

PEMBROKE DOCK INFRASTRUCTURE

Landscape and Visual Assessment

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1 INTRODUCTION

- 1.1 The purpose of this Landscape and Visual Appraisal (LVA) is to identify and assess the likely landscape and visual effects that would result from the development proposals associated with the Pembroke Dock Marine Project in the settlement of Pembroke Dock along the Milford Haven Inner Waterway in Pembrokeshire. (grid reference: SM958037, X [Easting]: 195835 and Y [Northing]: 203799), hereafter referred to as the 'Application Site' with the development proposals referred to as the 'Proposed Development'.
- 1.2 It is intended that this LVA will provide statutory and non-statutory consultees with sufficient information to determine the potential significant impacts of the Proposed Development on the receiving environment and will inform the issue of appropriate planning consent by the local authority.
- 1.3 This assessment has been prepared with consultation with the landscape officer at Pembrokeshire County council within which the Application Site lies.
- 1.4 A plan showing the location of the Proposed Development and its context are shown in Figure 1: Site Location Plan.
- 1.5 This report considers the effects on:
- Landscape elements and features;
 - Landscape Character; and
 - Visual Amenity.
- 1.6 A detailed methodology is provided in Appendix 1.
- 1.7 The report provides an overview of the Application Site within the landscape and visual context of the surrounding area and sets out the planning context of the Application Site with reference to landscape issues. The existing baseline landscape features and landscape character, which together make up the landscape resource, are described and reference is made to published landscape character studies and any relevant landscape designations. The current visibility of the Application Site from selected representative viewpoints in the surrounding landscape is also assessed.
- 1.8 A description of the Proposed Development is provided and the potential effects of these proposals on the landscape resource and the visual environment are identified. Mitigation measures, which form an integral part of the Proposed Development, are also described together with how these measures are likely to prevent, reduce or offset any perceived adverse effects. Refer to the Figure JPW1115-04 Indicative Proposed Masterplan.
- 1.9 Landscape effects refer to changes arising from the Proposed Development on the physical elements that make up the landscape and which influence its character. These, together, form the landscape resource. Visual effects refer to the changes to existing views available from representative Viewpoints within the landscape surrounding the Application Site.
- 1.10 An assessment has been made of the effects of the Proposed Development on the visual environment during the first winter following completion of the development (Year 1) and for the summer 10 years after completion of the development (Year 10).

2 ASSESSMENT METHODOLOGY

- 2.1 This chapter has been prepared with regard to best practice as described in the documents below:
- Guidelines for Landscape and Visual Impact Assessment, Third Edition Landscape Institute and the Institute of Environmental Management and Assessment GLVIA3, (2013);
 - GLVIA3 Statement of Clarification 1/13;
 - An Approach to Landscape Character Assessment, Natural England (2014);
 - Visual Representation of Development Proposals, Technical Guidance Note 06/19, Landscape Institute (17th September 2019); and
 - Planning Policy Wales LANDMAP Guidance Note 1: LANDMAP and Special Landscape Areas (2017) and
- 2.2 The Guidelines for Landscape and Visual Impact Assessment (GLVIA3) are broad guidelines rather than detailed prescriptive methodologies. The methodologies tailored for the assessment of the Proposed Development are based on GLVIA3 guidance and are presented in detail at Appendix A. and summarised below.
- 2.3 Landscape and visual studies provide an analysis of the physical and perceptual attributes of an area. The assessment of landscape issues relates to the potential effect of development on the landscape resource, which encompasses landscape character, quality and distinctive features, including topography, drainage, vegetation and built features, whereas the study of visual constraints is concerned with the potential effect on views and visual amenity.
- 2.4 The analysis of visual constraints includes the identification of important views towards the Application Site, which are generally from a range of visual receptors, both public (highways and public rights of way) and private (residential properties and places of employment). Visual receptors are of varying sensitivity to change, with views from the ground floors of private residences generally accepted as being more sensitive to change than those from highways or places of work where attention is focussed elsewhere. Public rights of way through rural areas with attractive landscapes, which are used for recreational purposes, are also usually accepted as being of high sensitivity to change.
- 2.5 The landscape assessment combines the results of both an objective and subjective appraisal of the landscape. This appraisal consisted of three stages including a desk study, a field survey and an analysis of the likely effects resulting from the Proposed Development in the light of these studies.
- 2.6 The study area for the assessment extends to a radial distance of 5km from the Application Site boundary. Whilst there may be the potential for effects of the Proposed Development to extend beyond this limit, it is considered that the visual perception of the Proposed Development within the landscape is likely to diminish with ever increasing distance and the Proposed Development, where visible, would be seen as an increasingly smaller component of the wider composite view.

Study Area

- 2.7 The study area extends to a radial distance of 5 km around Pembroke Dock Marine as per the guidelines stated in the Guidelines for Landscape and Visual Impact Assessment (GLVIA3). Figure 5: Zone of Theoretical Visibility shows the location of the project as well as the extent of each 5 km radius.

Baseline Methodology

- 2.8 The Guidelines for Landscape and Visual Impact Assessment (GLVIA3) are broad guidelines rather than detailed prescriptive methodologies. The methodologies tailored for the assessment of the Pembroke Dock Marine project are based on GLVIA3 guidance and are presented in detail at Appendix A. The methodology is summarised below.
- 2.9 Landscape and visual assessment studies provide an analysis of the physical and perceptual attributes of an area. The assessment of seascape issues relates to the potential effect of development on the landscape/seascape resource, which encompasses character, quality and distinctive features including topography, drainage, vegetation and built features, whereas the study of visual constraints is concerned with the potential effect on views and visual amenity.
- 2.10 The analysis of visual constraints includes the identification of representative views towards the project site, which are generally from a range of visual receptors, both public (highways and public rights of way) and private (residential properties). Visual receptors are of varying sensitivity to change, with views from the ground floors of private residences generally accepted as being more sensitive to change than those from highways or places of work where attention is focused elsewhere. Public rights of way through rural areas with attractive landscapes, which are used for recreational purposes, are also usually accepted as being of high sensitivity to change.
- 2.11 The landscape and visual assessment combine the results of both an objective and subjective appraisal of the landscape. This appraisal consisted of three stages including a desk study, a field survey and an analysis of the likely effects resulting from the proposed development in light of these studies. The study area for the assessment extends to a radial distance of 5 km from the Application Site. With respect to the seascape baseline, information has been derived from the Marine Character Areas (MCA)21: Milford Haven; MCA22: South Pembrokeshire Coastal and Inshore Waters and the PCNP Seascape Character Assessment (LDA, PCNPA, 2013).

Desktop Study

- 2.12 Information on the project study area was collected through a detailed desktop review of existing studies and datasets including the assessment of 1:25,000 scale Ordnance Survey maps together with aerial photography to establish the general context of the Pembroke Dock Marine landscape seascape visual study area.
- 2.13 The ZTV Plan (Figure 5: Zone of Theoretical Visibility) shows areas from which the Proposed Development may be visible. The ZTV takes account for the screening effects of existing significant vegetation blocks (modelled at 12m) and built form (modelled at 9m), uses an assumed observer height of 2m. Five origin points have been used to represent the parameters of the Proposed Development. Landform data was taken from OS Terrain 5 mapping, using point data across the Application Site. The range of proposed building heights (between 10m – 40m) for buildings as shown on the Figure JPW1115-04 Indicative Proposed Masterplan.
- 2.14 A 5km radius has been selected for the extent of the study area used for this assessment which is considered to be consistent with GLVIA3 guidelines which refer to a “need for an approach that is in proportion to the scale of the project that is being assessed and the nature of the likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional.

2.15 This was followed by an analysis of relevant documentation (reports, development plans, assessments, government guidance etc.) to clarify the landscape and planning context. These are summarised at Table 5.1 below.

Table 5.1: Summary of key desktop reports.

Title	Source	Year
Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3)	Landscape Institute and the Institute of Environmental Management and Assessment	2013
GLVIA3 Statement of Clarification 1/13	Landscape Institute and the Institute of Environmental Management and Assessment	2014
National Park Management Plan 2015 - 2019	Pembrokeshire National Park Authority	2014
An Approach to Landscape Character Assessment	Natural England	2013
Local Development Plan	Pembroke County Council	2013
LANDMAP Methodology "Visual and Sensory"	NRW	2016
Pembrokeshire Coast National Park Coast Seascape Character Assessment	NRW	2013
Marine Character Areas	Natural England, Scottish Natural Heritage and Countryside Council for Wales	2012

Field Work

2.16 Fieldwork involved a visual survey of the Application Site and the surrounding area to assess its character and identify key landscape elements and features. To inform the baseline, site specific surveys were undertaken within the environs of the Application Site to record the character and identify key landscape features and visual analysis as per the methodology in GLVIA3. A summary of the surveys undertaken to inform the landscape and visual assessment is outlined in Table 5.2 below with the viewpoints visited listed in Table 5.4.

Table 5.2: Summary of site-specific survey data.

Title	Extent of survey	Overview of survey	Survey contractor	Date	Reference to further information
Landscape and visual survey	5km ZVI radius	Environs and shore-based survey along the long-range PCP Wales coastal path and the local network of public rights of way and public highways relating to the Application Site.	N/A	03 rd May 2018, 25 th Oct 2018 and 21 st Oct 2019.	N/A

Identification of landscape designations

2.17 All landscape designations (see Figures 2: Landscape Designations) within the Pembroke Dock Marine landscape seascape visual study area that could be affected by the construction operational phases of the project were identified using the two-step process described as follows:

- Step 1: All designated sites of international, national and local importance within the Pembroke Dock Marine landscape and seascape and visual study with a radius of 5km were identified using a number of sources. These included National Resources Wales LANDMAP database, Natural Resources Wales National Character Areas, Natural Resources Wales, National Seascape Assessment for Wales, Pembrokeshire Coast National Park Seascape Character Assessment (SCA 31, 32 and 34), Pembrokeshire Coast Landscape Character Assessment, Pembroke County Council Local Development Plan, and
- Step 2: Using the above information and expert judgement, sites were included for further consideration if e.g. a designated site directly overlaps with the Pembroke Dock Marine project; and e.g. sites and associated features were located within the potential Zone of Impact (Zoi) for impacts associated with the project.

2.18 With respect to the landscape baseline, information has been derived from NRW LANDMAP database LANDMAP. This is an “all-Wales Geographical Information System based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent dataset”. It is administered by NRW and comprises five spatially related datasets or aspect layers as follows:

- Geological Landscape: “*considers the physical, primarily geological influences that have shaped the contemporary landscape and identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology*”;
- Landscape Habitats: considers the distribution of habitats at a broad scale comparable to other aspect layers leaving more localised information to be accessed through other datasets;
- Visual and Sensory: considers what aspects of landscape are “*perceived through our senses, primarily visually, from the physical attributes of landform and landcover to their visible patterns of distribution and their consistent relationships in particular areas*”;
- Historic Landscape: identifies “*those classes of historic land uses, patterns and features that are structurally prominent and contribute to the overall historic character of the present landscape*”; and
- Cultural Landscape: within LANDMAP this is “*taken to embrace any kind of human activity that can be related to landscape. It includes the contrived and sometimes pre-eminent expressions of culture, like art or literature, in which the landscape maybe depicted or described, as well as the prosaic and commonplace expressions, like the choice of building materials, which were perhaps not intended to create something valuable or special*”.

Consultation

2.19 Following on from the requirements of the Scoping Opinion from Pembrokeshire County Council (28th June), contact was made with the Landscape Officer to discuss and agree viewpoints and photomontages as listed in table 5.3 below with the viewpoints agreed listed in Table 5.3. The viewpoint locations are shown on Figure 7: Viewpoint Locations.

Table 5.3: Consultation Responses Relevant to this Chapter

Date	Consultee and Issues Raised	How/ Where Addressed
11th October 2018	Mr Richard Staden Landscape Officer at Pembrokeshire County Council to agree 2km radius and viewpoint locations.	16 viewpoints have been assessed and photomontages produced from 4 of the agreed viewpoints, plus an extra photomontage added at the request of the Landscape Officer from VP 13.

Table 5.4: Representative Viewpoint Description

Representative Viewpoint Number	Viewpoint Orientation	Viewpoint Description
VP 1	Hazelbeach - distance of 1196m looking SE towards the site	View from PCP in Hazelbeach
VP 2	Llanstadwell - distance of 1117m looking SE towards the site	View from PCP in Llanstadwell
VP 3	Neyland - distance of 1134m looking S towards the site	View from PCP and coastal public highway in Neyland
VP 4	Neyland - distance of 989m looking SW towards the site	View from PCP and coastal public highway in Neyland
VP 5	Neyland - distance of 1223m looking SW towards the site	View from public highway near Neyland centre
VP 6	Neyland - distance of 982m looking SW towards the site	View from coastal car park in Neyland
VP 7	Cleddau Bridge - distance of 1584m looking SW towards the site	View from elevated public highway on bridge
VP 8	Burton Ferry - distance of 2100m looking SW towards the site	View from costal public highway
VP 9	Pembroke Dock - distance of 682m looking SW towards the site	View from costal public park
VP 10	Pembroke Dock - distance of 600m looking SW towards the site	View from costal highway
VP 11	Pembroke Dock Presely Road - distance of 337m looking NW towards the site	View from PCP near Defensible Barrack Hill
VP 12	South Pembrokeshire Golf Course - distance of 900m looking NE towards the site	View from PRoW
VP 13	Pembroke Dock St Patrick's Hill - distance of 22m looking NE towards the site	View from public highway
VP 14	Pembroke Dock coast - distance of 33m looking NE towards the site	View from public car park
VP 15	Llanreath - distance of 478m looking NE towards the site	View from costal public beach
VP 16	Pwllcrochan - distance of 3800m looking NE	View from coastal PCP

Limitations of the Assessment

- 2.20 The baseline site survey work was undertaken in May 2018, October 2018 and October 2019 when the vegetation in the surrounding landscape was almost in full foliage. Visual penetration may increase in late autumn, winter and early spring when this vegetation will be without foliage. This has been taken into account as part of the visual impact analysis.

3 BASELINE ENVIRONMENT

- 3.1 The aim of the baseline study is to describe the individual components of the physical landscape which are present on-site and within the landscape seascape visual study area and to provide an understanding of how the landscape and seascape constituent elements including character, spatial variation, geographic extent, condition, the way in which the landscape is experienced, and the value attached to it which may be affected by the Proposed Development.

Description of the Surrounding Area

- 3.2 Pembroke Dock Marine is located within the Milford Haven Waterway which is an integral part of Britain’s oil and gas industry and one of the busiest ports in the UK. Pembroke Dock Marine also forms part of the town of Pembroke Dock along its northern shoreline and approximately 900m from the shoreline of the settlement of Neyland across the waterway to the north.
- 3.3 The landscape and seascape can be described as an intensely used urban waterway scattered with recreational floating craft and yachts, marker buoys and commercial shipping. Port operational activities are dominant, including the Pembroke car ferry, tugs, service and pilot vessels. Commercial fishing boats as well as large numbers of recreational motor and sailing craft as well as large jetty and slipway structures are common along the waterway. There are a significant number of commercial navigational lights, marks and buoys along the approaches as well as other markers for recreational navigation. Views to the west are dominated by the tall oil refinery structures, gas and petrochemical storage tanks and vertical element of the power stations elevated on the cliffs above the waterway edges. The Cleddau bridge lies approximately 1.50km to the north east and is a dominating feature in the local landscape.

Public Rights of Way

- 3.4 The Pembrokeshire Coast Path (PCP) Public Right of Way (PROW) which forms part of the Wales Coast Path which is a well-used internationally recognised long distance PROW, runs adjacent to the eastern boundary of the Application Site and then continues along the shoreline on the Neyland side of the waterway to the north. The PROWs associated with Application Site are shown on Figure 3: PROWs.

Landscape Designations

- 3.5 The Pembrokeshire Coast National Park (PCNP) lies within the 5km study area as shown on Figure 2: Landscape Designations. However, the Application Site lies outside the PCNP which nearest point lies approximately 3.1km to the north east and there is no inter-visibility.
- 3.6 The Application Site lies within the Milford Haven Landscape of Outstanding Historic Interest and Pembroke Dock Historic Landscape Character Area which is described as comprising of the 19th century naval dockyards including Pembroke Dock and the 19th century grid-pattern planned town. Included in this area are many 19th century worker and town houses, with 20th century housing, light industrial development on its outskirts.
- 3.7 The Application Site also lies adjacent to the Pembrokeshire Marine Special Area of Conservation (SAC) and the estuary edges by the Milford Haven Waterway Site of Special Scientific Interest (SSSI).

- 3.8 The Application lies within MCA 21: Milford Haven and incorporates the marine components of the Pembrokeshire Coast National Park Seascape Character Areas (PCNPSCA). This identifies the key characteristics of the MCA as follows;
- Drowned ria with steep red sandstone cliffs, sheltered bays and shallow creeks surrounded by rolling and occasionally steep sided hills with distinctive woodland down to the water's edge;
 - The sheltered tidal estuary creates an internationally and nationally important natural harbour with mudflats, sandy inlets, marshes, creeks and bays;
 - Strong currents and swell at mouth of the estuary becoming more sheltered the further inland travelled where tidal changes take over as the main influence factor on the character;
 - The ria forms a unifying theme between the two distinctly contrasting characters of the enclosed unsettled upper stretches in the east and the open developed estuary in the west;
 - Major deep-sea port, Pembroke Port and Milford Docks, with extensive industrial facilities, oil refineries, the largest oil/gas/petrochemical storage facilities in the UK and power station;
 - Dispersed settlement with single dwellings and some small medieval and traditional villages along the upper stretches of the river systems, with limited transport links;
 - Historically important quays at Milford Haven and Pembroke, along with Carew Castle and tidal mill, medieval waterside settlements and many features associated with military defence;
 - Popular recreation and sailing destination especially around Dale, although low key recreation including small boat moorings elsewhere. High numbers of walkers use the coastal path which hugs the coastline;
 - Busy ports and commercial shipping channels to the west with tanker terminals, ferry terminal and marinas contrasting to the high levels of tranquillity within the sheltered tidal estuary to the east;
 - Varied views within the estuary often contained and channelled by the surrounding steep hills of Pembrokeshire Coast National Park, opening up towards the wide estuary mouth; and
 - The oil refinery and associated infrastructure dominates views into the MCA, including from the surrounding seas (MCAs 18,19, 22 and 23).

LANDMAP Aspect Areas

3.9 A summary of each LANDMAP Aspect Area and description covering the site are provided in Table 5.5 below and are shown in Figures 6a to 6g.

Table 5.5: LANDMAP Aspects for Pembroke Dock Marine:

Aspect type	Area ID	Area name	Classification	Evaluation
Aspect type	Area ID	Area name	Classification	Evaluation
Geological Landscape	PMBRKGL128	Cleddau	Other	High
Landscape Habitat	PEMBRKLH602	Pembroke Dock	Residential Greenspace	Moderate

Visual and Sensory	PMBRKVS067	Pembroke Dock	Urban	Moderate
Historic Landscape	PMBRKHL43875	Pembroke Dock	Planned Settlement	High

Listed Buildings and Conservation Areas

- 1.1 The Application Site lies within the Pembroke Dock Conservation Area and contains six listed buildings (or structures) as follows:
- Grade II* former Graving Dock including bollards and capstans;
 - Grade II Building Slip No 1;
 - Grade II Building Slip No 2;
 - Grade II former Timber Pond (also known as the Pickling Pond);
 - Grade II former Foremen’s Office (currently in third party ownership but intended to become part of the scheme); and
 - Grade II Dockyard Walls.
- 3.10 The complex known as Defensible Barracks lies in an elevated position overlooking the Application Site to the south is a Scheduled Ancient Monument. A separate Historical Assessment has been prepared in support of the planning application providing a more detailed appraisal of the important historic features and listed buildings and should be read in conjunction with this report.

Topography

- 3.11 Made ground exists across the Application Site with approximate thickness ranging from 0.2 to 7.9m below ground level. The majority of the surface covering within the site is concrete hardstanding which is in relatively good condition.
- 3.12 With regard to topography, the site is relatively flat although it slopes marginally towards the west, from 8.1 AOD along the eastern extent of the site to the lowest point of 6.0 AOD along the western boundary.
- 3.13 In terms of geology, weathered bedrock exists underneath the site to an approximate thickness of between 3.6 and 10.4m. Where the weathered bedrock was fully penetrated by boreholes, strata of the Pembroke Limestone Group was encountered and medium grained metamorphic rock was encountered in two boreholes.

Residential Properties

- 3.14 There are numerous residential properties within the ZTV that would therefore have potential views of the Application Site which are identified as:

- Properties located close by to the south and east in Pembroke Dock within 0.5km.
- Properties located close by to the west associated with St Patricks Hill within 0.2km.
- Properties located across the waterway to the north east in Waterston, Hazel Bank and Llanstadwell at approximately 1.0 - 1.5km.
- Properties located across the waterway to the north in Neyland at approximately 1.0 - 1.5km.
- Properties located across the waterway to the north in Neyland at approximately 1.0 - 1.5km.
- Properties located across the waterway to the north east at approximately 2.0km.

Commercial Properties

- 3.15 There are numerous commercial properties in Pembroke Dock including West Llanion Business Park, Cleddau Bridge Business Park as well as hotels, shops, public houses and South Pembroke hospital which are close to the Application Site and within the ZTV that would therefore have potential views of the Proposed Development.

Public Highways

- 3.16 The Application Site is located within the surroundings of the following public highways:
- Commercial Row/ Western Way A4139 located to the east
 - Fort Road locate parallel to the south parallel
 - Cleddau Bridge A477 elevated to the north east

Baseline Visual Receptors

- 3.17 The ZTV (see Figure 5) shows that the most prominent areas of potential visibility of the Proposed Development occur in areas to the north, east and west at distances between approximately 0.5km to 2km from the Application Site, mainly from across the waterway from the settlement of Neyland and to the east from the settlement of Pembroke Dock. The ZTV also indicates that some parts of the Application Site are potentially visible from the elevated ground directly to the south which will then diminish quickly due the elevated topography dropping away. Close range local views are limited due to the high boundary wall surrounding the Application Site.

Selection of Representative Viewpoints

- 3.18 The ZTV for the Proposed Development was used to guide the selection of representative viewpoints for the visual assessment. The selected viewpoints are not intended to cover every possible view, but rather are representative of a range of receptor types e.g. residents, walkers, cyclists and road users from various directions and distances from the Application Site boundary.
- 3.19 A visual assessment from the 16 representative viewpoints was carried out in May 2018, Oct 2018 and Oct 2019 to determine how the Proposed Development might influence the visual amenity for these typical receptors. The assessment was carried out as part of the site survey, with the photographic assessment recording the character of the view and the existing visibility of the Application Site. The representative viewpoint photographs (as shown on Figures 8a – 8p: Viewpoint photographs) and representative computer generated images from 5 of the viewpoints (VP 1, VP4, VP9, VP11 and VP13) are shown on Figures 9a – 9e: Photomontages are provided in Appendix 2.

Detractors in the Landscape

- 3.20 The landscape and seascape has many factors that detract from the sensitivity of the area, including the existing power station towers, the refinery, wind turbines, tanks and associated industrial features, urban centres and large commercial sheds close to and visible from the water, the Cleddau bridge and main roads detracting from the tranquillity of the area and the presence of established commercial and recreational ships, boats and the ferry using the waterway.

Key Sensitive Receptors

- 3.21 Considering the results of the baseline, the key sensitive receptors of the Inner Milford Haven landscape and seascape in association with the Application Site and Development Proposals are as follows:
- Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest in Wales and Pembroke Dock Historic Landscape Character Area;
 - Popular recreational designation for walkers using the long range Pembrokeshire Coast Path (PCP), visitors and recreational boating;
 - The settlement pattern of Pembroke Dock; and
 - Effect on visual amenity: Viewpoints from publicly assessable points in Pembroke Dock, the Cleddau Bridge and across the Daugleddau from publicly accessible coastal viewpoints in Neyland and Burton Ferry.

Future Baseline Conditions

- 3.22 Predicting the future baseline landscape involves a degree of speculation and uncertainty, as acknowledged at paragraph 5.33 of GLVIA3. The Pembrokeshire Coast National Park Management Plan 2015 – 2019 reviewed as part of the desk-based assessment for this chapter identifies forces for change in relation to development and retaining the special qualities of the landscape, this includes consideration of renewable energy potential and capacity. It contains a section on ‘what the park might look like in 2050’ predicting improvements in sustainable design and renewable energy generation The National Landscape Character Areas (NRW 2016) (published by NRW) has also been reviewed but did not contain text relating to future issues or forces for change.
- 3.23 The Pembrokeshire Coast National Park Authority Seascape Character Assessment December 2013 was also reviewed as part of the desk-based assessment and identifies forces for change in relation to natural process and climate change. For Pembroke Dock and the port of Milford, growth in tourism and water based motor leisure boats and sailing activities is predicted from the recently built marina and increased mooring capacity. Marine commercial activity is predicted to continue to respond to more LNG and other changing requirements for energy.
- 3.24 It is recognised that no landscape or seascape is static and that the landscape and seascape across the study area is under different pressures and continually changing. Further to a review of the above, in terms of landscape character, it is considered that the character of the baseline landscape for the inner waterway will continue to change in the future mainly as a result of increases in recreational boating (up to and including 2050).

4 DESCRIPTION OF THE PROPOSALS AND MITIGATION MEASURES

4.1 The maximum design scenario of the visible elements of the construction phase of the Proposed Development are shown on Figure JPW1115-04: Indicative Proposed Masterplan). The intention of the proposed development is to create a flexible and efficient port-related office, industrial, warehousing and distribution, and ancillary area capable of meeting the needs of the modern blue economy (meaning the sustainable use of ocean resources for economic growth, improved livelihoods and jobs and ocean ecosystem health) that will provide a significant contribution to the £1.3 Bn Swansea Bay City Deal (SBCD). This will involve the intensive use of land side areas for fabrication, repair and servicing of boats, renewable energy devices, transporting cargo and other works requiring marine access, served by an appropriately structured highly flexible enlarged slipway. To realise the vision of a centre of excellence, several modifications are required to the layout of the Gate 4 area, including:

- Formation of a single 'mega' slipway and extension of the slipway towards deeper water;
- Provision of large areas of hardstanding in proximity to the quayside;
- Areas of flat land for use either as 'laydown' or capable of being developed to create buildings in response to time-sensitive business requirements.
- Enhanced interconnectivity between the new Gate 4 facility and the existing Gate 1 facility.

4.2 The proposed development will enable the provision of an enlarged single slipway at Gate 4 to facilitate the efficient transfer of vessels and marine renewable devices between land and sea, together with the formation of large open laydown areas to facilitate working on boats and devices without occupying slipways. The new single slipway will replace two existing smaller slipways and will be designed such that the historic fabric of the outer walls of these two smaller slipways will be retained.

Marine Components of the Project

4.3 With respect to the marine elements of the proposed development, the proposed works will include:

- Capital dredging around the slipways and within the Graving Dock;
- The creation of a single 'mega' slipway by combining the two existing westernmost slipways and extending the slipway into the Milford Haven Waterway into deeper water;
- The infilling of the Graving Dock; and
- The infilling of the Timber Pond.

Onshore Components of the Project

- 4.4 In addition to the hardstanding and laydown areas outlined above, large buildings for assembly, manufacturing and repair of vessels and devices will be required. At the southern boundary, areas and buildings for the importation and storage of goods and raw materials by land for fabrication activities on site will be required.
- 4.5 To achieve this, the following will be necessary:
- Creation of efficient areas of open space laydown in brownfield areas within the curtilage of the dockyard.
 - Infilling the former Graving Dock (via the methods outlined in the marine components constructions section below);
 - Infilling the former Timber Pond (via the methods outlined in the marine components construction section below); and
 - Demolition of some other buildings which are no longer fit for purpose, although the listed former Foremen’s Office will be retained.
- 4.6 The above will allow the creation of six open areas for light assembly, maintenance, external storage, laydown and parking and an extended slipway and transition area. It will also provide space to construct three buildings to be used for fabrication, repair and light assembly purposes.
- 4.7 Table 5.6 below sets out the ‘worst case’ parameters (i.e. largest), for the purposes of the regarding the buildings to be erected and the extent of the open areas.

Table 5.6: Summary of Proposed Development

Building or Area	Use	Maximum Footprint (sq m)	Maximum Width and Breadth (m)	Maximum Height (m)
Building A	Fabrication	11,900	170 x 75	40
Building B	Repair and Fabrication	4,900	75 x 65	40
Building C	Light Assembly	2,500	129 x 20	10
Area C1	Light Assembly and Maintenance External Storage and Parking	5,000	N/A	N/A
Area D	Open Batching Plant and Storage Area	15,600	N/A	N/A
Area E1	Employee Car Park	3,050	N/A	N/A

Building or Area	Use	Maximum Footprint (sq m)	Maximum Width and Breadth (m)	Maximum Height (m)
Area E2	Employee Car Park	4,900	N/A	N/A
Area F1	External Multi Use Laydown and Final Assembly Area	8,100	N/A	N/A
Area F2	External Processing and Multi Use Laydown and Assembly Area	4,850	N/A	N/A
Area J	Extended Slipway and Transition Area	13,100	N/A	N/A

Mitigation Measures

- 4.8 The main visible components of the Proposed Development likely to create impact on the landscape and visual context are as follows:
- Building A;
 - Building B;
 - Building C;
 - Area J.
- 4.9 As a direct result of operational necessity, proposed buildings A and B are large. However, historically, the Port has accommodated a number of large buildings, especially the numerous historic slipway cover buildings, all of which were located immediately adjacent to Milford Haven Waterway.
- 4.10 The design team examined several envelope options whilst developing a scheme to satisfy the end user needs and in part, due to the physical height and mass of these buildings in the locality, recognised the need to visually diminish their impact when viewed from significant locations.
- 4.11 The design concept of buildings A and B shows comparison of the proposed production facilities at Pembroke with their 19th century counterpart's in the heyday of ship building and the form of the 'mansard' type envelope structures sitting over the 'Slip-Docks'. Although none of the original slip-dock structures remain at Pembroke Dock Marine, the historic CGI recreations by De Montfort University show how closely these resembled their contemporary's at Chatham of which the remaining slip no 3 (preserved as a museum) indicates today. The spirit of these great single volume structures with their unique scatter of roof lights to provide the maximum quantity of natural light technically available at that time, provide a distinctive appearance and it is this concept that has

been used to interpret to bring an identity to the proposed modern structure (see Figures 9a – 9e: Photomontages).

- 4.12 The internal space required to assemble modern `off shore structures` with the use of overhead travelling cranes and requiring large clear-opening gable doors to access external apron areas to the quayside, necessitate using a mansard with greater vertical emphasis to the side walls combined with a gentle sweeping curve to the roof providing a profile reminiscent of their historic forebears. Panelisation of the side walls and use of scatter pattern (colour -deep blue) translucent panels make suggestion of the slip-docks` and their colour (metallic Pewter) selected for historic and visual purposes to minimise `volumetric bulk` in context of the industrial structures within the area (see Figures 9a – 9e: Photomontages. At night the structures provide a filigree of light from their many small scale translucent panels and visually diminish the mass of the entire structure.
- 4.13 Existing mature trees and vegetation has been retained along the entrance and main access road r to Gate 4 to help soften views along the access road from the local highway network.

5 PLANNING POLICY CONTEXT

- 5.1 Policy generally seeks to minimise landscape and visual effects from development and to avoid significant adverse effects. This applies particularly to landscapes with statutory designations, including in this case, Pembrokeshire Coast National Park (PCNP), but also other landscapes outside of designated areas, where there is an aspiration in policy terms to conserve and enhance landscapes of high value or features which are particularly distinctive.

National Policy Statements

- 5.2 Planning policy on renewable energy infrastructure, specifically in relation to landscape and seascape visual assessment, is contained in the Overarching National Policy Statement (NPS) for Energy (EN-1; DECC, 2011a) and the NPS for Renewable Energy Infrastructure (EN-3, DECC, 2011b), which include guidance on what matters are to be considered.

Relevant Guidance

- 5.3 Planning Policy Wales 10 (PPW 10) sets out the land use policy of Welsh Government. Chapter 5 of PPW 10 emphasises the particular importance of statutory designations of National Parks and Areas of Outstanding Natural Beauty (AONBs) and also states that all landscapes in Wales are valued and should have their special qualities protected. Paragraphs 5.30 and 5.31 of PPW 10 refer to the importance of LANDMAP, the use of which is discussed in the paragraph below. Paragraph 5.113 of PPW 10 explains that areas subject to constraints or considered unsuitable for development may include those where conservation or enhancement of the natural and historic environment requires development to be limited, where visual intrusion will need to be carefully considered, including the policies to be pursued in Heritage Coast areas, and where there maybe risks of erosion, flooding or land instability.
- 5.4 Pembrokeshire Local Development Plan (February 2013) - In relation to landscape, seascape and visual impacts, Policy GN.1 'General Development Policy' states development will be permitted where the following criteria are met:
- The nature, location, siting and scale of the proposed development is compatible with the capacity and character of the site and the area within which it is located;
 - It would not result in a significant detrimental impact on local amenity in terms of visual impact, loss of light or privacy, odours, smoke, fumes, dust, air quality or an increase in noise or vibration levels; and
 - It would not adversely affect landscape character, quality or diversity, including the special qualities of the PCNP and neighbouring authorities.
- 5.5 National Character Areas - LANDMAP is the formally adopted methodology for landscape assessment and is advocated by Planning Policy Wales (PPW) and is promoted by Natural Resource Wales (NRW). It is considered to be a "whole" landscape approach that covers all landscapes, designated and non-designated in Wales. LANDMAP separates each character area into nationally consistent datasets into the following five categories (Aspects) as follows:
- Geological Landscape;
 - Landscape Habitats;
 - Visual and Sensory Landscape;

- Historic Landscape; and
- Cultural Landscape.

5.6 Each category is provided with an evaluation level as provided in Table 5.7 below.

Table 5.7: LANDMAP Evaluation

Evaluation	Definition
High	Of regional or county importance to the aspect
Moderate	Of local importance to the aspect
Low	Of little or no importance to the aspect
Unknown	Insufficient information exists to evaluate the area

6 ASSESSMENT OF SIGNIFICANCE CONSTRUCTION EFFECTS

- 6.1 The impacts of the construction phase of the Proposed Development have been evaluated on landscape, seascape and visual assessment. The maximum design scenario of the visible elements of the construction phase of the Proposed Development are shown on Figure JPW1115-04: Indicative Proposed Masterplan) and summarised in Table 5.6 above in Section 4.
- 6.2 The main visible components of the Proposed Development likely to create impact on the landscape and visual context are as follows:
- Building A
 - Building B
 - Building C
- 6.3 A conclusion of significance of impact on the key sensitive receptors as identified above in paragraph 3.22 including additional lighting during the construction phase has been given as follows:

Impact on the Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest and Pembroke Dock Historic Landscape Character Area

- 6.4 Pembroke Dock historic landscape character area comprises the 19th century naval dockyards and the 19th century grid-pattern planned town. Included in this area are many 19th century worker and town houses, with 20th century housing, light industrial development on its outskirts. The large scale LNG refinery and gas/oil storage tanks, the power station and other energy related development including the wind turbines form elevated and visually prominent permanent elements in the local landscape beyond the port towards the open sea. This busy waterway and port is scattered with evidence of commercial shipping and recreational boating including markers buoys, slipways and moorings and a variety of floating vessels ranging from small craft, yachts, tug boats, ferry ships, LNG and oil tankers.

Magnitude of impact

- 6.5 The magnitude of the impact of the visible elements of the Proposed Development as listed above will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:
- The impact is considered to be direct; and
 - The impact is considered to be short term.
- 6.6 The impact is predicted to be of local spatial, short term duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will during construction be projecting from 0m - 40m which is considered to have a high impact, especially during the later stages of the construction period. The magnitude is therefore, considered to be high.

Sensitivity of the receptor

- 6.7 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. The sensitivity of the receptor is therefore considered to be of medium value.

Significance of the effect

- 6.8 Overall, the sensitivity of the receptor is considered to be of medium value and the magnitude of the impact of maximum design scenario is deemed to be major. The effect will therefore be of Moderate Adverse significance of effect.

Popular recreational designation for walkers using the long range Pembrokeshire Coast Path (PCP), visitors and recreational boating

- 6.9 This busy waterway and port is scattered with evidence of commercial shipping and recreational boating including markers buoys, slipways and moorings and a variety of floating vessels ranging from small craft, yachts, tug boats, ferry ships, LNG and oil tankers. The large scale LNG refinery and gas/oil storage tanks, the power station and other energy related development including the wind turbines form elevated and visually prominent permanent elements in the local landscape beyond the port towards the open sea.

Magnitude of impact

- 6.10 The magnitude of the impact of the visible elements of the Proposed Development as listed above will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:
- The impact is considered to be direct: and
 - The impact is considered to be short term.
- 6.11 The impact is predicted to be of local spatial, short term duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will during construction be projecting from 0m - 40m which is considered to have a high impact, especially during the later stages of the construction period. The magnitude is therefore, considered to be high.

Sensitivity of the receptor

- 6.12 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. However, as the majority of the

receptors are recreational users of the PCP and within leisure boats, they are considered to be of high value as is the PROW itself.

Significance of the effect

- 6.13 Overall, the sensitivity of the receptor is considered to be of high value and the magnitude of the impact of maximum design scenario is deemed to be high. The effect will be of Major Adverse significance of effect.

Settlement Pattern Pembroke Port

- 6.14 Pembroke Dock is an urban historic settlement pattern. It is centred on the 19th century and early 20th century naval dockyards, and smaller private shipbuilding yards. The dockyards are surrounded by a high defensive wall and flanked by two 19th century gun towers. Large parts of the yard are now given over to modern industry, including the Irish ferry port, but several large stone buildings in the Georgian tradition close to the dock's entrance provide a strong architectural signature. Several of the original docks also survive as do a collection of 20th century military structures, including two large hangars built for flying boats. Defensible Barracks originally constructed on an open hillside overlooking the dockyards is now surrounded by development. The 19th century town is built in a grid pattern, and this, together with the survival of many wide streets of contemporaneous houses and other buildings, provides a strong architectural signature. The combination of a planned street pattern and high survival rate of contemporaneous houses and other buildings provides Pembroke Dock with a coherent historic character.

Magnitude of impact

- 6.15 The magnitude of the impact of the visible elements of the Pembroke Dock Marine project as listed above will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:
- The impact is considered to be direct: and
 - The impact is considered to be short term.
- 6.16 The impact is predicted to be of local spatial, short term duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will during construction be projecting from 0m - 40m which is considered to have a high impact, especially during the later stages of the construction period. The magnitude is therefore, considered to be high.

Sensitivity of the receptor

- 6.17 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. However, as the majority of the receptors are recreational users of the PCP and within leisure boats, they are considered to be of high value.

Significance of the effect

6.18 Overall, the sensitivity of the receptor is considered to be of medium value and the magnitude of the impact of maximum design scenario is deemed to be high. The effect will therefore be of Moderate Adverse significance of effect. Table 5.8 summarises the effects on landscape designations and elements.

Table 5.8: Summary of effects on landscape designations and elements.

Landscape Elements	Value	Susceptibility	Sensitivity	Magnitude	Effect
Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest	Medium	Low	Medium	High	Moderate Adverse (localised)
Pembroke Dock Historic Landscape Character Area	Medium	Low	Medium	High	Moderate Adverse (localised)
Popular recreational designation for walkers using the long range Pembrokeshire Coast Path (PCP), visitors and recreational boating	Medium	Low	High	High	Major Adverse (localised)
Settlement Pattern Pembroke Port	Medium	Medium	High	High	Moderate Adverse (localised)

Effect on visual amenity: Viewpoints from publicly assessable points in Pembroke Dock, the Cleddau Bridge and across the Daugleddau from Publicly Accessible Coastal Viewpoints in Neyland and Burton Ferry

6.19 A total of 16 viewpoints were assessed (see Figures 8a – 8p: Viewpoint photographs and Figure 7: Viewpoint Locations). The anticipated effects on visual receptors during the construction phase and representative viewpoints are shown in Table 5.9 below.

Distant Views (2km+ from the Application Site)

6.20 There are two distance range representative viewpoints over a distance of 2km – VP8 and VP16. VP8 is assessed as undergoing a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development. VP16 is assessed as undergoing a Minor Adverse significance of effect on visual amenity.

Distant Views (1km - 2km from the Application Site)

6.21 There are five medium range representative viewpoints – VP1, VP2, VP3, VP5, and VP7. VP1, VP2 and VP3 are assessed as undergoing a Major Adverse significance of effect on visual amenity. VP5

and VP7 are assessed as undergoing a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development.

Medium Range Views (500m to 1km from the Application Site)

6.22 There are four medium range representative viewpoints – VP4, VP6, VP9 and VP10. VP4, VP9 and VP10 would undergo a Major Adverse significance of effect on visual amenity and VP6 would undergo a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development.

Short-range Views (less than 500m from the Application Site)

6.23 Of the four representative short-range VP11, VP13, VP14, VP15, all of the effects would be localised and would undergo Moderate Adverse significance of Effects at Years 1 remaining at Moderate after 10 years.

6.24 The anticipated effects on visual receptors and representative viewpoints are shown in Table 5.9 below.

Table 5.9 Summary of Effects on Visual Receptors and Representative Viewpoints

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
VP1: Hazelbeach - distance of 1196m	Looking south east at a distance of 1196m from the nearest site boundary at contour 5 AOD. Receptors are slow moving walkers using the PCP along the shoreline.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape breaking the skyline in an already industrialised context where large commercial buildings are a common element.	High	High	Major Adverse
VP2: Llanstadwell - distance of 1117m looking SE towards the site	Looking south east at a distance of 1117m from the nearest site boundary at contour 7 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	New buildings A and B will be clearly visible especially during the later stages of the construction period above and within the built envelopment of the existing docks just breaking the skyline in an already industrialised context where large commercial buildings are a common element.	High	High	Major Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
VP3: Neyland - distance of 1134m looking S towards the site	Looking south at a distance of 1134m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape breaking the skyline in an already industrialised context where large commercial buildings are a common element.	High	High	Major Adverse
VP4: Neyland - distance of 989m looking SW towards the site	Looking south west at a distance of 989m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape just breaking the skyline in an already industrialised context where large commercial buildings are a common element (see Figure 13b).	High	High	Major Adverse
VP5: Neyland - distance of 1223m looking SW towards the site	Looking south west at a distance of 1223m from the nearest site boundary at contour 15 AOD. Receptors are fast moving in vehicles using the town centre.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape in an already industrialised context where large commercial buildings are a common element.	Medium	High	Moderate Adverse
VP6: Neyland - distance of 982m looking SW towards the site.	Looking south west at a distance of 982m from the nearest site boundary at contour 19 AOD. Receptors are slow moving in vehicles	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape just above the	Medium	High	Moderate Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
	and on foot using car park.	skyline in an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.			
VP7: Cleddau Bridge - distance of 1584m looking SW towards the site	Looking south west at a distance of 1584m from the nearest site boundary at an elevated position at contour 22 AOD. Receptors are slow moving walkers using the PCP across the bridge and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the docks across the seascape just above the skyline in an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.	Medium	High	Moderate Adverse
VP8: Burton Ferry - distance of 2100m looking SW towards the site	Looking south west at a distance of 2100m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers and in vehicles using the using the highway.	Buildings A and B will be visible especially during the later stages of the construction period in the docks across the seascape just above the skyline underneath the Cleddau bridge which will remain the dominant element in the foreground against an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.	Medium	Low	Moderate Adverse
VP9: Pembroke Dock - distance of 682m looking SW towards the site	Looking south west at a distance of 682m from the nearest site boundary at contour 6 AOD. Receptors are slow moving walkers using the recreational open space.	Buildings A and B will be clearly visible especially during the later stages of the construction period in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and	High	High	Major Adverse

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
		energy infrastructure are a common element (see Figure 3c).			
V10: Pembroke Dock - distance of 600m looking SW towards the site	Looking south west at a distance of 600m from the nearest site boundary at contour 7 AOD.	Buildings A and B will be clearly visible especially during the later stages of the construction period above the boundary wall in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and energy infrastructure are a common element.	High	High	Major Adverse
VP11: Pembroke Dock Presely Road near the Defensible Barracks - distance of 337m looking NW towards the site	Looking north west at a distance of 337m from the nearest site boundary at contour 39 AOD. Receptors are slow moving walkers using the PCP.	Buildings A and B will be clearly visible especially during the later stages of the construction period from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial buildings and the ferry terminal are common elements (see Figure 13b).	High	Medium	Moderate Adverse
VP12: South Pembrokeshire Golf Course - distance of 900m looking NE towards the site	Looking north east at a distance of 900m from the nearest site boundary at contour 47 AOD. Receptors are slow moving walkers using the local footpath close to the PCP.	Buildings A will be clearly visible and building B will be partially visible especially during the later stages of the construction period from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial	High	High	Major Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
		buildings and the ferry terminal are common elements.			
VP 13: Pembroke Dock St Patrick's Hill - distance of 22m looking NE towards the site	Looking south at a distance of 22m from the nearest site boundary at contour 21 AOD. Receptors are fast and slow moving using the local highway network	Buildings A and B will be clearly visible especially during the later stages of the construction period at close range from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial buildings and the ferry terminal are common elements (see Figure 13e).	Medium	High	Moderate Adverse
VP14: Pembroke Dock coast - distance of 33m looking NE towards the site	Looking north east at a distance of 33m from the nearest site boundary at contour 7m AOD. Receptors are slow moving and on foot using this public car park.	Buildings A and B will be clearly visible especially during the later stages of the construction period at close range above the boundary wall breaking the skyline.	Medium	High	Moderate Adverse
VP 15: Llanreath - distance of 478m looking NE towards the site	Looking north east at a distance of 1470m from the nearest site boundary at contour 5 AOD. Receptors are slow moving using the beach and public highway.	Buildings A and B will be clearly visible especially during the later stages of the construction period within the context of the dockland built envelope breaking the skyline within the waterway where large commercial buildings common elements.	Medium	High	Moderate Adverse
VP16: Pwllcrochan - distance of	Looking north east at a distance of 3800m from the nearest site	Buildings A and B will be visible especially during the later stages of the	High	Low	Minor Adverse

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect During Construction Phase
3800m looking NE	boundary at contour 26 AOD. Receptors are slow moving walkers using the PCP.	construction period in the middle distance within the docks and urban setting in an already industrialised context where large commercial buildings and energy infrastructure are a common element with the hills beyond in the landscape forming a prominent backdrop.			
Private Views from properties in Hazelbeach, Llanstadwell, Neyland, Burton Ferry, Pembroke Dock and St Patrick's Hill.	Private Views from properties in Hazelbeach, Llanstadwell, Neyland, Burton Ferry, Pembroke Dock and St Patrick's Hill. Receptors are static.	Generally, buildings A and B will be clearly visible especially during the later stages of the construction period in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and energy infrastructure are a common element.			Major Adverse

Night-time Visual Effects

- 6.25 A sensitive lighting scheme should be provided for the construction phase and potential limitations to working hours during winter to minimise the night time visual effects on the local landscape.

7 ASSESSMENT OF SIGNIFICANCE OPERATIONAL EFFECTS

7.1 The impacts of the operational phase of the Proposed Development (as listed in paragraphs 4.1 – 4.7 and summarised in Table 5.6 above) have been evaluated on landscape, seascape and visual assessment as follows.

7.2 A conclusion of significance of impact on the key sensitive receptors as identified above in paragraph 3.22 has been given as follows:

Impact on the Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest and Pembroke Dock Historic Landscape Character Area

7.3 Pembroke Dock historic landscape character area comprises the 19th century naval dockyards and the 19th century grid-pattern planned town. Included in this area are many 19th century worker and town houses, with 20th century housing, light industrial development on its outskirts. The large scale LNG refinery and gas/oil storage tanks, the power station and other energy related development including the wind turbines form elevated and visually prominent permanent elements in the local landscape beyond the port towards the open sea. This busy waterway and port is scattered with evidence of commercial shipping and recreational boating including markers buoys, slipways and moorings and a variety of floating vessels ranging from small craft, yachts, tug boats, ferry ships, LNG, and oil tankers.

Magnitude of impact

7.4 The magnitude of the impact of the visible elements of the Proposed Development will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:

- The impact is considered to be direct; and
- The impact is considered to be long term; and
- The impact is considered to be permanent and irreversible.

7.5 The impact is predicted to be of local spatial, long term and permanent duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will be projecting 40m which is considered to have a high impact. The magnitude is therefore, considered to be high.

Sensitivity of the receptor

7.6 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. The sensitivity of the receptor is therefore considered to be of medium value.

Significance of the effect

- 7.7 Overall, the sensitivity of the receptor is considered to be of medium value and the magnitude of the impact of maximum design scenario is deemed to be major. The effect will therefore be of Moderate Adverse significance of effect.

Popular recreational designation for walkers using the long range Pembrokeshire Coast Path (PCP), visitors and recreational boating

- 7.8 This busy waterway and port is scattered with evidence of commercial shipping and recreational boating including markers buoys, slipways and moorings and a variety of floating vessels ranging from small craft, yachts, tug boats, ferry ships, LNG and oil tankers. The large scale LNG refinery and gas/oil storage tanks, the power station and other energy related development including the wind turbines form elevated and visually prominent permanent elements in the local landscape beyond the port towards the open sea.

Magnitude of impact

- 7.9 The magnitude of the impact of the visible elements of the Pembroke Dock Marine project as listed above will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:
- The impact is considered to be direct; and
 - The impact is considered to be long term; and
 - The impact is considered to be permanent.
- 7.10 The impact is predicted to be of local spatial, long term and permanent duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will be projecting 40m which is considered to have a high impact. The magnitude is therefore, considered to be high.

Sensitivity of the receptor

- 7.11 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. However, as the majority of the receptors are recreational users of the PCP and within leisure boats, they are considered to be of high value.

Significance of the effect

- 7.12 Overall, the sensitivity of the receptor is considered to be of high value and the magnitude of the impact of maximum design scenario is deemed to be high. The effect will be of Major Adverse significance of effect.

Settlement Pattern Pembroke Port

- 7.13 Pembroke Dock is an urban historic settlement pattern. It is centred on the 19th century and early 20th century naval dockyards, and smaller private shipbuilding yards. The dockyards are surrounded by a high defensive wall and flanked by two 19th century gun towers. Large parts of the yard are now given over to modern industry, including the Irish ferry port, but several large stone buildings in the Georgian tradition close to the dock's entrance provide a strong architectural signature. Several of the original docks also survive as do a collection of 20th century military structures, including two large hangars built for flying boats. Defensible Baracks, originally constructed on an open hillside overlooking the dockyards is now surrounded by development. The 19th century town is built in a grid pattern, and this, together with the survival of many wide streets of contemporaneous houses and other buildings, provides a strong architectural signature. The combination of a planned street pattern and high survival rate of contemporaneous houses and other buildings provides Pembroke Dock with a coherent historic character.

Magnitude of impact

- 7.14 The magnitude of the impact of the visible elements of the Pembroke Dock Marine project as listed above will form common elements within the wider landscape as large scale buildings associated with the energy industry, specifically:
- The impact is considered to be direct: and
 - The impact is considered to be long term; and
 - The impact is considered to be permanent and irreversible.
- 7.15 The impact is predicted to be of local spatial, long term and permanent duration. It is predicted that the impact will affect the receptor directly, as buildings A and B will be projecting 40m which is considered to have a high impact. The magnitude is therefore considered to be high.

Sensitivity of the receptor

- 7.16 LANDMAP identifies the context as being of medium sensitivity. Due to the function of this part of the waterway as a port and for commercial and recreational boating concurrent with a number of dominant built structures adjacent (Cleddau Bridge and port buildings) concurrent with oil refinery structures and vertical elements of the power stations and wind turbines elevated on the cliffs above the waterway looking seawards, there are a number of factors that detract from sensitivity. Consequently, the receptor is deemed to be of low vulnerability. However, as the majority of the receptors are recreational users of the PCP and within leisure boats, they are considered to be of high value.

Significance of the effect

- 7.17 Overall, the sensitivity of the receptor is considered to be of medium value and the magnitude of the impact of maximum design scenario is deemed to be high. The effect will therefore be of Moderate Adverse significance of effect. Table 5.10 below summaries the effects on landscape designations and elements.

Table 5.10: Summary of effects on landscape designations and elements.

Landscape Elements	Value	Susceptibility	Sensitivity	Magnitude	Effect
Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest	Medium	Low	Medium	High	Moderate Adverse (localised)
Pembroke Dock Historic Landscape Character Area	Medium	Low	Medium	High	Moderate Adverse (localised)
Popular recreational designation for walkers using the long range Pembrokeshire Coast Path (PCP), visitors and recreational boating	Medium	Low	High	High	Major Adverse (localised)
Settlement Pattern Pembroke Port	Medium	Medium	High	High	Moderate Adverse (localised)

Effect on visual amenity: Viewpoints from publicly assessable points in Pembroke Dock, the Cleddau Bridge and across the Daugleddau from Publicly Accessible Coastal Viewpoints in Neyland and Burton Ferry

7.18 A total of 16 viewpoints were assessed (see Figures 8a – 8p: Viewpoint photographs. The anticipated effects on visual receptors and representative viewpoints are shown in Table 5.11 below.

Distant Views (2km+ from the Application Site)

7.19 There are two distance range representative viewpoints over a distance of 2km – VP8 and VP16. VP8 is assessed as undergoing a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development. VP16 is assessed as undergoing a Minor Adverse significance of effect on visual amenity.

Distant Views (1km - 2km from the Application Site)

7.20 There are five medium range representative viewpoints – VP1, VP2, VP3, VP5, and VP7. VP1, VP2 and VP3 are assessed as undergoing a Major Adverse significance of effect on visual amenity. VP5 and VP7 are assessed as undergoing a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development.

Medium Range Views (500m to 1km from the Application Site)

7.21 There are four medium range representative viewpoints – VP4, VP6, VP9 and VP10. VP4, VP9 and VP10 would undergo a Major Adverse significance of effect on visual amenity and VP6 would undergo a Moderate Adverse significance of effect on visual amenity as a result of the Proposed Development.

Short-range Views (less than 500m from the Application Site)

7.22 Of the four representative short-range VP11, VP13, VP14, VP15, all of the effects would be localised and would undergo Moderate Adverse significance of Effects at Years 1 remaining at Moderate after 10 years.

Table 5.11 Summary of Effects on Visual Receptors and Representative Viewpoints

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
VP1: Hazelbeach - distance of 1196m	Looking south east at a distance of 1196m from the nearest site boundary at contour 5 AOD. Receptors are slow moving walkers using the PCP along the shoreline.	Buildings A and B will be clearly visible in the docks across the seascape breaking the skyline in an already industrialised context where large commercial buildings are a common element (see Figure 13a).	High	High	Major Adverse	Major Adverse
VP2: Llanstadwell - distance of 1117m looking SE towards the site	Looking south east at a distance of 1117m from the nearest site boundary at contour 7 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	New buildings A and B will be clearly visible above and within the built envelopment of the existing docks just breaking the skyline in an already industrialised context where	High	High	Major Adverse	Major Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
		large commercial buildings are a common element.				
VP3: Neyland - distance of 1134m looking S towards the site	Looking south at a distance of 1134m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible in the docks across the seascape breaking the skyline in an already industrialised context where large commercial buildings are a common element.	High	High	Major Adverse	Major Adverse
VP4: Neyland - distance of 989m looking SW towards the site	Looking south west at a distance of 989m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers using the PCP along the shoreline and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible in the docks across the seascape just breaking the skyline in an already industrialised context where large commercial buildings are a common element (see Figure 13b).	High	High	Major Adverse	Major Adverse
VP5: Neyland - distance of 1223m looking SW towards the site	Looking south west at a distance of 1223m from the nearest site boundary at contour 15 AOD. Receptors are fast moving in vehicles using the town centre.	Buildings A and B will be clearly visible in the docks across the seascape in an already industrialised context where large commercial buildings are a	Medium	High	Moderate Adverse	Moderate Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
		common element.				
VP6: Neyland - distance of 982m looking SW towards the site.	Looking south west at a distance of 982m from the nearest site boundary at contour 19 AOD. Receptors are slow moving in vehicles and on foot using car park.	Buildings A and B will be clearly visible in the docks across the seascape just above the skyline in an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.	Medium	High	Moderate Adverse	Moderate Adverse
VP7: Cleddau Bridge - distance of 1584m looking SW towards the site	Looking south west at a distance of 1584m from the nearest site boundary at an elevated position at contour 22 AOD. Receptors are slow moving walkers using the PCP across the bridge and fast moving within vehicles using the highway.	Buildings A and B will be clearly visible in the docks across the seascape just above the skyline in an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.	Medium	High	Moderate Adverse	Moderate Adverse
VP8: Burton Ferry - distance of 2100m looking SW towards the site	Looking south west at a distance of 2100m from the nearest site boundary at contour 8 AOD. Receptors are slow moving walkers and in vehicles using the using the highway.	Buildings A and B will be visible in the docks across the seascape just above the skyline underneath the Cleddau bridge which will remain the dominant	Medium	Low	Minor Adverse	Moderate Adverse

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
		element in the foreground against an already industrialised backdrop where large commercial buildings and energy related infrastructure are a common element.				
VP9: Pembroke Dock - distance of 682m looking SW towards the site	Looking south west at a distance of 682m from the nearest site boundary at contour 6 AOD. Receptors are slow moving walkers using the recreational open space.	Buildings A and B will be clearly visible in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and energy infrastructure are a common element (see Figure 3c).	High	High	Major Adverse	Major Adverse
V10: Pembroke Dock - distance of 600m looking SW towards the site	Looking south west at a distance of 600m from the nearest site boundary at contour 7 AOD.	Buildings A and B will be clearly visible above the boundary wall in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and energy	High	High	Major Adverse	Major Adverse

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Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
		infrastructure are a common element.				
VP11: Pembroke Dock Presely Road near the Defensible Barracks - distance of 337m looking NW towards the site	Looking north west at a distance of 337m from the nearest site boundary at contour 39 AOD. Receptors are slow moving walkers using the PCP.	Buildings A and B will be clearly visible from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial buildings and the ferry terminal are common elements (see Figure 13b).	High	Medium	Moderate Adverse	Moderate Adverse
VP12: South Pembrokeshire Golf Course - distance of 900m looking NE towards the site	Looking north east at a distance of 900m from the nearest site boundary at contour 47 AOD. Receptors are slow moving walkers using the local footpath close to the PCP.	Buildings A will be clearly visible and building B will be partially visible from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial buildings and the ferry terminal are common elements.	High	High	Major Adverse	Major Adverse
VP 13: Pembroke Dock	Looking south at a distance of 22m from	Buildings A and B will be clearly	Medium	High	Moderate Adverse	Moderate Adverse

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
St Patrick's Hill - distance of 22m looking NE towards the site	the nearest site boundary at contour 21 AOD. Receptors are fast and slow moving using the local highway network	visible at close range from this elevated viewpoint within the context of the dockland built envelope enclosed within the waterway where large commercial buildings and the ferry terminal are common elements (see Figure 13e).				
VP14: Pembroke Dock coast - distance of 33m looking NE towards the site	Looking north east at a distance of 33m from the nearest site boundary at contour 7m AOD. Receptors are slow moving and on foot using this public car park.	Buildings A and B will be clearly visible at close range above the boundary wall breaking the skyline.	Medium	High	Moderate Adverse	Moderate Adverse
VP 15: Llanreath - distance of 478m looking NE towards the site	Looking north east at a distance of 1470m from the nearest site boundary at contour 5 AOD. Receptors are slow moving using the beach and public highway.	Buildings A and B will be clearly visible within the context of the dockland built envelope breaking the skyline within the waterway where large commercial buildings common elements.	Medium	High	Moderate Adverse	Moderate Adverse
VP16: Pwllcrochan - distance of 3800m looking NE	Looking north east at a distance of 3800m from the nearest site boundary at contour 26 AOD. Receptors are	Buildings A and B will be visible in the middle distance within the docks and	High	Low	Minor Adverse	Minor Adverse

Visual Receptor/ Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Effect Year 1 with mitigation	Effect Year 10 with mitigation
	slow moving walkers using the PCP.	urban setting in an already industrialised context where large commercial buildings and energy infrastructure are a common element with the hills beyond in the landscape forming a prominent backdrop.				
Private Views from properties in Hazelbeach, Llanstadwell, Neyland, Burton Ferry, Pembroke Dock and St Patrick's Hill.	Private Views from properties in Hazelbeach, Llanstadwell, Neyland, Burton Ferry, Pembroke Dock and St Patrick's Hill. Receptors are static.	Generally buildings A and B will be clearly visible in the context of the existing dock breaking the skyline against a backdrop already industrialised context where large commercial buildings and energy infrastructure are a common element.			Major Adverse	Major Adverse

Night-time Visual Effects

- 7.23 A sensitive lighting scheme should be provided for the development to minimise the night time visual effects on the local landscape. Regarding buildings A and B, at night the structures provide a filigree of light from their many small scale translucent panels and visually diminish the mass of the entire structure.

8 SUMMARY AND CONCLUSIONS

- 8.1 The potential landscape and visual impacts that relates to the Proposed Development for Pembroke Dock Marine located along the north-western edge of the settlement of Pembroke Dock (grid reference: SM958037, X [Easting]: 195835 and Y [Northing]: 203799) in the town of Pembroke Dock on the southern side of the Milford Haven Waterway.
- 8.2 The Proposed Development relates to the existing port functions located within the Milford Haven Waterway which is an integral part of Britain's oil and gas industry and one of the busiest ports in the UK. The landscape and seascape can be described as an intensely used urban waterway scattered with commercial shipping, commercial fishing boats and marker buoys. Port operational activities are dominant including the Pembroke car ferry, tugs, service and pilot vessels. Large jetty and slipway structures are common along the waterway. Views to the west are dominated by the tall oil refinery structures, gas and petrochemical storage tanks and vertical element of the power stations elevated on the cliffs above the waterway edges. The Cleddau bridge lies approximately 1.50km to the north east and is a dominating feature in the local landscape.
- 8.3 PCNP is a nationally designated landscape within the 5km study area, however the Application Site lies approximately 3.1km from the nearest boundary of the national park and there is no inter-visibility. There are no statutory landscape designations associated directly with the Application Site, however it lies the Milford Haven Waterway Registered Landscape of Outstanding Historic Interest and the Pembroke Dock Historic Landscape Character Area. The Milford Haven Waterway is placed adjacent to the north and lies within the Pembrokeshire Marine Special Area of Conservation (SAC) and Milford Haven Waterway Site of Special Scientific Interest (SSSI) which overlap the site along the shoreline.
- 8.4 Analysis of the LANDMAP Visual and Sensory Aspect Area reveals that the Application Site is classed as Urban. The Pembroke Dock Marine project has been an evolving design process with respect to landscape and visual effects, which has involved an interactive process within the design team considering environmental factors including landscape and seascape character and visual impact. This approach utilises the information provided within the LANDMAP datasets. The design and location of the proposed buildings have been refined in response to this process where design, appearance and scale has been a key factor in lessening the likely landscape and visual effects. The primary landscape qualities of all 5 Aspect Areas within the ZTV are maintained and respected as the land use of the Application Site would remain intact as a functional port and the Proposed Development would fit in with the existing urban pattern, respecting the urban grain.
- 8.5 The Proposed Development would follow the existing levels of Application Site respecting the topography which would remain largely intact. Consequently, the urban pattern and complexity would not change as a result.
- 8.6 Of the four landscape designations and elements assessed, the Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest and the Pembroke Dock Historic Landscape Character Area would undergo Moderate Adverse impacts as a result of the Proposed Development. The effects on the popular recreational designation for walkers using the long range PCP, visitors and recreational boating and the settlement pattern of Pembroke Port would undergo Major Adverse impacts.

- 8.7 Of the sixteen representative viewpoints assessed, four are short-range local views (VP11, VP13, VP14, VP15) where all of the effects would be localised and would undergo Moderate Adverse significance of visual effects at Years 1 remaining at Moderate after 10 years. There are four medium range (500m - 1km) representative views (VP4, VP6, VP9 and VP10), of which three would undergo a Major Adverse significance of effect on visual amenity and VP6 would undergo a Moderate Adverse effect on visual amenity. There are five medium range (1km – 2km) representative viewpoints with VP1, VP2 and VP3 assessed as undergoing a Major Adverse significance of effect on visual amenity and VP5 and VP7 are assessed as undergoing a Moderate Adverse significance of effect on visual amenity. Two distance range representative viewpoints (2km +) were assessed with VP8 undergoing a Moderate Adverse significance of effect and VP16 undergoing a Minor Adverse significance of effect on visual amenity. All of the viewpoints assessed result in an impact of Moderate or Major with the exception of the impact on VP16.
- 8.8 Mitigation measures adopted as part of the design development comprised the design team examining several envelope options whilst developing a scheme to satisfy the end user needs and in part, due to the physical height and mass of these buildings in the locality, recognised the need to visually diminish their impact when viewed from significant locations.
- 8.9 The design concept of the buildings A and B which functionally and operationally need to be large draws comparison of the proposed production facilities at Pembroke with their 19th century counterpart's in the heyday of ship building and the form of the `mansard` type envelope structures sitting over the `Slip-Docks`. The spirit of these great single volume structures with their unique scatter of roof lights to provide the maximum quantity of natural light technically available at that time, provide a distinctive appearance and it is this concept that has been used to interpret to bring an identity to the proposed modern structure. Panelisation of the side walls and use of scatter pattern (colour -deep blue) translucent panels make suggestion of the slip-docks` and their colour (metallic Pewter) selected for historic and visual purposes to minimise `volumetric bulk` in context of the industrial structures within the area. At night the structures provide a filigree of light from their many small scale translucent panels and visually diminish the mass of the entire structure.
- 8.10 It is acknowledged that with delivery of this development, as with any type of development, it will give rise to change in the visual character of the Application Site itself and to the views of people overlooking, visiting or walking through the localised area within a context where large scale prominent port commercial buildings and energy infrastructure are common elements. The extent of change has been minimised through careful/sensitive design and mitigation to ensure that the landscape and visual impacts judgement will need to be outweighed against the benefits delivered by the Proposed Development.
- 8.11 Of the four landscape designations and elements assessed, the Designation of Milford Haven Waterway Registered Landscape of Outstanding Historic Interest and the Pembroke Dock Historic Landscape Character Area would undergo Moderate Adverse impacts as a result of the Proposed Development. The effects on the popular recreational designation for walkers using the long range PCP, visitors and recreational boating and the settlement pattern of Pembroke Port would undergo Major Adverse impacts.

9 REFERENCES

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APPENDICES

Appendix A

Detailed Assessment Methodology

APPRAISAL OF LANDSCAPE EFFECTS METHODOLOGY

This Appraisal of Landscape Effect has been undertaken with reference to best practice, as outlined in the following published guidance:

- Guidelines for Landscape and Visual Impact Assessment, Third Edition Landscape Institute and the Institute of Environmental Management and Assessment GLVIA3, (2013);
- GLVIA3 Statement of Clarification 1/13;
- An Approach to Landscape Character Assessment, Natural England (2014);
- Photography and Photomontage in Landscape and Visual Impact Assessment Advice Note 01/11, Landscape Institute (2011); and
- Planning Policy Wales LANDMAP Guidance Note 1: LANDMAP and Special Landscape Areas (2016) and
- Planning Policy Wales LANDMAP Guidance Note 3: (2013).

GLVIA3 states within paragraph 1.1 that *“Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people’s views and visual amenity.”*

GLVIA3 also states within paragraph 1.17 that when identifying landscape and visual effects there is a *“need for an approach that is in proportion to the scale of the project that is being assessed and the nature of the likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional.”*

GLVIA3 recognises within paragraph 2.23 that *“professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters much of the assessment must rely on qualitative judgements”*³ undertaken by a landscape consultant or a Chartered Member of the Landscape Institute (CMLI).

The effects on cultural heritage and ecology are not considered within this report.

Study Area

The study area for the report was taken to be a 5km radius from the site. However, the main focus of the assessment was taken as a radius of 2km from the site as it 1 Para 1.1, Page 4, GLVIA, 3rd Edition 2 Para 1.17, Page 9, GLVIA, 3rd Edition 3 Para 2.23, Page 21, GLVIA, 3rd Edition 2 is considered that beyond this distance, even with good visibility, the proposals would not generally be perceptible in the landscape.

Effects Assessed

Landscape and visual effects are assessed through professional judgements on the sensitivity of landscape elements, landscape character, visual receptors and representative viewpoints combined with the predicted magnitude of change arising from the proposals.

The landscape and visual effects have been assessed in the following sections:

- Effects on landscape elements;
- Effects on landscape character; and
- Effects on visual amenity.

Sensitivity is defined in GLVIA3 as “a term applied to specific receptors, combining judgments of susceptibility of the receptor to a specific type of change or development proposed and the value related to that receptor.”

Various factors in relation to the susceptibility and value of landscape elements, landscape character, visual receptors or representative viewpoints are considered below and are cross referenced to determine the overall sensitivity as shown in Table 1:

Table 1: Overall sensitivity of landscape and visual receptors

USCEPTIBILITY	VALUE:	HIGH	MEDIUM	LOW
	HIGH	High	High	Medium
	MEDIUM	High	Medium	Medium
	LOW	Medium	Medium	Low

Magnitude of change is defined in GLVIA3 as “a term that combines judgements about the size and scale of the effect, the extent over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.” Various factors contribute to the magnitude of change on landscape elements, landscape character, visual receptors and representative viewpoints.

The sensitivity of the landscape and visual receptor and the magnitude of change resulting from the Proposed Development are cross referenced in Table 1 to determine the degree of landscape and visual effects.

EFFECTS ON LANDSCAPE ELEMENTS

The effects on landscape elements are limited to the site and include the direct physical change to the fabric of the land, such as the removal of woodland, hedgerows or grassland to allow for the proposed development.

Sensitivity of Landscape Elements

Sensitivity is determined by a combination of the value that is attached to a landscape element and the susceptibility of the landscape element to changes that would arise as a result of the proposed development – see pages 88-90 of GLVIA3. Both value and susceptibility are assessed as high, medium or low.

The criteria for assessing the value of landscape elements and landscape character is shown in Table 2:

Table 2: Criteria for assessing landscape value

HIGH	<p>Designated areas at an International, National or Local scale (including but not limited to World Heritage Sites, National Parks, AONBs, SLAs, etc.) considered to be an important component of the country’s character experienced by a high number of people.</p> <p>Landscape condition is good and components are generally maintained to a high standard. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has an elevated level of tranquillity.</p> <p>Rare or distinctive landscape elements and features are key components that contribute to the landscape character of the area.</p>
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MEDIUM	<p>No formal designation but (typically) rural landscapes, important to the setting of towns and villages and also considered to be a distinctive component of the national or local landscape character experienced by a large proportion of its population.</p> <p>Landscape condition is fair and components are generally well maintained.</p> <p>In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has a moderate level of tranquillity.]</p> <p>Rare or distinctive landscape elements and features are notable components that contribute to the character of the area.</p>
LOW	<p>No formal designations but a landscape of local relevance (including but not limited to public or semi-public open spaces, village greens of allotments) and also green infrastructure and open spaces within residential areas likely to be visited and valued by the local community.</p> <p>Landscape condition may be poor and components poorly maintained or damaged. In terms of seclusion, enclosure by land use, traffic and movement, light pollution and presence/absence of major infrastructure, the landscape has limited levels of tranquillity.</p> <p>Rare or distinctive elements and features are not notable components that contribute to the landscape character of the area.</p>

The criteria for assessing the susceptibility of landscape elements and landscape character is shown in Table 3:

Table 3: Criteria for assessing landscape susceptibility

HIGH	<p>Scale of enclosure – landscapes with a low capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc.</p> <p>Nature of land use – landscapes with no or little existing reference or context to the type of development being proposed.</p> <p>Nature of existing elements – landscapes with components that are not easily replaced or substituted (e.g. ancient woodland, mature trees, historic parkland, etc.). Nature of existing features – landscapes where detracting features, major infrastructure or industry is not present or where present has a limited influence on landscape character.</p>
MEDIUM	<p>Scale of enclosure – landscapes with a medium capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc.</p> <p>Nature of land use – landscapes with some existing reference or context to the type of development being proposed.</p> <p>Nature of existing elements – landscapes with components that are easily replaced or substituted. Nature of existing features – landscapes where detracting features, major infrastructure or industry is present and has a noticeable influence on landscape character.</p>
LOW	<p>Scale of enclosure – landscapes with a high capacity to accommodate the type of development being proposed owing to the interactions of topography, vegetation cover, built form, etc.</p> <p>Nature of land use – landscapes with extensive existing reference or context to the type of development being proposed.</p> <p>Nature of existing features – landscapes where detracting features or major infrastructure is present and has a dominating influence on the landscape.</p>

Various factors in relation to the susceptibility and value of landscape elements are assessed and cross referenced to determine the overall sensitivity as shown in Table 1.

Magnitude of Change on Landscape Elements

Professional judgement has been used to determine the magnitude of change on individual landscape elements within the site as shown in Table 4:

Table 4: Criteria for assessing magnitude of change for landscape elements

HIGH	Total loss of a landscape element.
MEDIUM	Partial loss or alteration to part of a landscape element.
LOW	Minor loss or alteration to part of a landscape element.
NEGLIGIBLE	No loss or very limited alteration to part of a landscape element.

EFFECTS ON LANDSCAPE CHARACTER

Landscape character is defined as the “*distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.*” The assessment of effects on landscape character considers how the introduction of new landscape elements physically alters the landform, landcover, landscape pattern and perceptual attributes of the site or how visibility of the Proposed Development changes the way in which the landscape character is perceived.

Sensitivity of Landscape Character

Sensitivity is determined by a combination of the value that is attached to a landscape and the susceptibility of the landscape to changes that would arise as a result of the proposed development – see pages 88-90 of GLVIA3. Both value and susceptibility are assessed as high, medium or low.

The criteria for assessing landscape character value are shown in Table 2.

The criteria for assessing landscape character susceptibility are shown in Table 3.

The overall sensitivity of landscape character is determined through cross referencing the value and susceptibility of landscape character as shown in Table 1.

Magnitude of Change on Landscape Character

Professional judgement has been used to determine the magnitude change on landscape character as shown in Table 5:

Table 5: Criteria for magnitude of change for landscape character

HIGH	Introduction of major elements into the landscape or some major change to the scale, landform, land cover or pattern of the landscape.
MEDIUM	Introduction of some notable elements into the landscape or some notable change to the scale, landform, landcover or pattern of the landscape.
LOW	Introduction of minor new elements into the landscape or some minor change to the scale, landform, landcover or pattern of the landscape.

NEGLIGIBLE	No notable or appreciable introduction of new elements into the landscape or change to the scale, landform, landcover or pattern of the landscape
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EFFECTS ON VISUAL AMENITY

The effects on visual amenity consider the changes in views arising from the proposed development in relation to visual receptors including settlements, 18/09/2015 | A.0292 Page |7 residential properties, transport routes, recreational facilities and attractions; and on representative viewpoints or specific locations within the study area as agreed with the Local Planning Authority. Sensitivity of Visual Receptors

Sensitivity is determined by a combination of the value that is attached to a view and the susceptibility of the receptor to changes in that view that would arise as a result of the proposed development – see pages 113-114 of GLVIA3. Both value and susceptibility are assessed as high, medium or low.

The value attached to a view includes a recognition of value through landscape designations, indicators of value attached to views by visitors such as the inclusion on maps or reference within guidebooks, provision of facilities, presence of interpretation boards, etc.

The criteria for assessing visual susceptibility is shown in Table 6:

Table 6: Criteria for assessing visual susceptibility

HIGH	Includes occupiers of residential properties and people engaged in recreational activities in the countryside such as using public rights of way.
MEDIUM	Includes people engaged in outdoor sporting activities and people travelling through the landscape on minor roads and trains.
LOW	Includes people at place of work e.g. industrial and commercial premises and people travelling through the landscape on A roads and motorways.

Magnitude of Change on Visual Amenity

Professional judgement has been used to determine the magnitude change on landscape character as shown in Table 7:

Table 7: Criteria for magnitude of change for visual receptors

HIGH	Major change in the view that has a defining influence on the overall view with many visual receptors affected.
MEDIUM	Some change in the view that is clearly visible and forms an important but not defining element in the view.
LOW	Some change in the view that is not prominent with few visual receptors affected.
NEGLIGIBLE	No notable change in the view.

DEGREE OF EFFECT FOR LANDSCAPE AND VISUAL RECEPTORS

The degree of effects is professional judgements based upon all the factors in terms of landscape and visual sensitivity and the magnitude of change arising from the proposed development. The cross referencing of landscape and visual sensitivity and the magnitude of change determines the overall degree of effects as shown in Table 8:

Table 8: Degree of landscape and visual effects

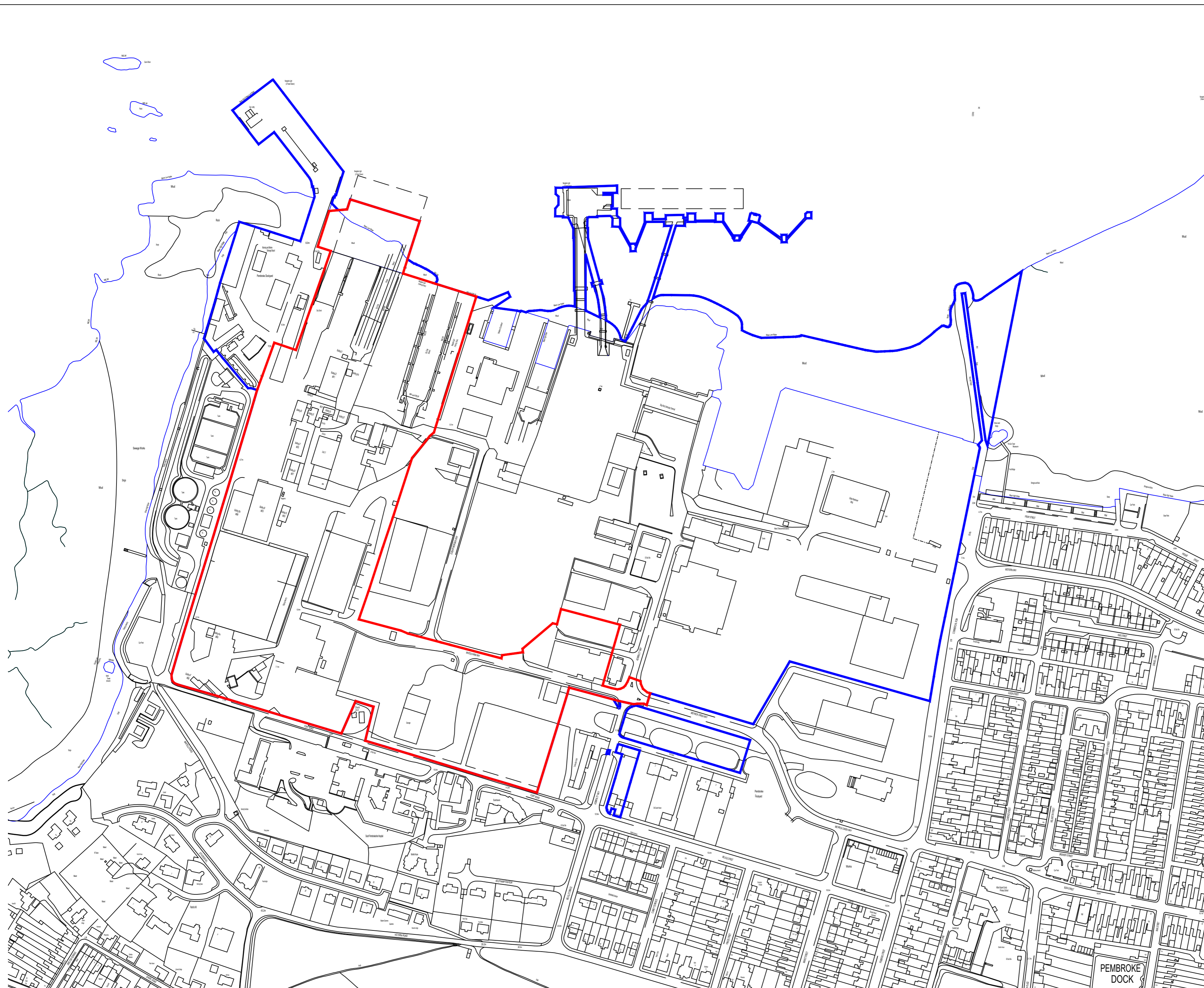
		Magnitude of Change			
		HIGH	MEDIUM	LOW	NEGLIGIBLE
ensitivity	HIGH	Substantial	Major	Moderate	Minor
	MEDIUM	Major	Moderate	Minor	Negligible
	LOW	Moderate	Minor	Negligible	Negligible

NATURE OF EFFECTS

GLVIA3 includes an entry that states “*effects can be described as positive or negative (or in some cases neutral) in their consequences for views and visual amenity.*” GLVIA3 does not, however, state how negative or positive effects should be assessed and therefore becomes a matter of subjective judgement rather than reasoned criteria. Due to inconsistencies with the assessment of negative or positive effects a precautionary approach is applied to this ALVE that assumes all landscape and visual effects are considered to be negative or adverse unless otherwise stated.

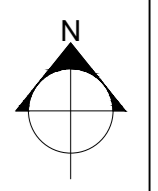


APPENDIX 2: FIGURES



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- Application Red Line
- Other Ownership Areas



C	Revised Red Line Plan	GG	DW	17/07/19
B	Red Line Amendment	GG	DW	12/07/19
Rev	Description	By	CB	Date



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 T: 02920 668 662 E: rpsca@rpsgroup.com

Client **Milford Haven Port Authority**

Project **Pembroke Dock Infrastructure**

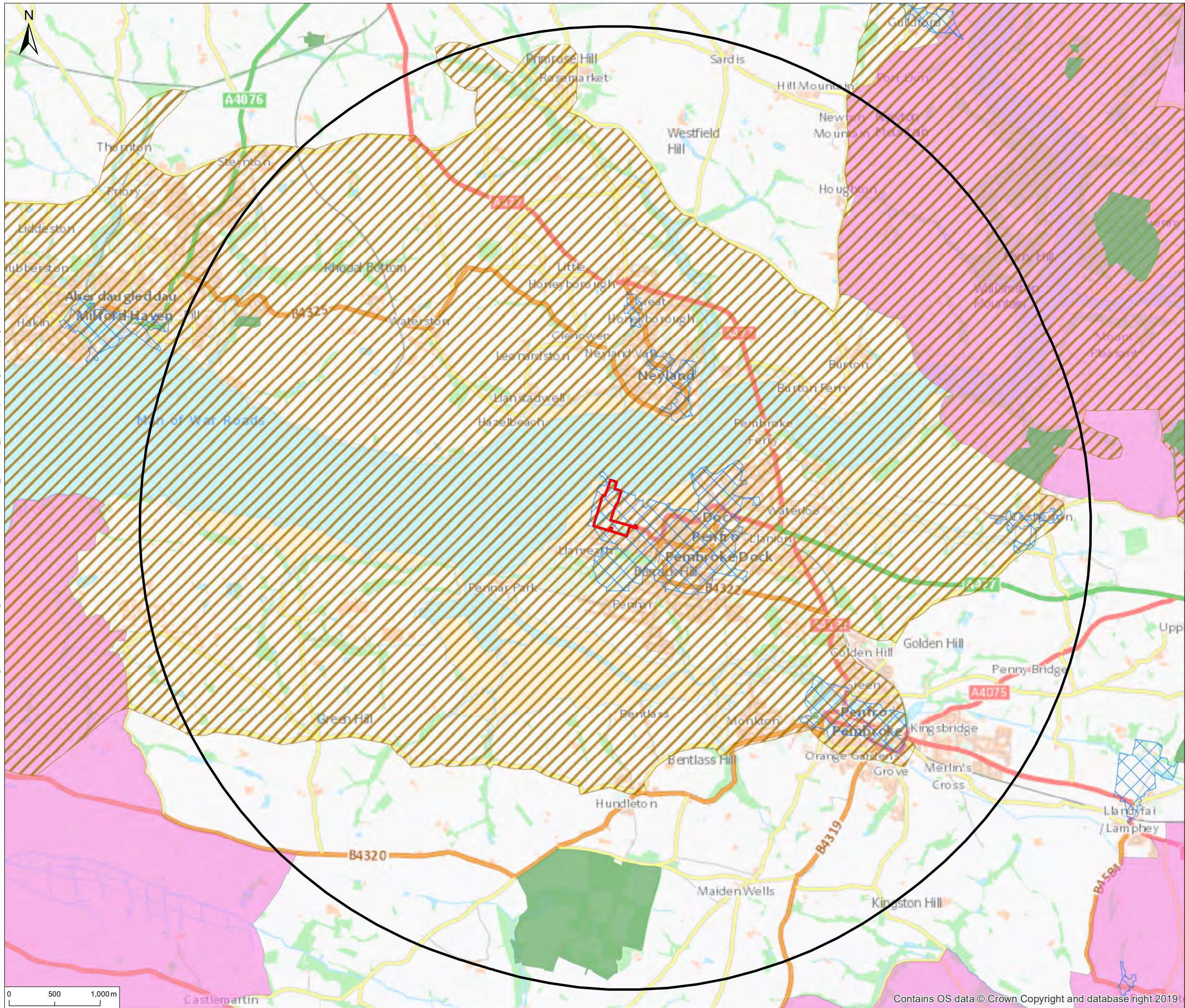
Title **Site Location Plan**

Status **DRAFT** Drawn By **GG** PM/Checked by **DW**

Job Ref **JPW1115** Scale @ A2 **1:2500** Date Created **FEB 18**

RPS Drawing / Figure Number
JPW1115-001 FIGURE 1 revC
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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-001\RevA_D191009_(Landscape Designations)\Figure 2.mxd



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- Legend**
- Site Location
 - 5km Buffer
 - Parks and Gardens
 - Conservation
 - Historic Landscapes
 - National Park
 - AONB

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19



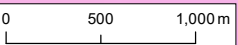
Park House, Greyfriars Road, Cardiff, CF10 3AF
 T: +44(0)2920 668 662 E: rpsca@rpsgroup.com

Client MILFORD HAVEN PORT AUTHORITY
Project PEMBROKE DOCK MARINE
Title LANDSCAPE DESIGNATIONS

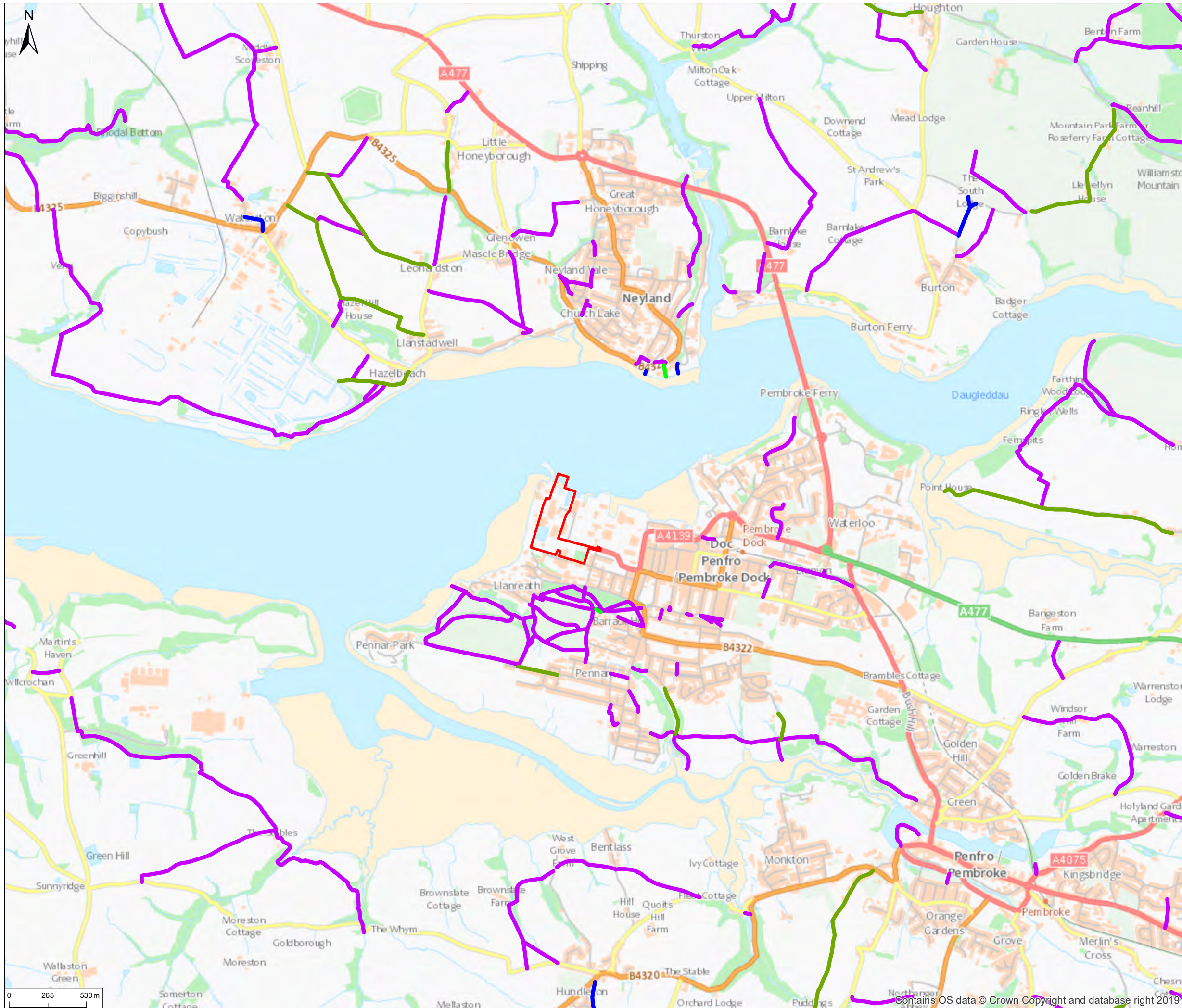
Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-001		A

FIGURE 2
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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-010RevA_D191009_(PROW Plan)\Figure 3.mxd



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Legend

- Site Location
- Public Footpath
- Bridleway
- Restricted Byway
- Byway Open to All Traffic

A	Updated Branding	GG	HD	09/10/19
Rev	Description	By	CB	Date

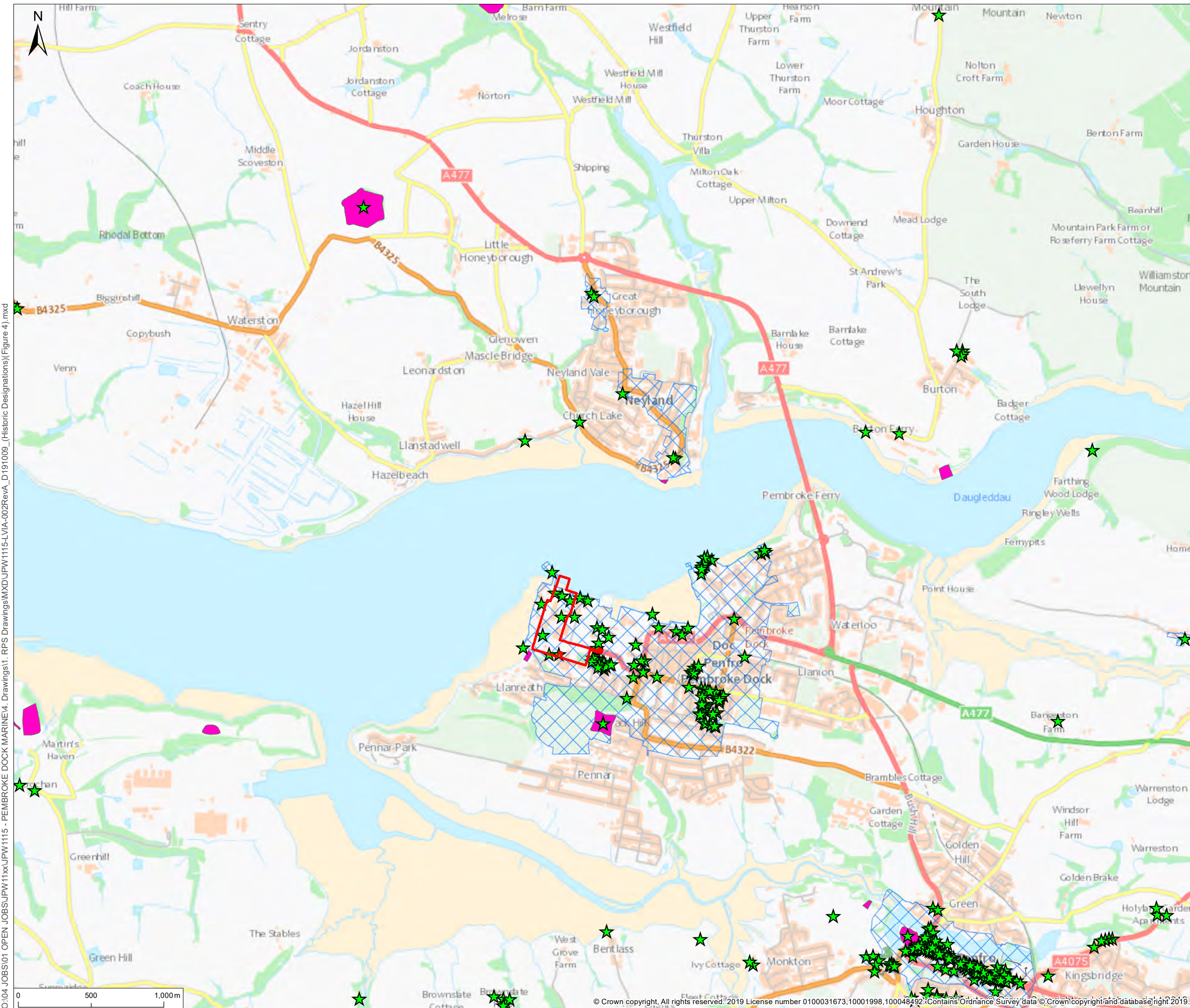
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Client **MILFORD HAVEN PORT AUTHORITY**
 Project **PEMBROKE DOCK MARINE**
 Title **PROW PLAN**

Status **PLANNING** Drawn By **GG** PM/Checked By **CF**
 Project Number **JPW1115** Scale @ A3 **1:25,000** Date Created **OCT 19**
 Drawing Number **JPW1115-LVIA-010** Rev **A**

FIGURE 3
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- Legend**
- Site Location
 - 5km Buffer
 - ★ Cadw Listed Building
 - Cadw Schedule Ancient
 - Parks and Gardens
 - Conservation

O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-002RevA_D191009 - (Historic Designations)\Figure 4.mxd

A	Updated Branding	GG	HD	09/10/19
Rev	Description	By	CB	Date



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Client **MILFORD HAVEN PORT AUTHORITY**

Project **PEMBROKE DOCK MARINE**

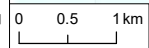
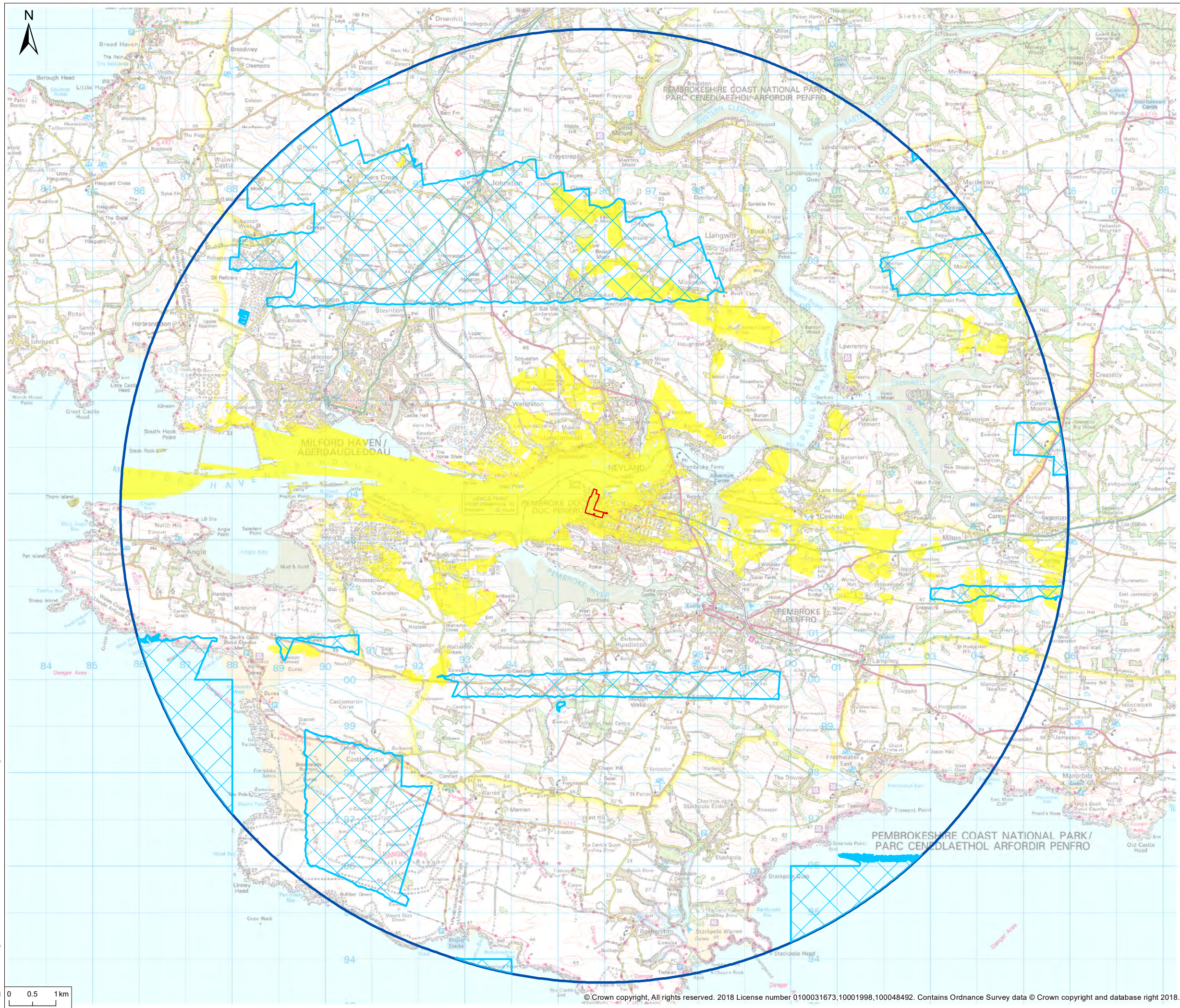
Title **HISTORIC DESIGNATIONS**

Status **PLANNING** Drawn By **GG** PM/Checked By **CF**

Project Number **JPW1115** Scale @ **A3** Date Created **OCT 19**
 1:25,000

Drawing Number **JPW1115-LVIA-002** Rev **A**

FIGURE 4
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- Legend**
- Red line
 - Zone of Theoretical
 - 10km Buffer
 - Lidar data not available

Data sources:	NRW Lidar	OS Terrain 50
Coverage	Within NRW data coverage	Outside of NRW data coverage
Date sourced	2018	2018
original cell size	2m	50m
Resampling	None	to 2m
ZTV calculated from multiple origin points that represent the parameters of the proposed development.	ZTV is calculated at heights of 40m, and 10m. Viewer height is 2m.	The effect of ground cover is modelled within lidar data coverage using lidar surface information.
ZTV is not calculated beyond 10km buffer.	The effects of earth curvature are considered. The effects of light refraction are considered.	

Rev	Description	Date	Initial	Checked



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
 T: +44(0)1235 821 888 E: rps@rpsgroup.com F: +44(0)1235 834 698

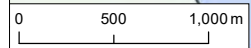
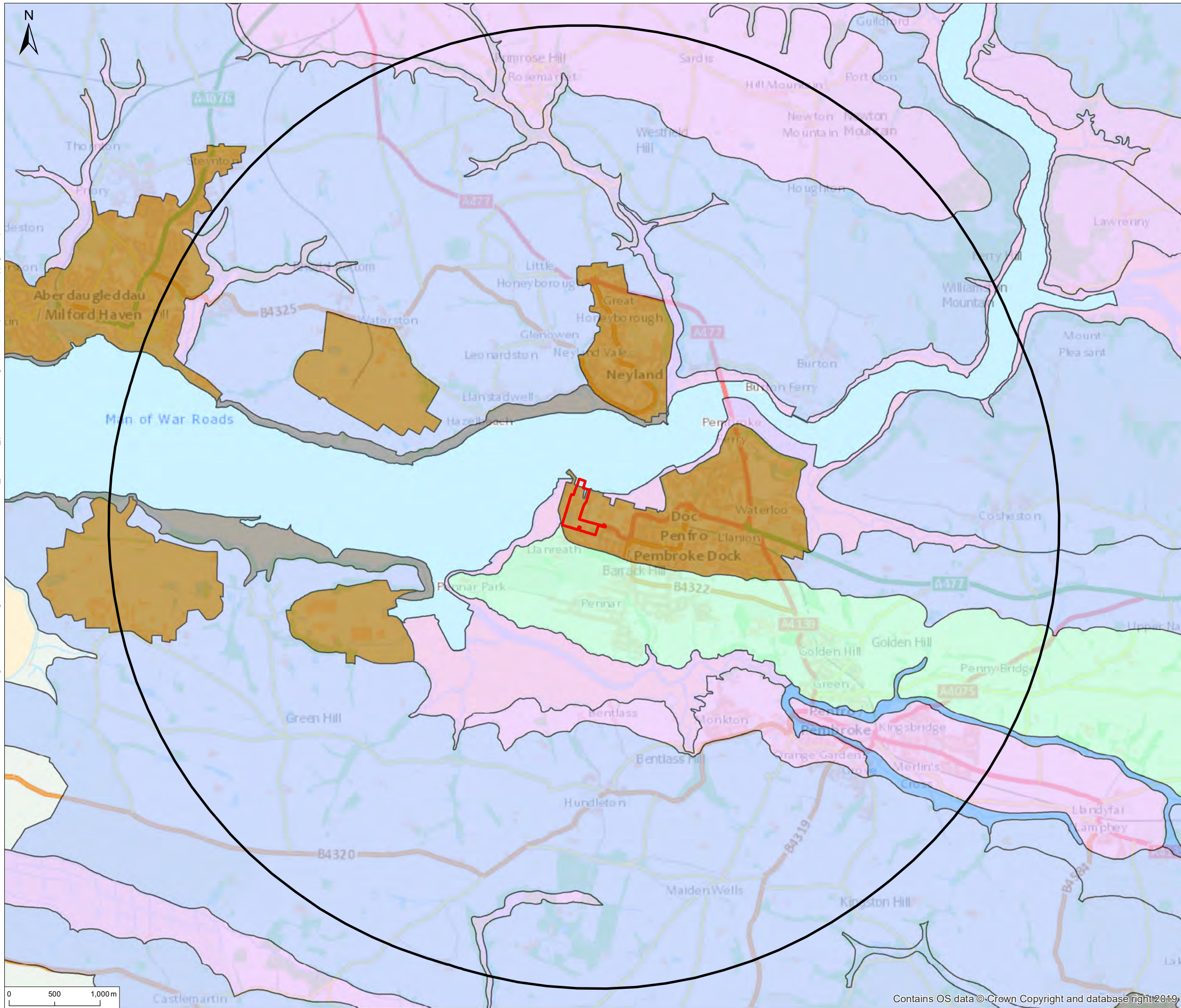
Client **Port of Milford Haven**
 Project **Pembroke Dock Marine**
 Title **Zone of Theoretical Visibility**

Status **Final** Drawn By: **MS** PM/Checked By: **KH/HD**
 Job Ref **JPW1115** Scale @ A3: **1:78,000** Date Created: **OCT 2019**

Figure Number **FIGURE 5** Rev: **-**

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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-003\RevA_D191009_(LANDMAP Geological Landscape Aspect L3)(Figure6a).mxd



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- Legend**
- Site Location
 - 5km Buffer
 - Heritage Coast
- LANDMAP Geological Landscape Aspect**
- CLS_3**
- Spits, bars and ridges
 - Rock cliff and shore
 - Lowland escarpment
 - Active lowland river-flood plain system
 - Engineered features and reclaimed / infilled land
 - Undulating lowland hill terrain
 - Other

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19



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Client **MILFORD HAVEN PORT AUTHORITY**

Project **PEMBROKE DOCK MARINE**

Title **LANDMAP: GEOLOGICAL LANDSCAPE ASPECT AREA CLASSIFICATION - LEVEL 3**

Status **PLANNING** Drawn By **GG** PM/Checked By **CF**

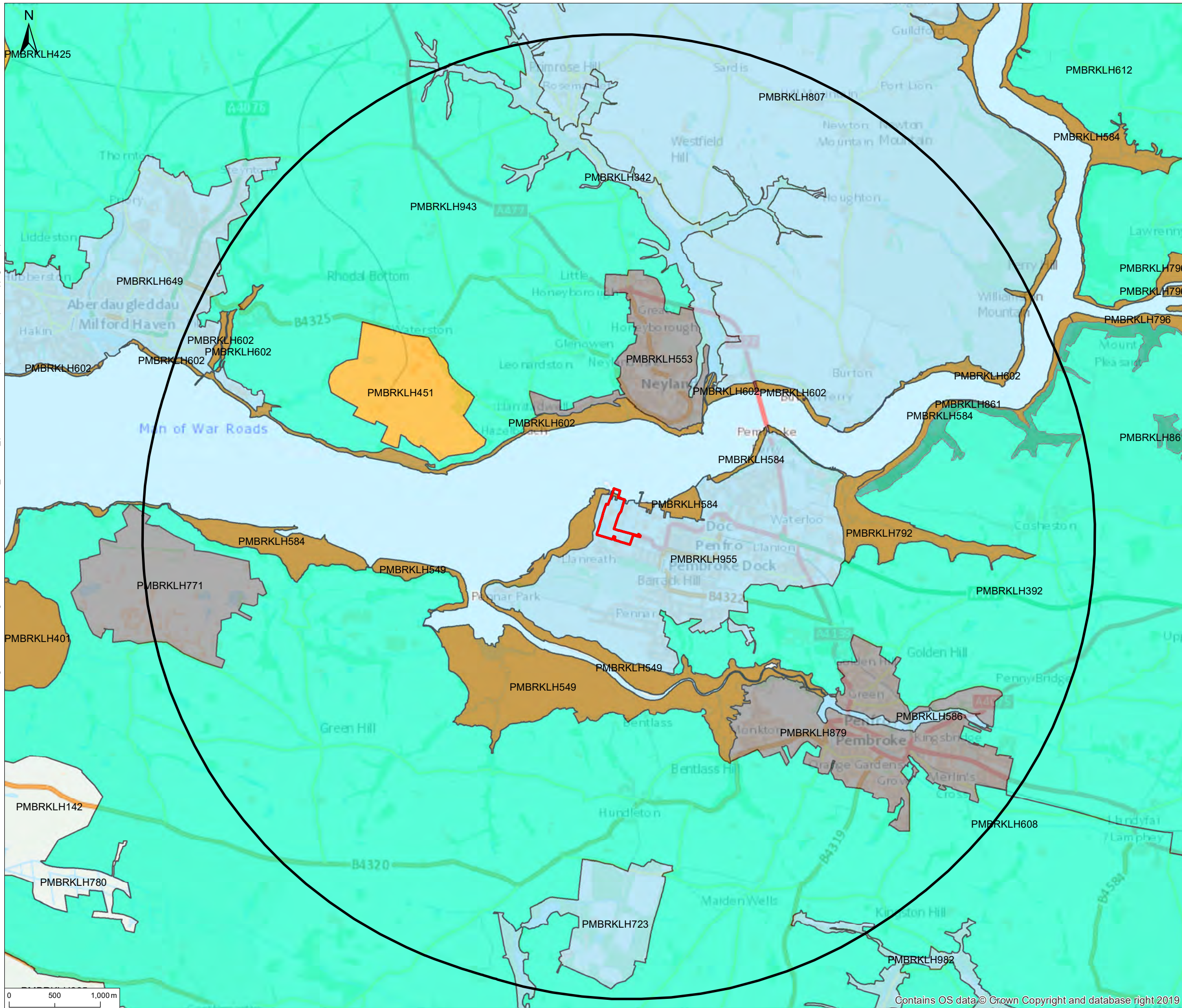
Project Number **JPW1115** Scale @ A3 **1:40,000** Date Created **OCT 19**

Drawing Number **JPW1115-LVIA-003** Rev **a**

FIGURE 6a
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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-004Reva_D191009_(LANDMAP Landscape Habitats Aspect L3)\Figure 6b.mxd



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Legend

- Site Location
- 5km Buffer

LANDMAP Landscape Habitats Aspect Area Classification

Level 3

- Broadleaved Woodland
- Improved Grassland
- Industrial
- Intertidal, Including Muds/Sands, Saltmarsh, Shingle[Trimmed]
- Mosaic
- Residential/Green Space

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19

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Client **MILFORD HAVEN PORT AUTHORITY**

Project **PEMBROKE DOCK MARINE**

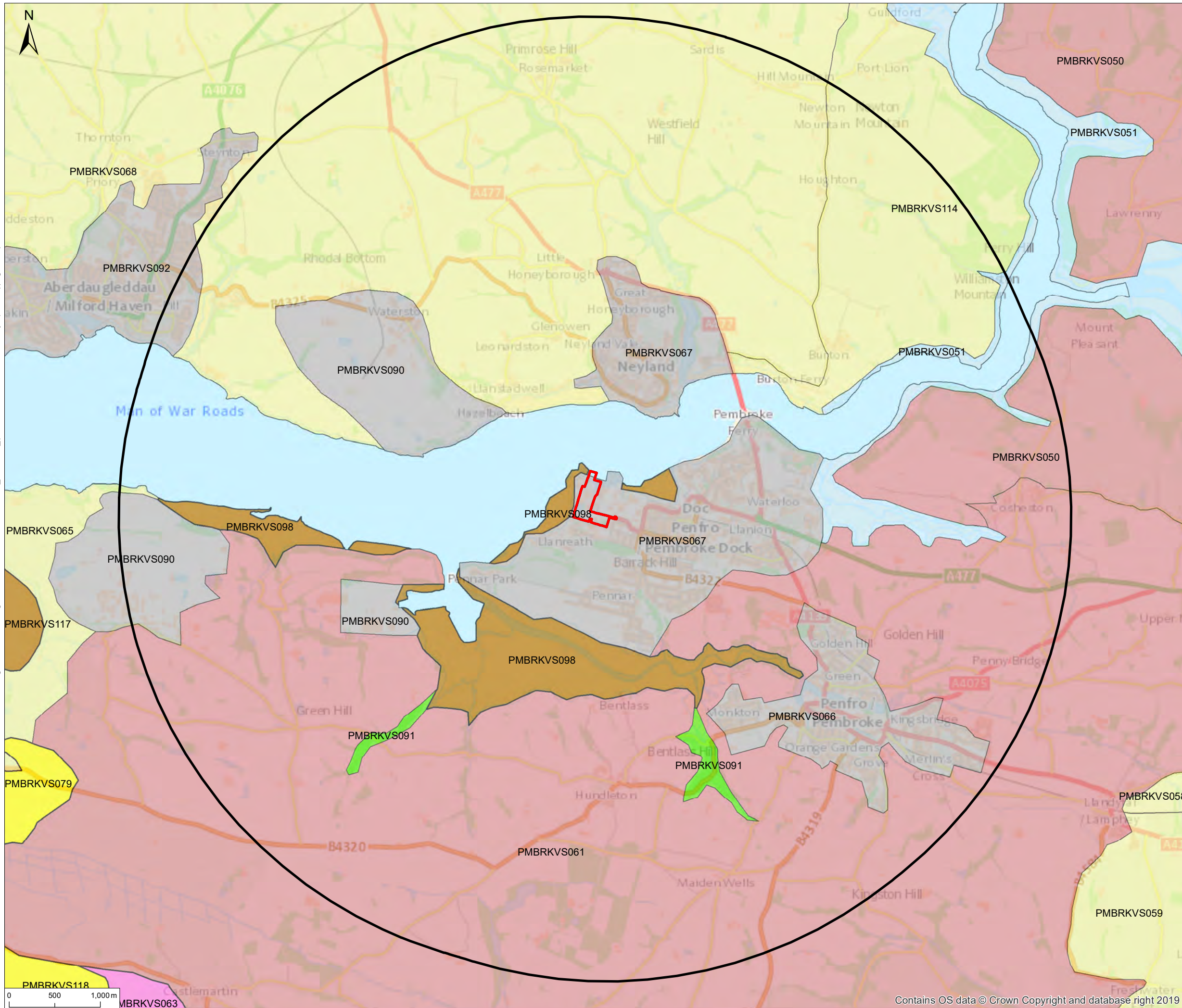
Title **LANDMAP: LANDSCAPE HABITATS ASPECT AREA CLASSIFICATION - LEVEL 3**

Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-004		A

FIGURE 6b
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Legend

- Site Location
- 5km Buffer

Visual and Sensory Aspect Area Classification

CLS_3

- Flat Open Lowland Farmland
- Dunes & Dune Slack
- Intertidal
- Wooded Lowland Valleys
- Hillside & Scarp Slopes Grazing
- River
- Open Lowland Valleys
- Urban
- Open Rolling Lowland
- Mosaic Rolling Lowland

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19

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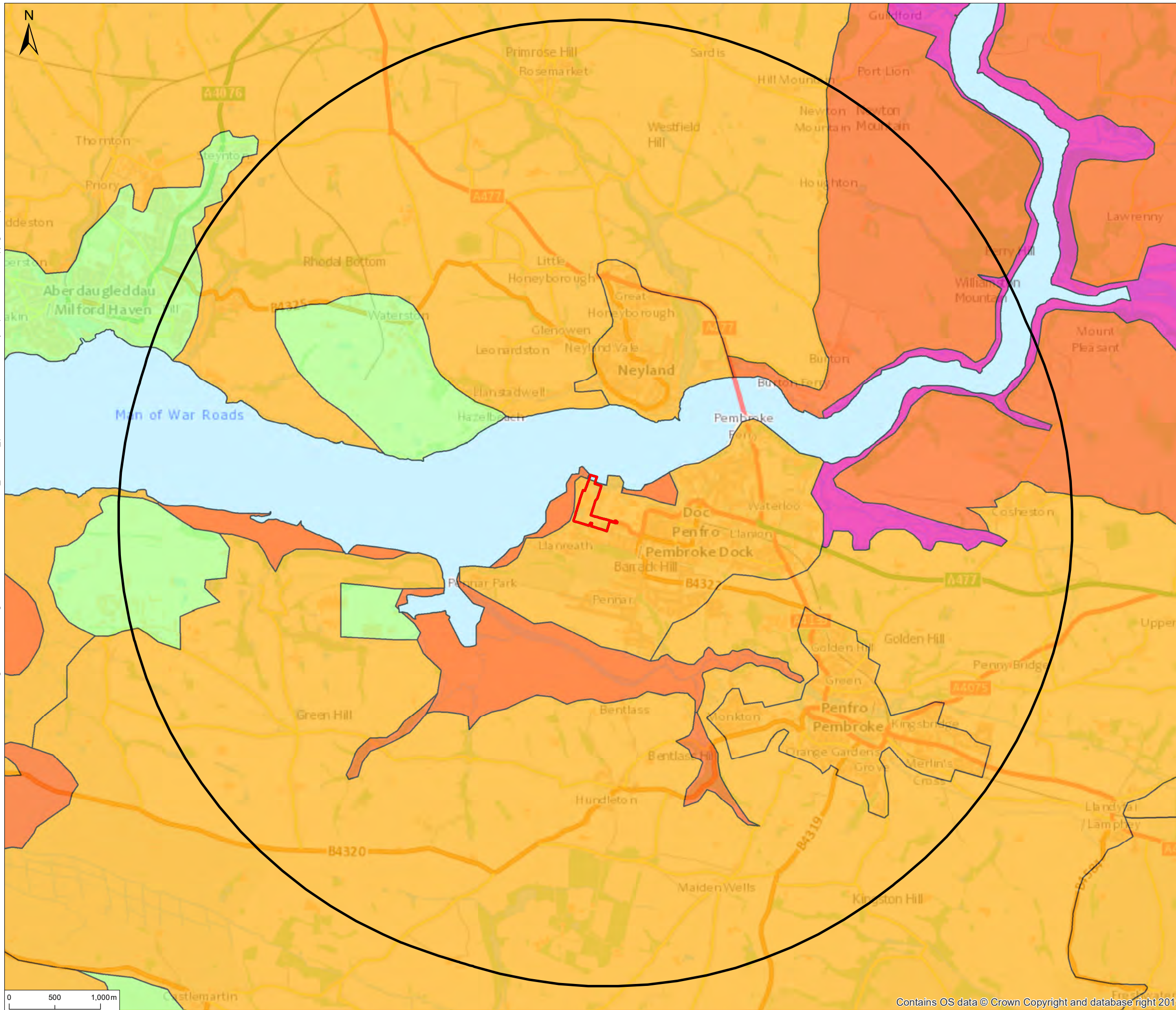
Project **PEMBROKE DOCK MARINE**

Title **LANDMAP: VISUAL AND SENSORY ASPECT AREA CLASSIFICATION - LEVEL 3**

Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-005		A

FIGURE 6c
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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-006RevA_D191009_(LANDMAP Visual & Sensory Aspect Overall Class)(Figure 6d).mxd



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Legend

- Site Location
- 5km Buffer

Visual and Sensory Aspect Overall Classification

VS50

- Low
- Moderate
- High
- Outstanding

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19



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Client **MILFORD HAVEN PORT AUTHORITY**

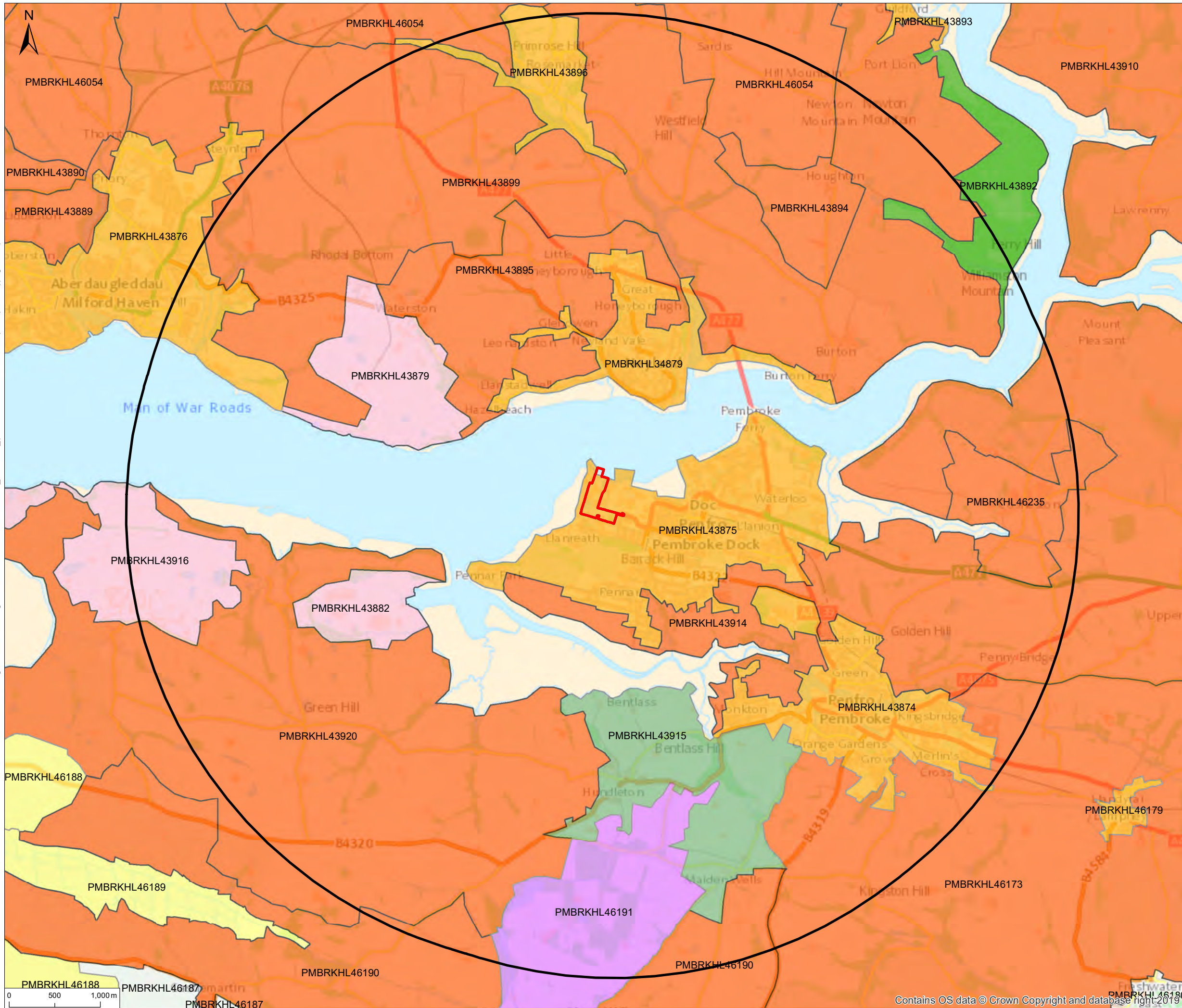
Project **PEMBROKE DOCK MARINE**

Title **LANDMAP: VISUAL AND SENSORY ASPECT OVERALL CLASSIFICATION**

Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-006		A

FIGURE 6d
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Legend

- Site Location
- 5km Buffer

Historic Landscape Aspect Area Classification Level 3

CLS_3

- Designed
- Irregular Fieldsapes
- Marginal Land
- Nucleated Settlement
- Processing/Manufacturing
- Regular Fieldsapes
- Woodland

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19



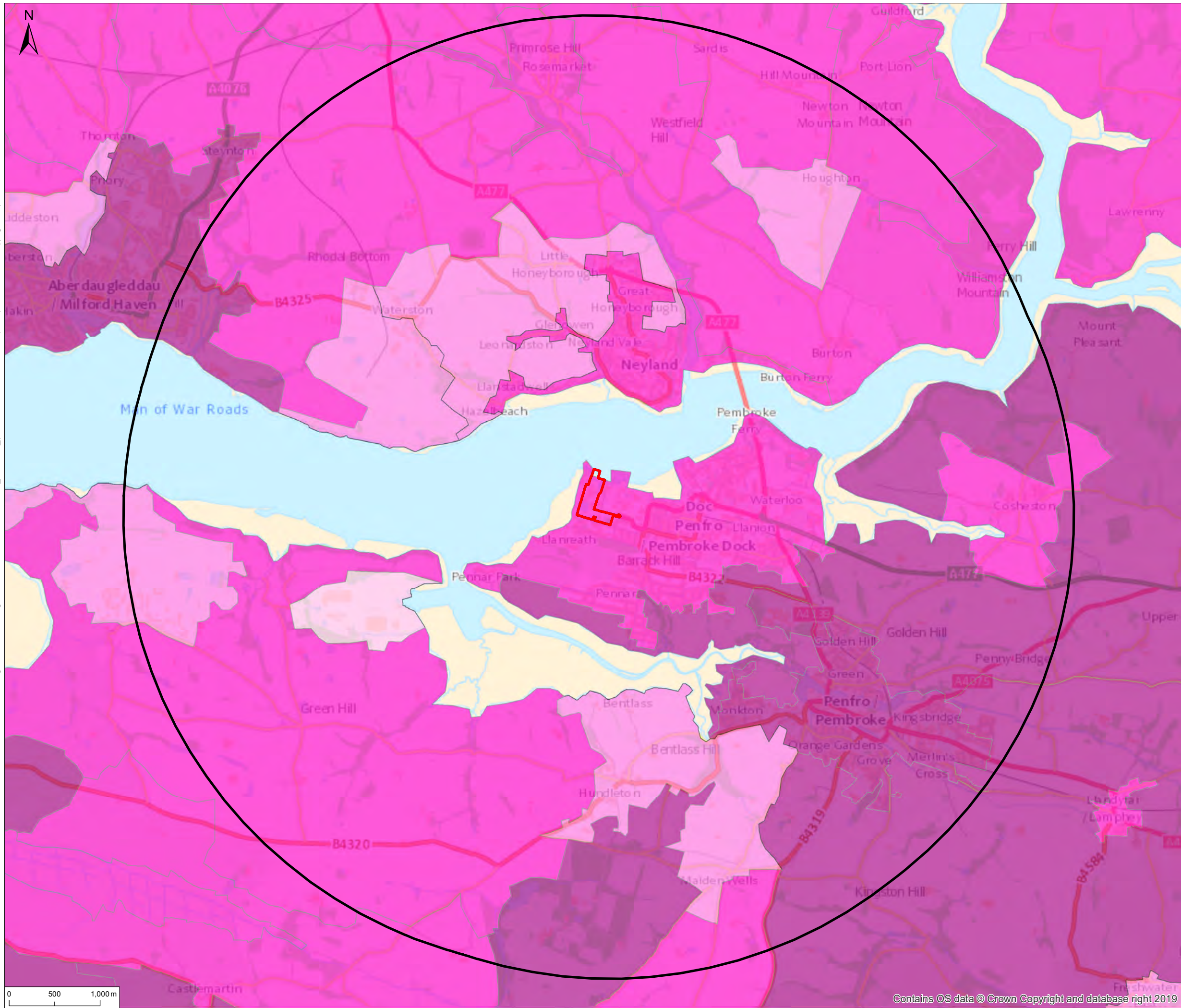
Park House, Greyfriars Road, Cardiff, CF10 3AF
 T: +44(0)2920 668 662 E: rpsca@rpsgroup.com

Client MILFORD HAVEN PORT AUTHORITY
Project PEMBROKE DOCK MARINE
Title LANDMAP: HISTORIC LANDSCAPE ASPECT AREA CLASSIFICATION - LEVEL 3

Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-007		A

FIGURE 6e
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O:\04_JOBS\01_OPEN_JOBS\JPW1115 - PEMBROKE DOCK MARINE\4_Drawings\1_RPS Drawings\MXD\JPW1115-LVIA-008Reva_D191009_(LANDMAP Historic Landscape Aspect Overall Value)\Figure 6f.mxd



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Legend

Site Location

5km Buffer

Historic Landscape Aspect

Overall Value

Low

Moderate

High

Outstanding

Unassessed

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19



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Client **MILFORD HAVEN PORT AUTHORITY**

Project **PEMBROKE DOCK MARINE**

Title **LANDMAP: HISTORIC LANDSCAPE ASPECT OVERALL VALUE**

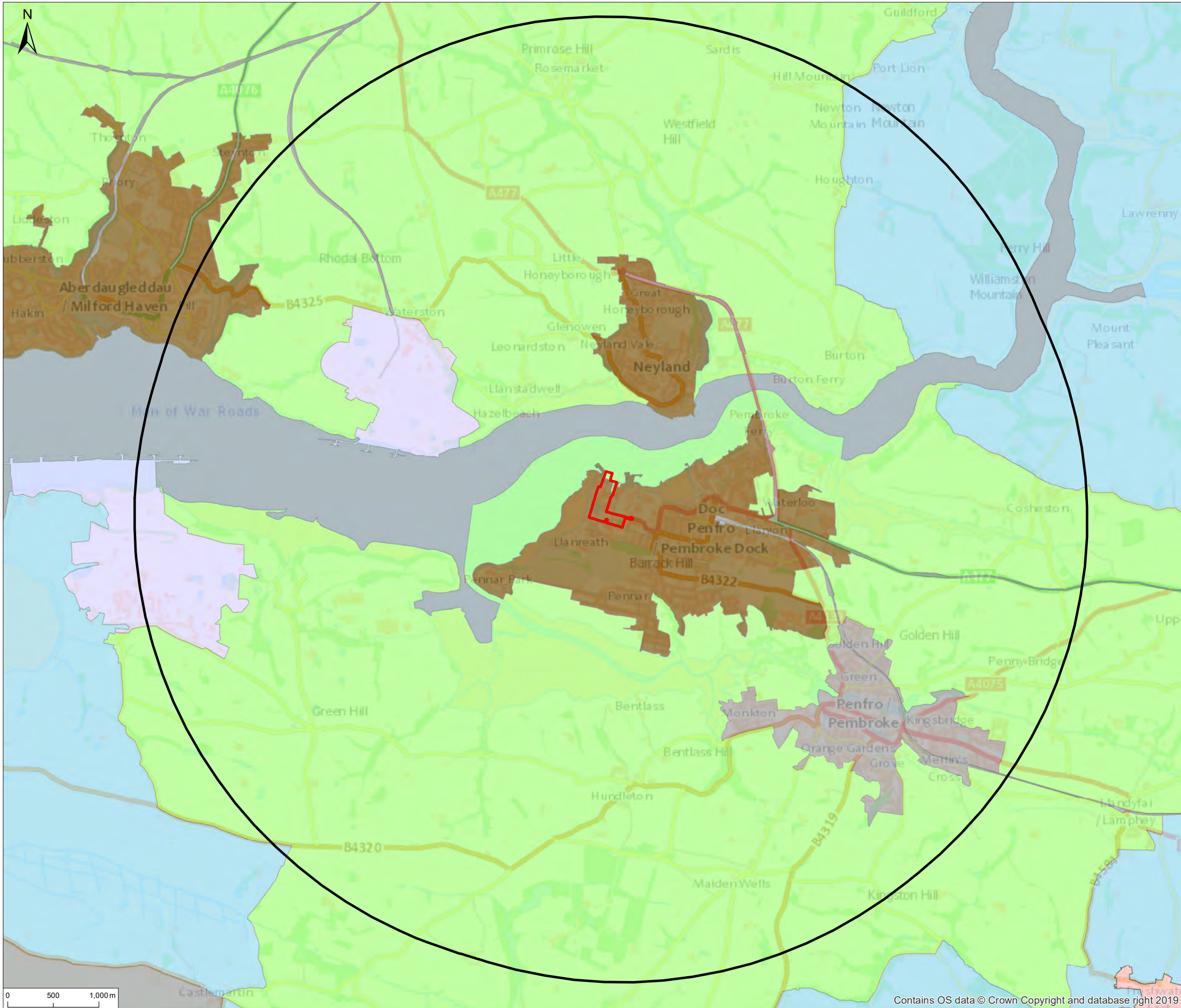
Status **PLANNING** Drawn By **GG** PM/Checked By **CF**

Project Number **JPW1115** Scale @ **A3** Date Created **OCT 19**
 1:40,000

Drawing Number **JPW1115-LVIA-008** Rev **A**

FIGURE 6f
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O:\04 JOBS\01 OPEN JOBS\JPW1115 - PEMBROKE DOCK MARINE\4. Drawings\1. RPS Drawings\MXD\JPW1115-LVIA-009RevA_D191009 - LANDMAP Cultural Landscape Aspect Area Class L3(Figure 6g).mxd



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Legend

- Site Location
- 5km Buffer

LANDMAP Cultural Landscape Aspect

Level 3

- Customs
- Industrial
- Infrastructure
- Institutions
- Rural
- Urban

Rev	Description	By	CB	Date
A	Updated Branding	GG	HD	09/10/19

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Client **MILFORD HAVEN PORT AUTHORITY**

Project **PEMBROKE DOCK MARINE**

Title **LANDMAP: CULTURAL LANDSCAPE ASPECT AREA CLASSIFICATION - LEVEL 3**

Status	Drawn By	PM/Checked By
PLANNING	GG	CF
Project Number	Scale @ A3	Date Created
JPW1115	1:40,000	OCT 19
Drawing Number		Rev
JPW1115-LVIA-009		A

FIGURE 6g
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- Legend**
- Proposed Test Areas
 - Photo Viewpoint
 - 2km Radius

Rev	Description	Date	Initial	Checked
A	Amend viewpoint locations	31/10/19	PO	HD

For guidance only. Do not scale off this drawing



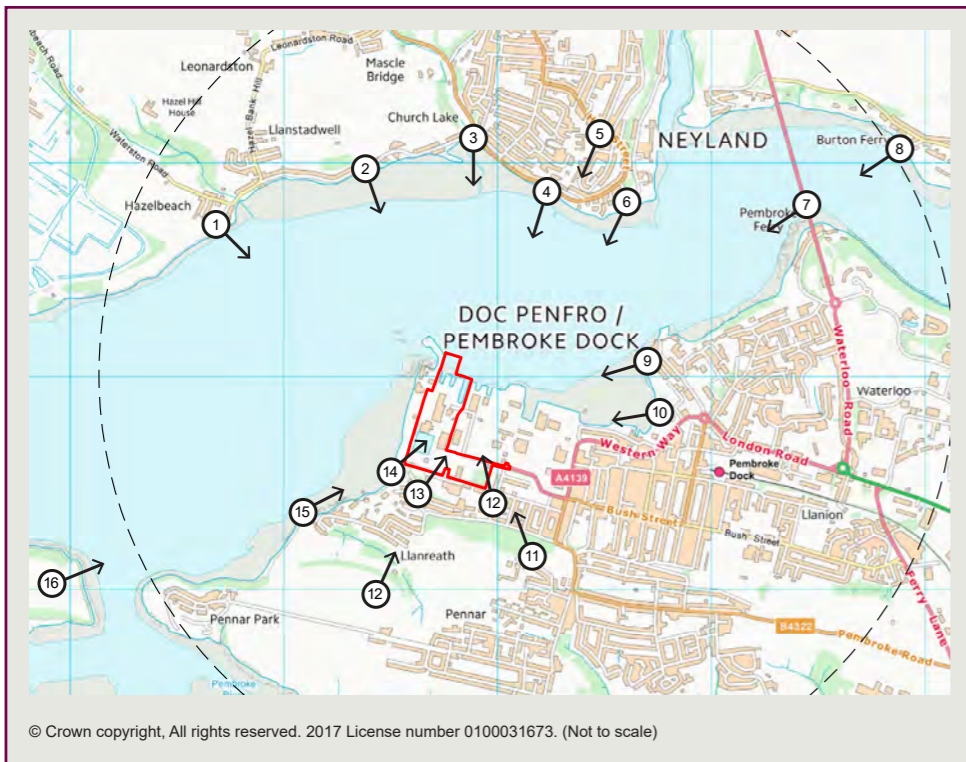
RPS | Consulting UK & Ireland
 2 Callaghan Square, Cardiff, CF10 5AZ
 T: +44(0) 2920 668 662 E: rpsca@rpsgroup.com

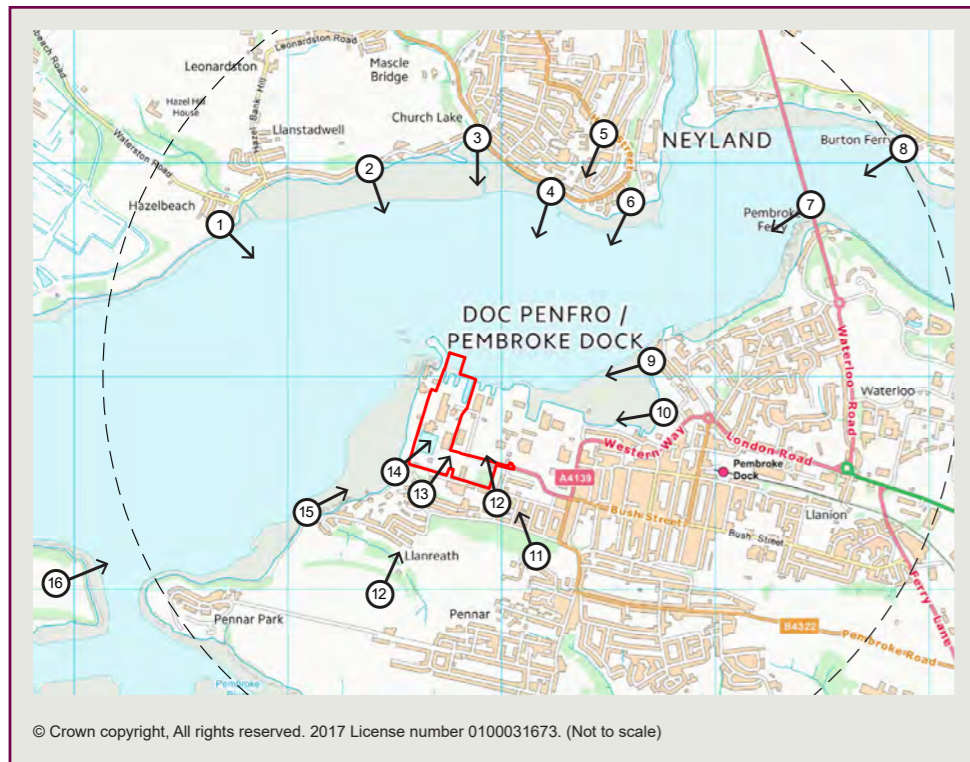
Client **MILFORD HAVEN PORT AUTHORITY**

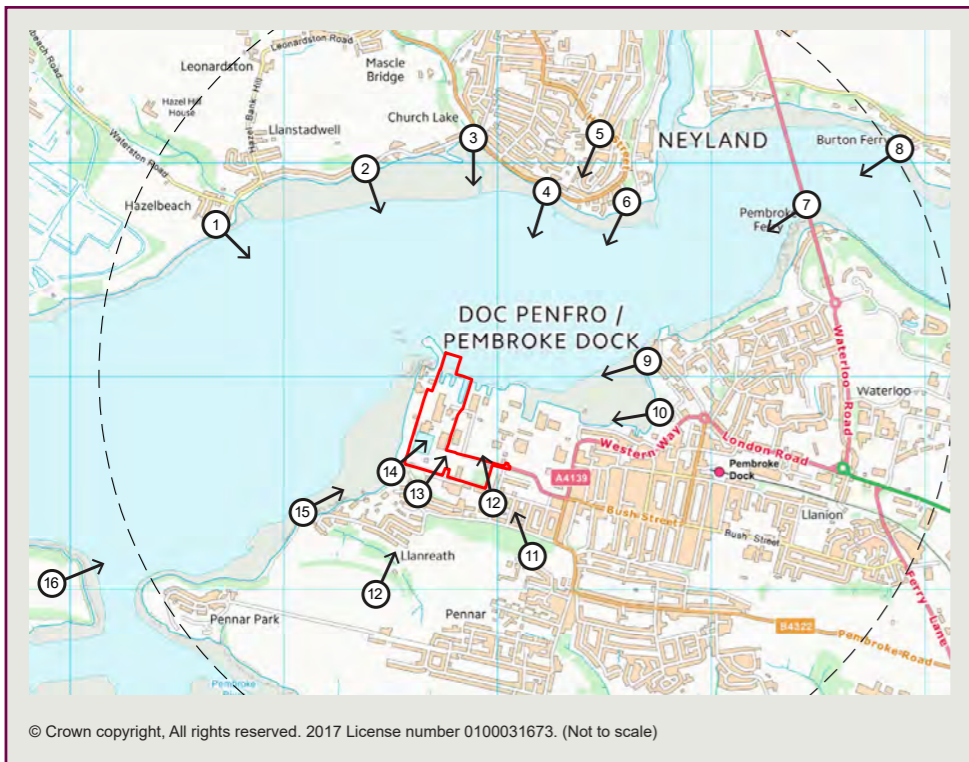
Project **PEMBROKE DOCK MARINE**

Title **LVIA PHOTO VIEWPOINTS**

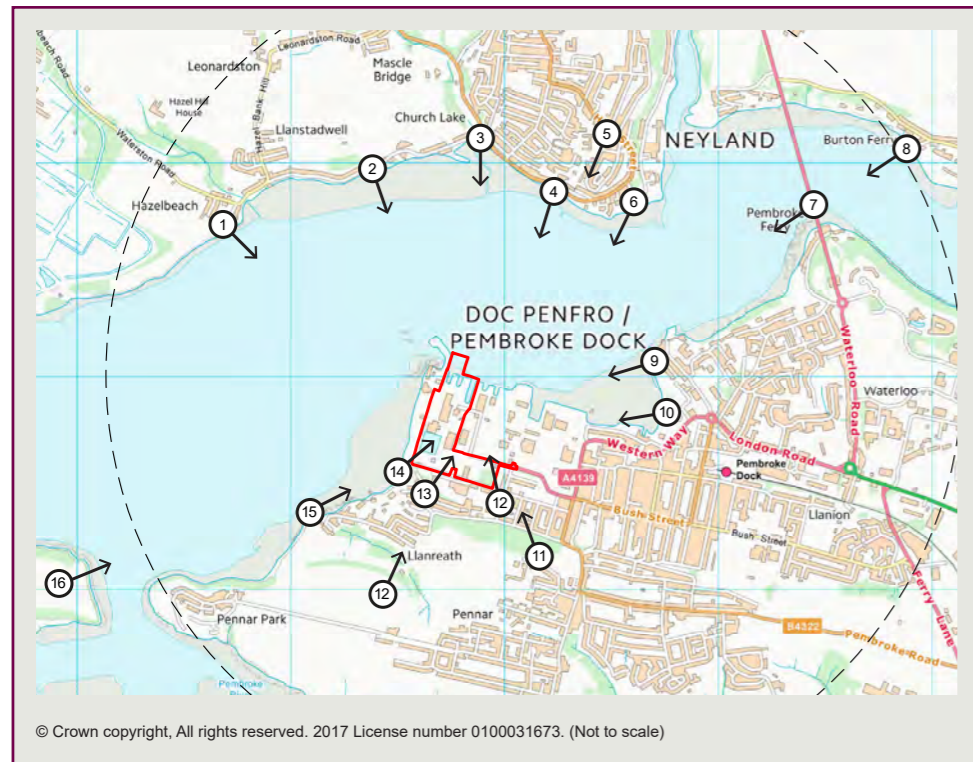
Status	Drawn By	PM/Checked by
Planning	AW/PO	HD
Job Ref	Scale @ A3	Date Created
JPW1115	1:20,000	NOV 18
Drawing Number		Rev
JPW1115-LVIA-012		A



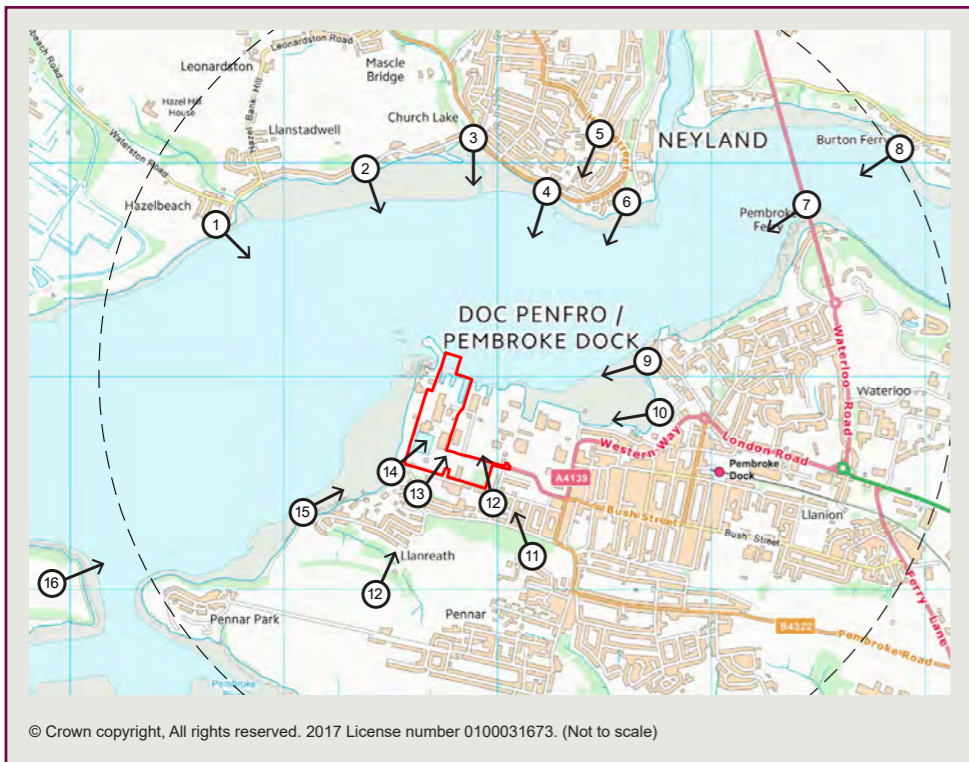


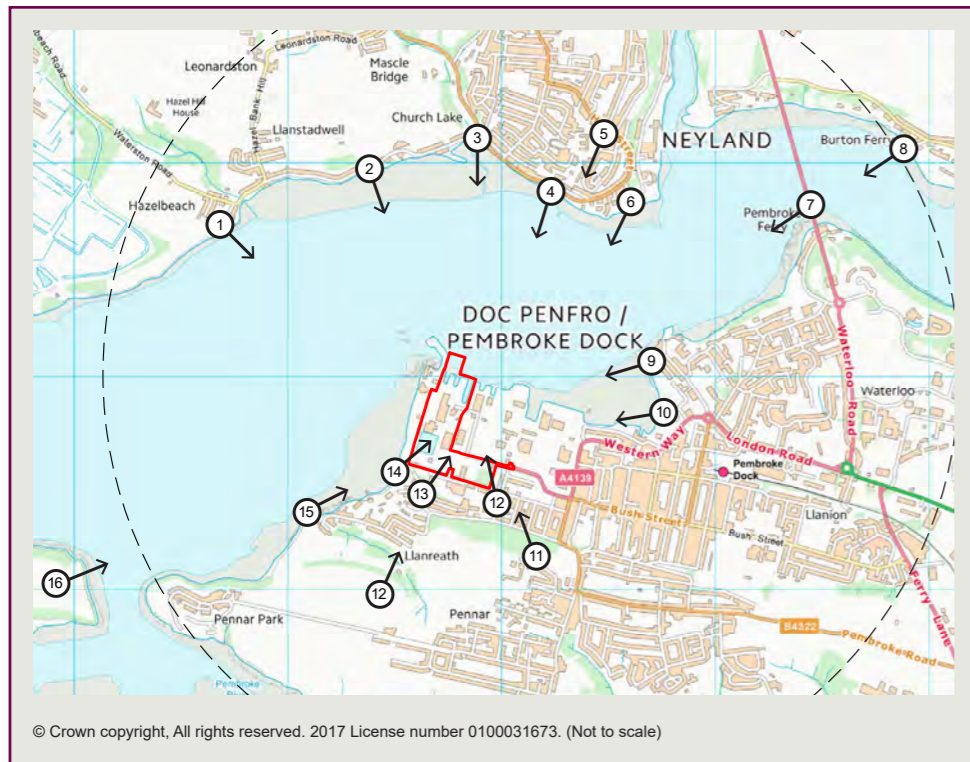


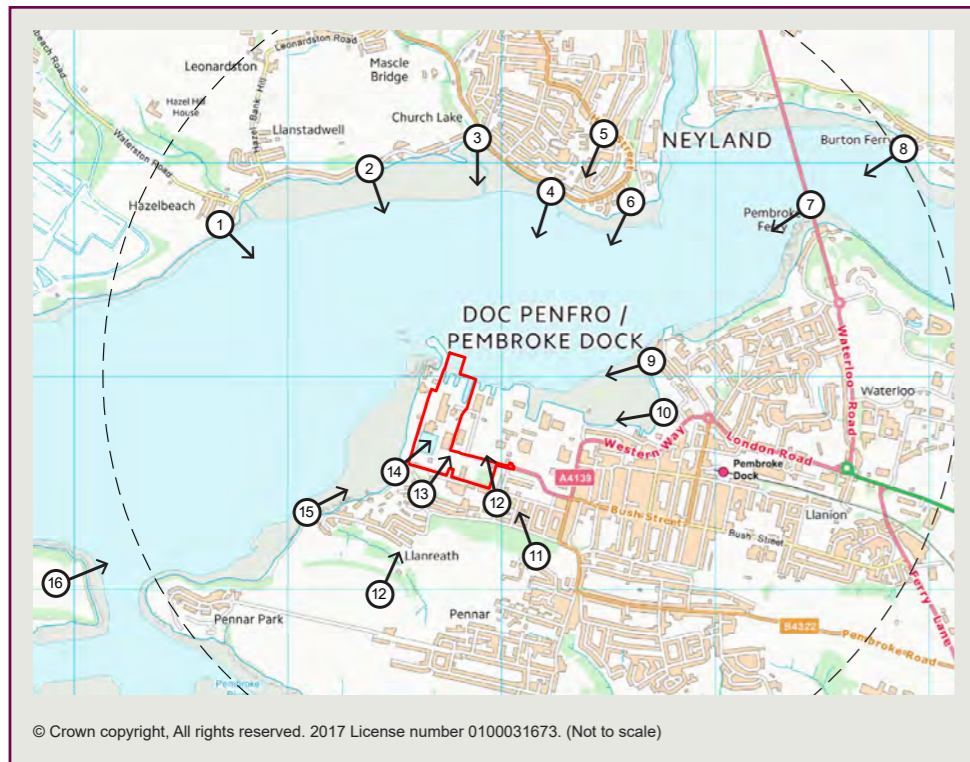
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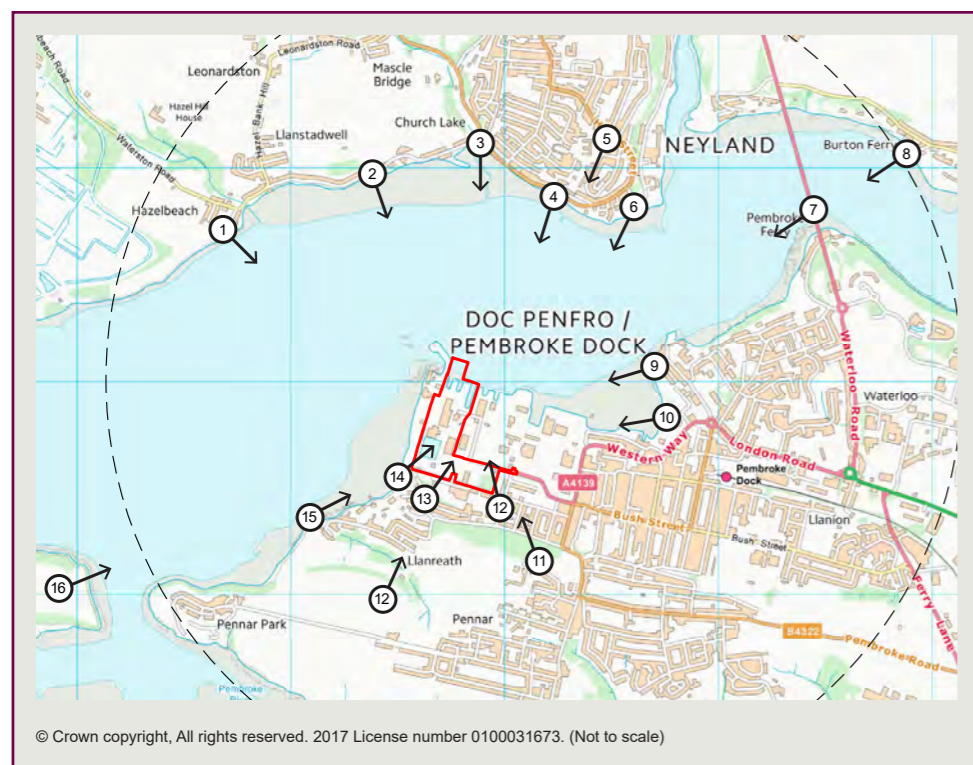


	Viewpoint 4	Pembroke Dock Marine JSL3241	Date of photograph: 11/10/2019	Distance to site: 989m OS reference: SM 96015 05006	Direction to site: South - west Viewpoint height: 1.5m AGL	Figure: xx
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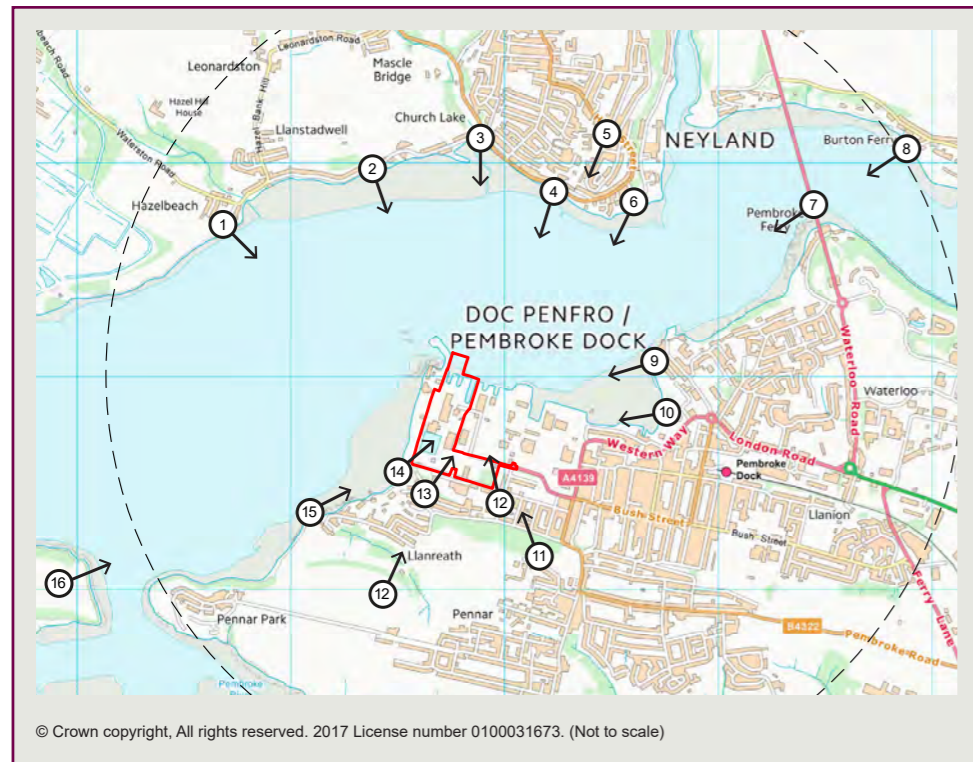


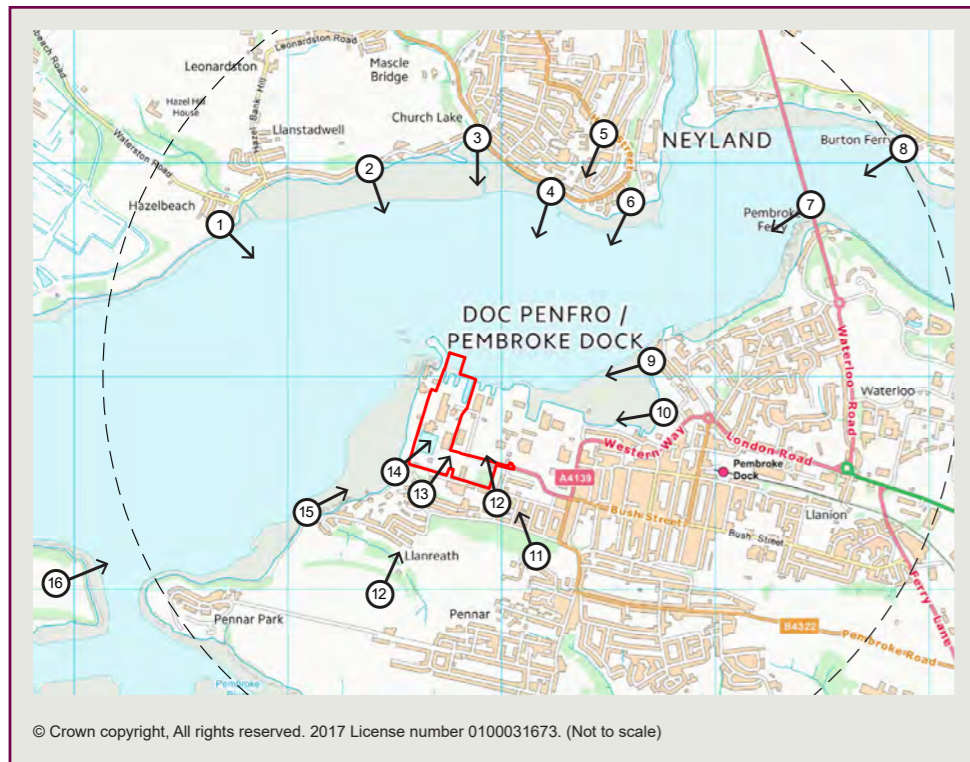


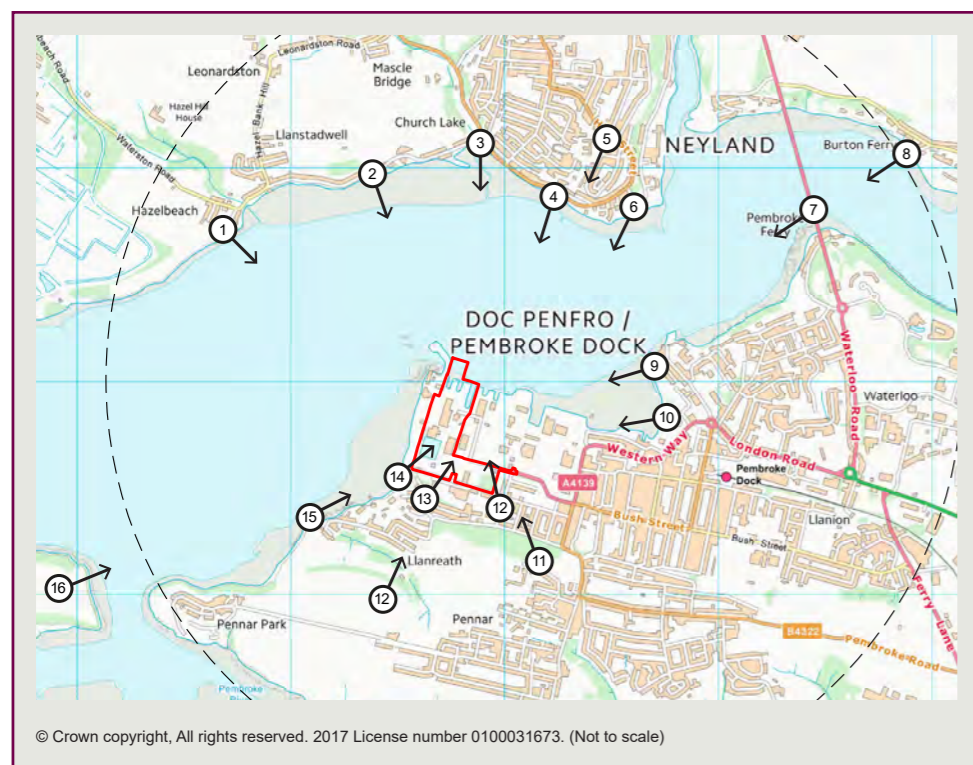


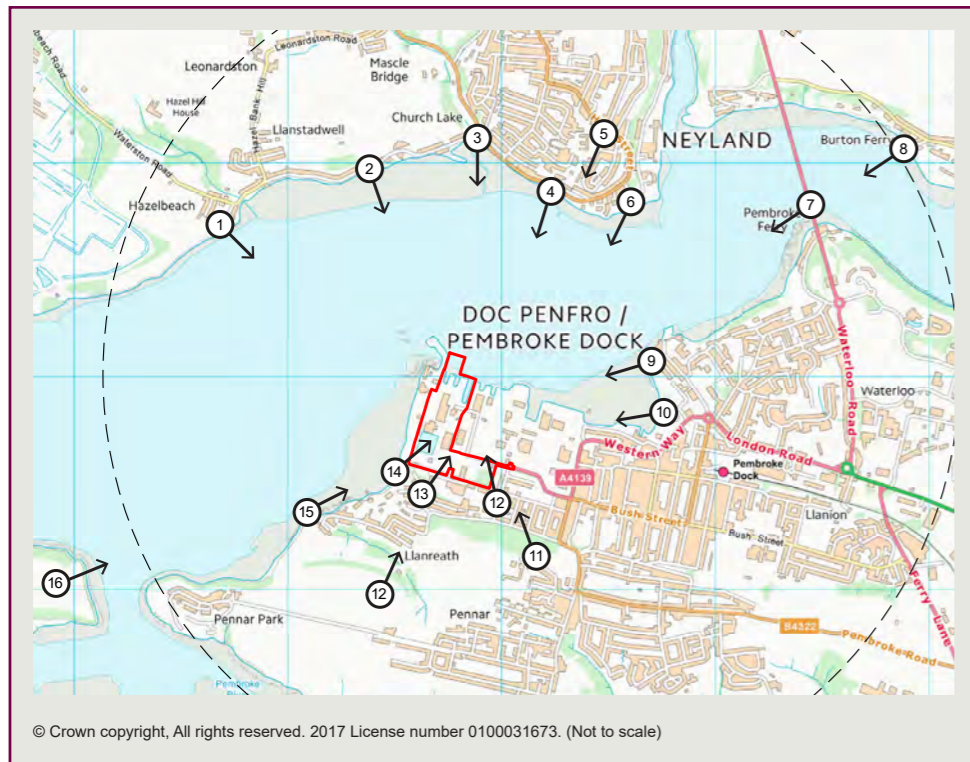


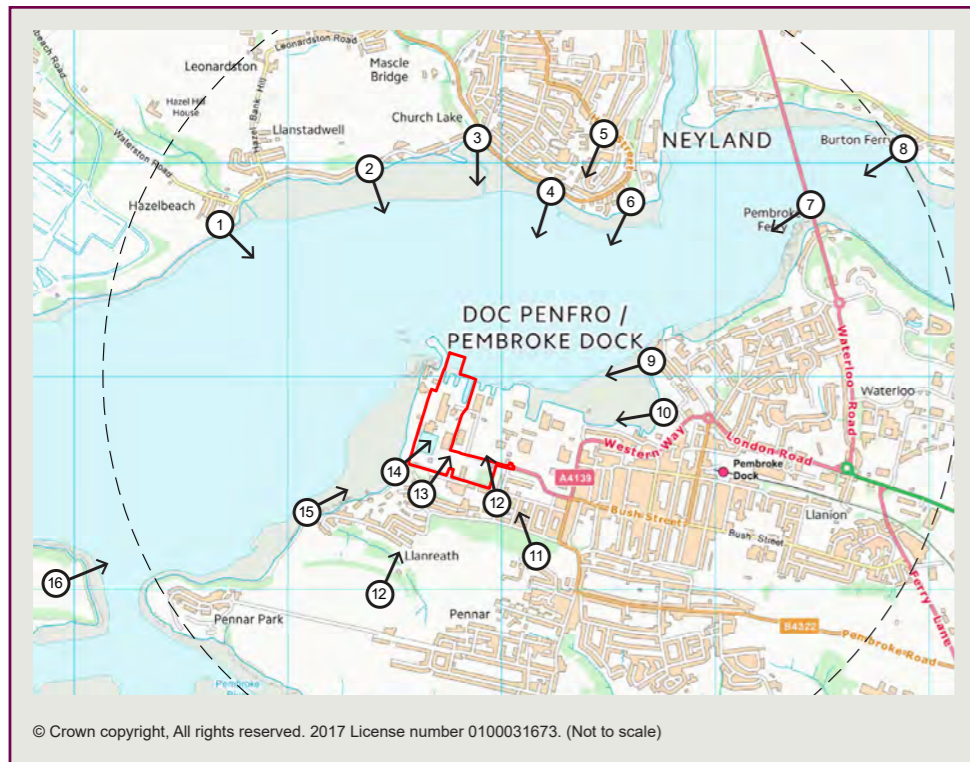
	Viewpoint 8	Pembroke Dock Marine JSL3241	Date of photograph: 11/10/2019	Distance to site: 2100m OS reference: SM 97912 05069	Direction to site: South - west Viewpoint height: 1.5m AGL	Figure: xx
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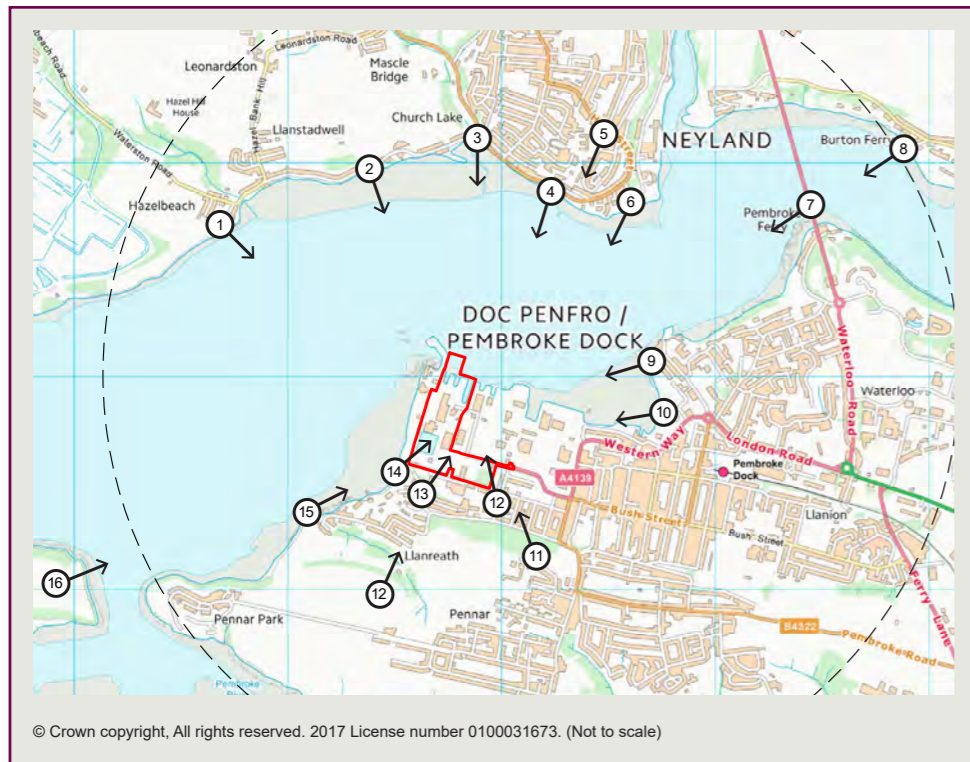


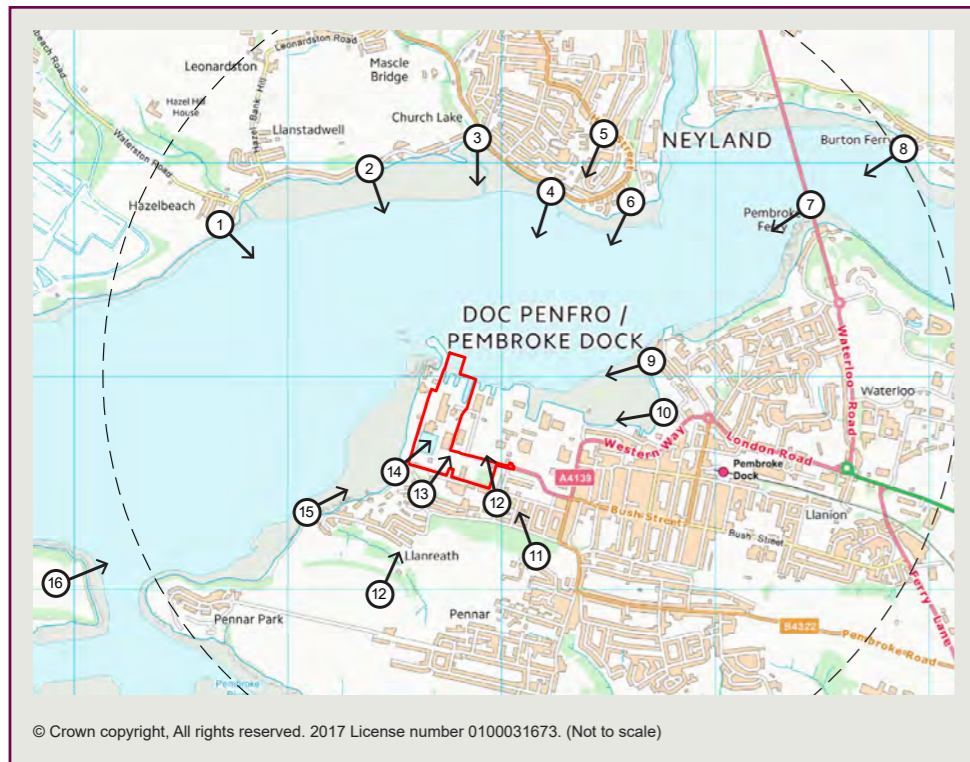


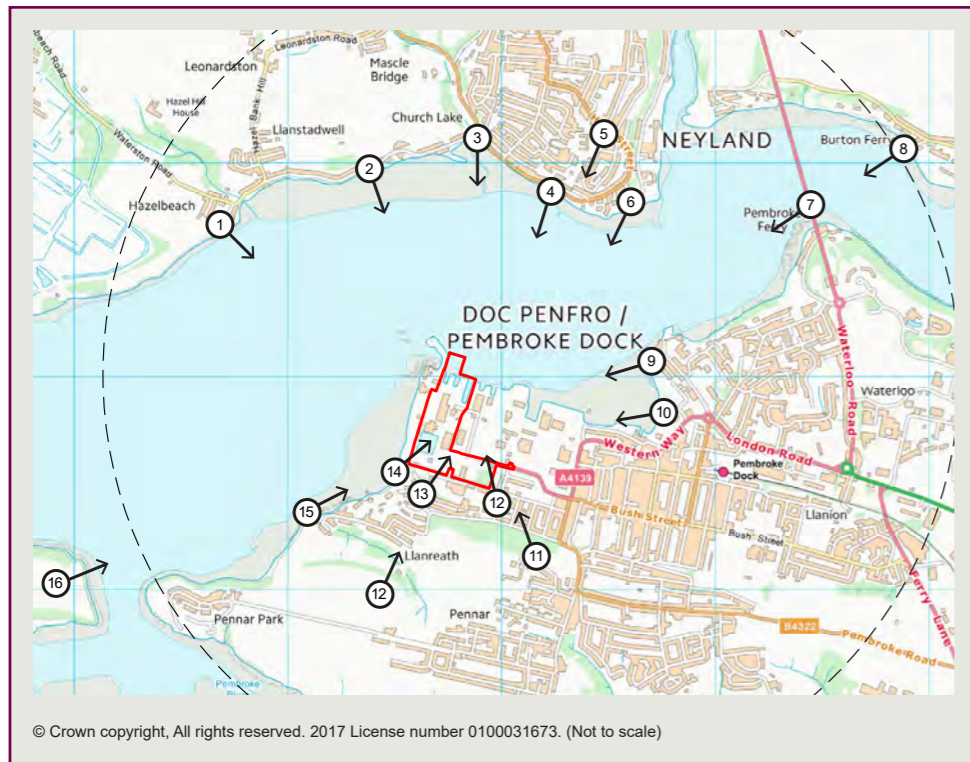














Existing view



Proposed wireline view

Ref: 3241-0004-01



Distance to site: 1.08km
OS reference: SM947048

Direction to site: South-East
Viewpoint height: ?m AOD

Approx. 75°
Viewing distance: 300mm @ A3

Viewpoint: 1
Figure : 9e



Existing view



Proposed wireline view

Ref: 3241-0004-01



Distance to site: 0.87km
OS reference: SM960049

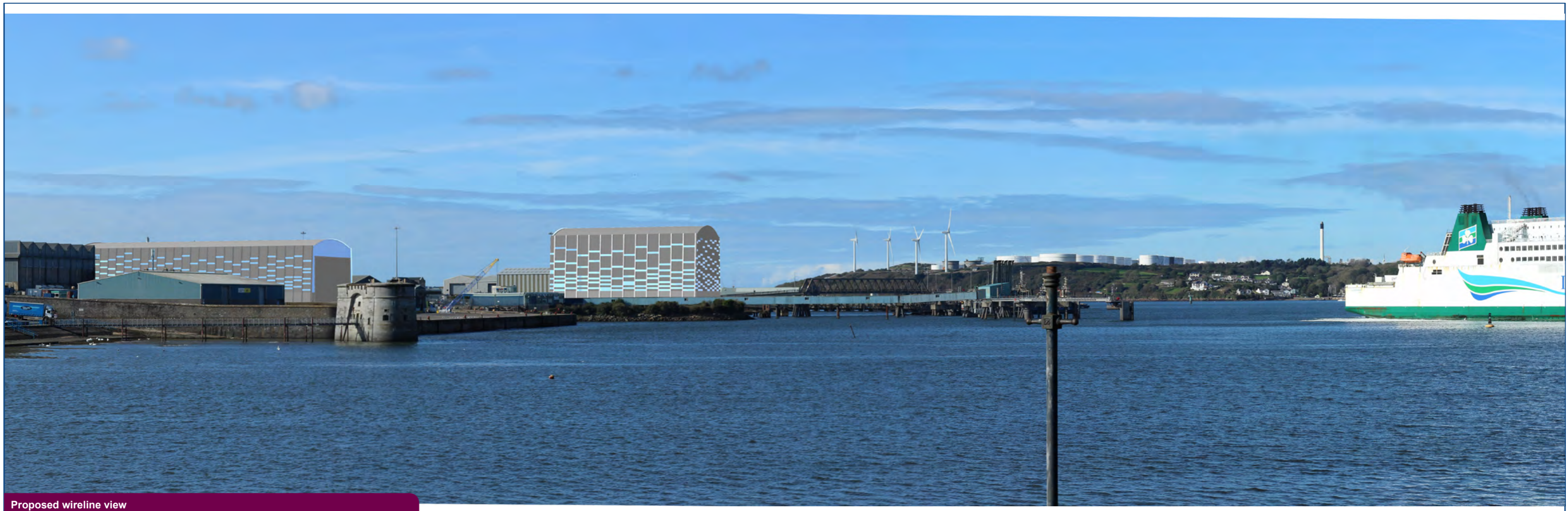
Direction to site: South
Viewpoint height: ?m AOD

Approx. 75°
Viewing distance: 300mm @ A3

Viewpoint: 4
Figure : 9e



Existing view



Proposed wireline view

Ref: 3241-0004-01



Distance to site: 0.38km
OS reference: SM967038

Direction to site: East
Viewpoint height: ?m AOD

Approx. 75°
Viewing distance: 300mm @ A3

Viewpoint: 9a
Figure : 9e



Existing view



Proposed wireline view

Ref: 3241-0004-01



Distance to site: 0.27km
OS reference: SM962031

Direction to site: North
Viewpoint height: ?m AOD

Approx. 75°
Viewing distance: 300mm @ A3

— Wire Line
— Wire Line

Viewpoint: 11
Figure : 9e



Existing view



Proposed wireline view

Ref: 3241-0004-01



Distance to site: 0.18km
OS reference: SM956033

Direction to site: North
Viewpoint height: ?m AOD

Approx. 75°
Viewing distance: 300mm @ A3

— Wire Line
— Wire Line

Viewpoint: 13
Figure : 9e