUMMARY

Comisiynwyd Aeon Archaeology gan Sirius Planning I gynnal Asesiad o Arwyddocâd Effaith Datblygiad ar Ardaloedd Tirwedd Hanesyddol (ASIDOHL) er mwyn cyd-fynd â chais cynllunio ar gyfer adeiladu System Storio Ynni Batri (BESS) newydd yn Lambeeth, Goldborough Road, Hundleton, Sir Benfro, SA71 5TR.

Mae'r gwerthusiad wedi dangos ymhlith y chwe HLCAs (ANTS) a aseswyd, y bydd yr effaith gyffredinol ar dri yn cael ei hystyried yn Gymedrol, tra bydd yr effaith ar y tri sy'n weddill yn Ychydig.

O ystyried lleoliad arfaethedig y datblygiad yn y dirwedd hon, yn enwedig o ran pa mor agos ydyw i Burfa Olew Texaco, sydd â rhai o'r strwythurau diwydiannol talaf ac amlycaf ar hyd yr aber – yn ogystal â Gorsaf Newid Greenlink sydd newydd ei hadeiladu a gerllaw, mae'r asesiad yn awgrymu bod yr effaith, yn golygaidd, dim ond Ychydig.

Aeon Archaeology was commissioned by Sirius Planning to carry out an Assessment of the Significance of the Impact of Development On Historic Landscape Areas (ASIDOHL) in order to accompany a planning application for the construction of a new Battery Energy Storage System (BESS) at Lambeeth, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR.

The evaluation has determined that among the six HLCAs assessed, the overall impact on three will be deemed **Moderate**, while the impact on the remaining three will be **Slight**.

Considering the proposed development's introduction into this landscape, particularly in close proximity to the Texaco Oil Refinery, which features some of the tallest and most prominent industrial structures along the waterway – as well as the newly built and adjacent Greenlink Converter Station, the assessment suggests that the impact is, intuitively, only **Slight**.

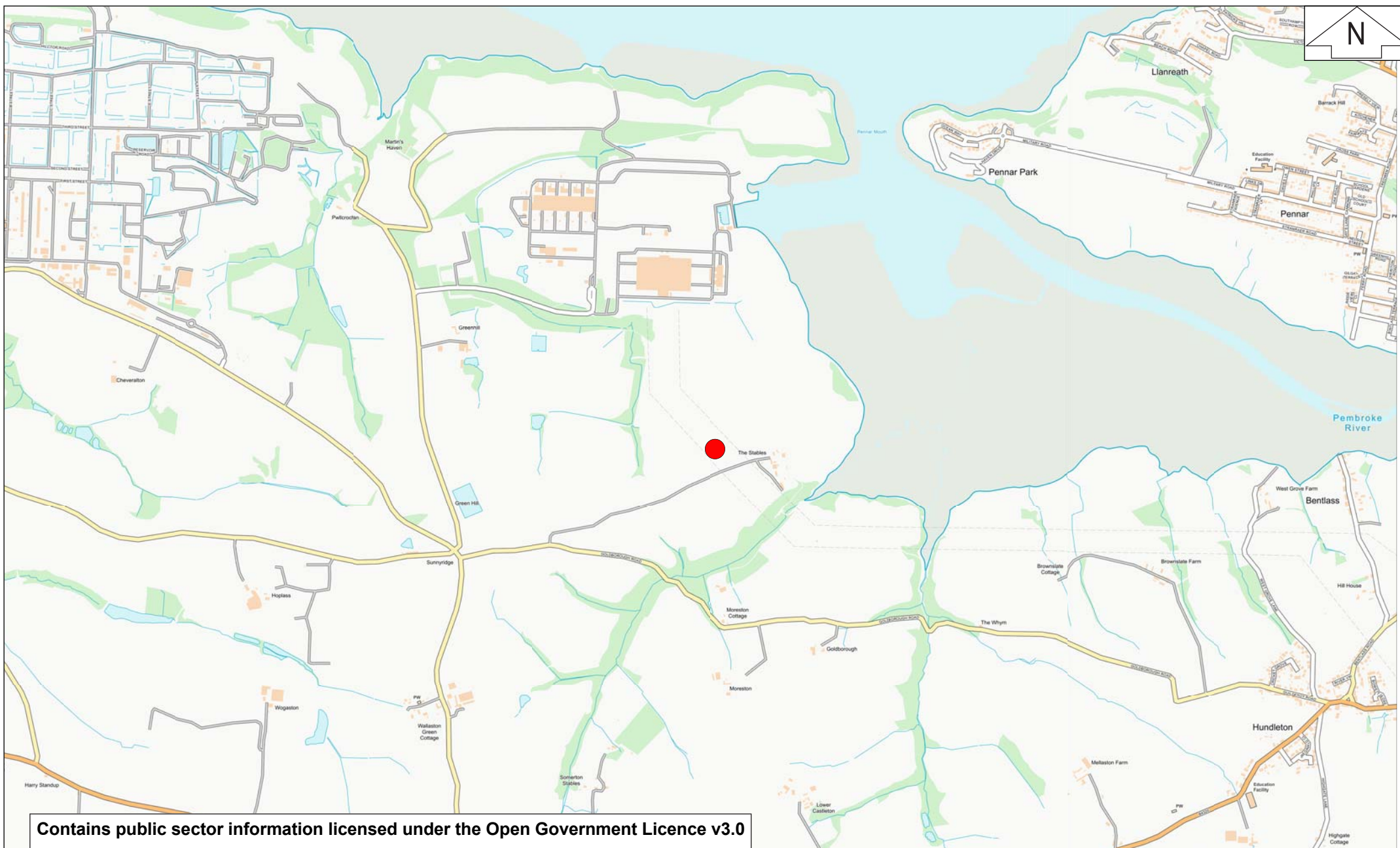
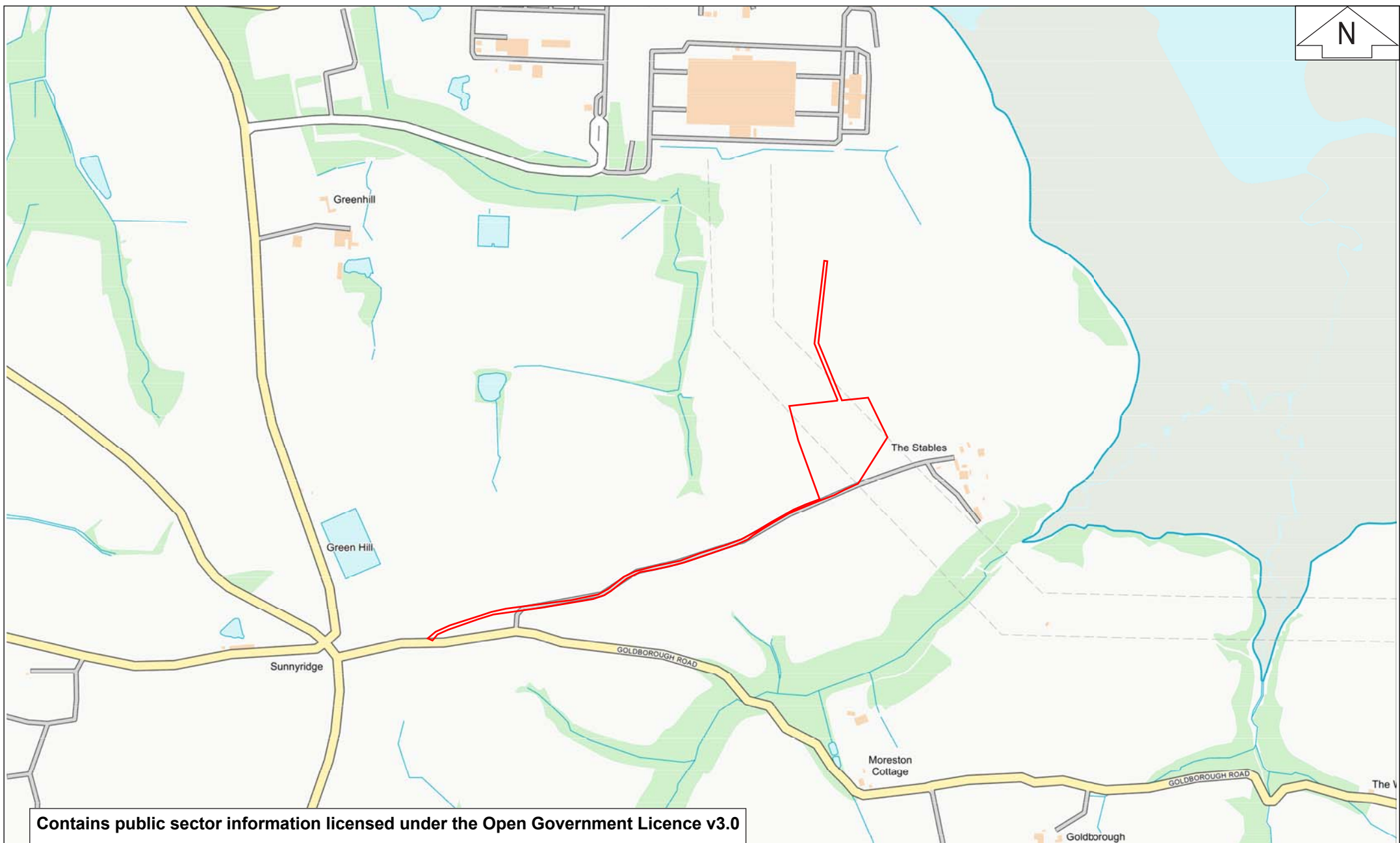


Figure 01: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:20, 000 at A4.



Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

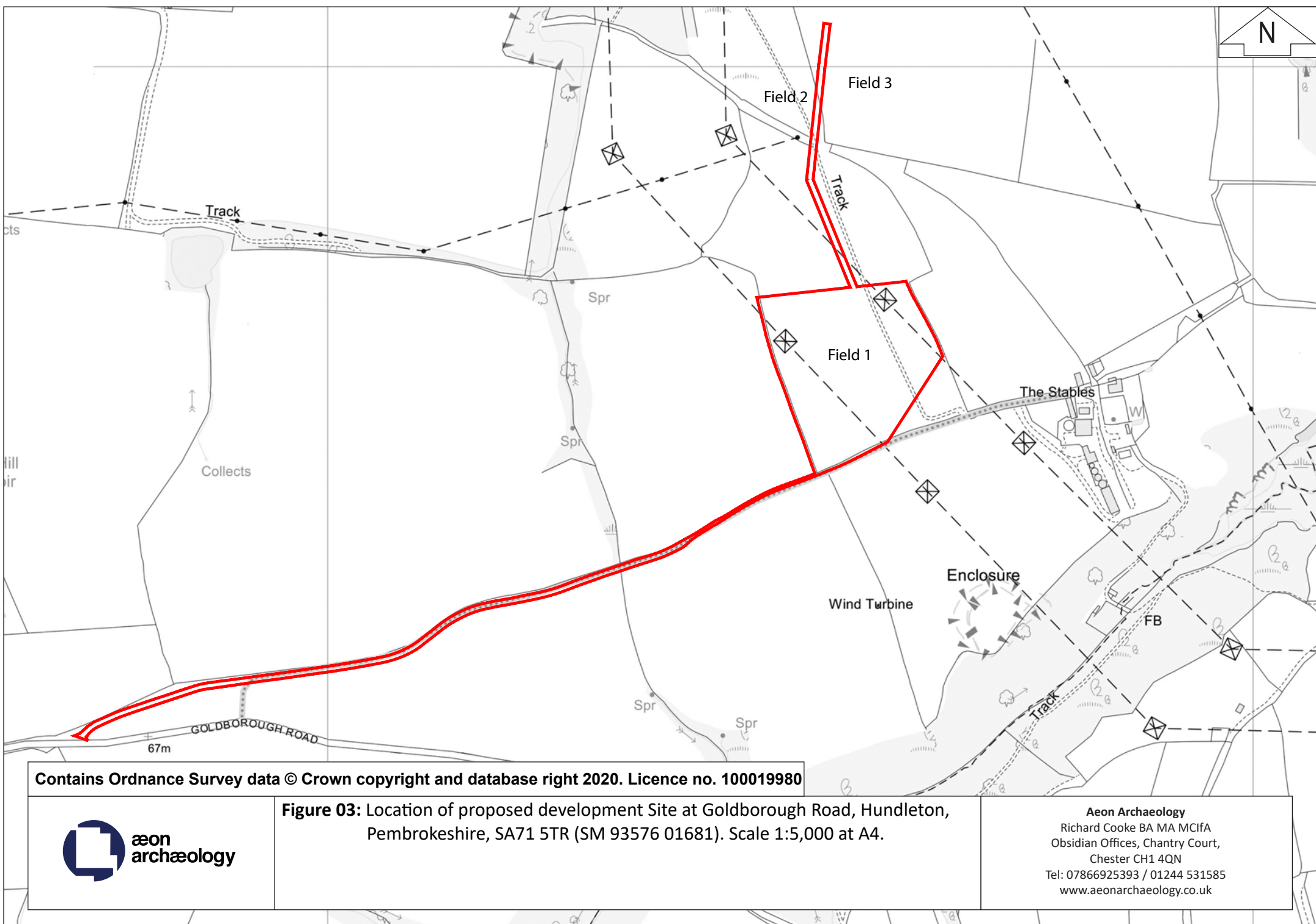


Contains public sector information licensed under the Open Government Licence v3.0



Figure 02: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:10,000 at A4.

Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk



Contains Ordnance Survey data © Crown copyright and database right 2020. Licence no. 100019980



Figure 03: Location of proposed development Site at Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR (SM 93576 01681). Scale 1:5,000 at A4.

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk



- KEY**
- PLANNING APPLICATION BOUNDARY
 - PROPOSED HV UG CABLES
 - PROPOSED PALADIN SECURITY FENCE
 - PROPOSED PALISADE SECURITY FENCE
 - PROPOSED GRAVELLED AREA
 - PROPOSED ACCESS TRACK
 - PROPOSED TARMAC BELMOUTH
 - SWITCHGEAR CABINS
 - SPARES/STORAGE CABIN
 - DNO CABINS
 - PCS & MV SKID
 - BATTERY UNITS



Contains Ordnance Survey data © Crown copyright and database right 2020. Licence no. 100019980



Figure 04: Proposed Site Layout. Scale 1:2,500 at A4.

Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

2.0 SECTION A

2.1 Introduction

Aeon Archaeology was commissioned by Sirius Planning, hereafter ‘the Client’, to carry out an Assessment of the Significance of the Impact of Development On Historic Landscape Areas (ASIDOHL) in order to accompany a planning application for the construction of a new Battery Energy Storage System (BESS) at Lambeeth, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR, hereafter ‘the Site’ (figures 1-4) (centred on NGR **SM 93576 01681**).

The event Primary Reference Number (PRN) assigned by the Dyfed Historic Environment Record (HER) for this ASIDOHL report is **130135**. This report forms part of a phased approach including an archaeological assessment report; a setting assessment report; and a Heritage chapter of an Environmental Statement. All of these reports should be read in conjunction.

2.2 Statutory and Non-Statutory Designations (Summary)

An archaeological assessment has been carried out by Aeon Archaeology in October 2023 (Report 0436) which noted that the proposed development lies within the *Milford Haven Waterway Registered Landscape of Outstanding Historic Interest (HLW (D) 3)* (figure 05). Specifically it lies within the following Historic Landscape Character Areas (HLCAs):

- The Rhoscrowther HLCA (DAT PRN 43,920).

There is 1 Listed Building within 1.0km of the Site but none lie within the Site boundary (figure 08).

The Site lies within 1km of the following Listed Buildings:

- Approximately 880m northwest of the grade II Limekiln Close to S end of Goldborough Pill (Ref: 6571).

There are 2 Scheduled Monuments within 1.0km of the Site but none lie within the Site boundary (figure 09).

The Site lies within 1km of the following Scheduled Monuments:

- Approximately 880m northeast of the prehistoric Wallaston Round Barrows (SAMnumber: PE064);
- Approximately 1km south of the prehistoric West Pennar Camp (SAMnumber: PE262).

:

The entirety of the proposed development Site lies within a Landscape of Outstanding Historic Interest, namely the *Milford Haven Waterway Registered Landscape of Outstanding Historic Interest (HLW (D) 3)* identified on the Register of Landscapes of Outstanding Historic Interest in Wales, Cadw: Welsh Historic Monuments, 1998 (Register). The Register is a material consideration in the planning process as set out in Planning Policy Wales, March 2002 (PPW), paragraph 6.5.23, which states:

‘Information in the Register should also be taken into account by local planning authorities in preparing UDPs and emerging Local Development Plans, and in considering the implication

of developments that are of such a scale that they would have more than local impact on an area on the Register’.

Detailed guidance on the use of the Register is provided 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, 2007 (“Guide to Good Practice”), which includes a Technical Annex setting out the ASIDOHL2 process (Assessment of the Significance of Impact of Development on Historic Landscapes) used in this assessment.

The ASIDOHL2 process is based on assessing development impacts in relation to discrete Historic Landscape Character Areas (HLCAs), into which the Historic Landscape has been geographically sub-divided.

2.3 Summary of the Milford Haven Waterway HLA

The contents and significance of the Milford Haven Waterway Historic Landscape Area is summarised in the Register as:

The Haven is a ria or drowned valley flooded after the end of the last Ice Age; its deep yet sheltered waters extend 30km inland of its mouth, before dividing into the Eastern and Western Cleddau which continue as tidal rivers for some distance. Tributaries such as the Pembroke, Carew and Cresswell Rivers and several smaller pills flowing into the Haven, significantly increase the length of its meandering and incised shore and coastline. On either side and extending to the Dale and Angle peninsulas at the Haven’s mouth, the low coastal plateau of south Pembrokeshire seldom rises above 80m above OD.

The littoral landscape of Milford Haven encapsulates the whole chronological range of maritime conquest, settlement, commerce, fishing and defence from the 11th century to the changing realities of the late 20th century. This is a highly articulate and distinctive land and seascape; its integrity is its highest factor. It exhibits both continuity and adaptation and its overall setting and range of features make it unique in Wales if not in Britain. Yet, despite its robust adaptation to the modern industrial and maritime operations of the oil and power industries, the integrity of this multiperiod coastal landscape also depends on the conservation of its historic elements.

Iron Age promontory forts are sited on several of the headlands at the entrance and along the course of the Haven and the Daugleddau. Early medieval, Christian and Viking sites are evidenced on place-name, documentary and epigraphic grounds, such as Early Christian Inscribed Stone monuments, but are no longer visible in the landscape. By contrast, the Norman conquest, achieved by coastally sited castle-boroughs, is still dramatically present at Pembroke, at Haverfordwest, and at Carew, all sited on the upper reaches of the rivers. Carew did not develop into a borough, and excavations, combined with a historic landscape study of Carew parish, has shown that a Dark Age stronghold and possible Romano-British site preceded the Norman castle, an indicator perhaps of similar pre-Norman foci at Pembroke and Haverfordwest. The precocious growth of these boroughs by the 13th century was partly because of their use as springboards for the Norman invasions of Ireland.

In more recent times, the construction of the Cleddau bridge marked the end of a network of cross-Haven ferries, which explains the historic pattern of communications and settlements on the shores of the Daugleddau still visible in surviving traces of landing places, piers and jetties. Early cross- Haven routes led to St Davids and Dark Age embarkation and landing points. At the turn of the 18th and 19th centuries, two new towns were constructed, Milford in 1790 by Sir William Hamilton, and Pembroke Dock in 1802 when the Royal Naval Dockyard was transferred from Milford. Both towns have regular planned layouts, both have experienced a history of boom and slump in shipbuilding, fishing and as railheads and ocean

terminals. Despite some major changes in the late 20th century, they both preserve distinctive townscapes and waterfronts and much still remains of the Naval Dockyard.

Changes in the ship sizes and technology meant that with the construction of these two towns, an earlier pattern of more dispersed coastal trade from places like Dale and Angle at the mouth of the Haven, and gradually from Pembroke and Haverfordwest, was relocated and concentrated in the new docks. This has to some extent preserved, even fossilized, quays, jetties and landing places and small settlements like Pennar, Lawrenny, Landshipping or Cosheston (which had two shipbuilding yards in the 18th century) further up river. These small ports served the coal mines of the Pembrokeshire coalfield located on both shores of the Daugleddau, and also the large limestone quarries at West Williamston, where a remarkable series of short canals through the tidal flats allowed direct barge access to the working faces at high tide. The Daugleddau ports flourished in the 16th, 17th and 18th centuries, but continued to work through the 19th century by changing to using barges to tranship cargoes down river to bigger vessels at the mid-Haven ports.

Medieval castles in the upper reaches of the Haven like Benton, Picton and Carew became transformed into gentry residences. Medieval ecclesiastical establishments, mainly small like Pill Priory or the Slebech Preceptory, survive as ruins or were adapted into residences. Only Picton Castle has an unbroken history of occupation and transformation into a great mansion with parks and gardens utilising the foreshore of the confluence of the Eastern and Western Cleddau Rivers. Conversely, well preserved sites of earlier, abandoned 17th century gardens and parks are still being recognized, notably the recently discovered terraced gardens of the vanished Landshipping House.

The most complete of the military and naval fortifications and service structures in the Haven are the mid to late 19th century Palmerstonian Forts. The development of naval defence and weaponry can be appreciated in its entirety by viewing the forts both from the waterway and from the shores together with barracks and inland forts, stores and depots. These military dinosaurs present problems of conservation and use, and the same fate is beginning to overtake some if not all of the late 20th century's legacy to the Haven, namely the jetties, oil terminals and shore processing facilities of the oil and power industries. This industry reached its zenith in the 1970s when Middle Eastern supply difficulties forced oil transport to use ocean routes in the VLCCs (Very Large Crude Carriers) for which the Haven, with its deep waters and westerly position on the north west European seaboard, was particularly suited. Visually, and in terms of the impact on the present landscape, the oil industry and the regulatory shore installations of traffic control and sea navigation systems run by the Milford Haven Port Authority cannot be ignored ([https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=en&id=HLW%20\(D\)%203](https://cadwpublic-api.azurewebsites.net/reports/historiclandscape/FullReport?lang=en&id=HLW%20(D)%203)).

The proposed development is expected have a direct (physical) impact upon the following HLCAs within the Milford Haven Waterway Historic Landscape Area (HLA) (figure 10):

Rhoscrowther HLCA 341 (DAT PRN 43920)

The proposed development is expected to have an indirect (mainly non-physical) impact upon the following HLCAs (figure 11):

Pembroke Dock HLCA 306 (DAT PRN 43875)

Gulf Oil Refinery HLCA 310 (DAT PRN 43879)

Pembroke Power Station HLCA 313 (DAT PRN 43882)

Texaco Oil Refinery HLCA 314 (DAT PRN 43916)

Carew, Milton and Nash HLCA 338 (DAT PRN 43914)

Hundleton and Maiden Wells HLCA 340 (DAT PRN 43915)

This report provides a full assessment of the significance of the impacts of the proposed development on the Historic Landscape in relation to the above HLCAs, in compliance with the ASIDOHL2 process.

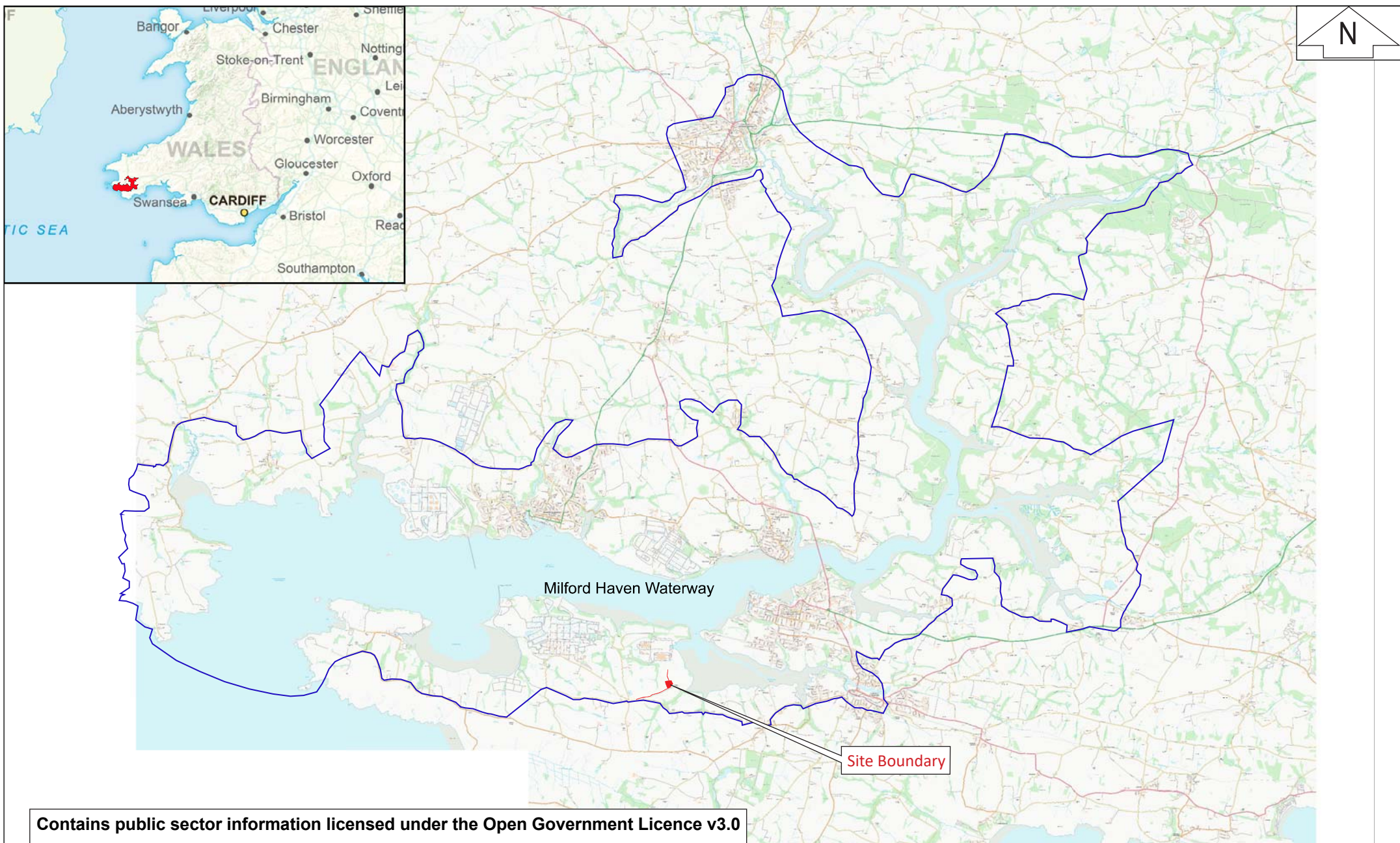


Figure 05: Location of the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest (HLW (D) 3). Scale 1:125,000 at A4.

3244	Lambeeth	Promontory Fort
3255	Lambeeth	Flint Working Site
3373	Cross Park	Cross
10790	Goldborough	Settlement
10791	Moreston;moreston	Settlement
11694	Lambeeth Farm	Farm
32777	Angle	Position Marker
33153	Pennar Gut	Quarry
33154	Pennar Mouth	Farmstead;Garden
34572	Cocheston Pill	Wreck
34612	Goldborough Pill, Lime Kiln	Lime Kiln
34613	Goldborough Pill	Building
34614	Lambeeth Mill; Cocheston Pill	Cottage;Mill
34615	Cocheston Pill	Lime Kiln
34616	Cocheston Pill	Quarry
34617	Cocheston Pill	QUARRY
34618	Pwllcrochan	Lime Kiln
34619	Pwllcrochan	Quarry
35054	Goldborough Pill	Quarry
35055	Goldborough Pill	Wreck
35056	Cocheston Pill	Bridge
35057	Cocheston Pill	Quarry
35059	Cocheston Pill	Findspot
39353	Goldborough Farm	Farm
39354	Goldborough Farm	Pigsty
39355	Goldborough Farm	Farmhouse
39356	Goldborough Farm	Building
39357	Goldborough Farm	Cart Shed
39368	Goldborough Farm	Pump House
43882	Pembroke Power Station	Power Stn
48371	Lambeeth Farm	Round Barrow Pair
60413	Limekiln Close to S End of Goldborough Pill	Limekiln
103265	Margery Bottom	Well
103266	Margery Bottom	Cottage
120942	Lambeeth	Farmstead
120945	Moreston	Farmstead
120946	Goldborough	Farmstead
126697	Well	Well

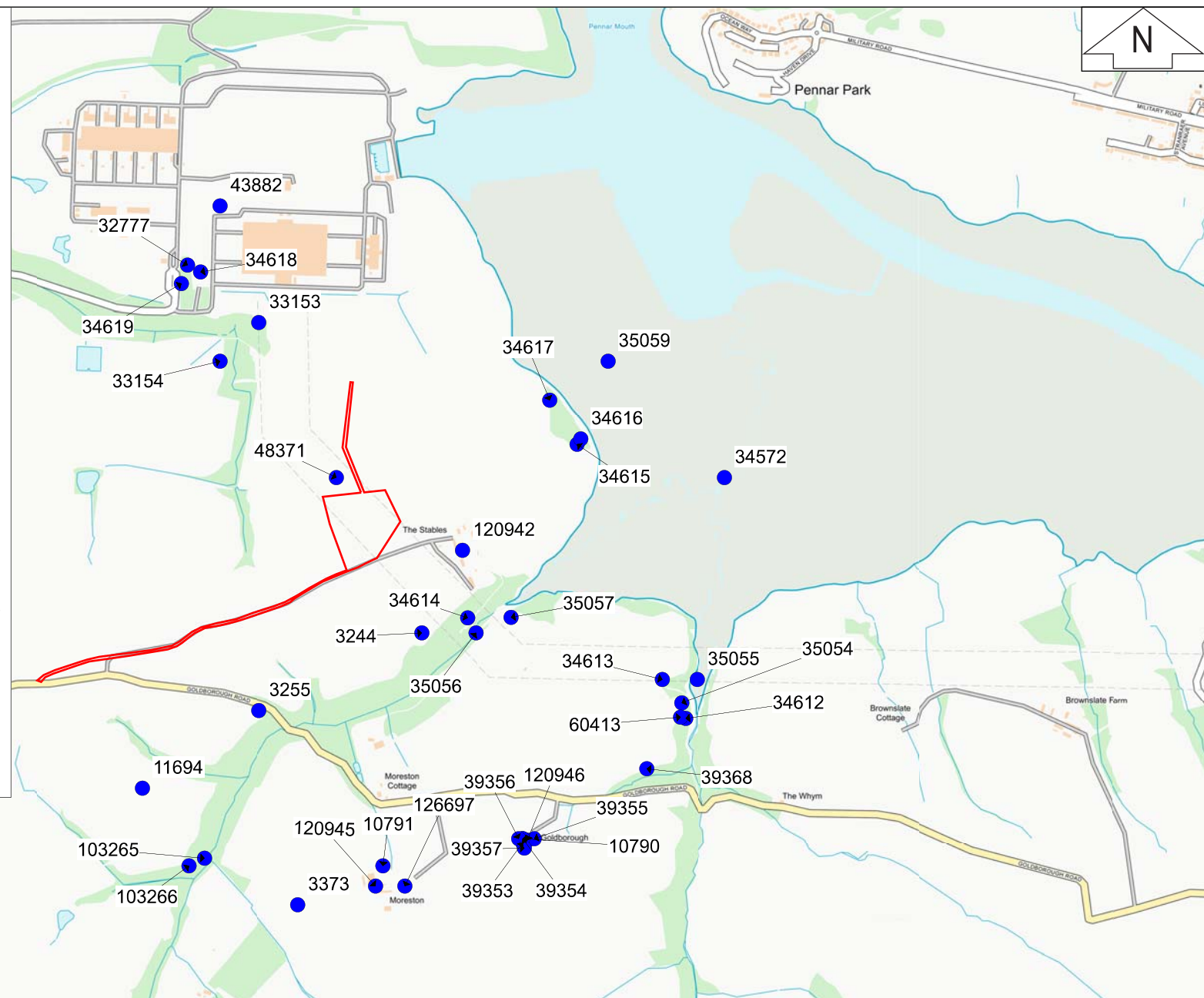


Figure 06: Location of non-designated monument points from the Dyfed Historic Environment Record. Scale 1:15,000 at A4.

Contains public sector information licensed under the Open Government Licence v3.0
This report contains material which is the copyright of the DAT HER Charitable Trust

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

- 305287 Lambeeth Enclosure
- 506961 Lambeeth Lime Kiln
- 506960 Quarry Lambeeth
- 90546 Shipwrecks near Pembroke Power Stn
- 524952 Wharf, old quarry and lime kiln
- 300012 Pembroke Power Stn
- 22012 Greenhill Farm
- 411074 Greenhill Farm, Pwllcrochan
- 274846 Lune, wreck
- 11161 Wallaston Calvinistic Methodist Chapel

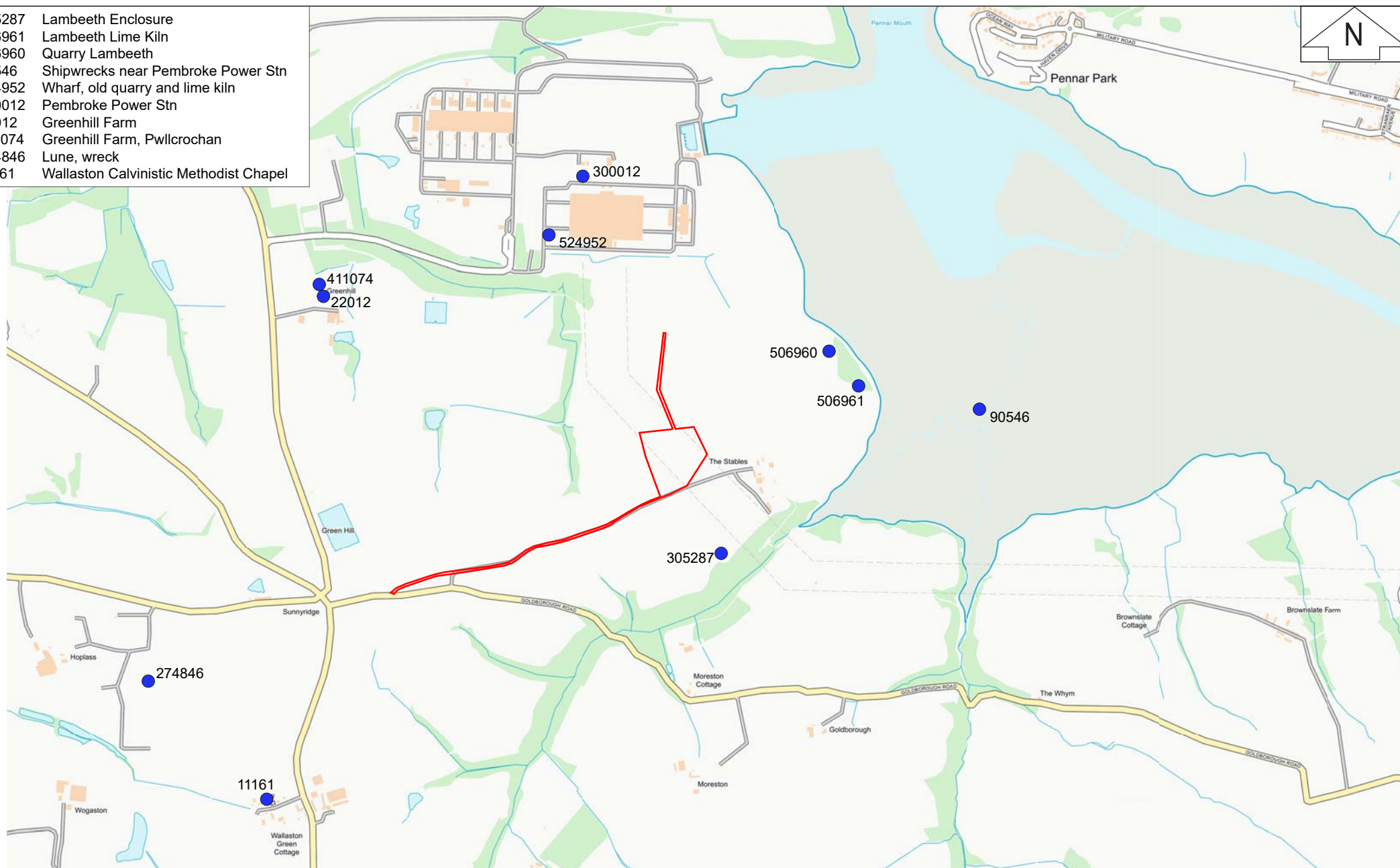


Figure 07: Location of non-designated monument points from the National Monument Record within 1km. Scale 1:15,000 at A4.



Contains public sector information licensed under the Open Government Licence v3.0
This report contains material which is the copyright of the DAT HER Charitable Trust

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

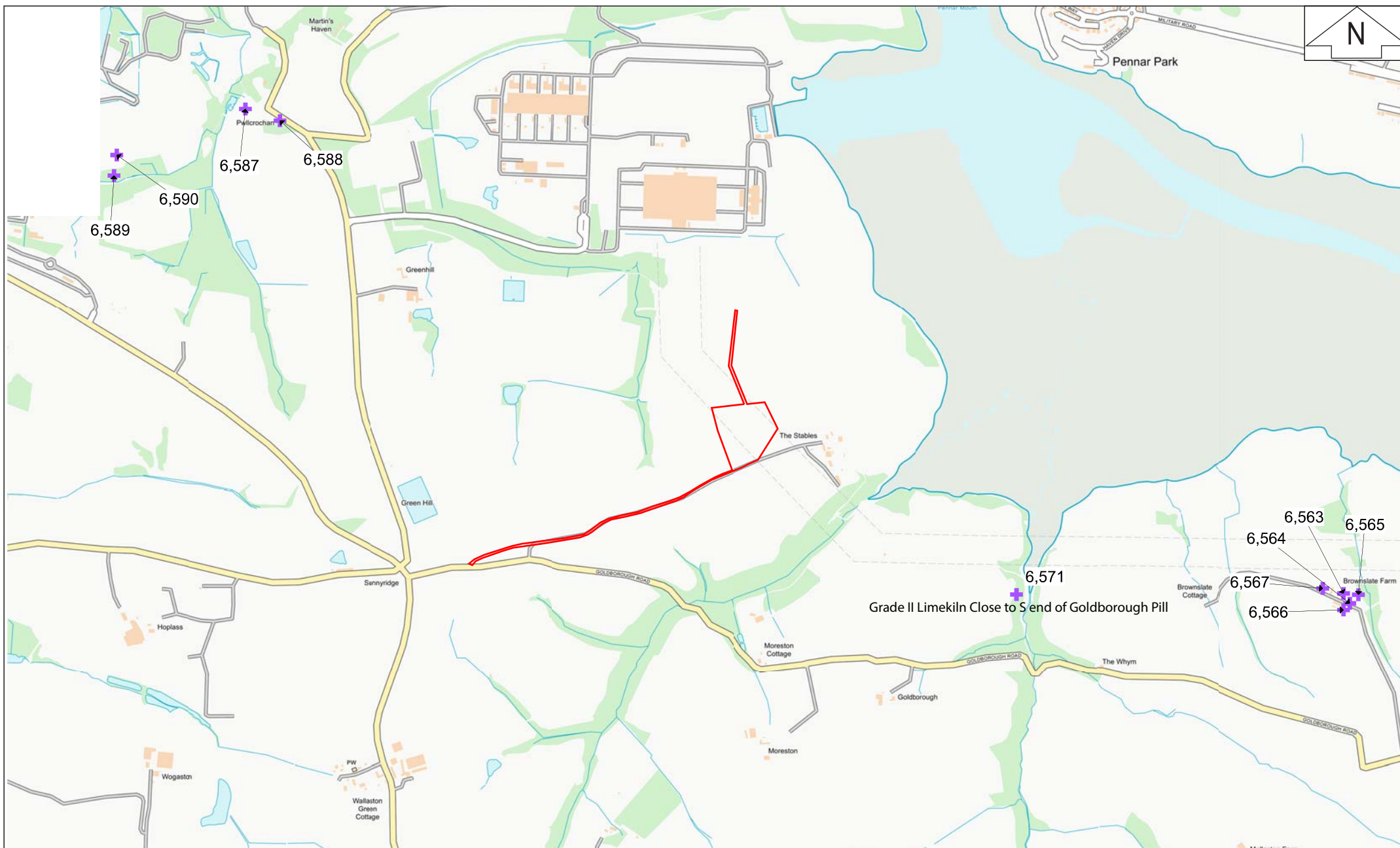


Figure 08: Location of Listed Buildings. Scale 1:15,000 at A4.



Contains public sector information licensed under the Open Government Licence v3.0
Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), DATE [19/10/2023], licensed under the Open Government Licence

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

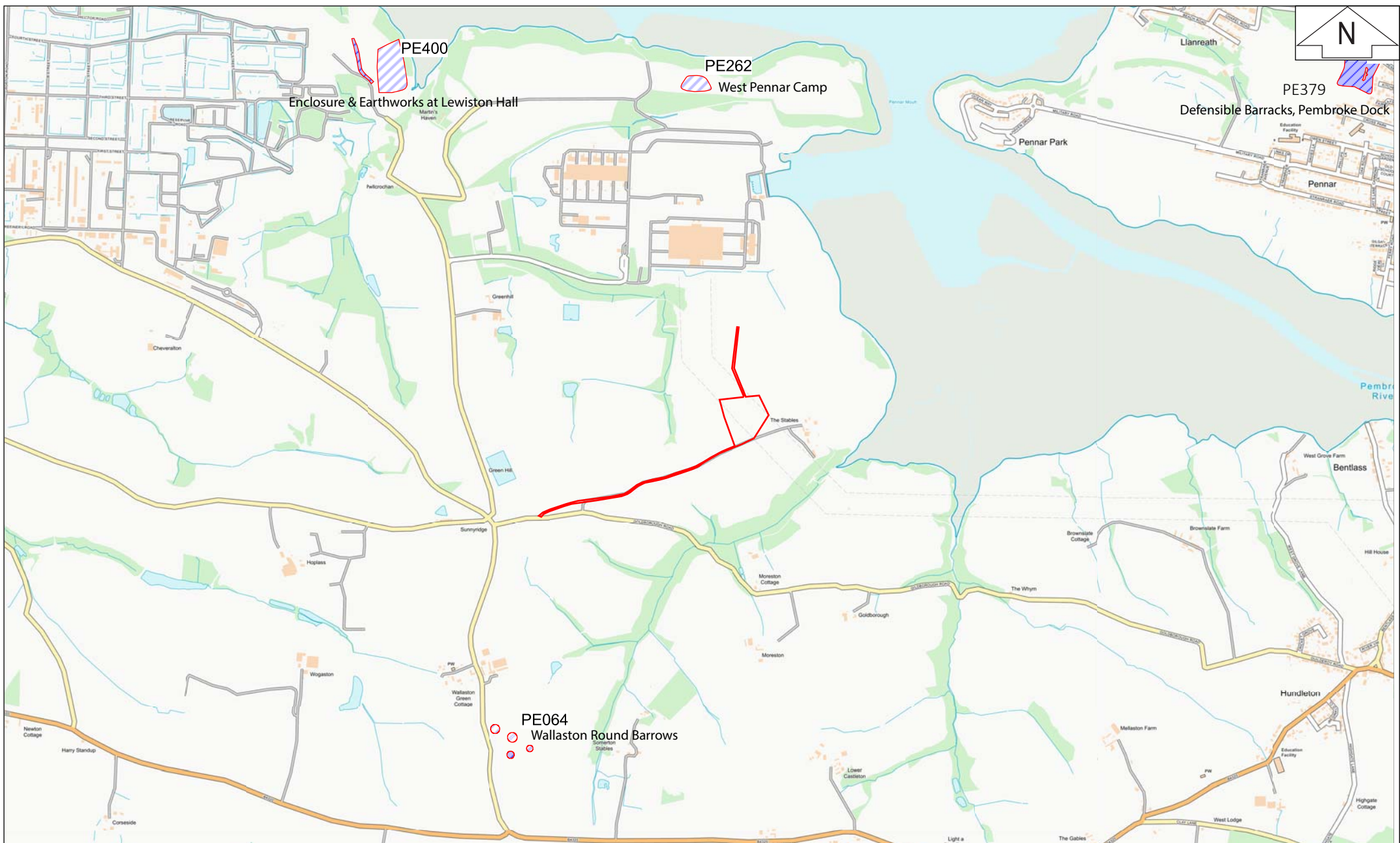


Figure 09: Location of Scheduled Monuments. Scale 1:20,000 at A4.



Contains public sector information licensed under the Open Government Licence v3.0
Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), DATE [19/10/2023], licensed under the Open Government Licence

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk



Contains public sector information licensed under the Open Government Licence v3.0



Figure 10: Location of the Rhoscrowther HLCA 341 (DAT PRN 43920) (Milford Haven Waterway HLA boundary shaded yellow).
Scale 1:50,000 at A4.

Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), DATE [19/10/2023], licensed under the Open Government Licence

Aeon Archaeology
Richard Cooke BA MA MCifA
Obsidian Offices, Chantry Court,
Chester CH1 4QN
Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

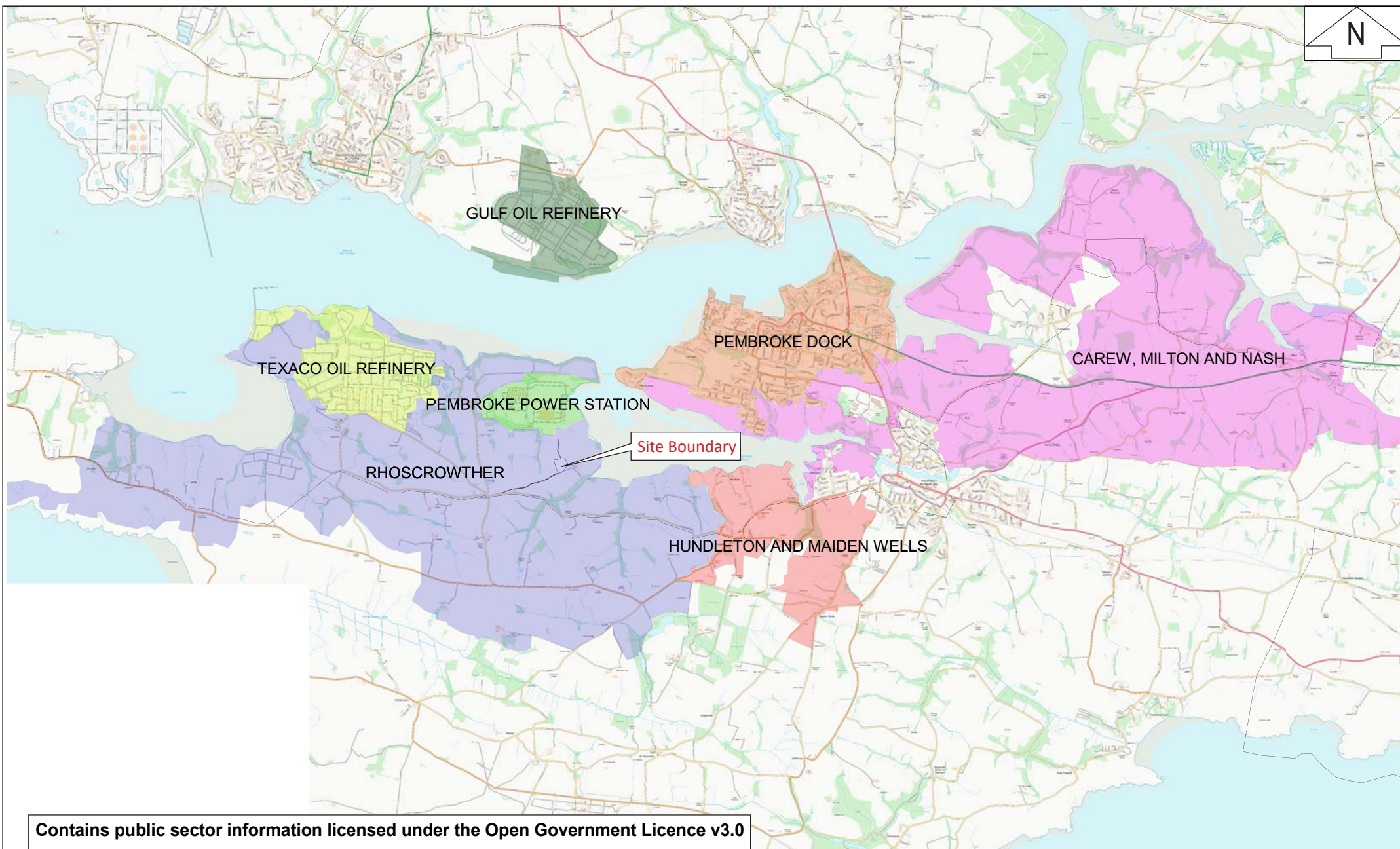


Figure 11: Location of the Rhoscrowther HLCA; Pembroke Dock HLCA, Gulf Oil Refinery HLCA; Pembroke Power Station HLCA; Texaco Oil Refinery HLCA; Carew, Milton and Nash HLCA; Hundleton and Maiden Wells HLCA. Scale 1:70,000 at A4.

Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), DATE [19/10/2023], licensed under the Open Government Licence

Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

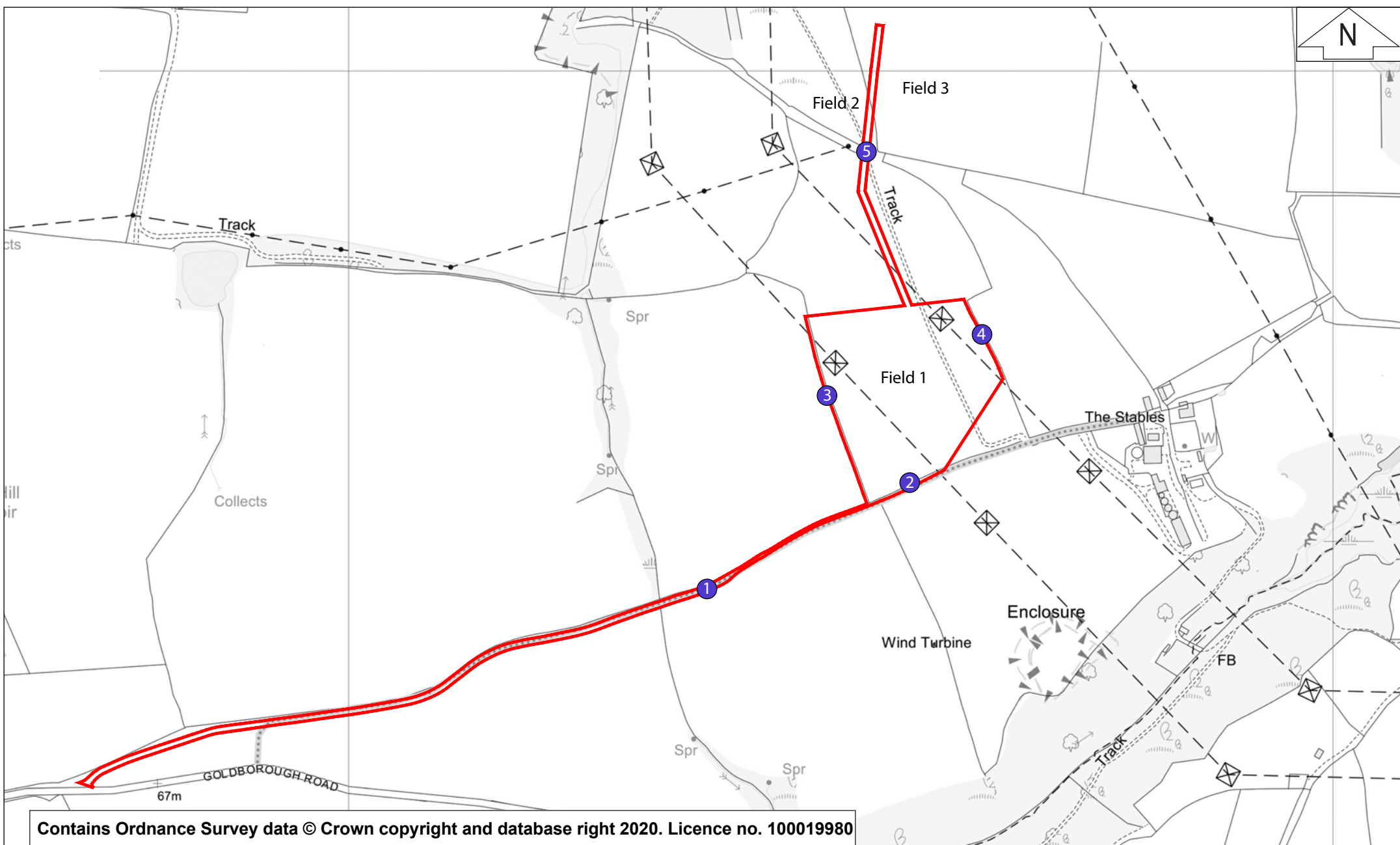
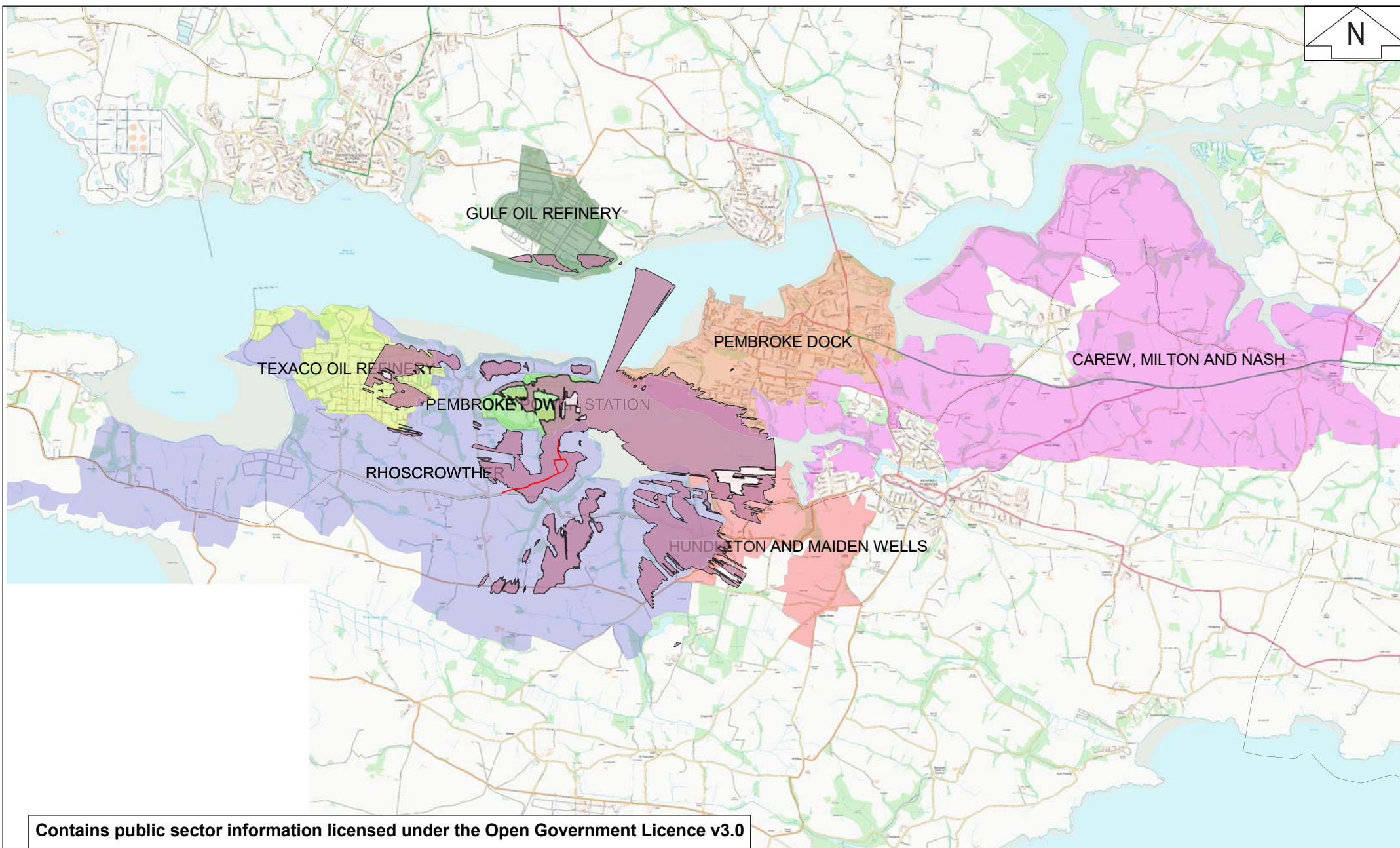


Figure 12: Location of archaeological features within the Site boundary as identified in the archaeological assessment (Aeon report 0436). Scale 1:5,000 at A4.



Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk



Contains public sector information licensed under the Open Government Licence v3.0



Figure 13: 5km Zone of Theoretical Visibility (ZTV) overlaid on the Rhoscrowther HLCA; Pembroke Dock HLCA; Gulf Oil Refinery HLCA; Pembroke Power Station HLCA; Texaco Oil Refinery HLCA; Carew, Milton and Nash HLCA; Hundleton and Maiden Wells HLCA. Scale 1:70,000 at A4.

Designated Historic Asset GIS Data, The Welsh Historic Environment Service (Cadw), DATE [19/10/2023], licensed under the Open Government Licence

Aeon Archaeology
 Richard Cooke BA MA MCifA
 Obsidian Offices, Chantry Court,
 Chester CH1 4QN
 Tel: 07866925393 / 01244 531585
www.aeonarchaeology.co.uk

3.0 ASIDOHL STAGE 1: CONTEXTUAL INFORMATION

3.1 Historical background

(Reproduced from Aeon Archaeology report 0436)

Prehistoric Period

Archaeological evidence for the Palaeolithic and Mesolithic periods in Wales spans almost 250,000 years, from the first Neanderthals, through the arrival of modern humans c. 30,000 years ago, to the emergence of ever more established farming communities, some 6,000 years ago. Within the Palaeolithic period, pre-modern human presence was seasonal, with tribes of hunter gathers exploiting varying landscapes and many settlements located in floodplains due to dependencies on scavenging and/or hunting for meat and foraging for vegetable foods. Southern Pembrokeshire is known to contain archaeological resources relating to the Palaeolithic, although these are mostly stray finds or located in cave sites, protected from glacier movements at the end of the last Ice Age. Although no known sites from that period are located within the search area, the potential remains for remains of Palaeolithic date to be present within the development area cannot be discounted.

The Mesolithic Period (10,000 – 4,000 BC) is defined by the gradual increase in temperature following the Devensian glacial period and saw a change in the practices of early humans with the development of agricultural technologies (Pollard 2008). The Mesolithic activity in Wales is largely concentrated along the coastal areas with limited inland sites found on upland areas located within river terraces or lakes. A flint working site (figure 05) has been identified c. 250m south of the Site. According to the HER records, this site was identified on the Wainwrights' 1963 map and is based on A L Leach's records. No further information on this site is provided.

The Wogan Cavern c. 4.5km east of the Site underneath Pembroke Castle comprises a high natural chamber overlooking the Pembroke River. Flint tools within this cave indicate occupation from at least the Mesolithic period (Cadw 2015).

During the Neolithic and Early Bronze Age periods there was a significant shift from hunter and gatherer practices to agricultural practices. Burial and ritual sites from this period have been identified across Wales, with known features consisting of large ceremonial, religious and burial monuments (Aston 1997). In the Neolithic period, burial monuments consisted of communal burials in the form of chambered tombs and earthen long barrows, but in the late Neolithic period and Bronze Age (c. 2,400 BC – 700 BC) there was a shift from communal burials to single burial monuments (Renfrew 1973). Settlement evidence, however, is still scarce, particularly for the Neolithic and Bronze Age. The late Bronze Age and Early Iron Age saw a shift in settlement patterns from open agricultural layouts to more enclosed defensive hillfort settlements, which characterises the Iron Age archaeological record of Wales.

Within the study area a number of round barrows have been identified. This includes the Scheduled group of four Bronze Age round barrows, known as Wallaston Round Barrows (PE064) c. 880m south of the Site. The Scheduled Monument comprises the earthen remains of all four barrows.

A pair of possible Bronze Age round barrows is recorded on the DAT HER located 44m to the north of the Site (Lambeeth Farm Round Barrows (documentary evidence) (DAT PRN: 48371). These were reportedly part excavated in 1929 however no trace of them is now evident and nothing is visible on the Lidar data or historic aerial photographs.

The site of an Iron Age fort (DAT PRN: 3244) has been identified c.225m south of the Site. This fort represents a small, semi-circular scarp-edge fort naturally well protected along its eastern side by a steep slope which falls away to a stream 25m below. The fort is recorded on historic mapping as an unlabelled enclosure, and is later labelled as settlement on the Ordnance Survey map of 1976.

Roman Period

The Roman military arrived in Britain in AD 43, bringing large parts of lowland England under their control by the summer of AD 47. By the AD 50s and 60s attentions then turned to the conquest of Wales, and Roman forces were soon confronting the Iron Age tribes of Wales. Wales was finally brought under Roman control in AD 76/77.

Limited archaeological remains dating to this period have been identified within the environs of the Site, and no features have been recorded within the study area.

Early Medieval and Medieval Periods

The early medieval history of Wales is fragmented and poorly documented. Archaeological evidence for this period is also usually limited, typically comprising scant buried evidence for relatively simple post and wattle-built houses and enclosures forming a dispersed pattern of both enclosed and unenclosed farmsteads.

In 1093 AD, Arnulph de Montgomery invaded the area and erected a fortification on what is now the site of Pembroke Castle. In 1098 AD a priory church dedicated to St Nicholas was founded 'at Pembroke, a castle of [Arnulph's] in Wales'. This appears to represent the foundation of the Benedictine priory at Monkton, which survives as the present-day parish church. St Mary's Church, which lies beyond the 1km study area, was granted to Monkton Priory in the 14th century and in the field to the south of the church earthwork remains of 5 buildings have been identified which represent the settlement at Pwll Crochan.

No known early medieval archaeological remains have been identified within the Site and there is limited confirmed evidence for the study area. However, it was likely that during the medieval period much of this landscape was associated with medieval manorial settlement of Castlemartin which was the demesne manor of the Lordship of Pembroke and largely formed agricultural land.

Two medieval settlements have been recorded by the HER within the study area, Moryston (DAT PRN: 10791) and Goldborough (DAT PRN: 10790). However, these have been identified through documentary evidence only and no medieval settlement remains have been identified. Farmsteads survive in these locations and currently comprise a mix of post-medieval and modern buildings. Many of the farms in the wider area also began as villages and are mentioned in accounts of the 13th century to the 15th century (DAT 2022), however no medieval remains have been identified.

It is likely that the Site comprised of agricultural land within this period, however, no evidence of pre-18th century land use has been identified.

Post-medieval Period

During the post-medieval period the Site lay within the parish of Pwllcrochan. This parish has historically been agricultural with the prominent occupation including pastoral farming, inshore fishing and shelling on the Pembroke Estuary. Within the documentary sources, the use of Crowe Pool for Oyster Pools has been noted.

The current field system, represented by large, irregular fields and dispersed settlement, dates to the late 18th century (Dyfed 2022). The earliest map available for the Site was the 1840 Tithe Map, however, a historic field boundary is shown in an east-west orientation within the Site on aerial photographs (REFS) which indicates some field boundary loss. Additionally, a trackway through the centre in a northwest/ southeast orientation. A number of post-medieval farmsteads are located within the study area including Lambeeth, Moryston, Goldborough, Somerford, and Wallaston.

There was, however, also an industrial element to this parish, with two blacksmiths, a corn mill, and a pump house recorded within the HER. In addition, a number of lime kilns were constructed during the 19th century (DAT PRN: 34612; 34615; 34618; 60413). Only those to the south of the Site are still extant and have been designated as a Grade II Listed Building. A number of quarry sites (DAT PRN: 33153; 34616; 34617; 34619; 35054; 35057) are also scattered throughout the east of the study area, largely on limestone and sandstone bedrock, and likely were associated with the adjacent kilns.

Modern development has been extensive within this landscape, with Pembroke Power Station constructed north of the Site in the 1960s. This is currently located c. 310m north of the Site, however, during the 20th century this extended into the northern extent of the Site.

A number of shipwrecks have been recorded within the study area, however their exact location is not recorded and thus they have not been shown on the figures. There is however, a recorded findspot site (DAT PRN: 35059) from where steel hawsers, iron and steel fittings, scraps, and timber fragments have been recovered within the tidal muds. These finds are thought to have been associate the Second World War warships which were beached here.

Historic cartography indicates that by the 19th century the Site was largely agricultural in nature. The Site is first depicted on the 1840 Tithe Map of the parish of Pwllcrochon (figure 19) which demonstrates that the Site boundary covered 6 different fields. The main part of the Site falls within plot 199, with the access road to the south traversing between plots 207, 209, and 210. A track is shown along the Site in plot 210. A second trackway is shown linking Lambeeth farm in the southeast with Pwllcrochan in the northwest. The northern extent of the Site (electrical connection) falls within the southeast corner of plot 198 and then into plot 197. The fields were all owned by John Mears and occupied by William Hall, aside from plot 210 which was occupied by John Thomas. These fields were all pasture / arable, besides field 209, which is recorded as ‘furze’ and thus likely was fallow heathland. The boundaries of these fields remain mostly unchanged since 1840, the major change is the construction of the road to Lambeeth Farm which splits from Goldborough Road to the south of the Site. By the 1864 survey the extant track within the Site is depicted.

The accompanying tithe apportionment provides the following information:

Plot	Landowner	Tenant	Field Name	Use
210	John Mears	John Thomas	South Hill	Pasture
209	John Mears	William Hall	West Hill	Furze
207	John Mears	William Hall	East Hill	Pasture
199	John Mears	William Hall	East New Park	Arable
198	John Mears	William Hall	Upper Meadow	Pasture
197	John Mears	William Hall	West Croft	Pasture

The 1968 aerial photograph shows that the northern part of the Site infringed into part of Pembroke Power Plant development. The 1965 aerial photograph shows the initial landscaping/construction works associated with the power plant, which were located to the north of the Site, however by 1968 the associated groundworks had extended into the Site.

Although, no buildings were constructed within this area and by 1977 the northern part of the Site and its surrounding fields had returned to agricultural land.

3.2 Summary description of the proposed development

It is proposed to construct a BESS across 3.5ha of agricultural land off Goldborough Road. The Site area includes the access track and cable route to the proposed point (an electricity pole in the field to the northeast of the proposed battery compound).

The Site is situated 500m south of Pembroke Power Station, c.1.5k northeast of the existing Wallaston Green Solar Farm, c. 2.3km southeast of the Valero Oil Refinery and c.3km southwest of Pembroke Dock. Pembrokeshire Coast National Park lies c.2.2km to the southwest of the application Site, and is separated from the Site by woodland, roads, hedgerows and fields.

The land within the Site lies on a northern lying slope, with the northern extent of the Site at 22m above Ordnance Datum (OD) and the south of the Site on 42m OD. The access track gradually extends up to the slope and meets Goldborough Road at 65m OD. The estuary of the River Pembroke lies 450m to the east of the Site. The wider landscape is comprised of agricultural fields and small parcels of woodland.

The Site sits in a semi-rural setting, with several farms in the locality and agricultural fields, however the landscape is strongly influenced by Pembroke Power Station and Valero Oil Refinery. The Site is irregular in shape and encompasses three agricultural fields, currently used for grazing. The fields are divided by established hedgerows interspersed with trees. The battery compound is to be positioned between two parallel rows of overhead power lines. Appropriate stand-off distances between the overhead lines have been built into the design of the Site.

The BESS and associated infrastructure will have a maximum export capacity of 49.9MW. The proposed development will comprise of 46 no. battery container units, 23 PCS/MV containers, 2no. spares/storage containers, 2no. switchgear containers, 2no. fire water tanks, 1no. fire water pumphouse, 2no. DNO cabins, a 132kv substation, internal access roads and perimeter fencing with CCTV. The proposed development will connect into the point of connection at an electricity pole in the field to the northeast of the proposed battery compound.

The facility will deliver significant environment benefits with the capacity to store and supply over 72,869,875kWh of electricity per year as an enabling technology for renewable generation and a replacement for gas fired power generation in providing rapid response power to satisfy peak demand. In performing these roles, the development has the ability to reduce carbon dioxide emissions by over 20,499 metric tonnes annually whilst also providing electricity storage equivalent to supplying over 20,819 homes.

3.3 Context for ASIDOHL assessment

At the request of Sirius Planning Ltd Aeon Archaeology have been contracted to undertake an ASIDOHL2 assessment of the significance of the impact of the proposed development on the Historic Landscape.

3.4 Planning history of the proposed development site

This report is in relation to a new planning application (yet to be submitted), intended to seek permission for the construction of the new BESS at Lambeeth.

3.5 Summary of the planning policy context

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO *Convention Concerning the Protection of World Cultural and Natural Heritage*¹ and the *European Convention on the Protection of the Archaeological Heritage*², commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and Country Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation — the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

Planning Policy Wales (edition 10, 2018) sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

Various principles and policies related to cultural heritage and archaeology are set out in Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.1.5 concerns planning applications:

The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for

¹ UNESCO, 1972, *Convention Concerning the Protection of the World Cultural and Natural Heritage*

² Council of Europe, 1992, *European Convention on the Protection of the Archaeological Heritage*

future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales

3.6 Assessment constraints

The following constraints apply to the ASIDOHL2 assessment presented below.

Site visits to the proposed development Site and to selected vantage points within the HLCAs upon which it was judged there would be discernible and measurable impacts, was undertaken on 01/11/2023 and 02/11/2023. The weather conditions were changeable between heavy rain, overcast conditions and starkly contrasting sunlight. This impacted upon the viewpoint photography but the photographs are deemed acceptable for the purposes intended.

All viewpoint photographs were taken at 35mm focal length to simulate actual points of view. Where the visual impact upon Scheduled Monuments and Listed Buildings has been assessed the results of the Setting of Historic Assets report has been utilised and has been reproduced in appendix I.

The limits of the Historic Landscape are taken to be those identified in Aeon Report 0436, which is shown by the solid blue line in Figure 05. This is in line with the latest guidance on determining landscape edges provided in the *Register Guide to Good Practice*, sections 7.1 – 7.7 (p. 13).

The Zone of Theoretical Visibility (ZTV) study supplied by the Client was undertaken without the adjacent new Greenlink Converter building being included as this building is too new for the data generation to take into account. As such the visual photography will in some cases contradict the ZTV study.

3.7 Assessment methodology

The assessment follows the guidance for the ASIDOHL2 process set out in the *Register Guide to Good Practice*, and was undertaken by Richard Cooke BA MA MCIfA, archaeological Contractor and Consultant at Aeon Archaeology, with advice on the ASIDOHL2 process provided by 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.

4.0 ASIDOHL STAGE 2: ASSESSMENT OF DIRECT, PHYSICAL IMPACTS OF DEVELOPMENT

4.1 Introduction

The second stage of the ASIDOHL2 process describes and as far as possible quantifies the direct physical impacts of the proposed development on the HLCA's affected by the development. This is described and quantified in three ways, which can be summarised as follows:

- a. In absolute terms, i.e. the proportion of the surface area of the HLCA affected.
- b. In relative terms, i.e. the proportion of each of the 'key historic landscape characteristics' (the baseline being those characteristics identified in the HLCA Report) that will be permanently lost or removed by the development.
- c. In landscape terms, the contribution that the 'key historic landscape characteristics' identified in (b) makes to the value of the HLCA as a whole.

The physical impacts are each assigned a score and the overall scores for the impacts on the individual HLCA are used to produce a quantified expression of the overall magnitude of direct impact on a 28 point scale (see table A.1). These are presented as a table for each HLCA along with qualifying statements and background information and summaries of the key characteristics of the HLCA's affected.

Table A.1 Overall magnitude of direct physical impacts

Score	Grading
24-28	Very Severe
19-23	Severe
14-18	Considerable
9-13	Moderate
4-8	Slight
0-3	Very Slight

4.2 The Milford Haven Waterway HLA (HLW (D) 3)

Historic Landscape Character Area 341 (DAT PRN 43920) Rhoscrowther (figure 10, 11 and 12)

Key characteristics: 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 boasts numerous prehistoric elements, with the current B4320 believed to trace the path of a prehistoric trackway called 'The Ridgeway.' This trackway, aligning with the main east-west ridge across south Pembrokeshire, has a rich archaeological heritage, supporting the traditional notion of its ancient origins. Adjacent to this region, Kilpaison Burrows' dune slacks overlay a well-known complex featuring Bronze Age round barrows and the Neolithic burial chamber known as the 'Devil's Quoit.' Additional prominent barrows are situated south of Wallaston Farm and near Hundleton at the Dry Burrows, while the Corston Beacon round barrow remains a prominent landmark.

The straight, north-south field boundaries that characterize much of south Pembrokeshire are co-axial with the east-west Ridgeway, suggesting a possible prehistoric origin. The Ridgeway continues to be a significant landscape feature, likely forming the boundary between the early

medieval commotes of Manorbier and Coedraith, both part of Cantref Penfro. Rhoscrowther itself served as an ecclesiastical center with a 'Bishop house,' a quasi-collegiate foundation of St Davids. The medieval Manor of Castlemartin covered much of the area and was associated with the Lordship of Pembroke, featuring a castle-guard fee. Rhoscrowther and Pwllcrochan, while loosely tied to the manor, established a separate gentry-house in Rhoscrowther parish during the later medieval period at Eastington.

In the 1840s, Hundleton parish was carved out of part of Monkton parish and fell within the borough liberty of Pembroke. Angle, holding 2 knight's fees, was a mesne lordship of Pembroke. Farms in the area originated as villas mentioned in accounts from the 13th to the 15th century. Pwllcrochan parish church was a Benedictine possession of Monkton Priory, Pembroke. Although evidence for open-field farming is limited, collective strip holdings within the fields of Newton Farm persisted until 1824.

Windmills were prominent in the medieval or early post-medieval period, with at least three believed to have occupied the area. 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 farms and major houses, such as Bangeston, possibly the site of a moated medieval manor, were directly owned by the Campbells. Rhoscrowther and Pwllcrochan became a distinct holding from the Castlemartin estate, forming the 'Rosecrowther and Pulcrogan Estate.' In 1824, the estate was sold to Sir John Owen of Orielson, encompassing the easternmost part of this area. The Mirehouses of Angle eventually acquired much of it.

By 1787, the present system of large, irregular fields and dispersed settlement had taken shape, as depicted on an estate map of that year. The villages of Rhoscrowther and the hamlet of Pwllcrochan were established but were later abandoned in the 1960s due to the construction of an oil refinery and power station. Additionally, limestone quarries are present in this area.

Impacts: The impact in terms of area is very slight. There are two archaeological features that will partially be impacted upon by the proposed development.

4.3 Assessment of Direct, Physical impacts on Historic Landscape Character Area 341 (DAT PRN 43920) Rhoscrowther

Absolute Impact (loss of area) 0.03443 sq km – 0.17%					
Magnitude and score Very Slight – 1					
Relative and landscape impacts (loss of known elements or characteristics) and scores					
Element / % loss	Category	Magnitude	Landscape value	Landscape value effect	
Hedgerow Field boundary (feature 2) 1,530m length total, 15m loss (0.98%)	D - 1	Very Slight - 1	Moderate - 3	Very Reduced - 1	Slightly
Trackway from Lambeeth Farm to Pwllcrochon (Wales Coast Path) (feature 5) 1,780m length total, 1m loss (0.06%)	C - 2	Very Slight - 1	Considerable - 4 (part of Wales Coast Path)	Very Reduced - 1	Slightly
Overall direct impact:	(7+Absolute impact 1) = 8 Slight				

5.0 ASIDOHL STAGE 3: ASSESSMENT OF INDIRECT IMPACTS OF DEVELOPMENT

5.1 Introduction

The third stage of the ASIDOHL process describes and as far as possible quantifies the **indirect physical and non-physical impacts** of the development on the HLCA affected. A clearly defined area will be directly or physically affected (assessed in Stage 2), but a much greater area could be indirectly affected owing to fragmentation or changes to the setting of features within the landscape. Changes to views of, or views from a landscape element or key characteristic are also important potential impacts to consider.

This stage is divided into two categories of impacts; the first, Stage 3 (a) assesses the indirect physical impacts; while the second, Stage 3 (b) assesses the indirect (non-physical) visual impacts.

5.2 Stage 3 (a) Indirect, physical impacts

The principal types of indirect physical impacts set out in the *Guide to Good Practice* include, but are not confined to:

- (a) An increased risk of exposure, erosion, disturbance, decay, dereliction or any other detrimental physical change to elements, during or consequent to development.
- (b) Related to (a), 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.
- (c) 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 intervening development.
- (d) 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.
- (e) The frustration of access leading to decreased opportunities for education, understanding or enjoyment of the amenity of elements, during or consequent to development

5.3 Stage 3 (b) Indirect (non-physical) impacts

These can occur to elements as a result of one or a combination including, but are not confined to, the following:

- (a) 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 vantage points and visual experience of a visitor today.
- (b) Impact on the visual connections between related elements, by occlusion, obstruction etc., for example, an essential line of sight between historically linked defensive sites will become blocked or impaired by an intervening development.

(c) Conversely, the creation of inappropriate visual connections between elements not intended to be inter-visible originally, by the removal of intervening structures, barriers, shelters, screening or ground.

(d) the visual impact of the development itself in relation to the existing character of the HLCA considering:

- its form – the scale, number, density, massing distribution etc. of its constituent features;
- its appearance – the size, shape, colour fabric etc., of its constituent features.

Stage 3 (b) is aimed at assessing to what extent the development constitutes a visual intrusion or encroachment, and to what extent in turn that affects the HLCA's character.

The indirect impacts in Stages (a) and (b) are each assigned a score, which are then added together and calibrated to the 28-point scale used in Stage 2 (see table A.1), in order to produce a quantified expression of the overall magnitude of indirect impacts on the individual HLCAs. These are presented as a table for each HLCA along with qualifying statements and background information and summaries of the key characteristics of the HLCAs affected.

5.4 Pembroke Dock HLCA 306 (DAT PRN 43875)

Key characteristics:

HLCA 306 encompasses the town of Pembroke Dock and is exclusively categorised as an urban Historic Landscape Character Area (HLCA). This area also encompasses the Pembroke Dock Conservation Area, and although the boundaries of these areas are not identical, they share a similar heritage resource. The HLCA extends eastward to include the Cleddau Bridge and the Waterloo area of Pembroke Dock. While the majority of the HLCA and the entire conservation area lie beyond the established assessment scope and outside the Zone of Theoretical Visibility (ZTV), key elements of the HLCA and conservation area are discussed upon to provide adequate context.

Established in the early 19th century as a 'Garrison' town, Pembroke Dock originated following the Admiralty's decision in 1812 to relocate their dockyards from Milford Haven to a new site at Paterchurch. By the mid-19th century, the town's grid pattern had been firmly established. Pembroke Dock holds heritage value owing to its historical and architectural significance as a Royal Shipbuilding location, a former departure point for steam packets to Ireland (now a ferry departure point), a garrison army base, and as an RAF base for flying boat operations during the Second World War. The Royal Dockyard featured 13 building slips, making it the nation's principal shipbuilding yard for over a century, launching nearly 250 warships and other vessels. Numerous Georgian and Victorian buildings, including the scheduled (PE379) and Grade II* listed (6448; 14371; 14372) Victorian Defensible Barracks and dock buildings, churches, chapels, shop fronts, public houses, Victorian school buildings, and other civic or keystone structures contribute to the town's special interest. Most of these structures, falling outside the assessment scope, form an integral part of the town's unique historical and architectural character.

Impacts: There are no indirect physical impacts upon this HLCA. The bulk of the HLCA and all of the conservation area fall outside the ZTV, with only the very southwest limit of the HLCA located within the ZTV. None of the key historic elements of the HLCA including Scheduled Monuments or Listed Buildings lie within the ZTV. There is an indirect, visual impact from the Pembroke Dock HLCA 306 to the Rhoscrowther HLCA 341 but only when viewed from the southwest limit (plate 01).

**5.5 Assessment of Indirect, visual impacts on Historic Landscape Character Area
Pembroke Dock HLCA 306 (DAT PRN 43875)**

Impacts	Category and Score	Magnitude and Score
View from Pembroke Dock HLCA to Rhoscrowther HLCA	B – 3	Slight - 2
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight



Plate 01: View from Pembroke Dock HLCA 306 across the Rhoscrowther HLCA 341 with the proposed development site shaded red.

5.6 Gulf Oil Refinery HLCA 310 (DAT PRN 43879)

Key characteristics: The Gulf Oil Refinery was built in 1966, transforming this historic landscape character area. With the exception of a narrow strip of land comprising sea cliffs and cliff tops, the entirety of this area is now occupied by the oil refinery and a small industrial estate. Before the refinery's construction, this landscape was primarily agricultural, situated mostly within Llanstadwell parish.

The only segment of the landscape that remains unaltered from the refinery's construction is a small portion of sea cliffs and cliff tops between the refinery and the sea. Within the Historic Landscape Character Area (HLCA), there are no designated historic environment features, and the description does not highlight any archaeological or historic environment points of interest.

Given the absence of visible historic assets in this area, it becomes challenging to conduct an assessment of indirect visual impacts on individual assets. Furthermore, the historical landform has been largely eradicated, adding to the difficulty of evaluating the landscape's historical characteristics.

Impacts: There are no indirect physical impacts upon this HLCA. The bulk of the HLCA falls outside of the ZTV, with only the very southern limit of the HLCA located within the ZTV and therefore there is an indirect, visual impact from the Gulf Oil Refinery HLCA 310 to the Rhoscrowther HLCA 341 at this point (plate 2).

5.7 Assessment of Indirect, visual impacts on Historic Landscape Character Area Gulf Oil Refinery HLCA 310 (DAT PRN 43879)

Impacts	Category and Score	Magnitude and Score
View from Gulf Oil Refinery HLCA to Rhoscrowther HLCA	C – 2	Slight - 2
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight



Plate 02: View from Gulf Oil Refinery HLCA 310 across the Rhoscrowther HLCA 341 with the proposed development site shaded red.

5.8 Pembroke Power Station HLCA 313 (DAT PRN 43882)

Key characteristics: This Historic Landscape Character Area (HLCA) is relatively compact, defined entirely by Pembroke Power Station situated on the southern side of Milford Haven Waterway. The initial power station, commissioned in the early 1960s, was decommissioned in the 1990s. The HLCA description was crafted during the demolition of the original power station around 2001. However, the new Pembroke B Power Station, a natural gas-fired facility, was officially inaugurated on September 19, 2012, and stands as the largest gas-fired power station in Europe.

Encompassing the eastern portion of Pwllcrochan parish, the HLCA includes the church, which during the medieval period was owned by the Benedictine Monkton Priory in Pembroke. The HLCA description suggests that the land within this area might have been associated with the broader Manor of Castlemartin, a demesne manor of the Lordship of Pembroke and a crucial holding connected to Pembroke Castle.

Before the power station's construction much of the region was an inlet, characterised by intertidal features such as mudflats and saltmarsh, alongside some farmland. The HLCA documentation notes the historical stability of the inlet, suggesting the potential presence of archaeological remnants. However, substantial terracing was undertaken on the farmland, using the resulting upcast to fill the inlet and create a level platform for the Power Station. Consequently, there is limited undisturbed land within the HLCA, and no discernible heritage features are visible.

The power station's character sharply contrasts with the surrounding farmland, although it is one of several sizable industrial installations along Milford Haven Waterway, with the Texaco Oil Refinery HLCA located approximately 600 meters to the west.

Impacts: There are no indirect physical impacts upon this HLCA. The bulk of the HLCA falls outside of the ZTV, with only the eastern and northern limits of the HLCA located within the ZTV and therefore there is an indirect, visual impact from the Pembroke Power Station HLCA 313 to the Rhoscrowther HLCA 341 at this point (plate 3).

5.9 Assessment of Indirect, visual impacts on Historic Landscape Character Area Pembroke Power Station HLCA 313 (DAT PRN 43882)

Impacts	Category and Score	Magnitude and Score
View from Pembroke Power Station HLCA to Rhoscrowther HLCA.	C – 2	Slight - 2
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight



Plate 03: View from Pembroke Power Station HLCA 313 across the Rhoscrowther HLCA 341.

5.10 Texaco Oil Refinery HLCA 314 (DAT PRN 43916)

Key characteristics: Almost the entire Historic Landscape Character Area (HLCA) is taken up by an oil refinery and an oil pumping station, with BP constructing a jetty and the pumping station in 1960, and Texaco building the oil refinery in 1963, officially opening in 1964, now known as Valero Oil Refinery.

Before the establishment of the oil industry installations, the landscape consisted mainly of farms and neatly arranged fields within Rhoscrowther and Pwllcrochan parishes. It can be assumed that the land within the oil refinery has undergone significant disturbance. Despite the presence of the oil pumping station, refinery, and associated jetties, the coastal fringe of the HLCA retains considerable archaeological potential. Popton Point on the northeast of Angle Bay hosts Fort Popton, a scheduled monument (PE446) and a Grade II* listed building (17168), while West Popton Camp, a promontory fort, is also a scheduled monument (PE264) on the north side of the HLCA overlooking Milford Haven. However, both Scheduled Monuments fall outside the Zone of Theoretical Visibility (ZTV).

The Pembrokeshire Coast path runs along the headland, providing close views of Fort Popton, but the proposed development will not be visible from these vantage points. A very small section of the Coast path lies within the ZTV; however, its impact is considered negligible.

Impacts: There are no indirect physical impacts upon this HLCA. Only the eastern half of the HLCA is located within the ZTV however upon visiting the HLCA it became clear that any development at the Site would be entirely obscured by the newly constructed Greenlink Converter building and as such there would be no indirect visual impact (plate 4).



Plate 04: View from Texaco Oil Refinery HLCA 314 across the Rhoscrowther HLCA 341.

5.11 Carew, Milton and Nash HLCA 338 (DAT PRN 43914)

Key characteristics: The Historic Landscape Character Area (HLCA) encompasses a substantial land expanse, covering nearly 2000 hectares, including the ecclesiastical parishes of Pembroke St Mary, Cosheston, Monkton, Nash, and Upton—all situated within the medieval Lordship of Pembroke—and Carew parish, belonging to the medieval Barony of Carew. The part of the HLCA within the purview of this assessment is a long and narrow area, spanning approximately 50 hectares on the north side of Pembroke River, positioned between this area and the residential locality of Pennar on the south side of Pembroke Dock.

Described as an agricultural landscape with extensive, scattered farms and large, reasonably uniform fields, the HLCA also encompasses mud flats, marshland, and the rocky foreshore along the Milford Haven waterway. Notably, the HLCA description doesn't specifically detail the portion along the Pembroke River, which is within the scope of this assessment. This region features open fields and the intertidal area beyond, lacking designated heritage features. The only visible historic asset is the modern metalled Ferry Road, serving as a pathway leading down to the river, likely the historical route to a ferry crossing.

Impacts: There are no indirect physical impacts upon this HLCA. The only part of the HLCA within the scope of the assessment is a long narrow area of land covering some 50ha on the north side of Pembroke River and therefore there is an indirect, visual impact from the Carew, Milton and Nash HLCA 338 to the Rhoscrowther HLCA 341 at this point (plate 5).

5.12 Assessment of Indirect, visual impacts on Historic Landscape Character Area Carew, Milton and Nash HLCA 338 (DAT PRN 43914)

Impacts	Category and Score	Magnitude and Score
View from Carew, Milton and Nash HLCA to Rhoscrowther HLCA.	B – 3	Slight - 2
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight



Plate 05: View from Carew, Milton and Nash HLCA 338 across the Rhoscrowther HLCA 341.

5.13 Hundleton and Maiden Wells HLCA 340 (DAT PRN 43915)

Key characteristics: Situated on the southern bank of the Pembroke River, this Historic Landscape Character Area (HLCA) is distinguished by its undulating terrain, gradually ascending from the shoreline southwards to an elevation exceeding 80 meters above sea level. Primarily an agricultural expanse, it is divided into small, regularly shaped fields, typically demarcated by embanked hedges.

The HLCA encompasses the parishes of Hundleton, positioned at the periphery of the Historic Landscape Area (HLA) of Milford Haven Waterway, and Monkton, situated some distance to the east and beyond the defined scope of this assessment. The village of Maiden Wells is located to the south of the HLCA, falling outside both the HLA and the specified assessment boundaries.

Within the HLCA, there are two Grade II listed buildings that align with the Historic Landscape Area. Notably, one of these, the Warehouse on the bank of Pembroke River Estuary, Bentlass Hill, Bentlass (6562), falls within the 5km extended study area and is also situated within the Zone of Theoretical Visibility (ZTV).

Impacts: There are no indirect physical impacts upon this HLCA. The only part of the HLCA within the scope of the assessment is the north-western corner and therefore there is an indirect, visual impact from the Hundleton and Maiden Wells HLCA 340 to the Rhoscrowther HLCA 341 at this point (plate 6). The Setting Assessment report has determined that although the grade II Listed Building of Warehouse on bank of Pembroke River Estuary, Bentlass Hill, Bentlass (6562) is within the ZTV the overall impact is neutral and therefore it has not been included within the below table.

5.14 Assessment of Indirect, visual impacts on Historic Landscape Character Area Hundleton and Maiden Wells HLCA 340 (DAT PRN 43915)

Impacts	Category and Score	Magnitude and Score
View from Hundleton and Maiden Wells HLCA to Rhoscrowther HLCA.	C – 2	Slight - 2
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Impacts	Score: 4	Grading: Slight



Plate 06: View from Hundleton and Maiden Wells HLCA 340 across the Rhoscrowther HLCA 341.

5.15 Rhoscrowther HLCA 341 (DAT PRN 43920)

Key characteristics: The HLCA incorporates or intersects with 10 scheduled monuments, although six of these are located outside the designated historic landscape's boundaries, and one falls beyond the established scope of this assessment. These monuments predominantly belong to the prehistoric era, featuring round barrows (PE059; PE060; PE064), Devil's Quoit Burial Chamber (PE020), two Iron Age coastal prehistoric enclosures (PE262; PE400), and West Pickard Camp Promontory Fort (PE167). Additionally, Eastington Manor House (PE263) to the northwest and an area of early medieval settlement west of Angle (PE554, located outside the 5km extended study area), as well as a later anti-aircraft battery (PE494), are also included.

The HLCA boasts 22 listed buildings, among which the Grade I listed Tower at Eastington Manor House (6594) and Grade I listed Church of St Decumanus (6591) at Rhoscrowther are notable. Additionally, the Grade II* listed former Church of St Mary at Pwllcrochan (6587) is noteworthy. Other structures are classified as Grade II and mainly consist of farm buildings and dwellings, including several in Rhoscrowther and Pwllcrochan.

Impacts: Development at the Site will result in a change of historic land use from one of post-medieval enclosed agricultural fields to modern industry thus resulting in an indirect physical impact.

The Setting Assessment has determined that although the grade II Listed Buildings of Brownslate Farmhouse (6563), Range of outbuildings on S side of entry court at Brownslate Farm (6564), Outbuilding at NE Corner of Front Yard at Brownslate Farm (6565), Cartshed to S of Brownslate Farm, (6566), Barn to W of Brownslate Farmhouse (6567), Limekiln Close to S end of Goldborough Pill (6571), Former National School Building (6588), Stone Building (now as a Barn) at Old Henllan (6589), Garden Arch at Old Henllan (6590), Sommerton Farmhouse (6598); grade II* Listed Building of Former Church of Saint Mary (6587); and the Scheduled Monuments of Enclosure & Earthworks at Lewiston Hall (PE400), Corston Beacon Round Barrow (PE059), and Dry Burrows Round Barrows (PE060) lie within the ZTV the overall impact is neutral and therefore it has not been included within the below table.

5.16 Assessment of Indirect, physical impacts on Historic Landscape Character Area Rhoscrowther HLCA 341 (DAT PRN 43920)

Impacts	Category and Score	Magnitude and Score
Change in historic land-use	C – 2 *a	Very Slight – 1 *b
Combined total: Very Slight 3		

*a The change in historic land-use, although significant, has already been frustrated by the development of the Greenlink Converter Station to the immediate west of the Site and the proposed development would be seen as a continuation of this modern industry.

*b The magnitude of the historic land-use change is only very slight when (*a) is considered, and the proposed development area is seen as constituting only 0.16% of the Rhoscrowther HLCA.

**5.17 Assessment of Indirect, visual impacts on Historic Landscape Character Area
Rhoscrowther HLCA 341 (DAT PRN 43920)**

Impacts	Category and Score	Magnitude and Score
View across the Rhoscrowther HLCA	B - 3	Very Slight - 1
Development form	3	Very Slight - 1
Development appearance	3	Very Slight - 1
Overall Magnitude of Indirect Visual Impacts	Score: 4	Grading: Slight

Overall indirect physical impact = 3

Overall indirect visual impact = 4

Overall magnitude of indirect (physical and visual) impacts on the Historic Character Area =
 $(4+3) \times 28 / 20 = 9.8$ (rounded to 10) = **Moderate**



Plate 07: View across the Rhoscrowther HLCA 341 towards the proposed development Site.

5.18 ASIDOHL Stage 3: Summary of Overall Magnitude of Indirect Impacts on Historic Character Areas

The following table is a summary of the overall magnitude of indirect impact scores and grading. The magnitude is based on the 28 point scale system used in stage 2 and stage 3.

Historic Landscape Character Area	Overall Magnitude (Score)
Pembroke Dock HLCA 306	Slight - 4
Gulf Oil Refinery HLCA 310	Slight - 4
Pembroke Power Station HLCA 313	Slight - 4
Carew, Milton and Nash HLCA 338	Slight - 4
Hundleton and Maiden Wells HLCA 340	Slight - 4
Rhoscrowther HLCA 341	Moderate - 10
Average Overall Magnitude	Slight - 5

6.0 ASIDOHL STAGE 4: EVALUATION OF RELATIVE IMPORTANCE

6.1 Introduction

The fourth stage of the ASIDOHL process and report evaluates the relative importance of the HLCAs (or part(s) thereof) directly or indirectly affected by development in relation to:

- (a) if relevant, the whole of the HLCA(s) or;
 - (b) the whole of the Historic Landscape Area (HLA) on the Register,
- followed by in each case;
- (c) an evaluation of the relative importance of the HLCA(s) concerned in the national context.

‘Which evaluation steps have to be done and how much input is required will depend on the scale of the development in relation to the nature and extent of the affected Historic Character Area(s) and the historic landscape area on the Register. For example, if a development directly affects an entire Historic Character Area, then only evaluation steps (b) and (c) need to be done. The complexity of the Historic Character Area(s) in terms of the variety of characteristics and numbers of elements affected will also influence the amount of input required.

In cases where both steps (a) and (b) have to be done, evaluating relative importance is necessary because it may well be that the relative importance of an element within the Historic Character Area differs from its relative importance within the overall historic landscape area on the Register. For example, a particular element could be abundant and fairly representative of the Historic Character Area as a whole, but might be quite rare in relation to the whole of the historic landscape area on the Register. Clearly, if an entire Historic Character Area is directly affected with the complete loss of all its constituent elements, then step (a) would not apply.

It is likely that evaluation scores could be influenced by a number of factors. The relative size and number of Historic Character Areas within the historic landscape area on the Register, and the number of Historic Character Areas affected in relation to the total number of Historic Character Areas within the historic landscape area on the Register, could all have some bearing on the values determined.

With regard to evaluation step (c), ‘national context’ should be taken to refer to the historic landscape areas on the Register, not the whole of Wales. Although all historic landscapes on the Register are of national importance, being either of outstanding or of special historic interest, some component Historic Character Areas may be of even greater significance, because of the range or the quality of elements they contain, the presence of designated elements within them, their relationship with other Historic Character Areas, their status as a key component in the historic landscape area on the Register, or because of a combination of these factors.’ (“Guide to Good Practice” p23)

The criteria used to evaluate relative importance are the Secretary of State's Criteria for Scheduling Ancient Monuments (Welsh Office Circular 60/96, Planning and the Historic Environment, p.15, Annex 3), although depending on the individual circumstances and the characteristics of the HLCAs concerned, not all criteria will be universally applicable.

The selected criteria are scored on a scale of 1 to 5 (Very Low or Poor to Very High or Very Good) and in many cases, the scores will be the same for stages (a) and (b) where both are required. Scores for stage (c) however, will generally but not always, be graded lower than

stages (a) and (b), because of the greater numbers and the wider ranges of element qualities to be found in the national context.

Scores are summarised as an overall percentage (out of a maximum possible score of all Very High grades) at the end of stages (a) and (b) and also (c) Stage 4 is then completed with a determination of, and a table showing, the average, overall value of all the HLCAs (or part(s) thereof) affected.

6.2 Pembroke Dock HLCA 306

Stage 4: Assessment of Relative Importance of HLCA 306 Pembroke Dock

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(b) Whole of historic landscape area					(c) National context				
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				
Overall Score:	40/55 = 73%: High					38/55 = 69%: High				

6.3 Gulf Oil Refinery HLCA 310

Stage 4: Assessment of Relative Importance of HLCA Gulf Oil Refinery 310

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(b) Whole of historic landscape area					(c) National context				
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
Overall Score:	28/55 = 51%: Considerable					15/55 = 27%: Moderate				

6.4 Pembroke Power Station HLCA 313

Stage 4: Assessment of Relative Importance of HLCA 313 Pembroke Power Station

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(b) Whole of historic landscape area					(c) National context				
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
Overall Score:	26/55 = 47%: Considerable					17/55 = 31%: Moderate				

6.5 Texaco Oil Refinery HLCA 314

As stages 2 and 3 of the ASIDOHL process have shown that the Texaco Oil Refinery HLCA 314 will not be directly or indirectly affected by the proposed development it will not be taken into the stage 4 phase of assessment.

6.6 Carew, Milton and Nash HLCA 338

Stage 4: Assessment of Relative Importance of HLCA Carew, Milton and Nash 338

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(b) Whole of historic landscape area					(c) National context				
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		
Overall Score:	44/55 = 80%: Very High					41/55 = 75%: High				

6.7 Hundleton and Maiden Wells HLCA 340

Stage 4: Assessment of Relative Importance of HLCA Hundleton and Maiden Wells 341

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(b) Whole of historic landscape area					(c) National context				
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
Overall Score:	34/55 = 62%: High					27/55 = 49%: Considerable				

6.8 Rhoscrowther HLCA 341

Stage 4: Assessment of Relative Importance of HLCA Rhoscrowther 341

Value	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor	V High	High	Mod	Fair	Poor
	(a) Area affected by development in relation to whole of historic character					(b) Whole of historic landscape area					(c) National context				
Rarity				x				x						x	
Representativeness			x				x						x		
Documentation			x				x						x		
Group Value				x				x						x	
Survival		x					x						x		
Condition		x					x							x	
Coherence		x					x						x		
Integrity		x					x					x			
Potential				x				x					x		
Amenity			x					x					x		
Associations					x			x						x	
Overall Score:	32/55 = 58%: Considerable					39/55 = 71%: High					30/55 = 55%: Considerable				

6.9 ASIDOHL Stage 4: Grade of overall value of relative importance of the HLCA's (or parts thereof) affected by development

Historic Landscape Character Area	Grading (average of (a)+(b)+(c))
Pembroke Dock HLCA 306	71 – High (range 60-79)
Gulf Oil Refinery HLCA 310	39 - Moderate (range 20-39)
Pembroke Power Station HLCA 313	39 - Moderate (range 20-39)
Carew, Milton and Nash HLCA 338	77 – High (range 60-79)
Hundleton and Maiden Wells HLCA 340	56 - Considerable (range 40-59)
Rhoscrowther HLCA 341	61 - High (range 60-79)
GRADE OF OVERALL VALUE	57 - Considerable (range 40-59)

7.0 ASIDOHL STAGE 5: ASSESSMENT OF OVERALL SIGNIFICANCE OF IMPACT OF DEVELOPMENT

7.1 Introduction

The final stage of the ASIDOHL process combines the results of Stages 2 – 4 in order to determine the overall significance of the impact of development on the HLA. This is determined by setting out and scoring the value of the HLCAs affected in relation to the effect caused by development, and the consequent change in the value of the HLA on the Register. This is presented in table 7.3 which is based on the framework, grades and scores set out in Table 13 of the Guide to Good Practice. The overall significance of impact for each HLCA is determined by adding together the scores in columns (a), (b), and (c) and grading them using the overall significance of impact table set out in Table 14 of the Guide to Good Practice, and reproduced here in table 7.2.

*As stages 2 and 3 of the ASIDOHL process have shown that the Texaco Oil Refinery HLCA 314 will not be directly or indirectly affected by the proposed development it will not be taken into the stage 5 phase of assessment.

7.2 Overall Significance of Impact

Score	Grade
26-30	Very Severe
21-25	Severe
16-20	Fairly Severe
10-15	Moderate
4-9	Slight
0-3	Very Slight

7.3 ASIDOHL Stage 5: Summary of the overall significance of impact of the proposed development at Lambeeth, Goldborough Road, Hundleton, Pembrokeshire, SA71 5TR, on the Milford Haven Waterway Historic Landscape Area (HLA) (Based on Guide to Good Practice, Table 13, p.29)

HISTORIC LANDSCAPE CHARACTER AREA	(a) VALUE OF HLCA based on Stage 4	(b) IMPACT OF DEVELOPMENT ON HLCA based on Stages 2-3	(c) IMPACT ON HISTORIC LANDSCAPE	OVERALL SIGNIFICANCE OF IMPACT (a)+(b)+ c)
Pembroke Dock HLCA 306	High 8	No Direct / Slight Indirect impacts. None of the key historic elements of the HLCA including Scheduled Monuments or Listed Buildings lie within the ZTV. There is an indirect, visual impact from the Pembroke Dock HLCA 306 to the Rhoscrowther HLCA 341 but only when viewed from the southwest limit 2	Very Low 1	Moderate 11
Gulf Oil Refinery HLCA 310	Low 3	No Direct / Slight Indirect impacts. The bulk of the HLCA falls outside of the ZTV, with only the very southern limit of the HLCA located within the ZTV. 1	Very Low 1	Slight 5
Pembroke Power Station HLCA 313	Low 3	No Direct / Slight Indirect. The bulk of the HLCA falls outside of the ZTV, with only the eastern and northern limits of the HLCA located within the ZTV. The nature of this HLCA means that it is not sensitive to the nature of changes involved in the Development. 1	Very Low 1	Slight 5
Carew, Milton and Nash HLCA 338	High 8	No Direct / Slight Indirect. The only part of the HLCA within the scope of the assessment is a long narrow area of land covering some 50ha on the north side of Pembroke River but the	Low 2	Moderate 11

		development will blend into the adjacent Greenlink Converter. 1		
Hundleton and Maiden Wells HLCA 340	High 7	No Direct / Slight Indirect impacts There are no indirect physical impacts upon this HLCA. The only part of the HLCA within the scope of the assessment is the north-western corner. 1	Very Low 1	Slight 9
Rhoscrowther HLCA 341	High 7	Slight direct physical impact / Moderate indirect impact 4	Low 2	Moderate 13

7.4 Concluding Statement

The proposed development would impact to a greater or lesser extent on six of the forty-eight HLCAs that make up the *Milford Haven Waterway Registered Landscape of Outstanding Historic Interest (HLW (D) 3)*. The physical footprint of the development is however relatively very small (0.17%) in relation to the area of the Rhoscrowther HLCA 341 in which it would be sited. Moreover, the proposed development would be directly adjacent to the Greenlink Converter, which is of a scale both larger in height and footprint and therefore the proposed BESS would continue an existing area of industrial development. When observed from the east the BESS would blend into the higher Greenlink Converter Station situated behind it; and conversely it would be hidden from view by the Converter when viewed from the west. The Site would mostly be hidden from view when observed from the south due to it occupying the downward slope of the high ground; and would mostly be hidden from view when observed from the north due to the size and scale of the Pembroke Power Station.

The development site would occupy land that has historically been enclosed farmland, and would thus involve a change in the historic land-use of the area. However, the field plot itself will be retained and aside from an opening in the southern field boundary the hedgerows will otherwise be retained.

The direct physical impact of the proposed development upon the Rhoscrowther HLCA 341 is *Slight*. Moreover, it is expected that two historical features (hedgerow field boundary and Trackway from Lambeeth Farm to Pwllcrochon (Wales Coast Path)) within the Site boundary will be impacted upon resulting in a *slight* significance of effect on the historic landscape.

The topography of the Site and the height of the adjacent Greenlink Converter Station would largely hide the proposed development from the Pembroke Dock; Gulf Oil Refinery; Pembroke Power Station; Carew, Milton and Nash; Hundleton and Maiden Wells; and Rhoscrowther HLCAs. Moreover, the proposed development would be seen as an extension to an already industrialised landscape including the Greenlink Converter, Pembroke Power Station, Texaco Oil Refinery, Gulf Oil Refinery and an area of solar panel development located approximately 1.2km to the southwest.

The equipment on site will be painted in a dark green colour to help assimilate them into the landscape. The site is already well screened to the south, east and west by established tall hedgerows. The addition of scrub planting to the southeast and east, and a new native hedgerow along the northern boundary will help contain the Site further and limit views. The landscape already comprises extensive industrial development, and the proposal will be viewed in the context of the adjacent Greenlink Converter Unit which has recently been constructed. The proposal will appear as a much smaller subservient development to this.

The variety in the landscape's character and the enduring visibility of its earlier elements create a situation where evaluating the effects of development might give a misleading impression of its true impact. This complexity arises from the interaction between defined historic character areas (HLCAs) and the overall significance attributed to the landscape. Many HLCAs encompass numerous elements contributing to the historical landscape's value. Even in cases where specific character areas lack such diversity, elements like modern industrial development are recognized as enhancing the landscape's value. Consequently, the overall value of individual character areas tends to be relatively high, potentially surpassing that of other designated historic landscapes where contemporary changes are considered detrimental to their character.

As a result, assessments of the overall impact of development, conducted in the final stage of evaluation (Stage 5) following ASIDOHL2 guidance criteria, are likely to yield higher scores than might otherwise be anticipated. Nevertheless, the evaluation has determined that among

the six HLCA's assessed, the overall impact on three will be deemed **Moderate**, while the impact on the remaining three will be **Slight**.

Considering the proposed development's introduction into this landscape, particularly in close proximity to the Texaco Oil Refinery, which features some of the tallest and most prominent industrial structures along the waterway – as well as the newly built and adjacent Greenlink Converter Station, the assessment suggests that the impact is, intuitively, only **Slight**. The judgment is based on the premise that a more significant impact would only be conceivable if the Development included a greater scale and more conspicuous location, distinctly separated from other industrial features. This hypothetical scenario would need to substantially alter the pattern of industrial activity along the waterway and, consequently, modify the extent of various character areas within it

In the broader context, the influence of the proposed development on this landscape, especially considering its location, will be evaluated within the framework of the dynamic historic nature of the landscape. This dynamic history has witnessed significant transformations at various historical junctures, contributing to its substantial historical depth. The landscape appears to be both less susceptible and more resilient to alterations as a consequence. The characteristics and visual aspects of the Development align reasonably well with the character of prevailing industrial infrastructure along the waterway.

Due to its limited physical impact, the Development allows for the ongoing clarity of the landscape; it does not alter our ability to comprehend and value the historical meaning and significance of the landscape. Consequently, it does not fundamentally diminish the landscape's overall value.

8.0 SOURCES

Aston, M. 1997. Interpreting the Landscape

Bensen, G.V. 1856. Burke's Dictionary of the Landed Gentry; Foss's Lives of the Judges of England

British Geological Survey website. www.bgs.ac.uk.

Cadw. 2007. Guide to Good Practice on using the Register of Landscapes of Historic Interest in Wales in the Planning and Development process.

Cadw. Scheduled Ancient Monument listings.

Cadw, 2017. The Setting of Heritage Assets in Wales

Chisholm, H. 1911. Encyclopaedia Britannica

Colburn, H. 1847. Burke's Genealogical and Heraldic History of the Landed Gentry, Volume 2

Dodd, C. R. 1844. The Peerage, Baronetage, and Knightage of Great Britain and Ireland

English Heritage, 1991. Management of Archaeological Projects (MAP2)

English Heritage, 2006. Management of Research Projects in the Historic Environment (MORPHE)

Jarrett, G. 1969. The Roman Frontier in Wales 2nd edition

NMR Site Record Cards

Pollard, A.M. 2008. Archaeological Chemistry

Renfrew, C. 1973. The Explanation of Culture Change: Models in Prehistory

Soulsby, I. 1983: The Towns of Medieval Wales

The Chartered Institute for Archaeologists, 2014. Standard and Guidance for Archaeological Assessment Desk-top study

Waddelove, E. 1999. The Roman Roads of North Wales: Recent Discoveries

