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HALLIDAY**

Planning, Landscape & Environment
an **RSK** company

LOW CARBON CEMENT MILL, NEWPORT DOCKS

Landscape and Visual Appraisal
CEM Minerals
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Document history

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1 EXECUTIVE SUMMARY

1.1 Overview

- 1.1.1 This appraisal describes the existing landscape and views, considers their sensitivity to change and identifies changes likely to arise from the Proposed Development, providing judgements of the importance of the effect arising.

1.2 The Site & Proposals

- 1.2.1 The Site is located in Newport Docks and extends to approximately 4.7 hectares of irregularly shaped, hard-surfaced land which is near, but not including the edge of the dock. The Site has previously been used for mineral importation and stocking-of marine won sand and gravel and coal. The Site is currently unoccupied and contains no permanent buildings.
- 1.2.2 The Proposed Development comprises the construction and operation of a Vertical Roller Mill and ancillary development for the production of a cement substitute with subsequent distribution of the final product.

1.3 Effects on Landscape / Townscape Character

- 1.3.1 A host landscape receptor was identified including the Site and its' surrounding context and the landscape effects arising from the Proposed Development were assessed. For both the construction and operational phase the physical, visual and perceptual effects on the host receptor were assessed as **Minor Neutral**.
- 1.3.2 In terms of the wider Study Area, effects on landscape character are visual and perceptual only and ranged from **Minor / Negligible Adverse** to **Negligible Neutral**. For the Study Area generally it was the sensitivity of the landscape receptor rather than the magnitude of effect and level of change that was the greater factor in determining overall effect.

1.4 Visual Effects

- 1.4.1 A range of visual receptors were identified and a number of candidate viewpoints agreed with the Local Planning Authority. Where viewpoints were inaccessible, expected rather than assessed effects are described.
- 1.4.2 The closest visual receptors were assessed as the lowest in terms of sensitivity where the Proposed Development would be viewed from Newport Docks, a secure site with restricted access. People will be engaged in work activities where visual amenity is incidental the expected effects are **Moderate / Minor Neutral**.
- 1.4.3 In the Study Area visual effects ranged from an expected **Minor / Negligible Neutral** from parts of the Wales Coast Path (where an additional building and structures in the view would be neither beneficial or adverse) to an assessed **Moderate Adverse** for the course of the Wales Coast Path near the River Ebbw, within 1km south-west of the Site. As a national long-distance PRow it is the high sensitivity of the receptor and value of broad panoramic views rather than the magnitude of effect which is the main contributor to overall effect.

- 1.4.4 In the majority of views, the Proposed Development will, to a varying degree, appear as dockside buildings, structures and activity in part of the view where such buildings, structures and activity currently form part of the visual baseline.

2 INTRODUCTION

2.1 Background

- 2.1.1 Stephenson Halliday was commissioned in March 2024 to prepare a Landscape and Visual Appraisal (LVA) of the Proposed Development at South Dock, Newport on behalf of CEM Minerals. This assessment forms part of a suite of documents supporting the application for this development proposal.
- 2.1.2 This assessment defines the existing landscape and visual baseline environments; assesses their sensitivity to change; describes the key landscape and visual related aspects of the proposed development; describes the nature of the anticipated changes and assesses the effects arising during construction and operational phases of the Proposed Development.

2.2 The Site and Proposals

- 2.2.1 Figure 1 places the Proposed Development in its surrounding context. The Site extends to approximately 4.7 hectares of irregularly shaped, hard-surfaced land which is near, but not including the edge of the dock, separated from the water body by the rails and unloading cranes. The site is generally flat and is bisected by the road and rail lines that serve properties further to the west. The Site has previously been used for mineral importation and stocking-of marine won sand and gravel and coal. Coal imports have now ceased. The Site is currently unoccupied and contains no permanent buildings.
- 2.2.2 The Proposed Development comprises the construction and operation of a Vertical Roller Mill and ancillary development for the production of a cement substitute with subsequent distribution of the final product. The proposed infrastructure, with an amended layout, will replicate the operations of the mill that is owned and operated by the applicant in Gent, Belgium.

2.3 Competence

- 2.3.1 This report has been prepared by Chartered Landscape Architects at Stephenson Halliday. The Practice has over 24 years of experience working in a variety of sectors throughout the UK. Key individuals working on this project have over 20 years' experience as practicing Landscape Architects, including the preparation of LVA reports and are Chartered Members of the Landscape Institute (CMLI).
- 2.3.2 The Practice is a Landscape Institute and IEMA registered practice and all work is prepared and reviewed internally by senior highly experienced landscape planners with Public Inquiry experience.
- 2.3.3 To inform the assessment, a site visit was made to various locations within the Study Area including, but not restricted to, representative viewpoints by Stephenson Halliday's assessment team during July 2024.

2.4 Stakeholder Consultation

- 2.4.1 Following the EIA screening process, it was confirmed in April 2024 that the Proposed Development did not require an accompanying EIA which would include a Landscape and

Visual Impact Assessment (LVIA). Pre-application advice received in June 2024 set out that although a LVIA would not be required “*an informal Landscape and Visual Appraisal (LVA) would be required...due to the scale of the proposals*”.

- 2.4.2 The advice required construction and operational phases to be assessed and that there should be discussion with the LPA regarding the scope of the LVA, particularly the identification of visual receptors and the selection of representative viewpoints. Both the NCC Case Officer and Landscape Consultant were consulted in July 2024 and a range of candidate viewpoints presented on an initial screening Zone of Theoretical Visibility (ZTV) figure. These were agreed as the basis of selecting a series of representative viewpoints.
- 2.4.3 Following field study in July 2024, it was evident that the candidate viewpoints from within Newport Docks (where visual effects would be greatest) were through controlled access, closed to the public. As such these would not be representative of the effects on views and the visual amenity for publicly accessible locations. It is beyond the scope of a LVA to assess what are essentially private views. Therefore, following further consultation in August 2024 with both the NCC Case Officer and Landscape Consultant, it was agreed that the expected, rather than assessed level of visual effects would be included in this report. These would be based on an understanding of the landscape and visual baseline, remote scoping and the extent of the ZTV.
- 2.4.4 A similar approach was also agreed in August 2024 for part of the Wales Coast Path, closed for safety reasons due to restoration work to the Newport Transporter Bridge. Candidate viewpoints were therefore unable to be put forward as representative viewpoints and a such effects from these locations are also described as expected and not assessed.

2.5 Study Area

- 2.5.1 The Guidelines for Landscape and Visual Impact Assessment (3rd Edition) (GLVIA3) recommends that the Study Area for a consideration of landscape effects should ‘*include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner.*’ It also recommends that the LVA should consider the area from which the proposed development will potentially be visible but that the emphasis ‘*must be on a reasonable approach which is proportional to the scale and nature of the proposed development.*’
- 2.5.2 It is accepted practice within landscape and visual appraisal work that the extent of the study area for a development proposal is broadly defined by the visual envelope of the proposed development.
- 2.5.3 In this case a Study Area of 3 kilometres (km), shown as dotted black lines on Figures 1 to 4. at 1km, 2km and 3km radii from the Site boundary is considered proportionate to identify all non-negligible effects on landscape and visual receptors.

2.6 Report Structure and Terminology

- 2.6.1 This report is structured as set out in the table of contents.
- 2.6.2 Supporting appendices have been prepared that supplement the sections regarding methodology, an assessment of landscape sensitivity and analysis of viewpoints. The

appendices are important to the written assessment and should be read alongside this report.

- 2.6.3 Key terms used within the assessment are described in Section 3 and Appendix 1 which sets out the methodology. A glossary is also provided within Appendix 1.

3 METHODOLOGY

- 3.1.1 The detail of the methodology is described in Appendix 1. For ease of reference, a summary of the primary judgements is provided below.

3.2 Sensitivity

- 3.2.1 Sensitivity is judged taking into account the component judgments about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted. A slightly greater weight is given to susceptibility in judging sensitivity of visual receptors as indicated below:

Table 3.1 Landscape Sensitivity

LANDSCAPE RECEPTORS		Susceptibility		
		High	Medium	Low
Value	National	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

Table 3.2 Visual Sensitivity

VISUAL RECEPTORS		Susceptibility		
		High	Medium	Low
Value	National	High	High/Medium	Medium
	Regional	High/Medium	High/Medium	Medium/Low
	Community	High/Medium	Medium	Low

3.3 Magnitude

- 3.3.1 Scale of effect is the primary factor in determining magnitude; which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale. The table below illustrates how this judgement is considered as a two-step process.

Table 3.3 Magnitude

Scale / extent	Large	Medium	Small	Negligible
Wide	Substantial			
Intermediate		Moderate		
Localised			Slight	
Limited				Negligible

Stage 1 Result / Duration	Substantial	Moderate	Slight	Negligible
Permanent	Substantial			
Long-term		Moderate		
Medium-term			Slight	
Short-term				Negligible

- 3.3.2 Where magnitude is judged to lie between levels, an intermediate assessment will be adopted.

3.4 Level of Effects

- 3.4.1 The significance of any identified landscape or visual effect is assessed as major, moderate, minor or negligible. These categories are based on the consideration of sensitivity with the predicted magnitude of change. The table below is not used as a prescriptive tool and illustrates the typical outcomes, allowing for the exercise of professional judgement. In some instances a particular parameter may be considered as having a determining effect on the analysis.

Table 3.4 Significance

		Magnitude of Change			
		Substantial	Moderate	Slight	Negligible
Receptor Sensitivity	High	Major	Major/Moderate	Moderate	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
	Low	Moderate	Moderate/Minor	Minor	Negligible

Beneficial/Adverse

- 3.4.2 Landscape and visual effects can be beneficial or adverse and in some instances may be considered neutral. Neutral effects are those which overall are neither adverse nor positive but may incorporate a combination of both.

3.5 Distances

- 3.5.1 Where distances are given in the assessment, these are approximate distances between the nearest part of the site and the nearest part of the receptor in question, unless explicitly stated otherwise. Distances are expressed in metres (m) or kilometres (km).

3.6 Visual Aids

- 3.6.1 Photographs of the existing views and views with annotation which accord with guidance for “Type 1” and “Type 3” visualisations as defined in Landscape Institute Technical Guidance Note 06/19 (TGN 06/19).
- 3.6.2 The visualisations are considered adequate to enable Council officers/members and members of the public who wish to comment on the application to understand the extent of the development in key views and to visualise the Proposed Development in its landscape context.

4 PLANNING POLICY

4.1 National Planning Policy (Wales)

- 4.1.1 The current national planning baseline for Wales is Planning Policy Wales (PPW) Edition 12 dated February 2024. Relevant national planning policy is addressed in the Planning Statement which accompanies the planning application for the Proposed Development.

4.2 Local Planning Policy & Guidance

4.2.1 Current local planning policy is described in the following adopted policy document:

- Newport Local Development Plan 2011 -2026 (adopted January 2015)

Newport Local Development Plan 2011 -2026 (Jan 2015)

4.2.2 The Newport Local Development Plan 2011-2026 adopted in 2015 (NLDP 2015) is the current adopted local spatial planning policy baseline. The relevant policies in landscape and visual terms are set out below:

Strategic Policy SP1: Sustainability

4.2.3 An overarching strategic policy, SP1 states that:

“Proposals will be required to make a positive contribution to sustainable development by concentrating development in sustainable locations on brownfield land within the settlement boundary”.

4.2.4 The Site is located within the urban boundary of the City of Newport. Proposals will be assessed against various criteria listed in Policy SP1. Those of relevance to the Proposed Development are *inter alia*:

ii) The reuse of previously developed land...;

v) The minimisation, re-use and recycling of waste;

ix) Conserving, enhancing and linking green infrastructure, protecting and enhancing the built and natural environment;

x) Conserving and ensuring the efficient use of resources such as water and minerals.”

Strategic Policy SP5: Countryside

4.2.5 Note: for the avoidance of doubt, while much of the Study Area lies within “the countryside” as defined in SP5, the Site is located within the settlement boundary of Newport. Policy SP5 states policy considerations regarding development within the countryside, not development outside the countryside that may have potential visual or perceptual effects on the surrounding countryside.

Strategic Policy SP8: Special Landscape Areas

4.2.6 This policy identifies 6 Special Landscape Areas (SLAs) within the administrative boundary of Newport. These are local, not statutory designations used by the LPA to inform planning policy and decision making. 3 of the 6 lies within the Study Area. The Site does not lie within an SLA. The SLAs are shown on Figure 2. Policy SP8 states that *inter alia*:

“Special landscape areas are designated as follows within which proposals will be required to contribute positively to the area through high quality design, materials and management schemes that demonstrate a clear appreciation of the area’s special features:

iii) Wentlooge Levels

iv) River Usk

v) Caldicot Levels.”

4.2.7 Para 2.32 (Page 23 NLDP 2015) states that:

“Developers will be required to ensure that proposals do not impact or affect the intrinsic character, quality, feature or conservation value of the SLA. Designs will be required to be of a high standard, appropriate in scale and massing, integrated sympathetically into the landscape as well as ensuring long term management. Supplementary Planning Guidance will provide detail concerning the value, management and maintenance of the areas.”

4.2.8 Note: it is not clear from the above as to whether this refers solely to development within the SLA or to development outside its but within what may be considered the “setting” of an SLA. There is no SPG listed on the Council website relating to Special Landscape Areas.

4.2.9 The Site lies in close proximity to the 3 SLAs listed above in Para 4.2.10. In terms of landscape and visual effects, there is the potential for transboundary effects as a result of the Proposed Development, particularly visual, but also perceptual, over the adjacent SLAs.

4.2.10 While the SLAs are not considered landscape receptors, to be assessed in their own right, they have been...*“designated on the basis of the LANDMAP process.”* (NLDP 2015 Para 2.30 Page 23). As such the SLA designation will be based on judgements of landscape value. Policy SP8 is therefore, of relevance to this report where the SLA status of the surrounding Site context will form part of the assessment of landscape value, sensitivity and susceptibility across the Study Area.

Strategic Policy SP9 : Conservation of the Natural, Historic and Built Environment

4.2.11 The Study Area contains several natural, historic and built environment designations as shown on Figure 2. Policy SP9 is therefore of relevance as:

“The conservation, enhancement and management of recognised sites within the natural, historic and built environment will be sought in all proposals.

General Policy GP2: General Development Principles – General Amenity

4.2.12 Policy GP2 sets out that development will be permitted subject to certain criteria being applicable. Those of relevance to this LVA report are *inter alia*:

“I) There will not be a significant adverse effect on local amenity, including in terms of noise, disturbance, privacy, overbearing, light, odours and air quality

ii) The proposed use and form of development will not be detrimental to the visual amenities of nearby occupiers or the character or appearance of the surrounding area.”

- 4.2.13 Para 3.11 (P42 NLDP 2015) regarding policy GP2 goes on to state the following, which is also relevant in terms of potential landscape and visual effects on both the Site, the locality and wider context:

“The amenity enjoyed by people in their local environment should not be significantly harmed as a result of development. All development proposals should therefore be appropriate for the immediate location, and also for the wider setting/context. The scale, nature and siting of a proposal must be appropriate to the location and must not undermine the character of either the site or the locality.”

General Policy GP5: General Development Principles – Natural Environment

- 4.2.14 Policy GP5 sets out the criteria that need to be met in order for development to be permitted. This includes *inter alia* of relevance to this report in terms of potential landscape and visual effects and mitigation:

“i) The proposals are designed and managed to protect and encourage biodiversity and ecological connectivity, including through the incorporation of new features on or off site...:

ii) The proposals demonstrate how they avoid, or mitigate and compensate negative impacts to biodiversity...:

iii) There will be no unacceptable impact on landscape quality:

iv) The proposal includes an appropriate landscape scheme, which enhances the site and the wider context including green infrastructure and biodiversity.”

5 BASELINE

5.1 Introduction

- 5.1.1 An overview of the baseline study results is provided in this section with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in section 6.6 for ease of reference.
- 5.1.2 This section provides a review of the key local baseline studies and guidance documents and identifies those landscape and visual receptors which merit detailed consideration in the assessment of effects, and those which are not taken forward for further assessment as effects *“have been judged unlikely to occur or so insignificant that it is not essential to consider them further”* (GLVIA3, para. 3.19).
- 5.1.3 Both this baseline section and the effects section describe landscape character and visual receptors before considering designated areas as it is common for designations to

encompass both character and visual considerations within their special qualities or purposes of designation.

5.2 ZTV study

- 5.2.1 A Zone of Theoretical Visibility (ZTV) study was generated based on the proposed design. This is shown on Figure 4 and indicates areas of potential visibility. The ZTV is a screening ZTV which takes into account topography, buildings and vegetation as visual barriers in order to provide a more realistic indication of potential visibility.
- 5.2.2 It should be noted that hedgerows, some copses of trees and individual trees are not modelled in the ZTV and will add an additional layer of screening in the landscape. The full details of data and software used to generate the ZTV are included in Figure 4. As such is expected that actual extent of visibility on the ground will be less than suggested by the ZTV.
- 5.2.3 The ZTV study was used to aid the identification of those receptors that are likely to be most affected by the proposed development and those that do not require detailed consideration. It should be noted that some areas shown as having potential visibility may have visibility of the development screened by more recent development, and some new views may have been opened up by demolition or removals since the latest LiDAR, OS and QGIS datasets.
- 5.2.4 At distances up to 1km from the Site, boundary intervisibility between the Site and potential receptors extends in all directions, primarily across Newport Docks. Where visibility is fractured, this is more likely to be due to the intervening presence of dockside buildings and structures rather than vegetation or topography.
- 5.2.5 This continues to be the case between 1km and 2km to the north and east of the Site where large buildings at the mouth of the River Usk including Usk Power Station act as visual barriers. To the west there is a greater extent of potential intervisibility between receptors over the Wentlooge Levels. Here fieldwork identified few intervening barriers to visibility of any great height, but in a notably flat landscape, it was observed that comparatively low height features such as hedges and individual trees were significant in terms of screening.
- 5.2.6 Between 2km and 3km there remains a greater more consistent level of potential intervisibility south-westwards over Wentlooge Levels towards St Brides. Visibility remains fractured due to buildings and vegetation over the Caldicot Levels to the south-east.
- 5.2.7 Aside from the screening effects of a headland near Broadwater, there is expected to be extensive visibility southwards for waterborne receptors at the mouth of the River Usk and approaches to Newport Docks as far as the 3km limit of the Study Area.
- 5.2.8 Observations in the field confirmed that the extent of intervisibility between the Site and Newport Wetlands Nature Reserve lying approximately 1.5km to 2.5km to the south-east is less than may be expected regarding the extent of ZTV presented in Figure 4.
- 5.2.9 The Wales Coast Path is a key source of receptor invisibility throughout the Study Area, though fieldwork revealed that the extent of visibility varies considerably. The greatest extent of intervisibility along this long distance PRoW is to the south-west at distances ranging from less than 1km to the 3km limit of the Study Area.
- 5.2.10 Effects on landscape or visual receptors outside the areas of visibility shown on the ZTV study would be Negligible and are not considered further in this report.

5.3 Landscape Character

Using Existing Landscape Character Assessments

- 5.3.1 Guidance on the use of existing landscape character assessments is set out in Paras 5.12 to 5.16 of GLVIA3 as summarised below.
- 5.3.2 GLVIA3 advises that *“the first step in preparing the landscape baseline should be to review any available assessments”* and that *“use should be made of any existing historic characterisation studies to provide information on the time depth dimension of the landscape.”* (Para 5.12 GLVIA3).
- 5.3.3 Further, GLVIA3 states these should be *“reviewed critically”* and that *“a judgment should be made as to the degree to which it will be useful in informing the LVIA process”* and *“justification should be provided for any departure from the findings of an existing established LCA”* (Para 5.13 GLVIA3).
- 5.3.4 GLVIA3 recognises the different scale of assessments that can be used to define the landscape baseline. This includes national *“broad-scale assessments”* that *“set the scene”* but *“may be too generalised to be appropriate”*, and local authority assessments that *“provide more detail on the types of landscape that occur in the study area”*. *“Ideally both should be used together”* to identify *“key characteristics”* which *“can be used to inform the description of the landscapes that may be affected by the proposal”*. (Para 5.14 GLVIA3).
- 5.3.5 GLVIA3 states that *“existing assessments may need to be reviewed and interpreted to adapt them for use in LVIA – for example by drawing out the key characteristics that are relevant and that “fieldwork will also be required to check the applicability of the assessment throughout the study area and to refine it where necessary”*. (Para 5.15 GLVIA3).
- 5.3.6 Existing assessments are therefore, the “starting point” in establishing the landscape baseline, *“it is still likely that it will be necessary to carry out specific and more detailed surveys....to analyse to what extent the site and its immediate surroundings conform or are different from the wider Landscape Character Assessments that exist, and to pick up other characteristics that may be important in considering the effects of the proposal.”* (Para 5.16 GLVIA3)
- 5.3.7 This approach allows the assessor to determine which assessments are relevant and where appropriate, interpret, adapt and refine them. This, combined with fieldwork observations, informs the judgment process regarding landscape character value and its sensitivity to the effects of the Proposed Development.
- 5.3.8 The following existing, published landscape character assessments are of relevance to this report, covering the Site and its surroundings, within the 3km radius of the Study Area:

National Landscape Character Areas (NLCAs) 2014

- 5.3.9 NLCAs form the broadest scale of landscape character assessment, there are 48 in total covering the whole of Wales the following 2 lie within the Study Area:

- **NCLA 34 Gwent Levels**
- **NCLA 35 Cardiff & Newport**

- 5.3.10 NCLA 34 covers the majority of the Study Area including the Site, its immediate surroundings, principally Newport Docks, and the surrounding levels either side of the River Usk. NCLA 35 adjoins NCLA 34 and covers the edge of Newport in the north-western extent of the Study Area, typically 2 to 3km from the Site boundary.
- 5.3.11 Boundaries between NCLAs are not always clearly evident “on the ground” and are often a transition zone between two different character types. In this instance, the docks in which the Site is located are in NCLA 34, but are not referenced in the assessment, whereas the assessment for the adjoining NCLA 35 accurately describes their character, which is notably different to the rest of NCLA 34.
- 5.3.12 This apparent anomaly is covered in greater detail in section 6.6 of this report. Given the “overlap” in boundaries and descriptions, both assessments are used to describe the landscape character of the Study Area.

Local Landscape Character Assessment

- 5.3.13 These assessments typically assess the local landscape at a regional, county or local level, dividing the landscape into Landscape Character Types (LCTs) and / or Landscape Character Areas (LCAs). In terms of landscape and visual assessment (LVIA or LVA), the descriptions are used to inform both the assessment of the existing landscape baseline value and sensitivity, and the assessment of landscape and visual effects.
- 5.3.14 At the time of writing this report (October 2024) there is no published regional, county or local landscape character assessment to describe the landscape within the administrative boundary of Newport.

LANDMAP

- 5.3.15 Para 6.3.19 on Page 143 of PPW Edition 12 (Feb 2024) provides the following description of LANDMAP:
- “LANDMAP is an important information resource, methodology, and monitoring baseline for the landscapes of Wales, which can help inform planning for the sustainable management of resources in an area. LANDMAP describes and evaluates the physical, ecological, visual, cultural and historic aspects of the landscapes of Wales, and provided the basis of a consistent, quality assured national approach to landscape assessment.”*
- 5.3.16 This report utilises the following LANDMAP Aspect Areas, a series of datasets which in combination, describe the landscape character baseline for the Site and surrounding Study Area:
- Visual and Sensory
 - Landscape Habitats
 - Historic Landscape

- Cultural Landscape
- Geological Landscape

5.3.17 Of these, the Visual and Sensory dataset provides the greatest contribution to this LVA report. Where other datasets contain information that assist in describing the local landscape character, these are referenced in the report and the supporting Appendix 3 which describes the landscape value, susceptibility and sensitivity of the host landscape receptor.

5.3.18 LANDMAP divides the Welsh landscape into parcels of land with a Unique Identification (UID) reference and name. Within the Study Area, the Visual and Sensory UIDs of greatest relevance and their overall evaluation value are shown on Figure 3, and listed below:

- NWPRTVS040 Docks and Level of Mendalgrief (includes the Site)
- NWPRTVS041 Eastern Usk Industrial Area
- NWPRTVS022 Ebbw River Corridor
- NWPRTVS010 Lower River Usk
- NWPRTVS037 Caldicot Level
- NWPRTVS005 Nash Wetlands
- NWPRTVS006 Estuary Saltmarsh
- NWPRTVS009 St Brides Estuary Grassland
- NWPRTVS001 Wentlooge Level
- NWPRTVS007 Estuary Mudflats

5.3.19 The Site and its immediate surroundings are located in the dock and dockside townscape of NWPRTVS040 at the centre of the Study Area. The industrial area of NWPRTVS041 is of similar character lying east of the Usk, typically between 1 and 2km from the Site.

5.3.20 NWPRTVS010, 022 and 007 represent the confluence of the River Ebbw and River Usk converging at the Severn Estuary at the southern extent of Newport Docks.

5.3.21 NWPRTVS001, 009 and the western extent of NWPRTVS006 in combination form the Wentlooge Level in the central and south-western reaches of the Study Area. The remainder of NWPRTVS006, 005 and 037 form the Caldicot Level to the east of the Study Area.

Historic Landscape Characterisation: The Gwent Levels 1995

5.3.22 This landscape characterisation study was undertaken on behalf of CADW in 1995, the area studied was broadly contiguous with the area described in NCLA 34. It comprises the extensive alluvial landscape that forms much of the southern part of the Study Area. The Site and its immediate context are not covered in this characterisation study.

- 5.3.23 This distinct landscape is described variously within the characterisation as The Outstanding Historic Landscape of Gwent Levels and The Gwent Levels Historic Landscape. It is cited as The Gwent Levels Historic Landscape of Outstanding Historic Interest in Wales in Part 2.1 of the Register of Landscapes, Parks and Gardens of Outstanding Historic Interest in Wales, 1998.
- 5.3.24 This is an example of the historic characterisation studies referred to in the GLVIA3 guidance at para. 5.3.2 of this report. This historic landscape is divided into 21 distinct Historic Landscape Character Areas (HLCAs). Those of relevance to this report are:
- HLCA 15 Eastern St. Brides
 - HLCA 16 Western St. Brides
 - HLCA 21 Maerdy
 - HCLA 01 Nash / Goldcliff Coastal Zone
- 5.3.25 Of these HCLAs 15, 16 and 21 form the Wentlooge Level to the west and south-west of the Site, HCLA 01 describes the part of the Caldicot Level within the Study Area to the east of the Site.

5.4 Visual Receptors

- 5.4.1 Visual receptors are “*the different groups of people who may experience views of the development*” (GLVIA, 3rd edition, para 6.3). In order to identify those groups who may be significantly affected the ZTV study, baseline desk study and site visits have been used.
- 5.4.2 The different types of groups assessed within this report encompass people at home and at work; people using key routes such as roads; cycle ways, people within accessible or recreational landscapes; people using Public Rights of Way; or people visiting key viewpoints. In dealing with areas of settlement, Public Rights of Way and local roads, receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common.
- 5.4.3 Note: It is beyond the scope of this LVA to assess views from private residential properties as LVA is concerned with effects on visual amenity from locations where the public can have free, unhindered access to views of the Proposed Development. This is demonstrated in the selection of representative viewpoints.
- 5.4.4 In this instance there are very few residential receptors, effects are expected to be no greater than **Negligible**, well below the level required for a Residential Visual Amenity Assessment (RVAA) and are not considered further in this report.

Baseline Visual Environment

- 5.4.5 The Site is located within Newport Docks. This is a flat, level, artificially created industrial landscape with a distinct dock and dockside character. South Dock was constructed at the original mouth of the River Ebbw, causing it to be diverted to its current course. It is a dynamic environment with the high levels of activity one would expect at a busy port.

- 5.4.6 The docks comprise large rectangular expanses of deep water surrounded by a network of road and rail links. Buildings are typically large to medium scale steel framed and steel clad with scattered examples of smaller buildings away from the dockside. Large vessels and port infrastructure such as cranes, lighting columns, beacons and other structures characterise this as an industrial dock rather than an industrial landscape.
- 5.4.7 Wind turbines and pylons are prominent features and combined with lighting columns, beacons, silos bring a vertical element to an often flat landscape.
- 5.4.8 Expanses of external storage areas and parking add to the built surface of the dockside. Processing of minerals, including the recycling of materials is a key activity at Newport Docks creating pyramidal or conical forms.
- 5.4.9 Any “natural landscape” is largely peripheral, with occasional pockets of remnant or self-set vegetation between plots. All are heavily influenced by previous and current dockside development and activity. This includes a prominent land-fill site to the west of the docks between the A48 and the River Ebbw.
- 5.4.10 Dock based views tend to be contained and channelled by the road network grid and large buildings, structures and boundary features. These views are often unremarkable, with few indications of a wider estuary landscape beyond. The exception is East Way Road where views of the River Usk and the flat industrialised edge of the Caldicot Level can be experienced.
- 5.4.11 Newport Docks is a controlled environment with restricted public access, as such its baseline visual environment is experienced by a limited number of people while at their place of work or authorised visitors only. These are typically considered to be low sensitivity receptors.
- 5.4.12 East of the River Usk the landscape continues to be urban and industrial with large plots containing building of various scale, the former Liberty Steel works and the massive, prominent power station at the mouth of the River Usk. These are connected physically and visually by the Newport Transporter Bridge, a prominent local landmark, currently under renovation.
- 5.4.13 The Wentlooge Level lies to the west of the Study Area, between 1 and 2km of the Site and further south-westward up to and beyond the 3km extent of the Study Area.
- 5.4.14 Away from the edge of the Severn Estuary, there are few roads throughout this flat estuary-side landscape at the edge of Newport. Roadside vegetation often restricts views, though there are frequent gaps where the road is flanked by drainage channels. These gaps allow views of an agricultural patchwork of small fields, topography is almost uniformly flat, in this landscape it is belts of trees and hedges rather than landform that provide visual containment.
- 5.4.15 At the edge of the Levels, broad panoramic views extent over a flat expanse of fields with few trees other than to field boundaries or adjacent to the many drainage channels or “reens” which are a key characteristic of this distinctive landscape. Views are often restricted to one or two fields by boundary hedges and trees belts. The “big skies” of a largely flat landscape are more likely to be interrupted by large pylons closer to the edge of the Severn Estuary.
- 5.4.16 The levels landscape is almost entirely artificial, resulting from centuries of human activity to drain and reclaim land from inundation from the tidal Severn Estuary. Buildings and

structures (vertical in particular) are more prominent in the landscape than they would be in an undulating landform with greater vegetation cover.

- 5.4.17 Other than buildings and structures, the most distinctive, artificial addition to the landscape is the St Brides Sea Wall. This long, regularly profiled flood defence berm follows the western side of the Severn Estuary towards the mouth of the River Usk and the eastern bank of the River Ebbw. The Wales Coast Path (a national long distance ProW) follows this prominent feature, at times it is difficult to determine whether this follows the base of the berm or runs across the top. Where the Path follows a minor road behind the berm (Heol Pont-Y-Cwch) views are greatly restricted by the mass of the flood defence earthwork.
- 5.4.18 Elevated views, above typical ground level, from the top of the berm, are expansive wide-ranging panoramas of an estuarine landscape. There are clear views towards Newport Docks and the broad expanse of the Severn Estuary and Bristol Channel. Views of the Site are often screened to a varying extent, from publicly accessible locations by existing intervening built form within Newport Docks.
- 5.4.19 In a near continuously flat landscape, it is difficult to determine the distance and time between landmarks such as the West Usk Lighthouse and The Lighthouse Inn. Pylons and overhead transmission lines are a recurring feature on the skyline.
- 5.4.20 These views will experience change on a daily basis due to the receding and incoming tidal water levels and the extent to which mud flats and marshes are visible compared to open water. The seasons, weather conditions and the subsequent variation in visibility, would also substantially affect these views and the viewer's experience of the landscape.
- 5.4.21 Views from the Wales Coast Path where it combines with the St Brides Wall could be described as sequential, the Site remaining in view albeit to varying extents from several locations on the same route of this PRoW.
- 5.4.22 On the other side of the Severn Estuary, the Caldicot Levels cover much of the landscape to the west of the Usk. Here the landscape character is broadly similar to those of the Wentlooge Level opposite. Views from minor roads tend to be over lower hedges than those described for the Wentlooge Level allowing a wider appreciation of a flat agricultural landscape.
- 5.4.23 From the edge of the Caldicot Level there are broad panoramic views from the Path towards the Wentlooge Level and outward distant views across the Severn Estuary including the islands of Flatholm and Steepholm and the mouth of the Bristol Channel.
- 5.4.24 Pylons and overhead transmission lines are a common feature in views throughout this part of the Study Area. Views towards the Site often contain other vertical elements such as wind turbines and chimney stacks. The Uskmouth Power Station and its associated infrastructure often screens views of Newport Docks in which the Site is located.
- 5.4.25 Having followed a large loop around Newport Docks (taking it away from the mouth of the Usk and Severn Estuary) the Wales Coast Path reemerges as a "coastal" rather than "inland" path near Uskmouth Power Station. The East Usk Lighthouse is a key landmark and together the West Usk Lighthouse, across the estuary, forms useful reference points in the landscape for users of the Path.

Visual Receptor Groups

- 5.4.26 The following visual receptor groups are located within the study area and are likely to have visibility of the proposed development, as shown on the ZTV on Figure 4. Effects on these receptor groups are considered further in section 6.7:
- **Newport Docks** - forms the immediate Site context and much of the majority of the Study Area within 1km of the Site. The clearest views towards the Site will be from Alexandra Docks, South Dock, east Quay and the grid of connecting roads such as West Way Road. Newport Docks has restricted access, the receptor group is therefore restricted to those permitted to be in the dock area, such as workers and visitors with prior agreement of the Docks Authority. Potential viewpoints that would demonstrate the extent of visibility are therefore unavailable to the public and would not be representative. Receptors at their place of work are typically considered low sensitivity receptors.
 - **PRoW Users** – there are few PRoW with the Study Area apart from the Wales Coast Path, a national long distance route, which is described and assessed separately in this report.
 - **Visitors to Local Attractions and Places of Interest** – This includes the Newport Transporter Bridge (closed for refurbishment and the completion of a visitor centre at the time of field study), the Newport Wetlands Nature Reserve and both the East Usk and West Usk Lighthouse.
- 5.4.27 There are also a number of receptor groups which are excluded from the detailed assessment, on the basis that visual effects are likely to be Negligible, for the reasons indicated below:
- **Local residents** - as stated previously, non-publicly accessible views such as those from private properties are not considered within this report.
 - **Views from the Severn Estuary, River Usk and River Ebbw** – these waterborne views are also beyond the scope of this report. All are navigable water channels, the Usk and Ebbw are used extensively to access Newport Docks, commercial vessels would be considered a place of work, a low sensitivity receptor. People accessing these watercourses for recreational use would be considered to be of higher sensitivity. The nature of the view and level of effect are expected to be similar to those of nearly land based views at a similar distance from the Site.
 - **National Rail Network** – train travel can involve an appreciation of the landscape whilst travelling through it, particularly if there are clear views of the local landscape when it is of high scenic quality, when this occurs they are assessed as a “key route” (see section below). In this instance a main Great Western Railway route passes within 1.7km west of the Site, coinciding with the location of Viewpoint 4 as shown on Figure 4. Views will be transient and intermittent, effects are expected to be no greater than Negligible and are not considered further in this report.

Key routes

- 5.4.28 As shown on Figure 1 Site Context, the following longer distance routes lie within the study area:

National Road Network

- **A48** – A major trunk road passing through the Study Area, its closest proximity to the Site is approximately 1.6km to the north-west, where it separates the Level of Mendalgief and the urban edge of Newport from the Gwent Levels and Newport Docks.

5.4.29 This road is elevated in the section described above, this allows drivers to experience passing wide panoramic views across Newport Docks including the Site, the extent of potential visibility from the A48 is shown on the ZTV in Figure 4.

5.4.30 The ZTV on Figure 4 indicates that most other roads in the wider Study Area with potential visibility are minor roads connecting scattered villages, hamlets and farmsteads throughout the surrounding countryside, within the Gwent Levels to the south-east and south-west of the Site

Recreational Routes

5.4.31 The Wales Coast Path is a long distance, advertised and promoted Public Right of Way (PRoW) which follows the entire coastline of Wales. It is a notable feature and a high sensitivity receptor which has informed the selection of the representative viewpoints, agreed with the LPA and presented in this report.

5.4.32 The Site is visible to varying degrees from much of its route, within 1km and to the 3km limit of the Study Area and beyond. Much of its route is easily accessible from Newport and the surrounding area on foot, by bicycle or via a short car journey, it appeared to be well used by numerous visitors during field study. Part of its route was closed to access during field study due to the refurbishment of the Newport transporter Bridge. Receptors accessing PRoW for recreation and an appreciation of the surrounding landscape are considered high sensitivity receptors.

5.4.33 A section of the Wales Coast Path, approximately 1km to the north-east of the Site, on the eastern side of Cold Harbour Reach was inaccessible at the time of field study and viewpoint photography. This included a number of candidate viewpoints as the ZTV presented in Figure 4 indicated that there was intervisibility between receptors on this route and the Site. As agreed with the LPA expected levels of effect are included in the relevant following sections of this report.

5.5 Landscape Designations and Value

Designated areas

5.5.1 There are a number of designated areas within the Study Area as shown on Figure 2 and described below.

Special Landscape Areas

5.5.2 There are 3 Special Landscape Areas (SPAs) within the Study Area, Wentlooge Levels, River Usk and Caldicot Levels (see paras 4.2.6 to 4.2.10 of this report). These are local planning, non-statutory designations.

- 5.5.3 The Wentlooge Levels SLA lies to the west of the Site, Caldicot Levels SLA to the east, the River Usk SLA extends southwards throughout the Study Area passing the Site to the north, east and south. Neither the Site or the host landscape receptor lie in any of these SLAs.
- 5.5.4 This report considers the SLA status in determining the value of the local landscape character, it is not assessed as a landscape or visual receptor.

Conservation Areas

- 5.5.5 There are 5 Conservation Areas (CAs) with the Study Area, to the north and north west of the Site, the closest being adjacent to the Newport Transporter Bridge, approximately 1.7km north of the Site. Neither the Site or the host landscape receptor lie within, or adjacent to a CA.
- 5.5.6 Given the degree of physical and visual separation between the Site and the CAs, any landscape, visual or perceptual effects on these CAs or their settings is expected to be no greater than **Negligible**, requiring no further assessment.

Registered Landscapes, Parks & Gardens

- 5.5.7 The boundary of Tredegar House Country Park extends to a marginally degree into the Study Area at its 3km limit to the north-east of the Site. At this distance any effects will be no greater than **Negligible** and are not assessed any further in this report.
- 5.5.8 The Outstanding Historic Landscape of Gwent Levels, also known as The Gwent Levels Historic Landscape is cited as The Gwent Levels Historic Landscape of Outstanding Historic Interest in Wales in Part 2.1 of the Register of Landscapes, Parks and Gardens of Outstanding Historic Interest in Wales, 1998. It covers large parts of the Study Area to the south east and south west of the Site. Neither the Site or the host landscape receptor lie within, or adjacent to, a registered landscape, park or garden.
- 5.5.9 This report considers the status of The Gwent Levels Historic Landscape in determining the value of the local landscape character, it is not assessed as a landscape or visual receptor.

National Monuments

- 5.5.10 Listed in the National Monument Records of Wales (NMRW) The most notable National Monument within the Study Area is the landmark Newport Transporter Bridge (NPRN43157), crossing the River Usk some 1.6km north of the Site. Further notable structures are the East Usk Lighthouse (NPRN96539) and the West Usk Lighthouse (NPRN34298), both lie on the Wales Coastal Path within the Study Area. Both are over 1.5km from the Site, all are located beyond the host landscape receptor.
- 5.5.11 Given the degree of physical and visual separation between the Site and the National Monuments listed above, any landscape, visual or perceptual effects on these assets or their settings is expected to be no greater than **Negligible**, requiring no further assessment.

6 THE PROPOSED DEVELOPMENT

6.1 The Proposal

- 6.1.1 The Proposed Development is described in detail in the Planning Statement which accompanies the planning application. The following summary text below is taken from the Planning Statement.
- 6.1.2 The Proposed Development comprises the construction and operation of a Vertical Roller Mill and ancillary development for the production of a cement substitute with subsequent distribution of the final product. The description of development also describes operations (Phase 1 and Phase 2) which are considered to be Permitted Development for a lessee of the Port Authority. The proposed infrastructure, with an amended layout, will replicate the operations of the mill that is owned and operated by the applicant in Gent, Belgium.
- 6.1.3 The Proposed Development facilitates the use and manufacture of a proven cement substitute which has a significantly lower carbon footprint and, at the same time, recycles a waste product that would otherwise be sent to landfill. The product itself supports other development and plans for growth.
- 6.1.4 The proposed development is entirely within the operational land of Newport Docks and will be undertaken in three phases as follows:
- Phase 1 - site preparation, connection to services, security fencing and the provision of foundations;
 - Phase 2 - importation, storage, and onward distribution of 100,000 tonnes per annum of cement substitute. This cement substitute is a finished product which is undergoing the normal consented operation of being unloaded and distributed from the site in smaller quantities; and
 - Phase 3 - the importation of up to 1,000,000 tonnes per annum of clinker/granulated blast furnace slag; construction and operation of the mill for processing, manufacture of cement substitute and onward distribution; the slag can be stored externally on the dockside but the clinker has to be stored under cover; a substation will be installed and hydrogen storage is proposed as a future use.

6.2 Design Approach and Mitigation

- 6.2.1 The design of the buildings and structures, including the layout, have been primarily influenced by the function of the development for the storage of raw materials, processing and storage of those materials and their onward distribution. The applicant already operates a similar plant in Belgium and has designed the project to be functional and efficient. It is also acknowledged that the design has been influenced by the need to prevent environmental harm through the adoption of mitigation measures identified in the various assessments.
- 6.2.2 The height of the buildings and other structures has been determined by function and the anticipated throughput of the facility. This has determined the number and size of the silos whilst the manufacturing process has dictated the size and area of the storage buildings. The

size has also been influenced by the delivery nature of the raw materials arriving, as they do, in large vessels on an infrequent but large-scale basis.

- 6.2.3 GLVIA3 states that *“good practice should aim to achieve mitigation at the highest possible level in this hierarchy...the ideal strategy is one of prevention / avoidance at the highest possible level of this hierarchy”*. And further; *“some likely significant adverse landscape and visual can be prevented or avoided through careful planning, siting and design...this may be achieved by the selection of a site that can more readily accommodate the Proposed Development”*.
- 6.2.4 The selection of the Site is a key mitigation factor insofar as it is a previously developed dockside plot, and industrial, brownfield site, appropriate for the type of development proposed. As a landscape receptor its receiving environment is of low sensitivity, contains development of similar scale and appearance and can accommodate the Proposed Development with limited effects on its existing character.
- 6.2.5 In terms of design, appearance, height, scale, massing, materials and elevational treatment the Proposed development is inherently an example of “form follows function”, driven by the processing operations. There is an associative benefit of siting development of the type proposed in close proximity to other similar buildings and structures, the Proposed Development will therefore be a logical extension of dockside development, contributing to existing, rather than generating new landscape (townscape) and visual effects.
- 6.2.6 The scope for landscape planting as mitigation is restricted given the Site constraints and the nature of the Proposed Development, with large building footprints and areas of hardstanding. There is little need for screen planting as visual mitigation given the site context where visual amenity is not a primary concern.
- 6.2.7 The Site is of limited ecological value. A landscape scheme will be submitted to discharge the requirements of any planning conditions attached to consent, providing amenity for visitors. Any mitigation benefit will be primarily in terms of ecological, biodiversity or habitat enhancement.

6.3 Construction

- 6.3.1 There will be a degree of construction related activity during Phase 1. This is essentially site preparation works and the preparation of foundations.
- 6.3.2 The main construction phase of the Proposed Development is Phase 3 which is expected to last no more than 12 months. This Phase includes the construction of the processing mill, erection of silos, construction of external covered storage areas and an office building
- 6.3.3 The duration of the construction phase is considered to generate short-term effects in accordance with the appended methodology where short-term effects are considered to be up to 2 years in duration

7 LANDSCAPE AND VISUAL EFFECTS

7.1 Effects on Site Fabric

- 7.1.1 This section describes the physical effects of the Proposed Development on the existing landscape components or elements which are present on the Site. These in combination form the “fabric” of the Site.
- 7.1.2 The application site is within the South Dock of Newport Docks and extends to 4.7 hectares. It currently comprises previously developed land with rail sidings, an existing dockside birthand with occasional areas of encroaching scrub.
- 7.1.3 For the most part it is formed of irregularly shaped, hard-surfaced land which is near, but not including the edge of the dock, separated from the water body by the rails and unloading cranes. Those cranes form part of the dock infrastructure that services the whole dockside, including the Site and existing adjacent uses.
- 7.1.4 The site is generally flat and is bisected by the road and rail lines that serve properties further to the west. Previously used for mineral importation and stocking-of marine won sand and gravel and coal. Coal imports now ceased. The area is currently unoccupied and no permanent buildings are on the site.
- 7.1.5 The whole of the Site is hard surfaced, with virtually no vegetation other than colonising scrub which includes occasional birch trees of small stature. There is no amenity landscape scheme associated with the previous occupation and use of the Site.
- 7.1.6 The initial change to the site fabric (Phase 1) will be the removal of existing redundant temporary structures such as the scaffolding fence along the southern boundary, scrub, a redundant temporary building and the provision of temporary welfare facilities. Connection will also be made to the existing services that cross the site for drinking water and power. New fencing and gates will be erected along the site boundary.
- 7.1.7 Once this is completed, Phase 2 will commence, including temporary plant, machinery and welfare facilities to allow the unloading of cement products from South Dock and transporting it over the existing railway line. This includes the erection of 4 storage silos, approximately 35m in height. At this stage, changes to the Site fabric will be the removal of the small areas of existing, scrub and the inclusion of structures and processes. The Site will remain predominantly hard standing.
- 7.1.8 While the above is operational, Phase 3 will be constructed as shown in the proposed layout as shown on drawing AR_PL_1001_F Layout Plan, accompanying the planning application. This includes the proposed mill and associated control rooms/welfare, the clinker transport conveyors and storage building and the cement silos. It also includes the reopening of the existing southern access point, where there is a bellmouth kerb arrangement and the formation of the staff car park. This will see a reduction in open hardstanding areas as these are prepared for the foundations and footprint of on-site buildings and structures.

- 7.1.9 Following the completion of construction works and car park formation, a landscape scheme will be implemented. This will introduce green infrastructure to the Site albeit in peripheral locations, due to the nature of the Proposed Development.
- 7.1.10 In summary a currently disused dockside will be developed with the introduction of structures, buildings, processes and movement, similar to the when the Site was in in previous use.

7.2 Viewpoint Analysis

- 7.2.1 Viewpoint analysis has been undertaken from a total of 7 viewpoints, the location of which is shown on Figure 4. Visualisations are presented as annotated photo sheets (Type 1 visualisation) and wireframes (Type 3 visualisation) which accompany this report.
- 7.2.2 The full viewpoint analysis is contained within Appendix 4: Viewpoint Analysis. The findings are summarised below in Table 6.1: Viewpoint Analysis Summary. In each case, distances are listed in relation to the nearest part of the Proposed Development to the viewpoint.
- 7.2.3 Please note that Appendix 4: Viewpoint Analysis considers the nature and the scale of changes to character and views at each viewpoint location only. The sensitivity of receptors and wider extent of the effect (beyond the individual viewpoint location) and its duration are considered in the main body of the assessment text below as part of the consideration of the magnitude and significance of effects.

Table 6.1 Viewpoint analysis summary

Viewpoint No.	Viewpoint	Approx. Distance / direction	Scale of Landscape Effect	Scale of Visual Effect
1	East Usk Lighthouse, Wales Coast Path	1.8km, SE of Site	Neutral (No Change)	Neutral (No Change)
2	Wales Coast Path, near Lighthouse Inn	2.7km SW of Site	Negligible	Negligible
3	West Usk Lighthouse, Wales Coast Path	1.4km SW of Site	Negligible	Small
4	Cuckoo Bridge Road, bridge over railway line, Wales Coast Path	1.5km WNW of Site	Negligible	Negligible
5	Outlet Pont-y-cwch Reen, Wales Coast Path	800m WSW of Site	Negligible	Small
6	Base of pylon, Wales Coast Path	750m SW of Site	Slight	Small

7	Cuckoo Bridge Road, below Wales Coast Path	760m SW of Site	Negligible	Negligible
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- 7.2.4 Each of the viewpoints is a “sample” of the potential effects, representing a wide range of receptors - including not only those actually at the viewpoint, but also those nearby, at a similar distance and/or direction. From these viewpoints it can be seen that the distribution of effects would be as follows:

7.3 Effects on Landscape & Townscape Character

- 7.3.1 To assess effects on landscape character, a host landscape receptor has to be identified. These would typically be the Landscape Character Area (LCA) or equivalent, as described in a local or county level Landscape Character Assessment. This would be a discrete parcel of land in which the Proposed Development is located. The host landscape receptor is the receiving environment for the physical, visual and perceptual effects of the Proposed Development.
- 7.3.2 Further visual and perceptual effects may extend across the wider landscape beyond the host landscape receptor. Where this occurs, adjacent or adjoining receptors are identified and the effects on their landscape character are assessed.
- 7.3.3 In the absence of local or county level assessment LCAs or similar for the Study Area, this report identifies the geographical extent of the following to be the host landscape receptor:
- **LANDMAP NWPRTVS040 Docks and Level of Mendalgrief**
- 7.3.4 This report focuses on the published description of NWPRTVS040 to describe the landscape character of the host landscape receptor. Where relevant, other datasets of LANDMAP are used to build a wider picture of the local landscape character for all landscape receptors throughout the Study Area.
- 7.3.5 As well as LANDMAP, extracted relevant descriptions from the published landscape character assessments described previously in section 5.3 are listed below.

NLCA 34: Gwent Levels

- 7.3.6 The following text is extracted from the opening summary description of NCLA 34:
- *“This is a distinctive, flat, lowland landscape with a geometric patchwork of watercourses that run between fertile fields. It is remarkable for having been created by reclaiming marshland and inter-tidal areas during successive periods going back to Roman times. In parts, the older patterns have changed almost beyond recognition over the past 150 years, sections having been built over by a major railway line, two motorways, a large steelworks, and a power station”*
 - *“...despite these changes, substantial areas of rural landscape and traditional historic features remain, including in many places the pattern of reens, being ditches that manage the water between the fields...the fertile soils are used for a variety of land uses, including cereal production, dairying, sheep and store cattle rearing and equestrian pursuits.”*

7.3.7 The published key characteristics of NCLA 34 within the Study Area are as follows:

- *“Alluvium – former marsh and inter-tidal areas from the Severn Estuary.*
- *Reclaimed landscape – drained, improved, enclosed, historical, agricultural landscape.*
- *Divided by the Usk Estuary – into two distinct parts: The Wentlooge Levels to the west and the Caldicot Level to the east.*
- *Flood embankment to the sea – the land has been successfully reclaimed from the sea and coastal marshes and is protected by the tides by a sea wall.*
- *Comparatively little settlement – away from the urban fringes, the Levels have comparatively little settlement, with nucleated and ribbon settlements linked by narrow roads.*
- *Major developments on fringes – ...a power station and pylons stand out in the flat landscape, while disproportionately large modern factory units outside Newport are also visible for long distances, and main motorways and rail lines are heard. Suburban development has enlarged settlements and urban development has spread from ...Newport.”*

7.3.8 The sensory and visual profile for NLCA 34 includes many of the key characteristics listed above, however the following extracts paint a useful picture of the perceptual aspects of the local landscape:

- *“An iconic man-made landscape...*
- *Rarely rising above 10 metres above sea level, the Levels form a large, open expanse of primarily pastoral agricultural land, which affords extensive views of the southern edge of the coalfield valleys and Usk valley inland, and from slightly higher ground or along the sea wall, long views across the Severn Estuary and the Bristol Channel.*
- *This distinctive and flat landscape of wide skies interfaces uncomfortably with...the Usk Mouth Power Station at Newport. Radiating from the latter are towering electricity pylon lines, that fence the skyline and dwarf the surrounding fields and grazing livestock. Large factory units and warehouses....appear out of scale for the Levels landscape, even when seen at some distance from within the rural core of the Levels.*
- *At times, a distant traffic roar can be heard, but despite the proximity of development, the Levels remain a distinct, rural area where solitude and quietness can be found.”*

7.3.9 The description of NLCA 34 includes references to geological, landscape habitat and historical landscape influences. Of greater relevance to this report are the references to cultural landscape influences. It is clear from fieldwork study that throughout the Study Area, there has been a comparatively recent, but increasing, modern industrial influence over the landscape, affecting its character:

- *“Over little more than 100 years the culture of the historic reclaimed landscape of the Levels, the result of two millennia of human intervention, has gradually been altered and eroded. First, there came the Great Western Railway....other prominent elements of modernity include the Uskmouth Power Station and its attendant web of electricity pylons, large-scale built development on the eastern side of the Usk....and the M4 and M48 motorways.*

- *The Caldicot Level east of Newport remains under considerable pressure from urban expansion.... at its eastern end, in the shadow of the Uskmouth Power Station, the creation of the Newport Wetland Reserve represents the most prominent change of land use in the 21st century...adds modern cultural dimensions in the form both of the Reserve being a compensation measure for the loss of Cardiff Bay mudflats, and as a combined visitor attraction and artificially designed haven for bird and other species.*
- *Hand in hand with pressure from large-scale modern development is a steady decline in agricultural land management resulting, for example, in the loss of reed-side willows, and the adoption of former agricultural land for equestrian grazing and stabling, and in the urban fringes, the piecemeal but rapid expansion of suburban development, industrial estates, large factory units, feeder roads, landfill and fly tipping."*

NLCA 35: Cardiff and Newport

7.3.10 The following text is extracted from the opening summary description of NCLA 35:

- *"The area forms a busy transport and development corridor. It occupies the coastal lowlands between the Severn estuary with its levels, and the edge of the South Wales Valleys with their uplands. The area includes major ports at Cardiff, Barry and Newport, and associated industrial infrastructure. There are also extensive residential, suburban areas and major retail, business and recreational facilities. There is an intensive network of busy roads and railways, including part of the M4 corridor."*

7.3.11 The published key characteristics of NCLA 35 within the Study Area are as follows :

- *"Busy, heavily urbanised areas - containing Cardiff, and other large settlements including Penarth and Barry to the south to the west and the city of Newport and new town of Cwmbran to the east.*
- *Ports – Cardiff, together with Barry and Newport with its industrialised river frontage.*
- *Prominent landmark structures – include...the series of bridges in Newport including the Transporter bridge....standing out prominently on the skyline.*
- *Lowland river corridors - the tidal River Usk forms the focus of Newport with the River Ebbw meandering to the south east."*

7.3.12 The sensory and visual profile for NLCA 35 includes many of the key characteristics listed above, however the following extracts paint a useful picture of the perceptual aspects of the local landscape:

- *"This is one of the most urbanised and busy landscape character areas in Wales.*
- *Newport is an industrial city lying on the sloping valley sides of the tidal River Usk, which forms a focus for the town with its muddy banks and sinuous course.*
- *Newport has been famous for its gigantic landmark transporter bridge..*
- *The open rural land between the urban areas is under pressure but is surprisingly tranquil in parts away from the transport corridors. It provides a welcome relief from the bustle of a dynamic part of Wales."*

7.3.13 In terms of landscape habitat influences the following is contained with the description of NLCA 35 :

- *“Newport..has a Wetlands Reserve near the Uskmouth Power Station. Formed as mitigation for the destruction of habitats by the creation of the Cardiff Barrage partly on former ash pits from the power station. In addition, the SAC and SSSI of the tidal River Usk is an historically important transport waterway, and an ecological feature whose course meanders through an extensive flood plain as far as Caerleon.”*

HLCA 01: Nash / Goldcliff Coastal Zone

7.3.14 The 1995 characterisation study describes the key historic landscape characteristics of HLCA 01:

- *“Diverse landscape: abundant intertidal and buried archaeological remains, drainage features (reens, banks, grips, surface drainage, bridges) small irregularly shaped fields, sinuous lanes with roadside waste, dispersed settlement, and large commons, monastic associations”.*

HLCA 15: Eastern St Brides

7.3.15 The 1995 characterisation study describes the key historic landscape characteristics of HCLA 15:

- *“Diverse landscape: early settlement focus (nr St. Brides Church), irregular field pattern of small fields and sinuous roads with remnants of roadside waste, dispersed settlement, seawall including demolished wall, drainage features include fen-banks, surface ridging (mainly grips, but also rare “ridge and furrow”).*

HLCA 16: Western St Brides

7.3.16 The 1995 characterisation study describes the key historic landscape characteristics of HCLA 16:

- *“Regular field pattern of long narrow fields, significant boundaries of probable Roman origin, drainage features include Peterstone Gout, the old sea wall, and a number of fen-banks (some ridgeing/surface drainage also survives), limited linear roadside settlement.”*

HLCA 21: Maerdy

7.3.17 The 1995 characterisation study describes the key historic landscape characteristics of HCLA 21:

- *“Former open moor: regular unified fieldscape of long narrow fields (ie single operation), drainage features mainly reens, dispersed settlement (includes Maerdy - medieval Reeve's house)”.*

7.3.18 Field observations from site visits in July 2024 confirmed that the published descriptions remain an accurate description of the local landscape character of the Study Area. The HCLAs of 1995 describe a flat, estuarine landscape that has for centuries been drained and shaped by human influence, primarily to reclaim and protect land from the tidal Severn

Estuary. The NCAs of 2014 describe the landscape in similar terms with reference to more modern, urbanising influences. While the Site lies within NCLA 34, its character is closer to the largely urban, industrial townscape described in NCLA 35.

- 7.3.19 In simple terms, the landscape character of the Study Area can be split into two distinct areas, the Gwent Levels (both the Wentlooge and Caldicot Levels) forming much of the south-western, southern and south-eastern Study Area and the urban edge of Newport to the north, extending into the central Study Area including the Site.

Effects on the Landscape Character of the Locality (NWPRTVS040)

- 7.3.20 Effects on the Site itself, described as the Site “fabric” are described in Section 6.4 of this report. The Locality is considered to be the Site and the surrounding landscape / townscape context covered by the host landscape receptor, the dockside area described in LANDMAP as NWPRTVS040 “Docks and Levels of Mendalgrief”.
- 7.3.21 Physical effects on the Locality are confined to the Site, however visual and perceptual effects on landscape or townscape character and how it is experienced extend across the Locality beyond the site boundary.
- 7.3.22 With reference to Appendix 3 of this report, the host landscape receptor is assessed as being of **Community** value with a **Low** overall susceptibility to development of the type proposed. These in combination, result in a **Low** overall sensitivity.

Construction Phase Effects

- 7.3.23 Construction phase effects are not limited to the physical effects on the Site itself, for example the dynamic quality of construction, vehicle and plant movement and noise generate audible or perceptual effects that extend beyond the Site boundary. In a quiet pastoral landscape, construction activity would be a notable addition to the landscape, effecting its tranquil character.
- 7.3.24 In this instance, the effects of construction are diminished due to the nature of the townscape receptor. The receiving environment is a busy dockside where high numbers of vehicle movements and continual activity in part defines its character.
- 7.3.25 The magnitude of effect is assessed as **Small** in scale, while these effects extend beyond the Site boundary they remain small and contained within the immediate Site context, they are therefore considered to be **Localised** in extent. The duration of effect is short-term. This results in an overall magnitude of effect which is **Slight**. This magnitude of effect on a **Low** sensitivity receptor results in an overall significance of effect which is **Minor Neutral** being neither beneficial or adverse.

Operational Phase Effects

- 7.3.26 The magnitude of effect is assessed as **Small** in scale given the relative size of the Site compared to the host receptor, as such these effects are also **Localised**. The duration of effect is long-term given the expected lifespan of the Proposed Development, resulting in an overall magnitude of effect which is **Slight**. This magnitude of effect on a **Low** sensitivity receptor, results in an overall significance of effect which is **Minor Neutral** being neither beneficial or adverse.

Effects on the Landscape Character of The Study Area

- 7.3.27 The following paragraphs describe the effects on landscape character beyond the receiving host landscape receptor. As the physical effects are contained to the Site, these effects are visual and perceptual only.
- 7.3.28 This report describes two receptors forming the remainder of the Study Area and the effects on their landscape or townscape character as follows:

The “Urban Edge” of Newport

- 7.3.29 The equivalent area of LANDMAP NWPRTVS038, 039, 056, 042, 041, 057 and 044, in their entirety or the extent to which they lie within the Study Area.
- 7.3.30 The urban edge of Newport includes residential areas to the north-west and north of the Site at the 3km extent of the Study Area, the remainder is largely industrial. This townscape is assessed as being of Community value, with a **Low** susceptibility to the Proposed Development, resulting in a **Low** overall sensitivity.
- 7.3.31 Effects are visual and perceptual only. The scale of effect is assessed as no greater than **Negligible**, the extent no greater than **Limited** for both the short-term construction and long-term operational phases the overall magnitude of change is therefore **Negligible**. On a **Low** sensitivity receptor the overall level of effect is no greater than **Negligible Neutral**.

The Gwent Levels

- 7.3.32 The equivalent area of LANDMAP NWPRTVS001, 009, 006, 022, 010, 007, 005 and 037, in their entirety or the extent to which they lie within the Study Area.
- 7.3.33 The Gwent Levels are a distinct landscape, with high levels of accessibility for recreation and amenity where an appreciation of the landscape / seascape character is part of the activity. Newport Docks are an established industrial element in the adjoining landscape exerting a degree of visual and perceptual effect over the Gwent Levels. For the most part, both the existing docks and the Proposed Development are or will be part of the landscape background. The Proposed Development is not expected to alter the current perception of Newport Docks as experienced from the comparatively tranquil locations across the Levels. They are assessed as being of **National** value with a **Low** susceptibility to the Proposed Development, resulting in a **Medium** overall sensitivity.
- 7.3.34 The scale of effect is assessed as **Negligible**, the extent **Limited** for both the short-term construction and long-term operational phases the overall magnitude of change is therefore **Negligible**. On a Medium sensitivity receptor the overall level of effect is no greater than **Minor / Negligible Adverse**.
- 7.3.35 In this instance it is the high, National value of the Gwent Levels as a receptor that elevates the sensitivity of the receptor resulting in Minor / Negligible effects that would otherwise be assessed as Negligible Adverse on a lower value receptor. Given the geographical extent of the Gwent Levels, at the outer 3km limit of the Study Area effects will be no greater than **Negligible Adverse**.

7.4 Visual Effects

- 7.4.1 Section 5.4 identifies the visual receptor groups to be included within the assessment of effects.

Visual Receptor Groups

- 7.4.2 This assessment focuses on effects on groups of visual receptors, incorporating effects on views from public

Newport Docks

- 7.4.3 This is the primary visual receptor group, closest to and including the Site where the greatest level of effect on existing visual amenity will be experienced as a result of the Proposed Development. Newport Docks is a closed environment, inaccessible to the public which would typically discount this receptor group from an assessment of effects, some consideration is included however, an approach agreed with the LPA to provide an indication of the expected level of effect.
- 7.4.4 With reference to the appended methodology (Appendix 1) the value of views within Newport Docks are expected to be of **Community** or **Low** value. The susceptibility of visual receptors is **Low**, views will be experienced by workers and visitors at their place of work, undertaking work activities where views are incidental to both the location and activity. The overall sensitivity is therefore **Low**.

Construction Phase Effects

- 7.4.5 The visual effects of construction are expected to be experienced to the greatest extent to the area within 500m of the Site, individual views will vary due to the presence of intervening buildings, open dockside will have clear views across South Dock and Alexandra Docks. Construction activity will be similar to the existing dockside activity forming part of the existing view.
- 7.4.6 The scale of change on views is expected to be typically **Medium** in scale and **Localised** in extent, short-term in duration, resulting in a **Moderate** magnitude of effect. For a Low sensitivity receptor the expected overall level of effect would be **Moderate / Minor Neutral**.

Operational Phase Effects

- 7.4.7 These medium to long-term effects will be experienced to the same scale and extent as the construction phase. The change will be the introduction of built form and structures and activity in part of the view (The Site) where such buildings, structures and activities existed previously.
- 7.4.8 The scale of change on views will remain **Medium** in scale and **Localised** in extent, resulting in a **Moderate** magnitude of effect. For a Low sensitivity receptor the expected overall level of effect would continue to be **Moderate / Minor Neutral**.
- 7.4.9 Determining effects to be neutral is "*particularly challenging*" (GLVIA 3rd edition). In simple terms, there will be a change to the view during both the construction and operational phases, but the level of visual amenity is expected to remain the same, the change will be notable to those experiencing it, but the change would be neither beneficial or adverse.

- 7.4.10 In this instance the Proposed Development will see the introduction of new buildings on site where dockside buildings stood previously, revitalising a currently disused part of South Dock. Newport Docks are a dynamic environment, with areas of decline and renewal. This is an inherent part of its current and historic character, hence effects being described as neutral.

PRoW Users

- 7.4.11 This receptor group does not include the Wales Coast Path, assessed separately in its own right. For the remaining PRoW users, views will typically be of **Community** or **Low** value, either of the surrounding countryside without the higher value coastal views or edge of settlement views with townscape and / or industrial elements.
- 7.4.12 PRoW users, accessing the landscape for recreational use are considered to be a **High** susceptibility receptor resulting in an overall sensitivity which is typically High / Medium, in this case **Medium**.
- 7.4.13 The scale of change will be **Negligible** and **Limited** in extent, there will be little if any change in scale and extent between construction and operational phases and the modifying factor of duration is also considered to have little consequence on views which are typically distant and filtered. This Negligible magnitude of effect on a Medium sensitivity receptor results in an overall level of effect that would be Minor / Negligible. In this instance no greater than **Minor / Negligible Neutral** where the change in the view and effect on visual amenity is neither beneficial or adverse.

Key Routes

National Road Network (A48)

- 7.4.14 This busy trunk road and link to the M4, passes through the Study Area as an elevated section some 1.6km from the Site. There are clear, expansive views across Newport Docks including the Site, albeit fleeting views given the levels of traffic and road speed.
- 7.4.15 From this route, the Site is barely visible beyond the intervening industrial context of storage yards and large buildings which comprise the foreground. The dominant features in views from the A48 are the series of towering pylons from Usk Power Station and the iconic landmark Newport Transporter Bridge. Wind turbines are further notable features in the existing view.
- 7.4.16 The Proposed Development, through both the construction and operational phases, is expected to appear as a minor addition to the urban industrial, dockside character which will continue to form much of the existing view.
- 7.4.17 With reference to the methodology at Appendix 1, considering road users as a receptor group and the value of the views, there is a low sensitivity to the Proposed Development. Any change would be barely perceptible, even to those with an intimate knowledge of the townscape, as such any visual effects would be no greater than **Negligible Neutral**.

Recreational Routes (Wales Coast Path)

- 7.4.18 As described previously this is the Primary PRoW within the Study Area and as such is assessed separately as a visual receptor in its own right. It provides opportunities to view the Site from many different locations at varying distances.
- 7.4.19 There is considerable variation in the degree to which the Proposed Development is visible and remains visible between locations, the extent to which it forms part of the view and the surrounding context in which it is viewed on its route. In LVA terms different views along a common route are described as sequential, in this case Newport Docks and the Proposed Development will form part of the views from and between viewpoint locations. The change in views is part of the overall visual and perceptual experience of receptors using the Wales Coast Path. This has informed the selection of viewpoints where viewpoints 1, 2, 3, 6 (or 7), 5 and 4 are sequential.
- 7.4.20 While the value of the views varies greatly along its route as a whole, subsequently affecting overall sensitivity, the Wales Coast Path is a **High** susceptibility visual receptor.

Views Across Coldharbour Reach / River Usk

- 7.4.21 A substantial part of the route was closed at the time of field study at Stephenson Street, preventing photography from candidate viewpoints on the eastern side of Coldharbour Reach and the mouth of the River Usk. This would include views to the north, north-east and east of the Site at distance between 1km and 1.5km. The effects described below for this stretch are therefore expected rather than assessed, based on remote scoping and an understanding of the visual baseline, an approach agreed with the LPA.
- 7.4.22 Views from the above would include both the construction phase and operational phase, with the Site appearing in the wider context of the existing dockside industrial townscape. The construction phase activity is expected to appear as a minor addition to the existing dockside activity experienced in the view. The operational phase will see the introduction of buildings and structures of similar scale, form and appearance as those already in the view.
- 7.4.23 Views towards the landmark Transporter Bridge will be unaffected. Large pylons, wind turbines, dockside cranes and silos at the existing Cemex site will remain the most prominent elements in views of an industrial environment across The River Usk.
- 7.4.24 These views are of **Community** or **Low** value on a High susceptibility receptor group the overall sensitivity is typically High / Medium, in this case **Medium**. The scale of change is expected to be **Negligible** and the extent **Limited** resulting in a **Negligible** magnitude of effect.
- 7.4.25 Given the value and composition of existing views, the introduction of the Proposed Development will bring about change, but this change is considered neither beneficial or adverse, the overall level of effect is therefore assessed as **Minor / Negligible Neutral**.

Views Across Pony-y-cwcw Reen / River Ebbw

- 7.4.26 The clearest views of the Proposed Development from the Wales Coast Path are at the confluence of the River Ebbw and Usk within 1km to the southwest of the Site as viewed from the coastal defences which form much of the route as represented by Viewpoints 5, 6 and 7.

- 7.4.27 Existing views are of a tidal estuarine landscape which is heavily influenced by its industrial context, including Newport Docks, Usk Power Station, wind turbines, cranes and several large pylons.
- 7.4.28 These views are considered to be of **Regional** or **Medium** value which combined with a **High** susceptibility receptor results in an overall sensitivity which is High / Medium, in this case **Medium**.
- 7.4.29 The construction phase will introduce movement and activity to views from this section of the Wales Coast Path, in a static environment this would attract attention to the Site. In a dynamic environment of dockside activity, moving cranes and turbines and on-going construction elsewhere in Newport Docks, the effects of the construction phase are diluted, forming part of the overall activity.
- 7.4.30 The operational phase will introduce a building of similar scale, form, height and appearance as the existing dockside buildings with which they will coincide on the skyline. For some views the increase in built form will foreshorten the view where the Proposed Development will block views of distant hills in the background landscape.
- 7.4.31 In both instances lower level construction activity and the lower part of the building elevation will be screened by intervening buildings and evergreen tree belts. Usk Power Station and the massive, at times overbearing, pylons will remain the dominant features in the view.
- 7.4.32 The visual effects will be greatest as experienced from Viewpoint 6, where the Proposed Development will be prominent on the skyline. The scale of change is **Small** the geographical extent **Localised** resulting in a **Slight** magnitude of effect. On a Medium sensitivity receptor the overall effect would typically be considered Moderate / Minor Adverse. Given the surrounding context and the extent to which Newport Docks forms part of the view, the overall effect is assessed as **Minor Adverse**.
- 7.4.33 The extent to which a relatively low coastal defence feature (between 3 and 5m height) can affect views in a flat landscape is demonstrated in Viewpoint 7, located behind the bund approximately 50m away from Viewpoint 6. The Proposed Development is screened almost entirely by the bund, to the extent that effects are **Neutral** rather than Negligible Adverse.

Views From The Edge of Newport

- 7.4.34 Represented by Viewpoint 4, the view contains many of the elements that form part of the view as experienced from Viewpoints 5 and 6. Value, susceptibility and sensitivity is as described for receptors at or near these viewpoints.
- 7.4.35 Both the construction and operational phases will appear as a minor extension of the activity, built forms and structures that already form part of the view. The Usk Power Station and large pylons will remain the dominant elements in the view.
- 7.4.36 The scale of change is typically **Negligible** and the geographic extent **Limited** resulting in a **Negligible** magnitude of change for a Medium sensitivity receptor group the overall level of effect is **Minor / Negligible Adverse**.

Views Across The Severn Estuary

- 7.4.37 These are over 1km in distance up the 3km extent of the Study Area, represented by Viewpoints 2 and 3. In both instances the construction and operational phases will be viewed in the context of the wider Newport Docks, Usk Power Station, (Newport Transporter Bridge – Viewpoint 3) wind turbines and large pylons. These will remain the most dominant features in the view regardless of the Proposed Development. The changes to the view are similar to those described previously for closer viewpoints, albeit forming a smaller part of the view due to the greater distance.
- 7.4.38 Given the **High (National)** value of broad panoramic views across the Severn Estuary (beyond the extent of view in the photosheets) in these locations, accessed primarily to appreciate the view, receptors are assessed as being of **High** overall sensitivity.
- 7.4.39 The scale of change will typically be **Negligible** and the extent **Limited**, for both phases of the Proposed Development resulting in a **Negligible** magnitude of effect, on a High sensitivity receptor. In this case it is the sensitivity of the receptor that is the greater factor than the magnitude of effect in determining the overall **Minor Adverse** level of effect.

Views From The Caldicot Levels

- 7.4.40 These views, represented by Viewpoint 1 are also broad panoramas of a large scale landscape / seascape across the Severn Estuary and Bristol Channel and are of **High (National)** value, this combined with the High susceptibility of the receptor group, results in a **High** overall sensitivity.
- 7.4.41 Views towards the Site are typically intermittent and screened by landform, vegetation and or built form. Viewpoint 1 depicts a situation where effects are **Neutral** with no change in the view. From nearby locations the overall effect for this receptor group is expected to be no greater than **Negligible Adverse**.

7.5 Summary of Landscape and Visual Effects

- 7.5.1 Large scale physical effects are confined to the Site itself and visual and perceptual effects to its immediate context for both the construction and operational phases of the Proposed Development. Newport Docks was identified as the host landscape / townscape receptor based on LANDMAP parcel NWPRTVS040 “Docks and Levels of Mendalgrief”.
- 7.5.2 For the host landscape Construction phase effects are diluted by the extensive on-going dockyard activity. The operational phase will result in the introduction of large buildings and structures in the context of nearby existing buildings and structures, on a Site where similar buildings and structures existed previously.
- 7.5.3 Landscape effects for both phases were assessed as being **Minor Neutral** on the host receptor as a whole. Neither phase fundamentally effects the existing character of Newport Docks in terms of scale, appearance, activity or operation. There is a change as a result of the Proposed Development but this change is neither beneficial or adverse.

- 7.5.4 For the Gwent Levels, the nearby Newport Docks already exert a perceptual influence over the levels, providing an industrial backdrop to an otherwise agricultural estuarine landscape. The construction phases will be a minor addition to the existing dockside activity currently experienced. The operational phase will introduce a minor increase in built form on the skyline.
- 7.5.5 Both phases will add to the landscape effects Newport Docks already exerts over the levels in terms of appreciating scenic quality, remoteness and tranquillity and were assessed as **Minor / Negligible Adverse** becoming **Negligible Adverse** at the 3km extent of the Study Area. In this instance it is the sensitivity of the landscape receptor not the magnitude of effect which is the main contributor to overall effect.
- 7.5.6 In terms of visual effects the Proposed Development will be visible to the greatest extent from Newport Docks where there will be the greatest change to views. Newport Docks is closed to the public, effects are therefore described as expected not assessed.
- 7.5.7 Receptors will be people at their place of work or visitors on work related activity where an appreciation of views is incidental. Views will already contain activity similar to that of the construction phase, the operational phase will introduce buildings and structures similar to those in existing views. The change in views is neither beneficial or adverse and is expected to be **Moderate / Minor Neutral** for both phases.
- 7.5.8 In the Study Area visual effects ranged from an expected **Minor / Negligible Neutral** from parts of the Wales Coast Path (where an additional building and structures in the view would be neither beneficial or adverse) to an assessed **MinorAdverse** for the course of the Wales Coast Path near the River Ebbw, within 1km south-west of the Site. As a national long-distance PRow it is the high sensitivity of the receptor and value of broad panoramic views rather than the magnitude of effect which is the main contributor to overall effect.
- 7.5.9 In the majority of views, the Proposed Development will to a varying degree appear as dockside buildings, structures and activity in part of the view where such building, structures and activity currently form part of the visual baseline.

Table 7.2 Summary of Effects

Only effects of greater than Negligible magnitude and/or Negligible significance are included in the summary table, **significant effects are underlined**.

Receptor	Description	Sensitivity	Magnitude	Significance	Beneficial /Neutral /Adverse
Landscape Character					
Newport Docks (host landscape receptor)	Construction Phase Effects	Low	Slight	Minor	Neutral
	Operational Phase Effects	Low	Slight	Minor	Neutral
Gwent Levels	Construction Phase Effects	Medium	Negligible	Minor / Negligible	Adverse
	Operational Phase Effects	Medium	Negligible	Minor/ Negligible	Adverse
Visual Receptors					
Newport Docks	Construction Phase Effects	Low	Moderate	Moderate/ Minor	Neutral
	Operational Phase Effects	Low	Moderate	Moderate/Minor	Neutral
PRoW (other than Wales Coast Path)	Construction Phase Effects	Medium	Negligible	Minor/ Negligible	Neutral
	Operational Phase Effects	Medium	Negligible	Minor / Negligible	Neutral
Wales Coast Path – views across Coldharbour Reach / River Usk	Construction Phase Effects	Medium	Negligible	Minor / Negligible	Neutral
Wales Coast Path – views across Pont-y-cwcw Reen / River Ebbw	Construction Phase Effects	Small	Slight	Minor	Adverse
	Operational Phase Effects	Small	Slight	Minor	Adverse

Wales Coast Path – edge of Newport	Construction Phase Effects	Medium	Negligible	Minor / Negligible	Adverse
	Operational Phase Effects	Medium	Negligible	Minor / Negligible	Adverse
Wales Coast Path – Severn Estuary	Construction Phase Effects	High	Negligible	Minor	Adverse
	Operational Phase Effects	High	Negligible	Minor	Adverse



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APPENDIX AX1:

LANDSCAPE AND VISUAL APPRAISAL METHODOLOGY AND CRITERIA

Introduction

1. The purpose of a Landscape and Visual Appraisal (LVA) is to identify and report the level of landscape and visual effects arising from the Proposed Development.
2. The following appendix sets out the methodology and criteria against which the appraisal of landscape and visual effects has been undertaken.
3. The Guidelines for Landscape and Visual Impact Assessment (Third Edition) (GLVIA3)¹ are widely recognised as the primary source of guidance for LVA in the UK but clearly state that: *“The guidance concentrates on principles while also seeking to steer specific approaches where there is a general consensus on methods and techniques. It is not intended to be prescriptive, in that it does not provide a detailed ‘recipe’ that can be followed in every situation. It is always the primary responsibility of any landscape professional carrying out an assessment to ensure that the approach and methodology adopted are appropriate to the particular circumstances.”* (paragraph 1.20)
4. GLVIA 3 also states that: *“professional judgement is a very important”* (paragraph 2.23) and that *“in all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others.”* (paragraph 2.24).
5. Wherever possible, identified effects are quantified, but as noted above, the nature of LVA requires interpretation using professional judgement. In order to provide a level of consistency to the LVA, the appraisal of landscape and visual effects is based on pre-defined criteria as set out in this appendix.
6. Landscape and Visual Appraisals are separate, though linked processes which GLVIA3 notes are *“related but very different considerations”*. The appraisal of the potential effect on the landscape is carried out as an effect on the environmental resource (i.e. the landscape). Visual effects are appraised as an inter-related effect on people.
 - Landscape effects derive from changes in the physical landscape elements which may give rise to changes in its distinctive character and how this is experienced, including consideration of aesthetic and perceptual aspects.
 - Visual effects relate to changes that arise in the composition of available views as a result of changes to the landscape, to people’s responses to the changes and to the overall effects with respect to visual amenity.

Establishing the Baseline

7. The baseline for consideration of landscape and visual effects is evaluated through desk study and site work and is the current situation at the time of the appraisal, unless noted otherwise. Existing

¹ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment Third Edition*; Spon; 2013

operational/ built development and development under construction is considered as part of the baseline.

8. For the purposes of this LVA report, there are no expected changes to the landscape or the introduction of development considered to be certain to take place therefore the future baseline, is considered to be the current baseline, with no further description or consideration required.

Direct and Indirect Effects

9. Direct and indirect effects are defined in GLVIA3. Direct effects may be defined as resulting “*directly from the development itself*” (paragraph 3.22). An indirect (or secondary) effect is one that results “*from consequential change resulting from the development*” (paragraph 3.22) and is often produced away from the site of the proposed development or as a result of a complex pathway or secondary association.

Landscape Effects

10. The starting point for an appraisal of landscape effects is a desk-based assessment of published landscape studies, which may include landscape character assessments, sensitivity and capacity studies and/or landscape designation reviews. Relevant documents are listed as appropriate in the appraisal and relevant extracts may be included as appendices where this is judged appropriate. Desk based assessment is supplemented by field work to verify the key characteristics of the landscape.
11. In accordance with GLVIA3, the level of landscape effects is determined by combining judgements regarding the sensitivity of the receiving landscape and the magnitude of the landscape effects arising from the Proposed Development.
12. An appraisal of the degree to which the proposed development changes “*distinct and recognisable pattern of elements, or characteristics, in the landscape that make one landscape different from another, rather than better or worse*” (‘An Approach to Landscape Character Assessment’, Natural England, 2014), enables a judgement to be made as to the level of the effect in landscape character terms.
13. In order to reach an understanding of the effects of development upon the landscape resource it is necessary to consider different aspects of the landscape baseline including:
 - **Landscape Fabric/Elements:** The individual features of the landscape, such as hills, valleys, woods, hedges, tree cover, vegetation, buildings and roads for example which can usually be described and quantified.
 - **Landscape key characteristics:** The particularly notable elements or combinations of elements which make a particular contribution to defining or describing the character of an area, which may include experiential characteristics such as wildness and tranquillity.

Landscape Sensitivity

14. It should be noted, as stated in GLVIA3, “*LVIA sensitivity is similar to the concept of landscape sensitivity used in the wider arena of landscape planning but is not the same as it is specific to the particular project or development that is being proposed and to the location in question*” (paragraph 5.39).
15. In LVA, landscape sensitivity is assessed by combining judgements about the value attached to a landscape and its susceptibility to the type of change and nature of the development proposed. The

overall sensitivity of the landscape to a particular development is described in the appraisal as **High**, **Medium** or **Low**.

- **Landscape Value:** This is the relative value or importance attached to different landscapes by society on account of their landscape qualities. Sometimes it is used as a basis for designation or recognition which expresses national or local authority consensus, because of its special qualities/attributes. Whilst the presence of formal designations are an important component when determining landscape value, other aspects are also considered as part of the judgement process as explained in Landscape Institute Technical Guidance Note 02-21², especially when considering the value of landscapes outside of national designations. These include factors related to natural and cultural heritage (for example ecological, geological or heritage matters), landscape condition, cultural associations (in terms of connections with people, arts or events), distinctiveness (i.e. a sense of unique identity in the landscape), recreational opportunities, perceptual aspects (including scenic quality, wildness and tranquillity) and landscapes with a clearly identifiable role or function. In this appraisal, the value attributed to the landscape is described as: **National**, **Regional** or **Community**.
- **Landscape Susceptibility:** Landscape Susceptibility according to GLVIA3 means “*the ability of the landscape receptor to accommodate the proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*” (paragraph 5.40). The susceptibility of the landscape varies depending on the type of development proposed and the particular site location. Judgements on landscape susceptibility include references to both the physical and aesthetic characteristics and the potential scope for mitigation. In this appraisal, the susceptibility of the landscape is described as **High**, **Medium** or **Low**.

16. The criteria and the detailed judgements regarding susceptibility and value of landscape receptors are identified within the sensitivity tables included within Appendix 3 (Landscape Sensitivity) of this appraisal.
17. Sensitivity is evaluated taking into account the component judgements about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment is adopted. Note that equal weighting is attributed to susceptibility and value when determining overall landscape sensitivity.

		Susceptibility		
		High	Medium	Low
Value	National	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

Magnitude of Landscape Change

18. The magnitude of landscape change arising from the proposed development at any particular location is assessed in terms of “*size or scale, the geographic extent of the area or receptor that is influenced and its duration and reversibility*” (paragraph 5.48).

² Landscape Institute Technical Guidance Note 02-21: Assessing Landscape Value Outside National Designations

19. Judgements concerning the **Scale** of the change take account of:

- degree of loss or alteration to key landscape features/elements; characteristics; and for designated areas – special qualities and/or purposes of designation;
- distance from the development; and
- landscape context to the development.

20. The approach to appraising effects on landscape character is to consider the key characteristics for the Landscape Character Area (LCA) within which the proposed development is located (the host LCA) and if relevant the adjacent LCA's (non-host) and identify which of these the proposed development would affect. A large scale change in landscape character is likely to occur where key characteristics would be lost or substantially changed. A small scale change is likely to occur where key characteristics are altered to a lesser degree and this can be influenced by distance and surrounding context.

21. Where particular views are a key characteristic of a landscape type, large or medium scale landscape character effects may occur where the proposed development becomes a key feature of those views. A similar approach applies to designated landscapes, for which the effects on the defined purposes of designation and special qualities are considered.

22. In this appraisal, the scale of landscape change is described as: **Large, Medium, Small or Negligible**.

23. Having established the scale of change to the landscape baseline, the **Geographic Extent** of the change can be identified. In this appraisal, the geographical extent of landscape change is described as: **Wide, Intermediate, Localised or Limited**.

24. **Duration and Reversibility** can be linked depending on the nature of the development. Reversibility is a judgement about the practicality of reversing the landscape effects of the proposed development (for example, solar farms are ultimately largely reversible whilst housing is permanent). Duration reflects how long the change will last and can include frequency the effect would be experienced. In this appraisal, the duration of the change would be considered:

- **short term** when lasting less than 2 years;
- **medium term** when lasting between 2 and 10 years;
- **long term** when lasting between 10 and 40 years, and
- **permanent** for more than 40 years.

25. Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams in Plate 1 below.

Visual Effects

26. In accordance with GLVIA3, the level of visual effects is determined by combining judgements regarding the sensitivity of visual receptors (people who view the landscape) and the magnitude of the change they experience arising from the Proposed Development.

Visual Receptor Sensitivity

27. In visual appraisal, visual receptor sensitivity is assessed by combining judgements about the value attached to views and the susceptibility of the viewer to the type of change and nature of the development proposed. The overall sensitivity of the visual receptor to a particular development is described in this appraisal as **High, Medium or Low**.

- **Value of Views:** The value of public views, which is the focus of GLVIA3, will vary depending on the nature, location and context of the view and the recognised importance of the view. Considerations include cultural associations; designation or policy protection; views of or from landmarks; and/or the scenic quality of the view. It should be noted that the value attributed relates to the value of the view only (e.g. a National Trail is nationally valued for access, but not always for the available views from every section). In this appraisal, the value attributed to visual amenity is described as: **National, Regional or Community**.
- **Susceptibility of Visual Receptors:** Those living within view of the Proposed Development are usually regarded as the highest susceptibility group as well as those engaged in outdoor pursuits for whom landscape experience is the primary objective. The susceptibility of potential visual receptors will also vary depending on the activity of the receptor. For visual receptors, susceptibility and value are closely linked - the most valued views are also likely to be those where viewer's expectations will be highest. In this appraisal, visual receptor susceptibility is defined in accordance with the criteria below.

High - Local residents; tourists; people engaged in outdoor recreation focused on an appreciation of views including users of footpaths and quiet country lanes, beauty spots and picnic areas and people experiencing views to or from important features of physical, visual, cultural or historic interest.

Medium - Local road users and travelers on trains. People engaged in outdoor recreation with some appreciation of the landscape e.g. road cycling, nature conservation, golf and water based recreation.

Low - Workers, users of facilities and commercial buildings (indoors) experiencing views from buildings. Road and rail users on fast moving commuting or trunk routes. Visual receptors where views are incidental to the activity and/or location.

28. Sensitivity is evaluated taking into account component judgements about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment is adopted. Note that a greater weight is intentionally attributed to the susceptibility of the visual receptor than to value. This is in recognition of the fact that relatively few views are specifically recognised through designation or cultural reference. This approach still acknowledges that value associations influence sensitivity.

		Susceptibility		
		High	Medium	Low
Value	High	High	High/Medium	Medium
	Medium	High/Medium	High/Medium	Medium/Low
	Low	High/Medium	Medium	Low

Magnitude of Visual Change

29. The magnitude of visual change arising from the Proposed Development is appraised in terms of its size or scale, geographic extent of the area or receptor that is influenced and its duration.
30. Representative viewpoints are used in the LVA as 'samples' on which to base judgements of the scale of change experienced by visual receptors. The wider extent of the effect and its duration are not captured in the viewpoint analysis (as a viewpoint cannot capture these factors for an entire route or

area). As duration and extent are necessary considerations in determining magnitude of change, judgements concerning magnitude and level of effect are provided for visual receptors and not for representative viewpoints. The only exception to this would be a specific viewpoint – where people visiting that location to look at the view are assessed as a visual receptor group in its own right.

31. With the exception of specific viewpoints (as noted above), each route (e.g. a footpath or road) and receptor group (e.g. a community or village) will encompass a range of possible views, which might vary from no view of the development to very clear, close views. Therefore, effects are described in such a way as to identify where views towards the development are likely to arise and what the scale and duration and extent of those views is likely to be. In some cases, this will be further informed by a nearby viewpoint and in others it will be informed with reference to ZTV studies, aerial photography and site visits. Each of these individual effects are then considered together in order to reach a judgement of the effects on the visual receptors along that route, or in that place.
32. The Scale of change arising from the Proposed Development as experienced by a visual receptor group reflects the degree to which the nature of the views from that location would be changed taking into account:
 - The distance of the viewpoint from the development;
 - the degree to which the development is visible or screened;
 - the angle of view in relation to main receptor activity or main focus of the view;
 - the horizontal and vertical field of view occupied by the development; and
 - the extent and nature of other built development visible.
33. In this appraisal, the scale of change in view is described as: **Large, Medium, Small or Negligible**.
34. The approach to appraising effects on views is to consider the full 360 degree view from any given receptor – not just those towards the development and/or shown in visualisations. It is assumed that the change would be seen in clear visibility and the appraisal is carried out on that basis. Seasonal variation in visibility due to varying vegetation cover is also taken into account in all judgements. Where appropriate, comment may be made on lighting and weather conditions.
35. For visual receptors moving through the landscape (e.g. road and footpath users), the length of their journey during which they would see the Proposed Development is reflected in the judgement of the **Geographic Extent** of effects. In this appraisal, the geographical extent of visual change is described as: **Wide, Intermediate, Localised or Limited**.
36. **Duration** reflects how long the change will last and judgements are framed in the same way as described above for landscape effects. In this appraisal, the duration of the change would be considered:
 - **short term** when lasting less than 2 years;
 - **medium term** when lasting between 2 and 10 years;
 - **long term** when lasting between 10 and 40 years, and
 - **permanent** for more than 40 years.
37. Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams in Plate 1 below.

Combining Scale of Change, Extent and Duration to Determine Magnitude of Landscape and Visual Effects

38. Scale of change is the first and primary factor in determining magnitude. Geographical extent and duration of the effect are modifying factors to the overall magnitude judgement which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale.
39. The diagrams presented below in Plate 1 illustrate in outline how these two modifying factors are considered in a two-stage process. A judgement is first formed about the scale of the change to the landscape or visual receptor. The geographic extent of the effect is then considered as a modifying influence in the first part of Plate 1 (Stage 1). The result or outcome of Stage 1 is then considered again in relation to the duration of the effect as illustrated in the second part of Plate 1 (Stage 2). The outcome of Stage 2 is the overall magnitude of effect judgement reported in the assessment. Plate 1 is not intended to be interpreted rigidly as a chart to provide definitive answers; professional judgement is employed as appropriate to arrive at an overall magnitude judgement.
40. In this appraisal, the magnitude of effects is described as **Substantial, Moderate, Slight** or **Negligible**. Where magnitude is judged to lie between levels, an intermediate assessment will be adopted.

Plate 1 Combining Scale of Change, Extent and Duration to Determine Magnitude of Landscape and Visual Effects

Stage 1 - Modifying Influence of Geographic Extent on Magnitude of Effect

Scale of Change					
		Large	Medium	Small	Negligible
Geographic Extent	Wide	Substantial			
	Intermediate				
	Localised		Moderate		
	Limited			Slight	
					Negligible

Stage 2 - Modifying Influence of Duration on Magnitude of Effect

Stage 1 Result					
		Substantial	Moderate	Slight	Negligible
Duration	Permanent	Substantial			
	Long-term				
	Medium-term		Moderate		
	Short-term			Slight	
					Negligible

Level of Landscape and Visual Effects

41. The level of any identified landscape or visual effect is described as **Major, Moderate, Minor** or **Negligible**. These categories are based on the consideration of receptor sensitivity with the predicted magnitude of effect. The table below is not used as a prescriptive tool and illustrates the typical outcomes, allowing for the exercise of professional judgement. In some instances a particular parameter may be considered as having a determining effect on the analysis.

Receptor Sensitivity	Magnitude of Effect				
		Substantial	Moderate	Slight	Negligible
	High	Major	Major/ Moderate	Moderate	Minor
	Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor/ Negligible
	Low	Moderate	Moderate/ Minor	Minor	Negligible

Beneficial/Adverse

42. Landscape and visual effects can be beneficial or adverse and in some instances may be considered neutral. Neutral effects are those which overall are neither adverse nor positive but may incorporate a combination of both. Whether an effect is beneficial, neutral or adverse is identified based on professional judgement. GLVIA 3rd edition indicates at paragraph 2.15 that this is a “*particularly challenging*” aspect of assessment, especially in the context of a changing landscape.
43. Where effects are neither beneficial or adverse they are described as neutral. For instance the introduction of development into an existing view may bring about a notable change to that view but the effects are neither detrimental (adverse) or an improvement (beneficial) to the existing level of visual amenity.

ANNEX 1: GLOSSARY OF TERMS

Term	Definition
Direct Effect	A direct (or primary) effect may be defined as an effect that is directly attributable to the development. ³
GLVIA3	‘ <i>Guidelines for Landscape and Visual Impact Assessment, Third Edition</i> ’, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment 2013.
Indirect Effect	An indirect (or secondary) effect is an effect that results indirectly from the proposed project as a consequence of the direct effect, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects. ⁴

³ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p155

⁴ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p156

Term	Definition
Key Characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
LVA	Landscape and Visual Appraisal
Landscape Capacity	The amount of change which a particular landscape character type or area is able to accommodate without significant detrimental effects on its character. Capacity is likely to vary according to the type and nature of change proposed.
Landscape Character	The distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse. ⁵
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type. ⁶
Landscape Character Types	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur, they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape Effects	Effects on the landscape as a resource in its own right. ⁷
Landscape Elements	Individual components which make up the landscape such as trees and hedges.
Landscape Features	Particularly prominent or eye-catching elements, like tree clumps, church towers or wooded skylines.
Landscape Quality or Condition	This is a measure of the physical state of the landscape. It may include the extent to which a typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements. ⁸
Landscape Receptor	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape Resource	The combination of elements that contribute to landscape context, character and value.
Landscape Value	The relative value or importance attached to different landscapes by society on account of their landscape qualities. ⁹
Level of Effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
Magnitude (of effect)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.

⁵ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p156

⁶ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

⁷ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

⁸ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

⁹ The Landscape Institute; Technical Guidance Note 02/21 Assessing Landscape Value Outside National Designations

Term	Definition
Mitigation	Measures including any process, activity or design to avoid, reduce, remedy or compensate for adverse environmental impact or effects of a development.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Residential Visual Amenity	A collective term describing the views and visual amenity from a residential property, relating to the type, nature, extent and quality of views that may be experienced from the property and its 'domestic curtilage' including gardens and access driveway. Residential Visual Amenity is only one component of the overall Residential Amenity, others being for example noise, shadow flicker and access amongst others.
Residual Effects	Potential environmental effects remaining after mitigation.
Sense of Place	The essential character and spirit of an area: <i>genius loci</i> literally means 'spirit of the place'.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor. ¹⁰
Type or Nature of Effect	Whether an effect is direct, indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
Visual amenity	Value of a particular place in terms of what is seen by visual receptors taking account of all available views and the total visual experience.
Visual Effect	Effects on specific views and on the general visual amenity experienced by people. ¹¹
Visual Receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	Computer simulation, photomontage or other technique to illustrate the appearance of a development. ¹²
Wildness	A quality of appearing to be remote, inaccessible and rugged with little evidence of human influence.
Wireframe or Wireline	A computer generated line drawing of the DTM (Digital Terrain Model) and the proposed development from a known location.
Zone of Theoretical Visibility (ZTV)	Area within which a proposed development may have an influence or an effect on visual amenity. ¹³

¹⁰ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p157

¹¹ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

¹² The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

¹³ The Landscape Institute/Institute of Environmental Management and Assessment; *Guidelines for Landscape and Visual Impact Assessment*; Spon; 2013; p158

APPENDIX AX2: VISUAL AIDS

Guidance and Standards Used

1. All Visibility Maps (ZTVs), photography, visualisations (wirelines and photomontages) and their graphical presentation has been undertaken in line with the Landscape Institute's Technical Guidance Note 06/19, Visual Representation of Development Proposals.
2. While this guidance note is under review at the time of this appendix and report (October 2024) it remains the current guidance for presenting visualisations to accompany LVA reports.

The Computer Model

3. To generate wireline visualisations and photomontages, computer models of the proposed site and study area are produced. Autodesk 3DS Max / POV-Ray are used to create a 3D computer model of the proposed development representing the specified geometry and position of the proposed development, and the existing landform (terrain). The landform information is derived from 50m resolution terrain data incorporating 5m resolution terrain data around the site and each viewpoint and viewpoints where required (either by local guidance, or where we judge it is needed for accurate modelling).
4. The computer models include the entire study area and all calculations take account of the effects caused by atmospheric refraction and the Earth's curvature. The computer models do not take account of the screening effects of any intervening objects such as vegetation, buildings or other non-terrain features, unless expressly stated.
5. The computer models combine the existing landform with the model of the proposed development and detailed data collected in the field to enable the output of accurate visual and graphical information and associated data for presentation as finished figures.

Visibility Maps: Zone of Theoretical Visibility

6. A Zone of Theoretical Visibility (ZTV) map has been generated using the viewshed routine in the Visibility Analysis plug-in for QGIS to assist in identifying areas where visibility would not occur as well as viewpoint selection, illustrate areas from where part or all of the proposed development may be visible and to indicate its potential influence in the wider landscape.
7. The ZTV is presented in Figure 4 which accompanies the main report. In this instance the ZTV presents the ZTV for two distinct elements of the Proposed Development. The ZTV for the processing mill (the main building of the the development) is shown in yellow, the ZTV for silos (a notable visual component of the development) is shown on. Where both ZTV coincide (where both elements are potentially visible from the same location) the ZTV is shown in green.
8. The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.
9. A digital surface model (DSM) has been derived from 5 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Heights of buildings and woodland have been taken from LIDAR height data.
10. The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The

actual extent of visibility on the ground will therefore be less than that suggested by the ZTVs shown in Figure 4.

11. It is important to note that the DSM does not take into account features that are not included as woodland and buildings within the OS mapping at the time the ZTV was prepared. Therefore the model does not take into account some localised features such as small copses, hedgerows or individual trees, neither does it take detailed account of felling, clearance, tree growth, demolition or construction which may have occurred after the OS mapping was prepared.
12. The ZTV also includes an adjustment that allows for the Earth's curvature and light refraction, being based on the DSM described previously and has a 5m² resolution.

Visualisations: Annotated Photos (Type 1)

13. Baseline photography has been undertaken at each of the 7 representative viewpoint location using a high-quality digital SLR camera with full frame sensor and a 50mm fixed focal length lens – in accordance with the relevant guidance identified above. The resulting photos are either presented as single frame images or combined into panoramas using PTGui photo stitching software and saved as planar projection images. Single frame and panoramic images are presented at either A3 or on wide format sheets, in accordance with Technical Guidance Note 06/19, and are annotated to indicate the extent of the proposed development and highlight any important features within the view.

Visualisations: Wireframes (Type 3)

14. Each of the 7 representative viewpoints are accompanied by the equivalent wireframe images.

Data Accuracy

15. The ZTVs presented in Figure 4 are based on the following data:

Layout file: Obs-ZTV-Building_FFL_5m-10km & Obs-ZTV

Silo_FFL_5m-10km

Terrain data: LIDAR_5m_Derived-DSM_3km

Viewer's eye height: 2m above ground level

Calculation grid size: 5m.

APPENDIX AX3: LANDSCAPE SENSITIVITY ASSESSMENT

The sensitivity of the landscape character types/areas which may receive significant landscape effects are assessed below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location. To assess the sensitivity of a particular landscape it is good practice to consider the value attached to the landscape and its susceptibility to the particular form of change likely to result from the proposed development. Assessment text relates to sensitivity of the landscape receptor as a whole, to the proposed development, with additional comments regarding the Site where relevant. In the main this has been taken from LANDMAP, National Landscape Character Areas (NCLAs) 34 and 35 as well as from local sources and site assessment. The table below is based on guidance provided within LI TGN 02/21 - specifically table 1 within that document.

Host Landscape: LANDMAP NWPRTVS040 Docks and Level of Mendalgrief

Factors affecting sensitivity	Lower Sensitivity to the Proposed Development	Higher Sensitivity to the Proposed Development	Explanation	Judgement
Value attached to Landscapes				
Designated scenic quality	No specific designation	National or regional designation	The host landscape receptor is not subject to any statutory or non-statutory designations related to its scenic quality.	Community
Natural Heritage	Low presence of ecological or geological / geomorphological interest.	High presence of ecological or geological / geomorphological interest.	Little of note in terms of geological / geomorphological interest, the receptor is for the most part flat and has historically been heavily influenced by expanding industrial, dockside development. There is more ecological interest than first impressions would suggest: <i>“Although mostly industrial land use, the four SINC sites support important ruderal species and reedbeds. These give the area a local significance and a borderline (low) / moderate value”</i> (LANDMAP Q45 entry for NWPRTLH047)	Community
Cultural heritage	Low presence of archaeology or historical interests	High presence of archaeology or historical interests	Few examples of archaeological or historical assets which contribute to a sense of place.	Community

Landscape condition/ quality	Landscape in a poor state of repair with incongruous elements	Landscape fully intact in good condition with limited incongruous elements	<i>"Poor – in older commercial areas boundaries and structural planting to the area has little management input and is deteriorating"</i> (LANDMAP Q27 entry for NWPRTVS040)	Community
Cultural associations	No strong associations with notable people, events or the arts.	Strong cultural associations with notable people, events or the arts, which contribute to perceptions of natural beauty.	Rather than notable people, events or contribution to the arts, Newport Docks have a strong cultural resonance with the wider city of Newport, driving its growth and shaping its identity as a dock town.	Regional
Distinctiveness	Commonplace elements and features, or the landscape itself. Lacking distinctive and strongly expressed character and with no important relationship to a settlement.	Presence of rare elements or features or rarity of the landscape itself. Landscape or townscape with a distinctive and clearly expressed character and/or with an important relationship to a settlement.	<i>"Strong – the docks give the area a strong sense of place and the tip is a major landmark"</i> (LANDMAP Q25 entry for NWPRTVS040). This is a large scale, industrial landscape with a distinct character. These elements are not rare in themselves and NWPRTVS040 has similar dock and dockside characteristics to other UK dockside towns and ports. There is an important relationship with the city of Newport, the docks are integral to its identity and the main generator of its growth and status from the Industrial Revolution to the early 20th Century. <i>"Newport expanded rapidly and changed from a small sea-port town to one of the most important places in the country for coal export....the town became known for its accessible modern docks"</i> (NLCA35 Cardiff and Newport).	Regional
Amenity and recreation	Limited amenity/recreational function where experience of the landscape or townscape is important.	Well used for recreation where experience of the landscape or townscape is important; or forms part of a view that is important to a recreational experience. May contain National Trails or other long distance routes.	This is an industrial landscape where people come to work, access to the dock area which forms the greater part of NWPRTVS040 is restricted to the general public preventing access for amenity / recreational purposes The Wales Coast Path (long distance route) does cross through the host landscape receptor but is likely to be a transit route through an industrial townscape to other more attractive sections across the Gwent Levels.	Community
Perceptual (Scenic)	Landscape with no particular scenic / visual appeal.	Landscape with strong appeal to the senses, particular visual.	<i>"Low – there are numerous detractors in the area"</i> (LANDMAP Q46 entry for NWPRTVS040)	Community

			<i>"There are detractive views into industrial buildings, the tip, warehouses and pylons are detractors" (LANDMAP Q23 entry for NWPRTVS040).</i> A largely industrial area comprising utilitarian buildings and structure of low aesthetic quality. An artificial human-made townscape with no scenic value.	
Perceptual (Wildness and Tranquility)	Busy with evidence of human activity, well-lit.	Remote, peaceful or with a sense of wildness. Dark skies.	<i>"Unattractive, noisy, threatening" (LANDMAP Q24 entry for NWPRTVS040)</i> The majority of the host landscape receptor is comprised of Newport Docks which is operational 24 hours a day, illuminated at night with high levels of movement and human activity compared to the surrounding Gwent Levels.	Community
Function	No important blue/green infrastructure function or important relationship with national landscape designation.	Landscape with important blue/green infrastructure function or strong relationship that is important to a national landscape designation.	While the host landscape receptor is bounded to the east, south and west by the confluence of the River Ebbw and the River Usk, where both join the Severn Estuary, NWPRTVS040 itself is disconnected from the surrounding blue / green infrastructure by the creation of the artificial docks.	Community
Overall Judgement of Value				Community

Susceptibility

Scale	Large scale landscapes /townscapes where the Proposed Development would be in proportion with the receiving landscape / townscape	Small scale intimate landscapes / townscapes which would be more sensitive to large scale structures	Host receptor is a large scale industrial urban townscape containing existing development of similar scale to the Proposed Development.	Low
Landform	Smooth regular flowing, flat or uniform landscapes or townscapes	Dramatic, rugged and complex landscapes	Predominantly flat industrial townscape where landform has been significantly shaped by human activity to built plateaux on a previously historically flat estuarine landscape.	Low

Openness/enclosure	Open and exposed landscapes or townscapes	Enclosed and sheltered landscapes or townscapes	For the most part the receiving townscape is an expansive flat, open dockside environment.	Low
Land cover	Extensive areas of simple or regular landcover (including intensive farming and forestry)	Complex, intimate or mosaic cover	A largely industrial townscape / dockside where landcover is typically built form either as large building footprints or extensive hard surfaced areas.	Low
Complexity and patterns	Simple and sweeping lines, linear feature and patterns or regular townscapes	Complex or irregular patterns	A townscape “grid” of planned linear roads and rail links, rectangular plots and docksides forming a simple regular pattern.	Low
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	A predominantly industrial townscape of large scale late 20 th / early 21 st century buildings and structures including dockside infrastructure, pylons and wind turbines.	Low
Views intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	A combination of both, some internal views are channelled and limited by surrounding buildings and structures. Open docksides allow extensive views of the Usk and Severn Estuary.	Medium
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes / townscapes without distinctive landform / built form or horizon	Areas with strong features, focal points that define the setting or skyline	An artificial flat townscape built on a low lying tidal estuary.	Low
Overall Judgement of Susceptibility				Low
Overall Judgement of Sensitivity				Low

APPENDIX AX4: VIEWPOINT ANALYSIS

Introduction

1. A viewpoint assessment has been carried out from a selection of key representative viewpoint locations to inform the assessment of the likely magnitude and significance of landscape and visual effects arising as a result of the Proposed Development.
2. In total 7no. viewpoints were selected to represent the range of visual receptors identified in this report. The locations of the selected viewpoints are shown on Photosheets 1 to 7. Details for each viewpoint are provided below. Panoramic photographs are provided to illustrate the existing view at each viewpoint location and the likely extent of the Proposed Development within the view (see Viewpoints 1 to 7).
3. A wireframe is presented to accompany an annotated photosheet for each of the 7 viewpoints.
4. This viewpoint assessment considers the nature of the predicted view and the scale of change. The wider extent of the effect (beyond the individual viewpoint considered), and its duration, are not captured in the viewpoint analysis (as a single viewpoint cannot capture extent or duration) and are considered in the main body of the assessment. Extent and duration are factors in the overall judgement on magnitude of change, therefore judgements on magnitude of change and overall level of effect and significance are also provided in the main assessment.
5. The method of assessment used for the viewpoint analysis, which is described in Appendix 1, accords with current best-practice guidance for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management, 2013). Observations are made of the baseline landscape and visual characteristics at each of the representative viewpoints. Observations, computer modelling and professional judgement are applied to determine the scale of change attributable to the Proposed Development (**Large, Medium, Small and Negligible**) upon landscape character and visual amenity at each individual viewpoint in order to determine the scale of effect.
6. The visual assessment takes into account the screening effect of intervening landform, vegetation and built form and the potential for changes to those baseline features. It assumes excellent clear weather conditions; although the influence of different seasons, weather, sunlight and visibility conditions have been considered, where relevant.

VP	Location	Key features of existing view	Predicted Visual Change	Predicted Change to Landscape Character
1	Wales Coast Path at East Usk Lighthouse	Predominantly flat landscape which is typical of the Gwent Levels, in this case the Caldicot Level and the Newport Wetlands Nature Reserve which forms most of the foreground view. The Wales Coast Path to the left of the view is well marked and maintained and appeared to be well used during the site visit. The large buildings and chimneys of Usk Power Station are visible centre and centre-right of the view are on or just below the skyline. Large power transmission pylons and overhead lines are a dominant feature of this and many other viewpoints. These bring notable large-scale vertical elements into an otherwise flat landscape. The wind turbine on the skyline centre-left of the view brings a dynamic quality to an otherwise static landscape. Background hills form a backdrop skyline behind intervening building and structures. From this location, looking away from the Proposed Development, there are broad panoramic views of the Uskmouth as it enters the Severn Estuary as far as the islands of Flatholm and Steephholm at the mouth of the Bristol Channel.	There is no predicted visual change from this location as the Proposed Development is located behind existing features in the landscape. This includes foreground wetlands, intervening woodland belts and built form on the skyline.	The Proposed Development will not change the local landscape character as experienced from this location.

2

Wales Coast Path near The Lighthouse Inn

Artificially flat landscape created from centuries of reclaiming and draining estuary flats to create agricultural land is visible to the left of the view, flat extensive mudflats at the mouth of the Severn Estuary are visible to the right of the view.

Central to the view extending from the foreground into the distance is a large coastal sea defence comprising an earthwork bund with a well-worn path across the top, well used at the time of the site visit.

A landfill and mineral reclamation site extends centre-left to centre view below the skyline partly screened by intervening tree belts.

The white West Usk Lighthouse is a notable landmark feature in the landscape in the distant centre-view.

Large examples of vertical infrastructure in the form of power infrastructure (pylons, wind turbines, chimneys) are dominant features on the skyline at various distances throughout the view.

To the centre-right of the view, the mass of Usk Power Station coincides with the backdrop outline of distant hills but remains a prominent feature in the landscape.

East Usk Lighthouse, the location of viewpoint 1 is barely visible at distance to the right of the view.

Views from this location, looking away from the Proposed Development, are broad panoramas across the Severn Estuary.

From this location, the Proposed Development is not expected to break the skyline, coinciding with existing buildings and the backdrop of distant hills.

It is expected to appear as a minor addition to Newport Dock which is viewed at distance from this location.

The landfill and mineral recycling site provides intervening screening, the extent to which it does so will change given the on-going movement of material and creation of final landform. This change will not substantially affect the extent to which the Proposed Development will be visible due to distance.

The view will not be altered to any notable extent, vertical elements (pylons, wind turbines) and the Usk Power Station will remain the most notable elements in the view.

The local landscape character as experienced from this location is typical of the Wentlooge Levels, comprising tidal mudflats and reclaimed agricultural land.

The expansive, open landscape with broad panoramic views will remain essentially unchanged.

The physical effects of the Proposed Development are contained to the Site and the immediate dockside context.

Visual, audible and perceptual effects of the Proposed Development on the surrounding landscape for both the construction and operational phases are expected to be minimal when experienced at this distance from the Site.

Currently the greatest detractor in visual and audible terms is the landfill and mineral recycling plant described opposite, both are notable intrusions in an otherwise tranquil landscape.

3

Wales Coast Path, near the West Usk Lighthouse

This view is sequential to Viewpoint 2. It contains many of the same elements viewed at closer distance.

This view represents those available to receptors using the Wales Coast Path approaching Newport Docks.

The distinct mound below the skyline to the left of the view is a landfill site adjacent to Newport Docks.

The docks form much of the central part of the view which has an increasingly industrial, urbanising background effect on views from what is essentially a pastoral landscape where flat, drained fields meet the tidal mudflats of the Severn Estuary, separated by the bund centre-left of the view.

Usk Power Station is prominent on the skyline to the right of the view.

Wind turbines, pylons and dockside cranes bring vertical elements to the view, breaking the skyline at various distances throughout the view.

The most notable features are the two large pylons in the centre-left and right of the view.

Newport Transporter Bridge is visible on the skyline to the left of and behind the large pylon centre-left of the view where its towers combine with other vertical elements in the view.

Distant hills form the backdrop to the extreme left and centre-right of the view.

From this location, looking away from the Proposed Development, there are still broad panoramic views of the Severn Estuary although the coastline, mudflats and large industrial buildings feature to a

There is a clear view towards Newport Docks from this location.

The Proposed Development will appear as a minor addition to the dockside buildings and structures already present in the view.

Existing buildings will screen the lower building elevations and lower parts of the silos.

The Proposed Development will break the skyline, increasing the height of built form in the view.

Large pylons and Usk Power Station will remain the most prominent features in the view.

The existing view of a flat, estuarine landscape with an industrial backdrop will not be substantially changed by the introduction of the Proposed Development.

From this location the estuarine landscape is already affected visually, audibly and perceptually by the urbanising, industrial presence of Newport Docks, Usk Power Station, large pylons and wind turbines.

The Proposed Development will sit within an existing dockside context which already exerts an influence over the surrounding landscape, more so that as experienced from Viewpoint 2.

The dynamic nature of the construction phase will generate visual, audible and perceptual effects that will be notable from this location, however this will be in the context of existing dockside activity and movement.

greater extent than open water compared to viewpoint 1.

4

Wales Coast Path, Cuckoo Bridge Road

At this location, the Wales Coast Path follows a minor road across the railway line, which provides an unusually high vantage point in an otherwise flat landscape.

The distinct mound to the left of the view is a landfill site, the only notable variation in topography in the view, apart from the location itself.

The foreground landscape of regular fields divided in straight lines by hedgerows and / or drainage channels known locally as reens is typical of the Wentlooge Levels.

The Severn Estuary is visible to the extreme left of the view, however the view has a pastoral rural, rather than estuarine / coastal character.

Large industrial buildings in Newport Docks and at Usk Power Station form much of the centre view where they share the skyline with vertical elements such as pylons and wind turbines.

Large pylons and numerous overhead transmission cables together with wind turbines are notable features in the landscape, the most prominent being the largest pylons to the right of the view crossing the Usk from Usk Power Station.

Looking away from the Proposed Development, views from this location are heavily influenced by the busy railway line which brings a dynamic quality to views and the urban edge of Newport occasionally visible through belts of trees and woodland.

This view will not be substantially affected by the introduction of the Proposed Development, which will appear as a minor addition to the industrial dockside buildings and power station which form much of the view.

It is expected to coincide with existing buildings on the skyline and others currently under construction, and will be partly screened by dockside buildings and intervening features in the landscape.

The numerous pylons will remain the most notable elements in the view.

The construction phase has the potential to draw attention to the central part of the view but this is in the context of existing activity within Newport Docks, the movement of wind turbines and existing construction activity to the centre-left of the view.

The Proposed Development will not change the local landscape character to any discernible extent, as experienced from this location.

There are less indications of estuarine features from this part of the Study Area, the character could be described as agricultural fields on the urban edge of Newport where urbanising influences partly define the local landscape character, this will remain the case.

There will be visual, audible and perceptual effects, more so during the construction phase. In terms of remoteness and tranquillity, the local landscape is already subject to a backdrop of road noise and a busy railway line.

5

**Wales Coast Path,
Outlet of Pont-y-
cwcw Reen**

This view is sequential to viewpoint 4.

The distinct estuarine landscape is clearly evident in this view as observed from the coastal defence earthwork, the slope of which is visible to the extreme right of the view. Here the outlet of Pont-y-cwcw Reen is joining the mouth of the River Ebbw as it in turn joins the mouth of the River Usk.

This view will change during the course of the day with incoming and outgoing tides

The skyline is an industrial urban townscape of dockside buildings throughout combining with the mass of Usk Power Station to the right of the view, Built form and structures form much of the skyline which is punctuated by vertical elements such as pylons, dockside cranes, chimneys and wind turbines.

Views from this location, looking away from the Proposed Development are of a flat agricultural landscape where the coastal defences although notable are less prominent than the large pylons which dominate the view.

There is a clear view towards the Proposed Development. It will appear on the skyline in the context of existing buildings of similar scale, mass and appearance.

The height of the building is in balance with other buildings on the skyline.

This addition in built form does not substantially alter the view of an industrial dockside backdrop to an estuarine landscape.

The lower part of the building will be screened by a belt of evergreen trees as such this level of screening will remain the same throughout the year.

The construction phase will attract attention to the central part of the view due to its dynamic nature, movement and activity.

There will be little change to the local landscape character as experienced from this location.

There is a distinct, shifting character in this part of the Study Area, although part of a wider tidal estuary which defines the character of much of the Study Area, changes in water level and incoming and outgoing tides are more appreciable in this location.

The landscape character is already influenced by the industrial landscape of Newport Docks and Usk Power Station, the Proposed Development will be a minor addition to the existing extent to which these exert a visual, audible and perceptual influence over the surrounding landscape.

6

**Wales Coast Path,
near pylon, mouth
of River Ebbw**

Sequential to viewpoint 5 and containing many of the same elements.

The base of the pylon to the left of the view gives some indication of the sheer scale of these large vertical structures which are dominant features and recurring elements in views of the local landscape.

The foreground landscape is similar to that of viewpoint 5 and will also change due to the tidal nature of the Uskmouth / Severn Estuary.

Dockside buildings, entrance pier, cranes and other structures form much of the view.

Views from this location, looking away from the Proposed Development, remain heavily influenced by dockside buildings and Usk Power Station with large pylons crossing a flat agricultural and / or estuarine landscape.

There is a clear view towards the Proposed Development which will appear on the skyline at the centre of the view. It will appear in the one part of the view which has a distant backdrop of hills in the wider landscape. This will form an almost completely industrial skyline of built form and structures.

Lower building elevations and the lower part of storage silos will be screened from view behind belts of trees within the surrounding context of Newport Docks. These trees are evergreen, there will therefore no reduction in screening during winter months.

The Proposed Development would be a notable addition to the view, but would not appear incongruous given its dockside context and its similarity in mass, scale and appearance to existing buildings which form part of the view.

Construction phase activity will draw attention to the centre of the view.

The local landscape character as experienced from this location has a distinct urban, industrial feel due to the adjacent Newport Docks, the presence of Usk Power Station and the towering structures of large pylons crossing the Uskmouth.

This will remain the case with the introduction of the Proposed Development.

This part of Newport Docks contains one of the dock gates with comparatively high levels of activity being experienced from this location generating visual, audible and perceptual effects.

The Proposed Development will present an increase in these effects particularly during the construction phase but this is not expected to change the local landscape character to any notable extent.

7

**Wales Coast Path,
near pylon, Cuckoo
Bridge Road**

Alternative to rather than sequential from viewpoint 6. In many instances it is not clear whether the route of the Wales Coast Path follows the line of Cuckoo Bridge Road to the left of the view or the path on top of the bund which forms much of the foreground view.

Viewpoint 7 taken at the base of the bund illustrates the screening effect of a comparatively low feature in a predominantly flat landscape with little change in levels or intervening topography and is in contrast to the wide panoramic views available from the top of the bund as presented in viewpoints 2 and 3.

The base of the pylon is the most dominant feature in the view. The upper elevations of dockside buildings and vertical structures are visible behind the earthwork which obscures views of the docks and Severn Estuary.

From this location, views looking away from the Proposed Development are dominated by large pylons crossing a flat agricultural landscape of regular fields divided by hedgerows and drainage ditches.

From this location there will be minimal visual change arising from the Proposed Development.

It is expected that the bund will almost completely screen the Proposed Development from view, with the top only expected to be visible to such a limited degree that the change will be barely noticeable to the casual observer.

The pylon will remain the most dominant feature in the landscape.

The existing buildings and structures on the skyline will remain more notable than the Proposed Development.

The minor addition of background build form will have very limited – if any effect on the local landscape character.

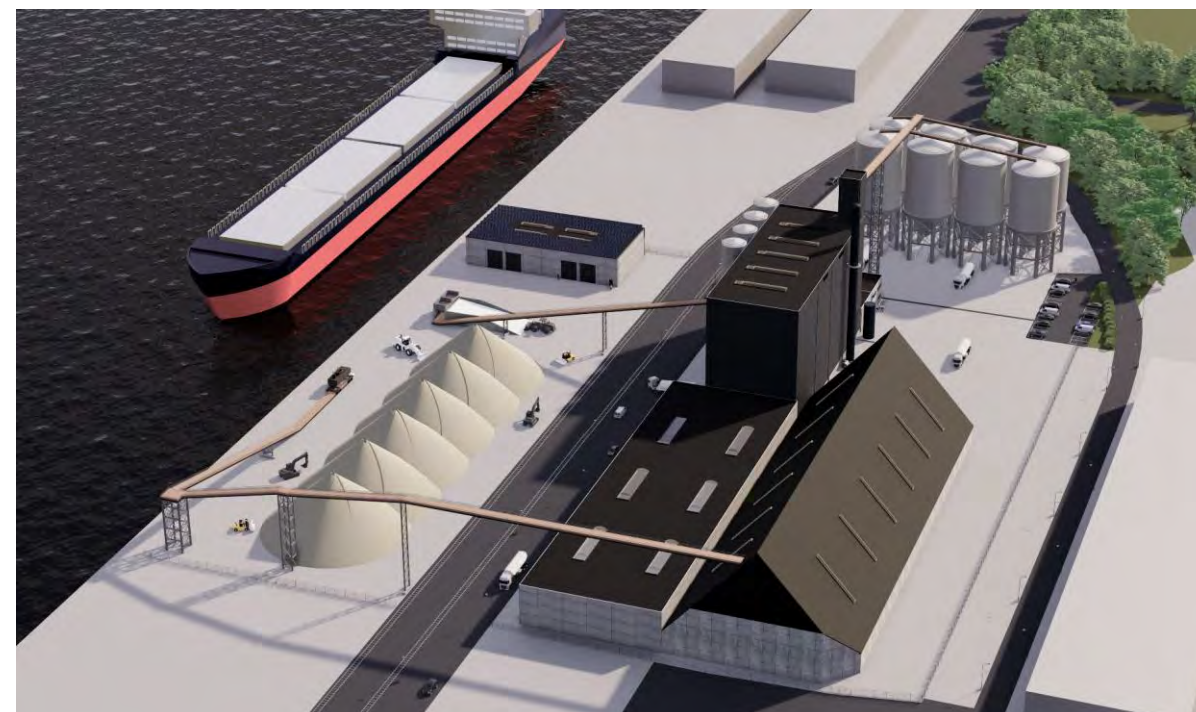
The physical effects of the landscape are contained within the Site itself. The audible and perceptual effects of the construction phase and to a lesser extent the operational phase are expected to extend over the wider landscape. This is however would be in the context of existing dockside activity



Uitbreiding fabriek te Alexandra Docks - New Port - Wales

Ontwerp masterplan en feasibility

Versie: 12/03/2024



Inhoudstafel

<i>Inplanting / luchtfoto</i>	<i>p3</i>
<i>Studie voorstellen inplanting</i>	<i>p4</i>
<i>Visualisatie totaal voorstel</i>	<i>p5-9</i>

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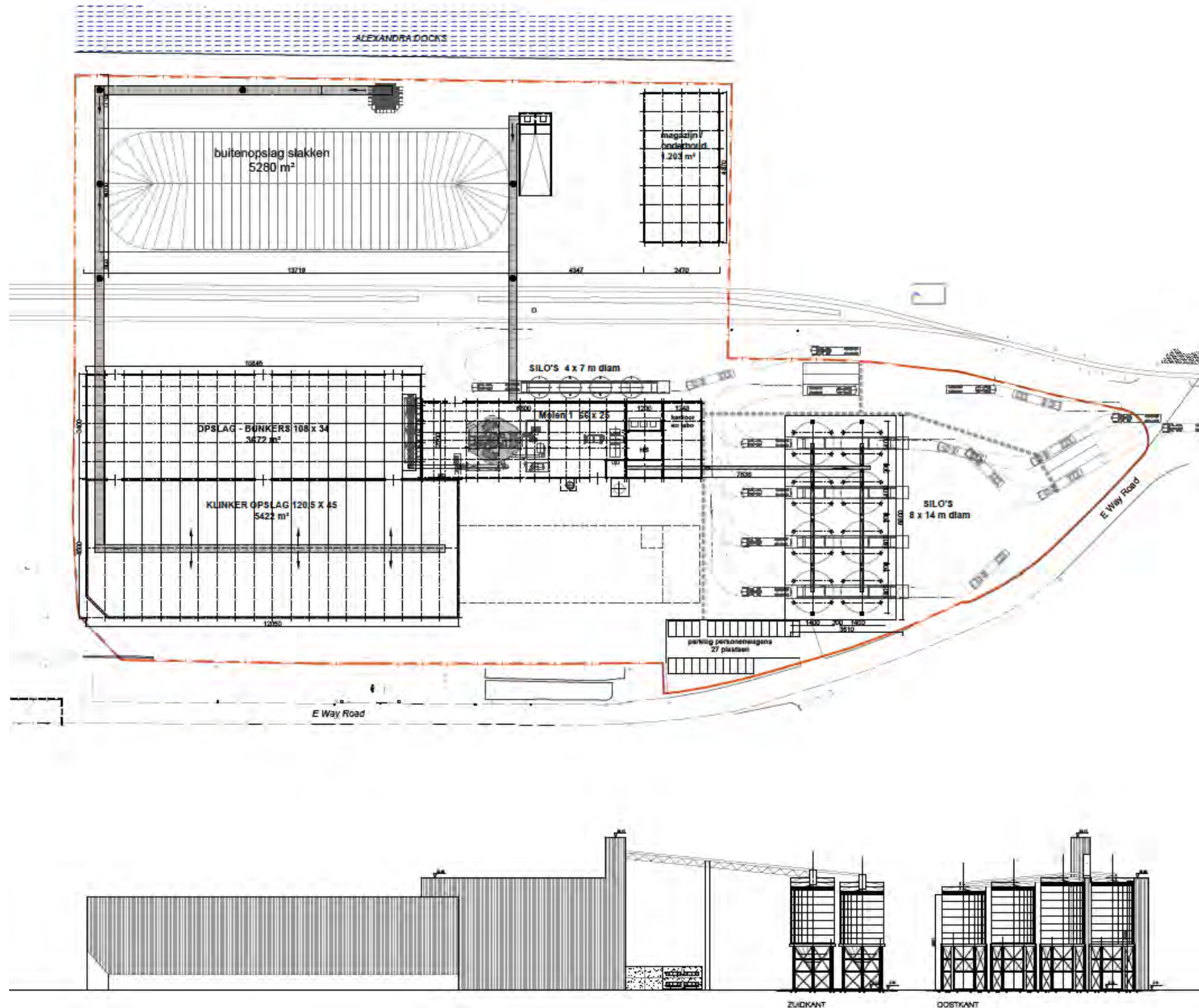
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- Inplanting / luchtfoto



- Studie voorstellen inplanting



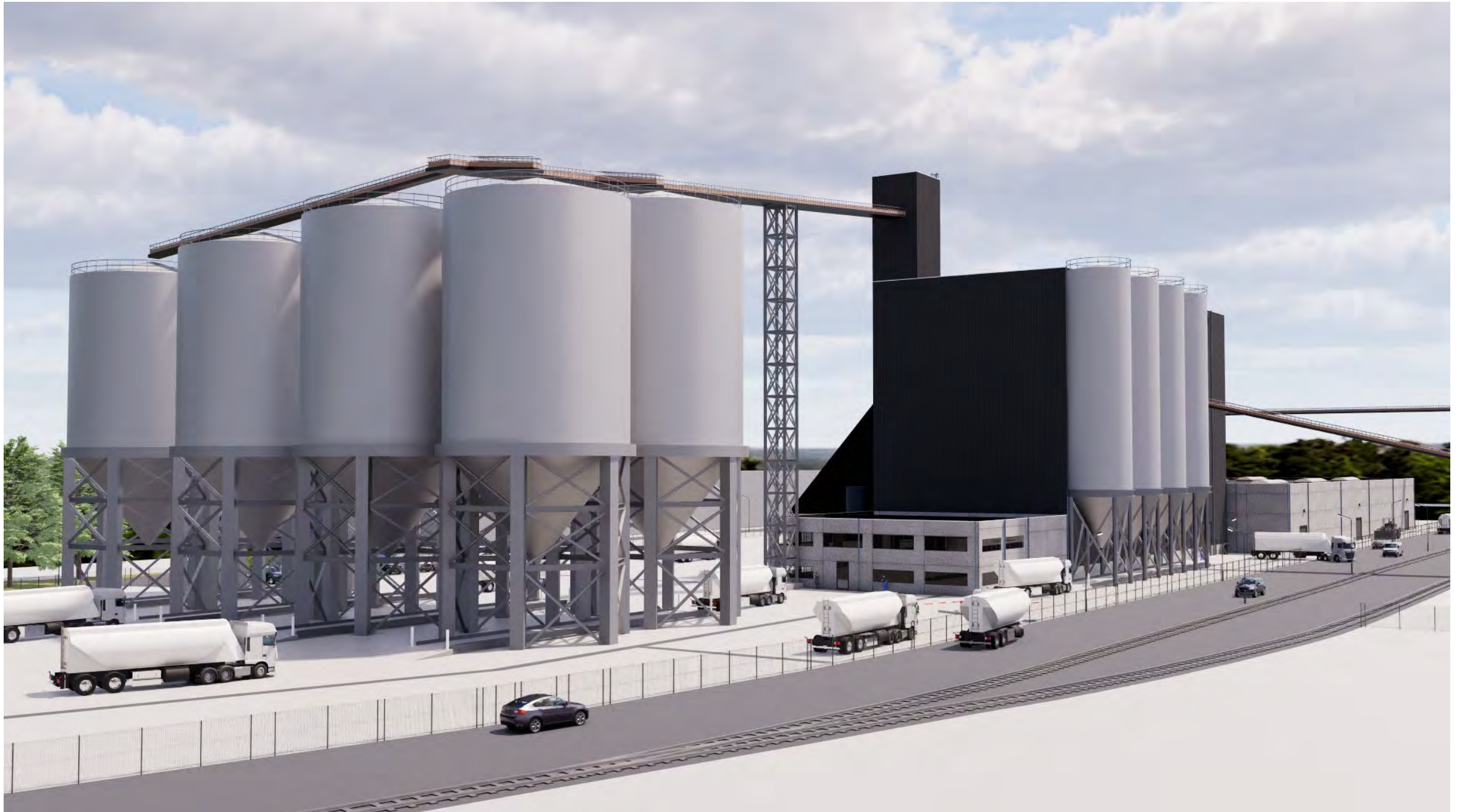
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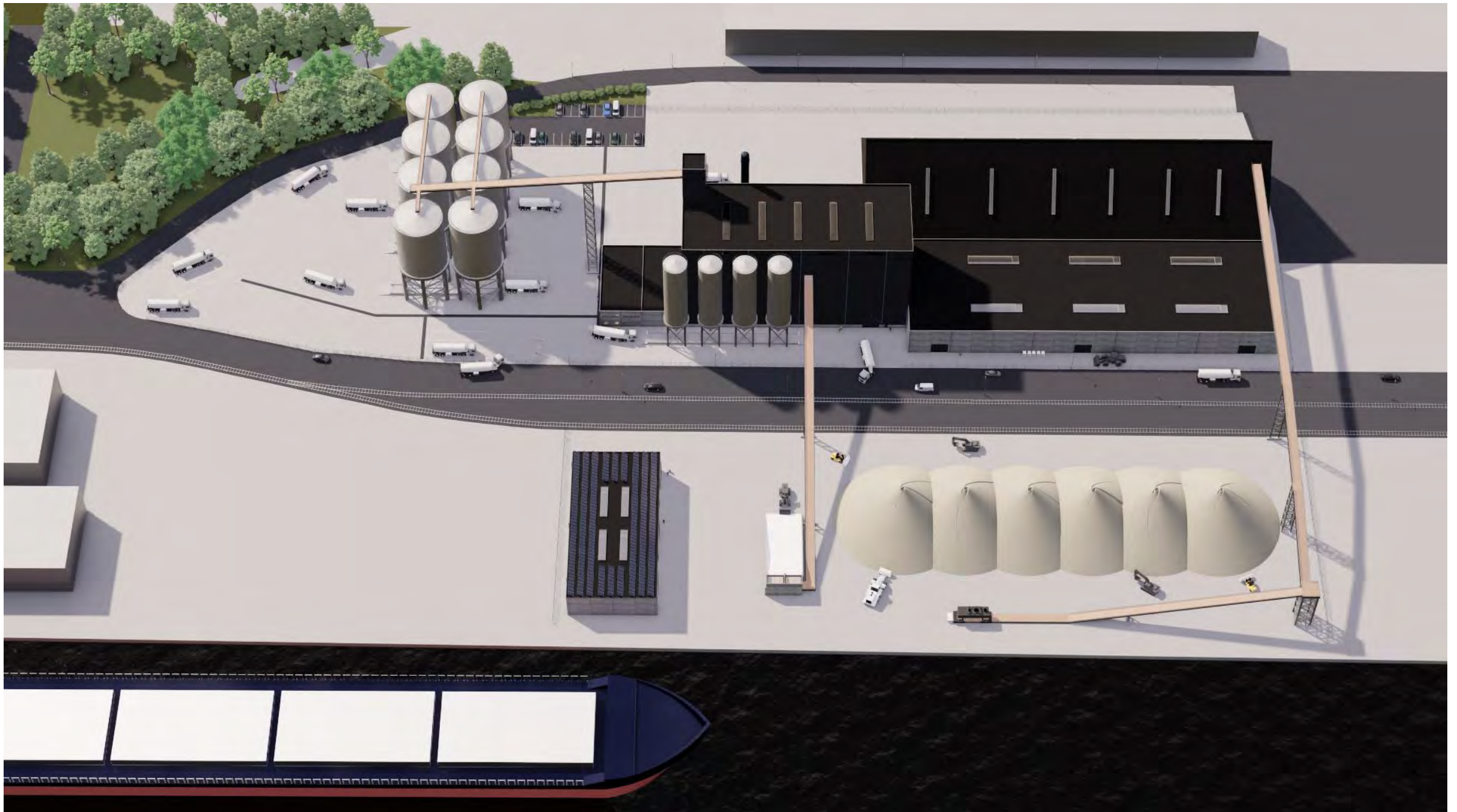
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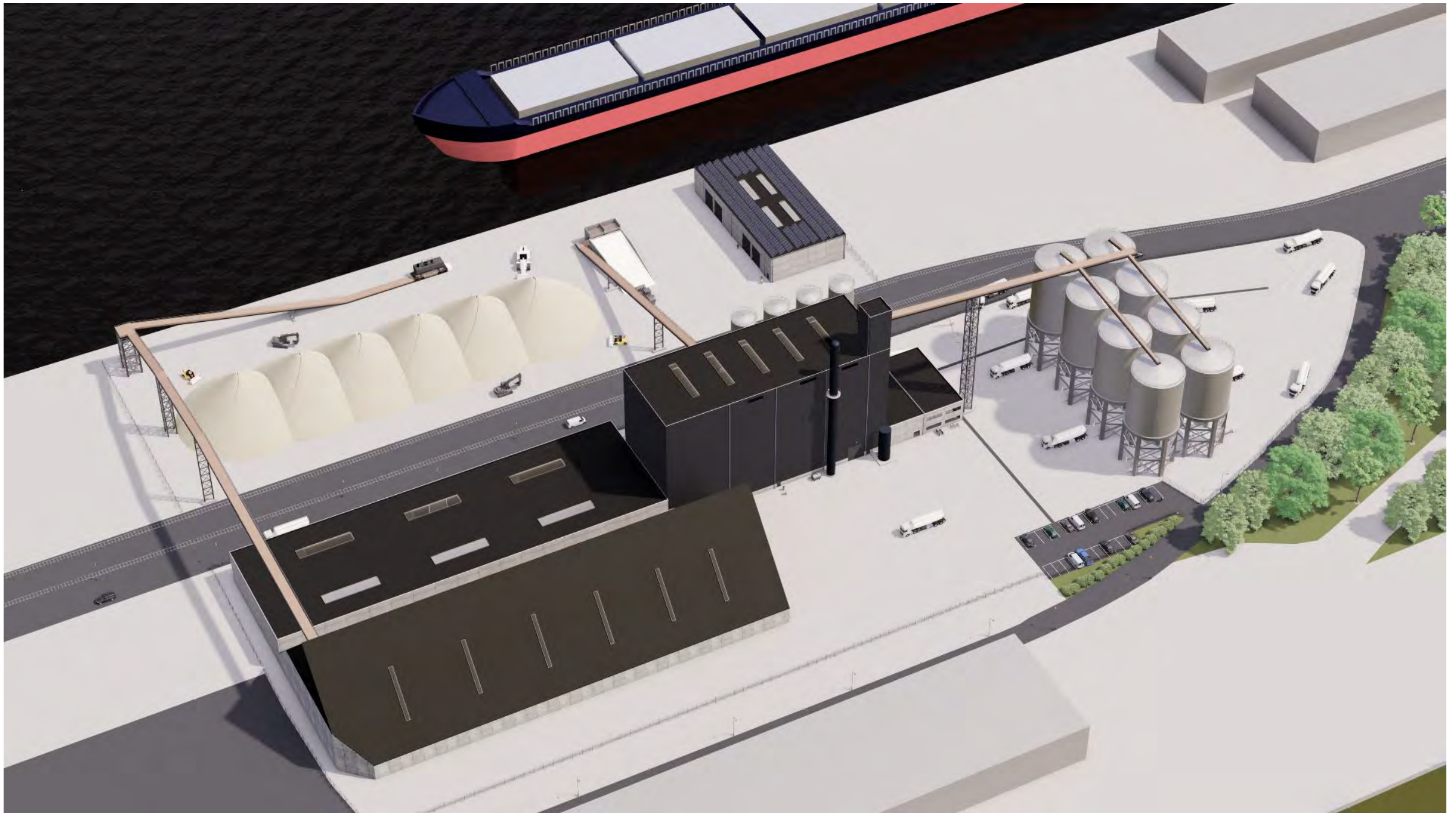
- Visualisatie totaal voorstel



- Visualisatie totaal voorstel



- Visualisatie totaal voorstel





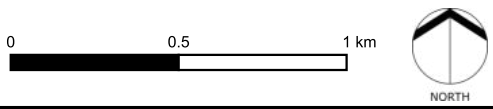
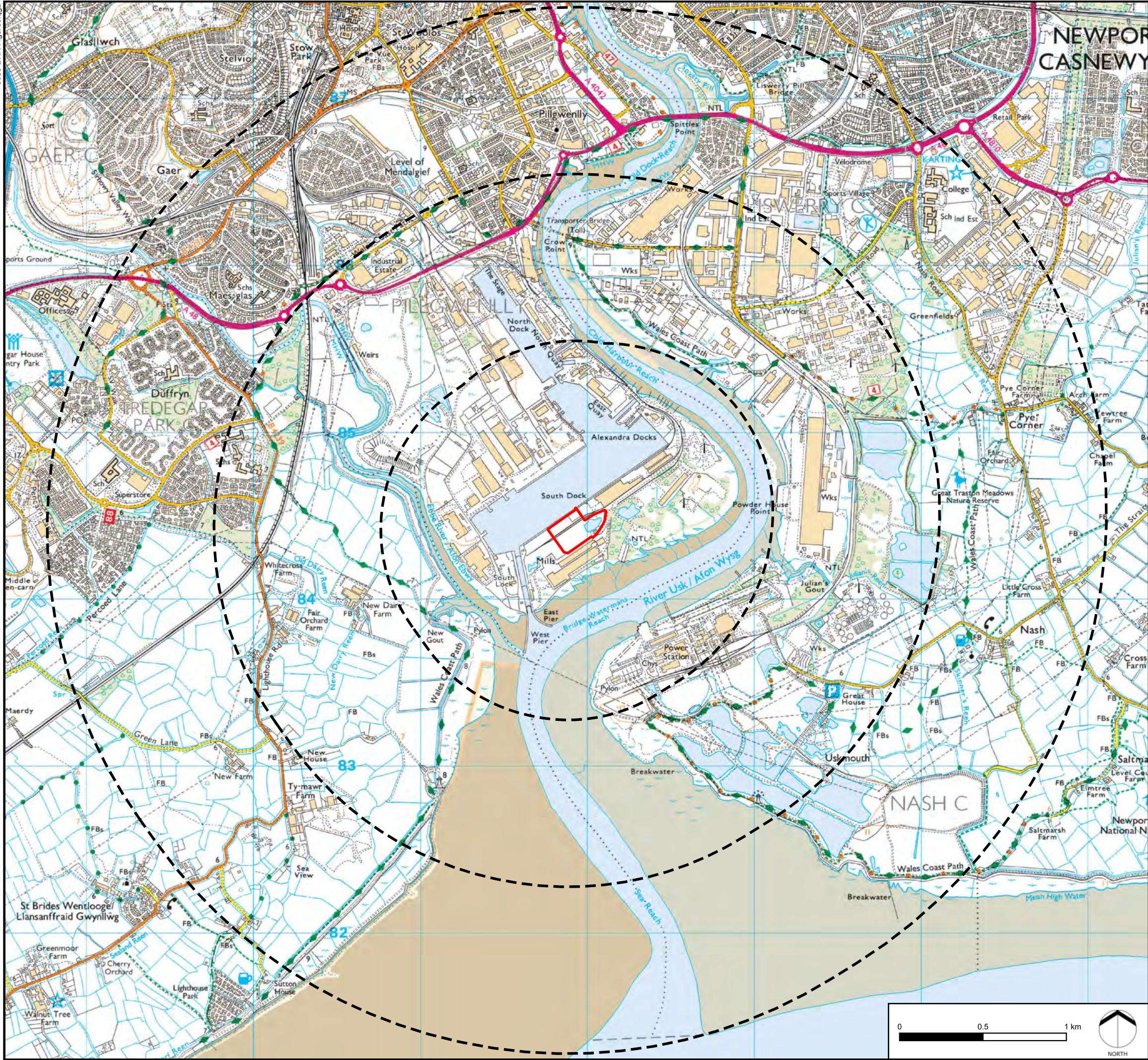
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FIGURE 1
Site Location

KEY

Site Boundary

Distance radii from Site Boundary (1, 2 and 3km)

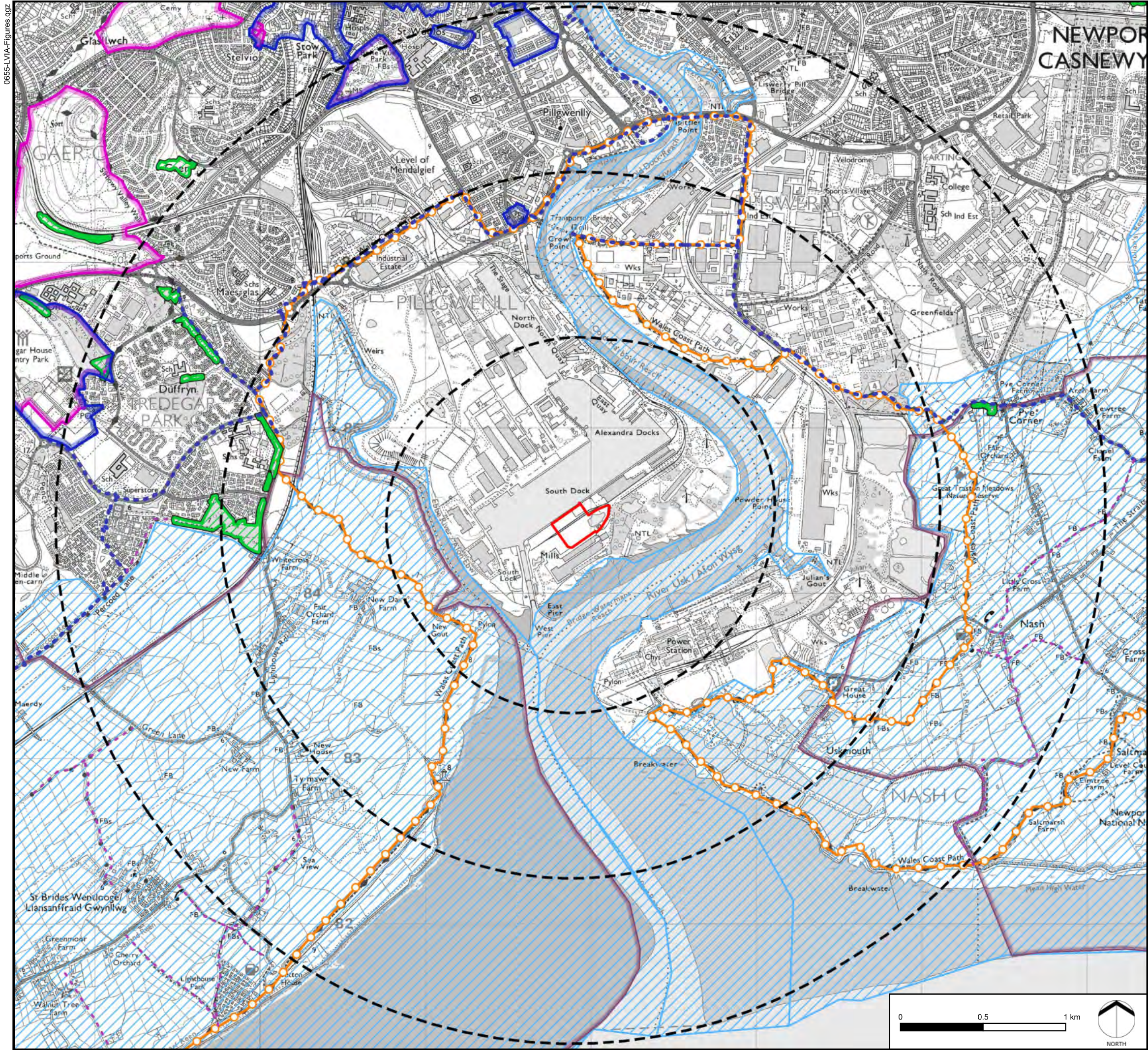


Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
SEP 2024	TD	A3	1:22,500	DP	-

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FIGURE 2
Site Context and Designations



- KEY
- Site Boundary
 - Distance radii from Site Boundary (1, 2 and 3km)
 - Access Routes
 - Long Distance Routes
 - Special Landscape Areas
 - Ancient Wood
 - Historic Landscapes - Gwent Levels
 - Parks and Gardens
 - Conservation Areas

0 0.5 1 km



Projected Coordinate System: British National Grid

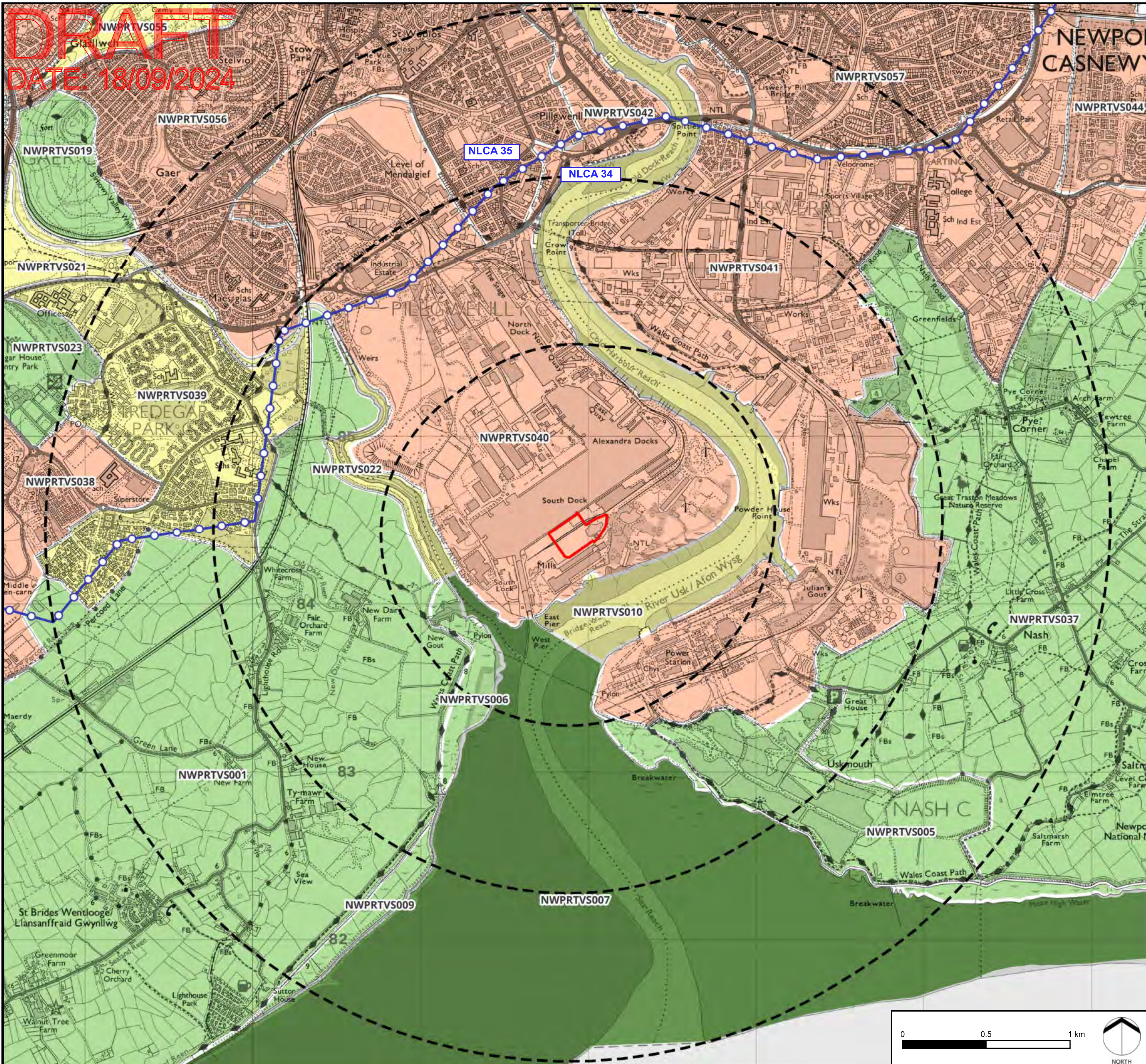
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DATE: 18/09/2024

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FIGURE 3

Landscape Character

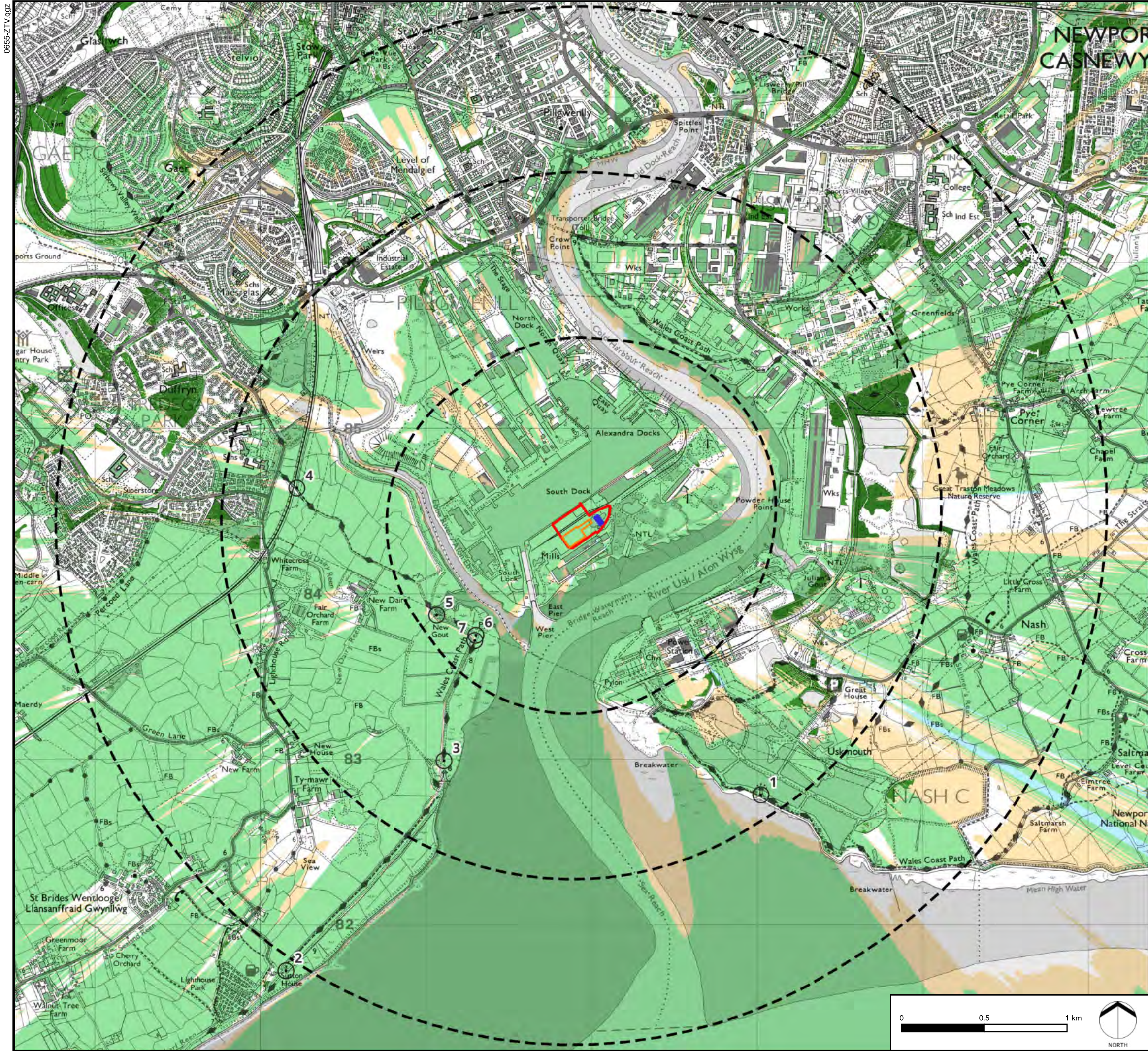


KEY

- Site Boundary
- Distance radii from Site Boundary (1, 2 and 3km)
- Landmap Visual Sensors**
 - Outstanding
 - High
 - Moderate
 - Low
- National Landscape Character Areas ((NLCA)
 - NLCA 34 Gwent Levels
 - NLCA 35 Cardiff, Barry and Newport

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FIGURE 4
Zone of Theoretical Visibility - including screening



KEY

- Site Boundary
- Viewpoints
- Distance radii from Site Boundary (1, 2 and 3km)
- Building
- Silo
- Woodland
- Building

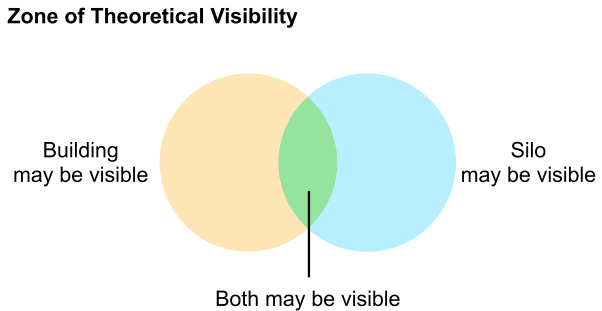


FIGURE DATA:
This figure has been based on the following data:

Layout file: Obs-ZTV-Building_FFL_5m-10km & Obs-ZTV-Silo_FFL_5m-10km
Terrain data: LIDAR 5m Derived-DSM 3km
Viewer's eye height: 2m above ground level
Calculation grid size: 5m

NOTES:
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.

A digital surface model (DSM) has been derived from 5 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Heights of buildings and woodland have been taken from LIDAR height data.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The actual extent of visibility on the ground will be less than that suggested by this plan.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 5m² resolution.

Projected Coordinate System: British National Grid

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