

# PEMBROKE DOCK INFRASTRUCTURE

Environmental Statement Chapter 14: Landscape – Supplementary  
Night Time Visual Appraisal

Pembroke Dock  
Infrastructure Supplementary  
Night Time Visual Appraisal  
V1  
November 2020

**SUPPLEMENTARY NIGHT TIME VISUAL APPRAISAL**

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## Contents

1	INTRODUCTION.....	4
2	ASSESSMENT METHODOLOGY.....	5
3	BASELINE ENVIRONMENT .....	6
4	DESCRIPTION OF THE PROPOSALS AND MITIGATION MEASURES.....	9
5	ASSESSMENT OF SIGNIFICANCE OF OPERATIONAL NIGHT TIME VISUAL EFFECTS ..	10
6	SUMMARY AND CONCLUSIONS .....	12
7	REFERENCES.....	13

## Appendices

Appendix A: Visually Verifiable Photomontages (Nicholas Pearson Associates)

# 1 INTRODUCTION

- 1.1 The purpose of this Supplementary Night Time Visual Appraisal (VA) is to identify and assess the likely visual night time effects that would result from the development proposals, during the operational phase of the Pembroke Dock Marine Project in the settlement of Pembroke Dock along the Milford Haven Inner Waterway in Pembrokeshire.
- 1.2 This supplementary report should be read together with the original LVA (RPS, February 2019) and does not repeat the information contained within that document, e.g. the assessment methodology, except where necessary for the purposes of clarification.
- 1.3 This report considers the night time effects on visual receptors only, as requested by National Resources Wales (NRW):
- 1.4 A night time photomontage of the development are provided at Appendix A.

## 2 ASSESSMENT METHODOLOGY

### Impact assessment criteria and proportionality

- 2.1 The methodology used in this night time VIA is based on the *Guidelines for Landscape and Visual Impact Assessment: Third Edition* (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (GLVIA3) and set out in Section 2 of the original LVA (RPS, February 2020). As set out in GLVIA3, this supplementary report has taken a proportionate approach to the assessment.
- 2.2 The significance matrix used in the original LVA, has been updated to more clearly reflect the terminology used in describing magnitude of impact (Negligible, Small, Medium and Large). The updated matrix is found in Table 1, below.

**Table 1: Significance of Effect Matrix**

		Magnitude of impact				
		No change	Negligible	Small	Medium	Large
sensitivity of receptor	Negligible	None	Negligible	Negligible to minor	Negligible to minor	Minor
	Low	None	Negligible to minor	Negligible to minor	Minor	Minor to moderate
	Medium	None	Negligible to minor	Minor	Moderate	Moderate to major
	High	None	Minor	Minor to moderate	Moderate to major	Major to substantial
	Very high	None	Minor	Moderate to major	Major to substantial	Substantial

- 2.3 All night time effects are intermittent in nature and that only those people that are active in the locations identified during the hours of darkness will experience any night time effects. It is probable that ‘night time’ effects will be mostly experienced by receptors during the hours of dawn and dusk, when the contrast of the proposed lighting and the night sky are not so noticeable and the magnitude of impact is less. Consequently, the significance of effects is lessened. For this reason, those effects that are judged to be Moderate are not considered to be significant in this assessment.

### 3 BASELINE ENVIRONMENT

3.1 The baseline environment is as described in Section 3 of the original LVA.

#### Residential Properties

3.2 There are numerous residential properties within the study area that would have potential night-time views of the Application Site. These are identified in the original LVA. However, it should be noted that a change in a private view is not a planning matter and should only be considered as such if there is the potential for harm over and above substantial adverse effects.

#### Public Rights of Way

3.3 The Public Rights of Way network include a National Trail, footpaths and bridleways.

3.4 The Wales Coast Path/Pembrokeshire Coast Path National Trail roughly follows the Pembrokeshire coast on both the northern and southern sides of Milford Haven. On the northern side of the Haven, the Application Site can be seen from sections of the National Trail, including those at:

- Wear Point/Milford Haven Oil Refinery;
- Minor road, Llanstadwell and Hazelbeach;
- B4325 Neyland;
- Cleddau Bridge.

3.5 People using the Wales Coast Path/Pembrokeshire Coast Path on the southern side of the Haven have views of the Application Site, including:

- A4139 to the east of the Dockyard;
- B4322, to the south-east of the Dockyard
- Roscrowther Oil Refinery, adjacent to Pwllcrochan Flats.

3.6 People using the Public Rights of Way network between the Milford Haven Oil Refinery and Neyland, on the northern side of the Haven have views of the Application Site.

3.7 Walkers using the Public Rights of Way network to the south of Pembroke Dock, including those at Barrack Hill have views of the Application Site.

#### Other Recreational Receptors

3.8 Recreational receptors, other than those people using the public Rights of Way network include people using the Haven for water-sports and recreational activities. These receptors have clear views of the Application Site.

3.9 People accessing the waterfront and beaches, for fishing, bird-watching, or other activities, also have clear views of the Application Site, including visitors to Burton Ferry.

3.10 On the southern side of the Haven, people using the golf course on Barrack Hill have views of the Application Site.

## Commercial Properties

- 3.11 There are numerous commercial properties in Pembroke Dock including West Llanion Business Park, Cleddau Bridge Business Park as well as hotels, shops and public houses that have views of the Application Site. Commercial properties to the north of the Haven will also have clear views of the Application Site.

## Community Facilities

- 3.12 South Pembroke hospital lies immediately to the south of the Application Site and is seen by people working, visiting and patients at the hospital.

## Dynamic Receptors

- 3.13 The Application Site can be seen by people travelling in vehicles on roads to the north of the Haven, including people travelling on the following roads:
- Minor road at Llanstadwell;
  - Minor roads between the Milford Haven Oil Refinery and Neyland;
  - B4325 at Neyland;
  - A477, Cleddau Bridge.
- 3.14 The Application Site is located close to the following public highways to the south of the Haven, including:
- Front Street and other residential roads to the east;
  - A4139, Admiralty Road/Commercial Row/Western Way located to the east;
  - Fort Road located parallel to the southern boundary of the application Site.
- 3.15 People working and travelling on marine vessels have views of the Application Site, including people travelling on the Pembroke to Rosslare Ferry.

## Baseline Visual Receptors

- 3.16 The ZONE OF Theoretical Visibility (ZTV) (see LVA, 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 0.5 km to 2 km 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 from ground level are limited due to the high boundary wall surrounding the Application Site.

## Selection of Representative Viewpoint

- 3.17 The ZTV for the Proposed Development was produced for the LVA and used to guide the selection of representative viewpoints for the visual assessment. The selected viewpoint for the night time

assessment was VP1, chosen due to its clear view of the Application Site and of the Proposed Development. This is described in Table 2, below.

**Table 2: Representative Viewpoint Description**

Representative Viewpoint Description		
Representative Viewpoint Number	Viewpoint Orientation	Viewpoint Location
Viewpoint 1 (VP1)	Hazelbeach, 1196 m to the north-west of the Application Site.	Wales Coast Path/Pembrokeshire Coast Path National Trail at Hazelbeach.

3.18 For this supplementary VIA, a night time photomontage from the VP1 location, has been produced to assist the assessment. The photomontage is presented at Appendix A of this report.

## Night Time Visual Context

3.19 The landscape context contains many elements that influence the sensitivity of visual receptors to the proposed change and the character of the views available to people living, working and travelling through the area. These include the existing power station towers, the oil refineries, wind turbines, tanks and associated industrial features, urban centres and large commercial sheds close to and visible from the water, the presence of established commercial and recreational ships, boats and the ferry using the waterway, as well as main roads.

3.20 At night the lights from these structures are evident in the landscape. Some of the lights in the existing dock buildings are bright and reflected in the water, when viewed across the Haven/Daugleddau towards the dockyard.

## Sensitive Receptors

3.21 Considering the night time visual baseline, the potential key sensitive visual receptors to the proposed lighting of the proposed buildings and their immediate surroundings, are considered to include:

- Residential views from properties adjacent to the existing dockyard;
- Walkers using the Wales Coast Path/Pembrokeshire Coast Path National Trail;
- People using the Haven/Daugleddau and the foreshore for recreational activities;
- People viewing Pembroke Dock, from across the Haven/Daugleddau from publicly accessible waterside viewpoints at Hazelbeach, Neyland and Burton Ferry.

## **4 DESCRIPTION OF THE PROPOSALS AND MITIGATION MEASURES**

- 4.1 The proposed lighting, at the operational phase of the Proposed Development is illustrated in the night time photomontage at Appendix A to this report.
- 4.2 The original single volume cover structures, of the dock buildings, had a unique scatter of roof lights to provide the maximum quantity of natural light technically available at that time. This created a distinctive appearance and it is this concept that has been used to bring an identity to the proposed modern structure and lighting, shown on the night time photomontage (Appendix A).
- 4.3 At night the structures provide a filigree of light, from their many small-scale translucent panels which helps to visually reduce the mass of the buildings.

## 5 ASSESSMENT OF SIGNIFICANCE OF OPERATIONAL NIGHT TIME VISUAL EFFECTS

- 5.1 The effect of the proposed lighting on visual receptors, during the operational phase of the Proposed Development, has been assessed, below.

### Magnitude of impact

- 5.2 The magnitude of the impact of the lighting of the Proposed Development is considered to be direct, long-term and intermittent (only at night, with less impact at dawn and dusk). In many views the proposed buildings will replace or screen the existing bright lights, the new lighting being muted and directional, thus reducing the number and brightness of any reflections in the waters of the Haven/Daugleddau (see photomontage at Appendix A to this report). Overall, the magnitude of the impact of the lighting is considered to be small.

### Sensitivity of the visual receptor

- 5.3 The sensitivity of the receptors varies from Low, e.g. people travelling in vehicles, to High, e.g. walkers using the Wales Coast Path/Pembrokeshire Coast Path. However, it is unlikely that these most sensitive receptors will be using the Public Rights of Way network at night. At dawn and dusk, when people might be starting out on or concluding a journey, the lighting will be less noticeable, due to there being less of a contrast between the lights and the sky, therefore the sensitivity of the receptors to the change will be lower.

### Significance of the night time visual effects

- 5.4 Overall, the significance of effects of the proposed lighting, where it is visible, is considered to vary between **Negligible adverse** and **Moderate adverse**. Due to the presence of existing lighting, the effect of the buildings to screen or replace some of that lighting, as well as the intermittent nature of the night time impacts, the significance of the effects of the night time lighting is considered not to be significant.

### Night Time Effects on Representative Viewpoint

#### Viewpoint 1

- 5.5 Viewpoint 1 was chosen as the location for the photomontage, as one of the most open, publicly accessible locations where walkers using the National Trail would have clear views of the Proposed Development (see Appendix A of this report). The anticipated night time effects on visual receptors at this viewpoint and representative viewpoints are summarised in Table 3 below.

**Table 3: Summary of Effects on Visual Receptors at Representative Viewpoint**

Visual Receptor / Representative Viewpoint	Description of the View	Change in Baseline	Sensitivity	Magnitude	Significance of Effect
VP1: 1196m from the Application Site	View south-east at approximately 5 m AOD. Receptors are walkers using the National Trail and the foreshore. The lighting effects would be mostly likely to be seen in the evening or early morning, as few people would be using this location at night.	The lights of 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 and lighting are a common element (see Appendix A).	High	Small	Moderate Adverse

5.6 Overall, the sensitivity of the receptor is considered to be High and the magnitude of the impact will be Small. The significance of effect is judged to be **Moderate adverse**, which for this intermittent impact is considered not to be significant.

## 6 SUMMARY AND CONCLUSIONS

- 6.1 The Proposed Development is located in the busy Pembroke Dock port amongst other large built structures, e.g. Cleddau Bridge and dockyard buildings. The buildings will be seen in the wider context of the oil refineries, power station and wind turbines, either side of the Haven/Daugleddau. The character of the views is an industrial one. At night the lights in and around the dockyard are bright and from some directions reflected in the water of the Haven/Daugleddau.
- 6.2 The magnitude of the impact of the lighting of the Proposed Development is considered to be direct, long-term and intermittent (only at night, with less impact at dawn and dusk). In many views the proposed buildings will replace or screen the existing bright lights, the new lighting being muted and directional, thus reducing the number and brightness of any reflections in the waters of the Haven/Daugleddau (see photomontage at Appendix A to this report). Overall, the magnitude of the impact of the lighting is considered to be small.
- 6.3 The sensitivity of the receptors varies from Low, e.g. people travelling in vehicles, to High, e.g. walkers using the Wales Coast Path/Pembrokeshire Coast Path. However, it is unlikely that these most sensitive receptors will be using the Public Rights of Way network at night. At dawn and dusk, when people might be starting out on or concluding a journey, the lighting will be less noticeable, due to there being less of a contrast between the lights and the sky, therefore the sensitivity of the receptors to the change will be lower.
- 6.4 Overall the significance of effects of the proposed lighting, where it is visible, is considered to vary between Negligible adverse and Moderate adverse. Due to the presence of existing lighting, the effect of the buildings to screen or replace some of that lighting, as well as the intermittent nature of the night time impacts, the significance of the effects of the night time lighting is considered not to be significant.
- 6.5 In conclusion, the night time visual effects of the Proposed Development are considered to be acceptable.

## 7 REFERENCES

Landscape Institute and the Institute of Environmental Management and Assessment (2013). *Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3)*.

Landscape Institute (17th September 2019) *Technical Guidance Note 06/19: Visual Representation of Development Proposals*.



**APPENDICES**

## APPENDIX A: PHOTOMONTAGES