



STEPHENSON
HALLIDAY

Planning, Landscape & Environment
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PORT TALBOT: P FIELDS

Landscape and Visual Appraisal
Tata Steel UK Ltd
August 2024

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Document history

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1 INTRODUCTION

1.1 Background

- 1.1.1 Stephenson Halliday was commissioned in July 2024 to prepare a landscape and visual impact appraisal (LVA) of the proposed development at the Tata Steel Works, Port Talbot.
- 1.1.2 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 once completed.

1.2 The Site and Proposals

- 1.2.1 Figure 1 places the proposed development within its local context within the established industrialised part of the Port Talbot works. The proposals consist of the proposed development of a circa. 2.7 ha (195 m by 140 m) concrete hardstanding area for continued operation of the steel works together with associated landscape, green infrastructure and drainage works.

1.3 Competence

- 1.3.1 This report along has been prepared by Chartered Landscape Architects at Stephenson Halliday. The Practice has over 24 years of experience working on landscape and visual assessments including for similar type proposals throughout the UK. Key individuals working on this project have over 20 years of experience as chartered landscape architects.
- 1.3.2 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.
- 1.3.3 To inform the assessment, a site visit was made to various locations within the study area during March 2024.

1.4 Stakeholder Consultation

- 1.4.1 Informal pre-application consultation on the scope of the planning application has been undertaken with Neath Port Talbot Council. Stephenson Halliday has been directly involved in detailed discussion on other development proposed on the steelworks site in recent years. The final list of viewpoints reflects the outcomes of discussions on these applications and is illustrated on Figure 2.

1.5 Study Area

- 1.5.1 It is accepted practice within landscape and visual assessment work that the extent of the study area for a development proposal is broadly defined by the visual envelope of the proposed development. In this case a study area of 3 km has been used (as shown by Figures 1-6). This study area is adequate to identify all non-negligible effects on landscape and views given the prevailing heights of built form and vegetation around the site (as shown

by Figure 2) in practice restrict visibility of the proposed development to approximately 3 km vicinity of the Site.

1.6 Report Structure and Terminology

- 1.6.1 This report is structured as set out in the table of contents. Supporting appendices have been prepared that supplement the sections regarding methodology, planning policy and baseline. The appendices are important to the assessment and should be read alongside this report.
- 1.6.2 Key terms used within the assessment are described in Section 2 and appendix 1 which set out the methodology. A glossary is provided within appendix 1: annex 1.

2 METHODOLOGY

- 2.1.1 The detail of the methodology is described in Appendix 1. A summary of the primary judgements is provided below.

2.2 Sensitivity

- 2.2.1 Sensitivity is judged taking into account the component judgments about the value and susceptibility of the receptor as illustrated by the table below. Susceptibility is defined as the ability of the landscape receptor to accommodate the proposed development, or, in the case of visual receptors, the occupation or activity of the people experiencing the view and the extent to which their attention is focussed on the view. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted. Note that a greater weight is intentionally attributed to the susceptibility of the visual receptor than to value in recognition that relatively few views are specifically recognised through designation or cultural reference.

Table 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 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

2.3 Magnitude

2.3.1 Scale of effect is the 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. The table below illustrates how this judgement is considered as a two-step process.

Table 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

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

2.4 Significance of Effects

- 2.4.1 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 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.

Table 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

- 2.4.2 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. Whether an effect is beneficial, neutral or adverse is identified based on professional judgement.

2.5 Cumulative Assessment

- 2.5.1 Cumulative assessment relates to the assessment of the effects of more than one development. Given the small scale of the proposed development and its location within an existing industrial area it is not considered that there would be any cumulative effects greater than negligible and therefore cumulative effects are not considered further.

2.6 Residential Amenity

- 2.6.1 As set out within LI Technical Guidance Note 02//19 'Residential Visual Amenity Assessment (RVAA)':

"Changes in views and visual amenity are considered in the planning process. In respect of private views and visual amenity, it is widely known that, no one has 'a right to a view.' ...

It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before."

- 2.6.2 This report does not include an assessment of residential visual amenity as it is judged that the proposed development would not give rise to effects meeting the threshold described above.
- 2.6.3 It should be noted that the threshold of harm required for the assessment of RVAA in relation to individually affected properties is a different matter to the assessment of visual effects on groups of receptors that include residential areas which may have views of the proposed development. Residential areas which do not meet the threshold for RVAA, but have potential views of the proposed development, are therefore still included as part of the overall assessment.

2.7 Distances

- 2.7.1 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.

2.8 Visual Aids

- 2.8.1 Annotated photographs of the existing views (Type 1) showing the proposed development have been prepared in accordance with Landscape Institute Technical Note 06/19 Visual representation of development. It was considered that block model photomontages would provide sufficient information to understand the scale and massing of the proposed scheme given the extent of the proposed earthworks and building heights. The methodology of production for the visualisations is described in Appendix 2.

3 PLANNING POLICY

3.1 Statutory and planning context

- 3.1.1 A summary of relevant local and national landscape and visual policy and guidance, as well as planning policy and guidance used in the LVA is provided **Table 5**.

Table 5: Legislation and guidance relevant to LVA

Document	Summary
Legislation	
European Landscape Convention	<i>'Landscape – an area perceived by people whose character is the result of the action and interaction of natural and/or human factors.'</i>
Development Plan Policy (incl. Future Wales 2040 and the Neath Port Talbot Local Development Plan 2011-2026)	
Planning Policy Wales (PPW), Edition 12, February 2024	Section 3: Strategic and Spatial Choices states: <i>"Good design can help to ensure high environmental quality. Landscape and green infrastructure considerations are an integral part of the design process. Integrating green infrastructure is not limited to focusing on landscape and ecology, rather, consideration should be given to all features of the natural environment and how these function together to contribute toward the quality of places. This embraces the principles of 'ecosystems services' and sustainable</i>

	<i>management of natural resources where multiple benefits solution become an integral part of good design. In a similar manner, addressing environmental risks can make a positive contribution to environmental protection and improvement, addressing land contamination, instability and flood risk and providing for biodiversity, climate protection, improved air quality, soundscape and water resources benefits.” (Page 27, para. 3.8).</i> <i>“Site and context analysis¹⁰ should be used to determine the appropriateness of a development proposal in responding to its surroundings. This process will ensure that a development is well integrated into the fabric of the existing built environment. The analysis process will highlight constraints and opportunities presented by existing settlement structure and uses, landscape, biodiversity, water environment, movement, infrastructure, materials and resources, soundscape and built form which will need to be considered when formulating proposals.” (Page 28, para. 3.14).</i> Section 6: Distinctive and Natural Places states: When discussing the landscape of Wales, Section 6 states: <i>“All the landscapes of Wales are valued for their intrinsic contribution to a sense of place, and local authorities should protect and enhance their special characteristics, whilst paying due regard to the social, economic, environmental and cultural benefits they provide, and to their role in creating valued places.” (Page 139, para 6.3.3)</i> With regards to Landscape Information, Section 6 states: <i>“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 natural resources in an area. LANDMAP describes and evaluates the physical, ecological, visual, cultural and historic aspects of the landscapes of Wales, and provides the basis of a consistent, quality assured national approach to landscape assessment.” (Page 143, para. 6.3.19).</i> <i>“Permanent removal of trees, woodland and hedgerows will only be permitted where it would achieve significant and clearly defined public benefits. Where individual or groups of trees and hedgerows are removed as part of a proposed scheme, planning authorities must first follow the step-wise approach as set out in paragraph 6.4.15. Where loss is unavoidable developers will be required to provide compensatory planting (which is proportionate to the proposed loss as identified through an assessment of green infrastructure value including biodiversity, landscape value and carbon capture).” (Page 159, Para 6.4.42)</i>
Material Considerations (incl. PPW or Technical Advice Notes (TANs))	
TAN 12, Design, March 2016	TANs provide detailed planning advice and local planning authorities take them into account when they are preparing development plans. Within the Character section of TAN 12 it identifies ‘Design Solutions’ which states: <i>“Landscape design – the way in which the land will be treated (other than buildings) for the purpose of enhancing or protecting amenities of the site and the area in which it is situated.”</i>
Site & Context Analysis Guide: Capturing the value of the Site, March 2016	In the ‘Outline of the document’ section, it states: <i>“The objectives of good design, as set out in national planning policy, should feed into an integrated analysis and design process that includes pre-application meetings with the planning authority and consultation with the Design Commission for Wales at appropriate stages.”</i>

4 BASELINE

4.1 Introduction

- 4.1.1 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 for ease of reference.
- 4.1.2 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).

Zone of Theoretical Visibility

- 4.1.3 A Zone of Theoretical Visibility (ZTV) study was generated based on the proposed design. This is shown on Figure 2 which indicates areas of potential visibility. The analysis was carried out using a topographic model and including buildings and woodland (with heights of 7.5 m for buildings and 15 m for woodland) as visual barriers in order to provide a more realistic indication of potential visibility.
- 4.1.4 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.
- 4.1.5 The ZTV for the Proposed Development shows that the main area of visibility extends is to the east as topography rises, albeit this is limited to approximately circa 3 km of the Site.
- 4.1.6 Existing built form and to a degree vegetation cover in the study area has a substantial effect on visibility and site work indicated that screening has not been fully reflected by the modelling and that visibility is likely to be slightly less than indicated by the ZTV study.
- 4.1.7 Effects on landscape or visual receptors outside the areas of visibility shown on the ZTV study would be negligible and are not considered in detail.

4.2 Landscape and seascape character

- 4.2.1 The following guidance documents provide advice relevant to this assessment:

National Landscape Character Areas and Marine Character Areas

- 4.2.2 The NRW National Landscape Character Areas (NLCA) define a broad landscape scale throughout Wales and are derived from LANDMAP. The Site is located in NLCA38: Swansea Bay and approximately 1.5 km from the south-western boundary of NLCA37: South Wales Valleys.

- 4.2.3 NRW also defines broad National Marine Character Areas (NMCA). The Site is adjacent to NMCA26: Swansea Bay and Porthcawl.
- 4.2.4 Paragraphs 5.13-5.15 of GLVIA3 indicate that landscape character studies at the national or regional level are best used to “*set the scene*” and understand the landscape context. It indicates that Local Authority Assessments provide more detail and that these should be used to form the basis of the assessment of effects on landscape character – with (appropriately justified) adaptation, refinement and interpretation where required. Effects on the landscapes and seascapes of the NLCAs and NMCAs are therefore not considered further.

Local Landscape Character Areas and Seascape Character Areas

- 4.2.5 The Neath and Port Talbot Landscape Assessment (NPTLA) (December 2004), undertaken by White Consultants, provides a framework for landscape planning by providing “*a clear understanding of the landscape resources which contribute to the economic and environmental qualities of the borough*”. The neighbouring Bridgend County Borough Landscape Character Assessment (BCBLCA) (July 2013) prepared by Land Use Consultants also falls within the 3 km study area. The local landscape character assessments within the study area and are illustrated on Figure 5.
- 4.2.6 Each of the local landscape documents are based on the LANDMAP process and provide an appropriate level of detail to form a starting point for further assessment, albeit they will require updating in accordance with latest LANDMAP data.
- 4.2.7 The Site is located in character area; LCA 50: Port Talbot Docks and Margam Works, which comprises of large-scale heavy industry.
- 4.2.8 In addition to this LCA, the following character areas defined by the NPTLA are within the study area and ZTV:
- LCA 1 – Margam Marsh
 - LCA 3 – Margam Country Park
 - LCA 6 – Mynydd Bromil, Mynydd Emroch & Mynydd Dinas
- 4.2.9 The ZTV for LCA 6 – Mynydd Bromil, Mynydd Emroch & Mynydd Dinas demonstrates potential visibility of the Proposed Development at distances over 1.5 km from the Site to the western flank of Mynydd Brombil and this receptor has therefore been considered further in section 5.7 below. LCA 1 and LCA 3 are potentially visible at distances over 2.5 km from an extremely small part of the LCA as demonstrated by the ZTV. Field study has shown that these views would be further screened by intervening vegetation and these two LCA are therefore not considered further within this LVA.
- 4.2.10 The ZTV indicates there would be no visibility of the Proposed Development within the Bridgend administrative boundary and it is therefore not considered further within this LVA.
- 4.2.11 The Carmarthen Bay, Gower and Swansea Bay Local Seascape Character Assessment (November 2017), prepared by White Consultants, provides an appropriate level of detail for

the assessment of the seascape effects. However, as the ZTV indicates no visibility of the Proposed Development it is not considered further within this LVA.

4.3 Visual Receptors

- 4.3.1 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.
- 4.3.2 The different types of groups assessed within this report encompass local residents; 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.
- 4.3.3 Representative viewpoints have been selected to aid the assessment of effects on visual receptors.

Baseline Visual Environment

- 4.3.4 The Site forms part of an operational steelworks which is a long-established industrial landmark in Port Talbot and Swansea Bay. It is bounded by the existing and operational industrial development of the steelworks. Major structures include the Continuous Annealing Process Line (CAPL) building, to the north, the permanent gasholder and Morfa Coke Ovens, and the blast furnaces. A large lagoon reservoir is also located to the west of the Site.
- 4.3.5 The wider surrounding area is comprised of a wide variety of different uses and character areas, including:
- West – Morfa Beach and coastline
 - East – Energy and industrial plants, M4 motorway, mainline railway line and Eglwys Nunydd Reservoir beyond
 - South – the Margam Sands and Kenfig Pool and Dunes, greenfield land and Kenfig Industrial Estate
 - North – the steelworks operated by the applicant, harbour and docklands operated by Associated British Ports.
- 4.3.6 The Site forms part of a long-since established and operational steelworks. It is an existing destination and major industrial landmark in Port Talbot and Swansea Bay. Major industrial buildings of significant scale and mass are common in this location of Port Talbot, including large emissions stacks and the two blast furnaces. The buildings and heavy industrial nature of the area within which they operate are integral elements of the character and appearance, and skyline of Port Talbot. It is also noted that large expanses of hardstanding essential to the successful operation of the industrial use are an established feature of the steelworks site in the locality.’

Recreational Routes

- 4.3.7 The Wales Coast Path runs inland along the Braided Route on the high ground to the east of the Site. This route is representative of the CROW accessible land and other PRoW in its vicinity.
- 4.3.8 The Ogwr Ridgeway/St Illtyd's Walk lie just outside the study area and ZTV but have been included as a somewhat distant receptor with potential views of the Site.

Specific viewpoints

- 4.3.9 There are no specific viewpoints within the study area.

Visitor Attractions

- 4.4 Margam Country Park is a Registered Park and Garden that is open to the public. RPGs are heritage rather landscape designations but are included as indicators of heritage value in the landscape as described in Appendix 3. Landscape Designations. As illustrated by Figure 2, the level of potential visibility of the Proposed Development is very low and at distances over 2.5 km. Field survey work, in conjunction with the viewpoints presented in Appendix 5 and preliminary viewpoint analysis in Appendix 4 and summarized in Table 6 below, demonstrates that the Proposed Development would be imperceptible from Margam Country Park; it is therefore not considered further in this LVA other than in the viewpoint analysis summarized in Table 6 below.

Designated areas

- 4.4.1 There are no specific designated landscapes within the study area that correspond with the ZTV.

5 THE PROPOSED DEVELOPMENT

5.1 The Proposal

- 5.1.1 The Proposed Development is for Tata Steel to build a new compound which would consist of a new concrete hardstanding measuring 195 m by 140 m and totalling approximately 2.7 ha as illustrated on Figure 1. The proposals place the Proposed Development within its local context within the established industrialised part of the Port Talbot works. The proposals would involve levelling earthworks to enable the creation of the concrete platform which would require the relocation of approximately 0.4 ha of open mosaic habitat that has developed on a spoil mound within the Site.

5.2 Design Approach and Mitigation

- 5.2.1 This section of the appraisal considers the fit with guidance provided in respect of visual impact and landscape character. Design policy and guidance notes the importance of respecting character.

- 5.2.2 The Proposed Development would introduce a new element into the Site that is entirely in keeping with the existing LCA 50: Port Talbot Docks and Margam Works landscape.
- 5.2.3 The construction of the project would take place over a short time period and would involve the use of plant and machinery that are already commonplace within the Site. As part of the ground preparation works, an area of vegetated spoil, with an open mosaic habitat, would require relocating as part of the site levelling work. The spoil would be set aside at the time of construction and made available for use as part of the wider development of the electric arc furnace green infrastructure works. The replaced mounds would be allowed to naturally re-colonise with the seed bed already in-situ within the spoil, hence maintaining the open mosaic habitat.

6 LANDSCAPE AND VISUAL EFFECTS

6.1 Introduction

- 6.1.1 This section sets out the effects that the proposed development would have on landscape and visual receptors.
- 6.1.2 Effects during construction and for the completed development are considered for each landscape and visual receptor.

6.2 Effects on Site Fabric

- 6.2.1 The Site currently consists of predominantly hardstanding, but with an area of open mosaic habitat that has developed on an area of spoil. The works will effectively require the spoil mound to be moved as part of the levelling works before the pouring of the concrete platform. The loss of habitat would be a temporary effect until it has been re-established in its new location and the changes would not be incongruous within the context of the Site.

6.3 Viewpoint Analysis

- 6.3.1 Viewpoint analysis has been undertaken from a total of 7 viewpoints. The viewpoint locations are illustrated on Figure 2. The visualisations (comprising photographs of the existing view, wireframes and photomontages) are illustrated with reference to Viewpoints 1 to 7.
- 6.3.2 The full viewpoint analysis is contained within Appendix 4: Viewpoint Analysis. The findings are summarised below in Table 6: Viewpoint Analysis Summary. In each case, distances are listed in relation to the nearest boundary.
- 6.3.3 Please note that Appendix 4: Viewpoint Analysis considers the nature of changes to character and views at each viewpoint location only. The scale and 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 1: Viewpoint Analysis Summary

Viewpoint No.	Viewpoint	Distance / direction	Scale of Landscape Effect	Scale of Visual Effect
1	Longlands Lane/PRoW 5/92.PT/3. LCA 1: Margam Marsh	1.2 km N	Negligible	Negligible
2	Tata Steel Recreation Ground/Abbotts Cl. LCA 49: Port Talbot, Sandfields, Baglan and Margam	1.3 km E	Negligible	Negligible
3	Morfa Avenue, Margam/ Wales Coast Path. LCA 49: Port Talbot, Sandfields, Baglan and Margam	1.6 km NE	Negligible	Negligible
4	Wales Coast Path. LCA 6: Mynydd Bromil, Mynydd Emroch & Mynydd Dinas	2 km W	Negligible	Small/ Negligible
5	Margam Country Park LCA 3: Margam Country Park	2 km E	Negligible	Negligible
6	Ogwr Ridgeway Walk/ Glamorgan Ridgeway Walk LCA3: Margam Country Park	3.4 km E	Negligible	Negligible
7	Wales Coast Path near Mynydd Brombil LCA 6: Mynydd Bromil, Mynydd Emroch & Mynydd Dinas	2.5 km N	Negligible	Negligible

6.3.4 From these viewpoints it can be seen that the distribution of effects would be as follows:

6.3.5 Effects on character type:

- Effects within the Site itself are judged to be small, as the removal of an existing vegetated mound is a relatively minor and commonplace feature in the Site
- Effects on landscape character are judged to be negligible within the wider study area and beyond as any changes to within the Site would be of such a small scale that they would be barely if at all perceptible.

6.3.6 Effects on landscape character outside of the Site, including LCA 6, are therefore considered negligible and are not considered further in this LVA.

6.3.7 Effects on views:

- The extent of visual effects is extremely limited and would be at most small/negligible, where the proposed development would be in direct views at approximately 2 km distance from the Site. Beyond these areas the proposed development is increasingly screened by intervening landform and vegetation or viewed at distances of greater than 3 km and visual effects reduce to Negligible.

6.4 Landscape Effects

- 6.4.1 Based on the assessments of the scale of effects as set out at 6.3.5 above, there would be at most a small scale change at the level of the site experienced to a limited extent within the wider host LCA 50 Port Talbot Docks and Margam Works landscape.
- 6.4.2 Short-term effects from the construction stage development would be of negligible magnitude, and negligible significance. Permanent effects would be of slight to negligible magnitude and minor/negligible significance.
- 6.4.3 The nature of effect is considered to be adverse in the short to medium term, as there would be a small perceived loss of the open habitat within the Site. In the medium to long term, the nature of effect is considered neutral, as the open mosaic habitat would be re-established within the wider steel works thus replacing that lost at the outset of the scheme.

6.5 Visual Effects

- 6.5.1 Based on the assessments of the scale of effects at viewpoints as set out at 6.3.7 above, almost all visual receptors would experience negligible effects and do not require detailed assessment.

Recreational routes

- 6.5.2 The Wales Coast Path, Braided Route lies to the east of the Site on the elevated ridge above the scarp slope.
- 6.5.3 ZTV mapping (see Figure 2) indicates more open visibility than is actually experienced due to localised screening by vegetation. Visibility of the proposed development would be experienced for a localised extent of the route from within open countryside, however, there is a constant appreciation of the presence of the existing steel works.
- 6.5.4 Overall, the scale of visual change for the section of the PRow with predicted visibility is considered to be small/negligible. Short-term effects from the construction stage development would be of negligible magnitude, and minor/negligible to negligible significance. Permanent effects would be of slight to negligible magnitude and minor to minor/negligible significance. The nature of effect is considered to be adverse in the short to medium term, as there would be a small perceived loss of the open habitat within the Site. In the long term, the nature of effect is considered neutral, as the open mosaic habitat would be re-established within the wider steel works thus replacing that lost at the outset of the scheme.

6.6 Summary of Landscape and Visual Effects

- 6.6.1 The development Site is located within the established industrialised part of the Port Talbot works. The proposals would involve levelling earthworks and the commensurate relocation of an area of open mosaic habitat to enable the creation of a circa. 2.7 ha concrete hardstanding area. The proposed development would result in a very small perceived increase in industrial development but would not be viewed as an incongruous new feature within the landscape.

- 6.6.2 There would be no effects greater than minor/negligible for landscape and visual receptors with the exception of walkers on the inland section of the Wales Coast Path, Braided Route, and other nearby associated PRow, who would experience effects ranging from minor to minor/negligible significance. Any such effects would initially be adverse in nature in the short to medium term, but becoming neutral in nature as the open mosaic habitat becomes re-established as part of wider green infrastructure improvements.
- 6.6.3 There would therefore be no long term adverse landscape or visual effects as a result of the proposed Development.

APPENDIX 1:

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.

Direct and Indirect Effects

8. 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

9. 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.
10. 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.
11. 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.
12. 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

13. It should be noted, as stated in GLVIA3, “*LVA 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).
14. 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**.

15. The criteria and the detailed judgements regarding susceptibility and value of landscape receptors are identified within the sensitivity tables included within Appendix 3 to this appraisal.
16. 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

17. 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).
18. 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.

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

19. 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.
20. 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.
21. In this appraisal, the scale of landscape change is described as: **Large, Medium, Small or Negligible**.
22. 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**.
23. **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.
24. Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams in Plate 1 below.

Visual Effects

25. 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

26. 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.

27. 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	National	High	High/Medium	Medium
	Regional	High/Medium	High/Medium	Medium/Low
	Community	High/Medium	Medium	Low

Magnitude of Visual Change

28. 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.
29. 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.
30. 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.

31. 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.
32. In this appraisal, the scale of change in view is described as: **Large, Medium, Small or Negligible**.
33. 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 there are operational (and consented) developments considered as part of the baseline, the visual effects consider the effects of adding the proposed development to that baseline. Where appropriate, comment may be made on lighting and weather conditions.
34. 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**.
35. **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.
36. Magnitude is considered taking into account the three contributory factors as illustrated by the diagrams in Plate 1 below.

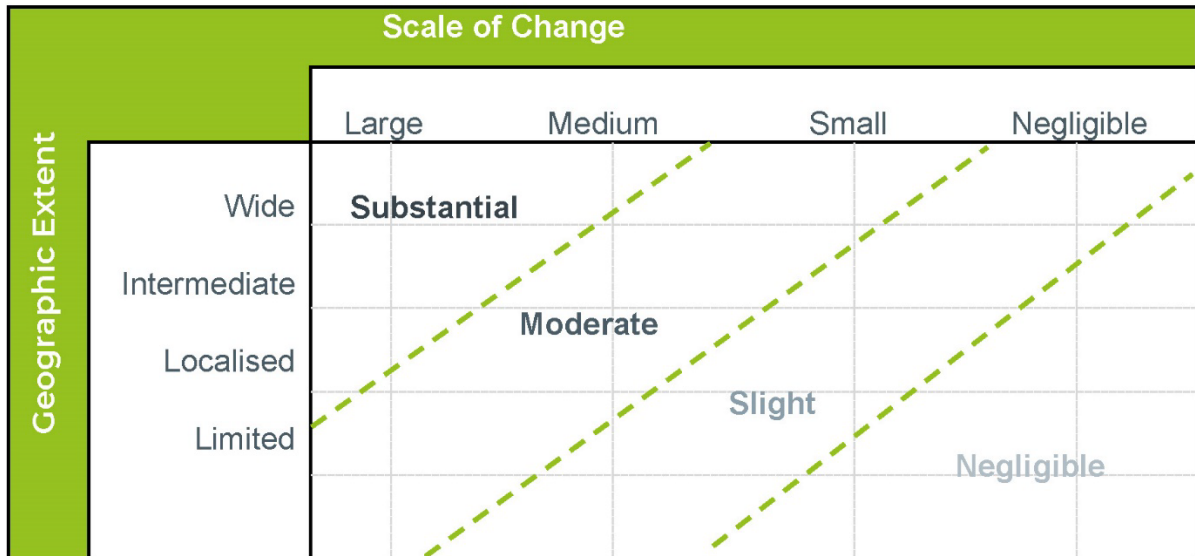
Combining Scale of Change, Extent and Duration to Determine Magnitude of Landscape and Visual Effects

37. 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.

38. 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.
39. 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



Stage 2 - Modifying Influence of Duration on Magnitude of Effect



Level of Landscape and Visual Effects

40. 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.

		Magnitude of Effect			
		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

41. 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.
42. However, for the avoidance of doubt, in this appraisal it has been assumed that where new infrastructure is introduced into the landscape or views, this will generally constitute an adverse effect. Any variation from this stance will be clearly justified.

ANNEX 1: GLOSSARY OF TERMS

Term	Definition
CLVIA	Cumulative Landscape and Visual Impact Assessment.
Cumulative Effects	Cumulative effects are the additional effects arising from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
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
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.

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

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

Term	Definition
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.
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.

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

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

Term	Definition
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

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 2: 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.

Visibility Maps: Zone of Theoretical Visibility

2. Zone of Theoretical Visibility (ZTV) maps have been generated using 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.
3. Unless expressly stated, the visibility maps present the extent of potential visibility on the basis of a 'bare ground' scenario: They do not account for the effects of screening and filtering of views as a result of intervening features (e.g. buildings, trees, hedgerows, etc) and so tend to over-estimate visibility, both in terms of the area from which the project can potentially be seen and potentially in terms of the extent of the development visible from a particular viewpoint.
4. ZTVs which include vegetation and buildings may use real height information derived from standard DSM products such as LiDAR – this approach is typically used for smaller study areas and urban areas. For larger study areas assumed heights are used which are stated on the ZTV figure. The location and extent of woodland and buildings is derived from OS Open data and assumed heights for these are added to the bare ground model. As a result, the ZTV study does not take account of all above ground features – only those included as woodland and buildings in the OS mapping at the time the ZTV was prepared. These ZTV studies present a more realistic visibility pattern than bare ground studies, but do not take detailed account of felling cycles, tree growth, demolition or construction.

Visualisations: Annotated Photos (Type 1)

5. Baseline photography has been undertaken at each 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.

Data Accuracy

6. The Ordnance Survey (OS) provides accuracy figures for the following terrain data products expressed statistically as root-mean-square error (RMSE) in metres:
 - OS Terrain@50 (50m resolution): 4m RMSE.
 - OS Terrain@5 (5m resolution): Urban and major communication routes 1.5m RMSE; Rural 2.5m RMSE; Mountain and moorland 2.5m RMSE.

APPENDIX 3: LANDSCAPE SENSITIVITY ASSESSMENT

The sensitivity of the landscape character 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 the LANDMAP guidance and Neath and Port Talbot Landscape Assessment (NPTLA) (December 2004) (quotes shown in italics) 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: LCA 50 - Port Talbot Docks and Margam Works

Factors affecting sensitivity	Lower Sensitivity to proposed development	Higher Sensitivity to proposed development	Explanation	Judgement
Value attached to Landscapes				
Designated scenic quality	No specific designation	National or regional designation	No national or local landscape designations	Community
Natural Heritage	Low presence of ecological or geological / geomorphological interest.	High presence of ecological or geological / geomorphological interest.	LANDMAP Landscape Habitats datasets are described as: - NPTLH063 (coincident with the LCA and the entire site area) has an overall evaluation of moderate, due to '<i>generally degraded industrial habitats, but with persistent habitats and species of interest</i>'. - NPTLH073 (to the south) has an overall evaluation of high, due to '<i>area of Priority Habitats, much of it SSSI quality, supporting numerous rare, scarce and Priority Species</i>'. It is noted that none of LCA50 lies within the area of SSSI designation. LANDMAP Geological Landscape datasets are described as: - NPTGL032– Margam (eastern half of LCA 50 and the entire site) has an overall evaluation of low.	Community

Factors affecting sensitivity	Lower Sensitivity to proposed development	Higher Sensitivity to proposed development	Explanation	Judgement
Cultural Heritage	Low presence of archaeology or historical interests	High presence of archaeology or historical interests	The first steel works was constructed in 1907 and continues to be a dominant presence and the Tata Steelworks remains a dominant feature of Port Talbot society and economy. LANDMAP Historic Landscape data sets are described as: - NPTHL006 – Port Talbot Industrial overall evaluation of high, to ‘<i>reflect the significance of the late 19th-20th century industrialisation ...genuinely rare survivors of the heavy industries which once dominated Wales.</i>’ LANDMAP Cultural Landscape data sets are described as: - NPTCLS091 – Margam Works historic elements predominantly evaluated as moderate.	Regional
Landscape condition / quality	Landscape in a poor state of repair with incongruous elements	Landscape fully intact in good condition with limited incongruous elements	The landscape consists predominantly of brown field land within the existing industrialised areas of the works. The LANDMAP condition and trend data sets reported are predominantly fair and constant.	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.	No associations with notable people, events and the arts described in published landscape character or LANDMAP studies.	Community
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 with a distinctive and clearly expressed character and/or with an important relationship to a settlement.	The LCA is wholly coincident with LANDMAP Visual and Sensory dataset NPTVS837 – Margam Works, which states that there is a strong sense of place/local distinctiveness created by the ‘ <i>dominant heavy industry which is overpowering and noisy.</i> ’	Regional
Amenity and recreation	Limited amenity/recreational function where experience	Well used for recreation where experience of the landscape is important; or forms part of a view that is important to a recreational	The area is generally inaccessible to the public, albeit the PRow and WCP to Longlands Lane are partially within the LCA for a very short section.	Community

Factors affecting sensitivity	Lower Sensitivity to proposed development	Higher Sensitivity to proposed development	Explanation	Judgement
	of the landscape is important	experience. May contain National Trails or other long distance routes.		
Perceptual (Scenic)	Landscape with no particular scenic / visual appeal.	Landscape with strong appeal to the senses, particular visual.	LANDMAP Visual and Sensory dataset (NPTVS837 – Margam Works) states that scenic quality is low, with the industrial works being a major detractor and there are no attractive views in or out of the aspect area.	Community
Perceptual (Wildness and Tranquility)	Busy with evidence of human activity, well-lit.	Remote, peaceful or with a sense of wildness. Dark skies.	The landscape is dominated by the industrial activity, noise and light associated with steel works. LANDMAP datasets are described as: - Visual and Sensory (NPTVS837 – Margam Works) describes the area is <i>'noisy'</i> and <i>'threatening'</i> with <i>'slight'</i> nighttime light pollution. - Cultural Landscape Services (NPTCLS091 – Margam Works) describes tranquillity as <i>'Zone B, significant disturbance'</i>	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.	There is limited blue/green infrastructure function due to the industrial nature of the site and the existing ditch system being overgrown with rank vegetation.	Community
Overall Judgement of Value				Community
Susceptibility				
Scale	Large scale landscapes where the development may be in proportion with the landscape are generally less sensitive.	Small scale intimate landscapes are generally more sensitive to large scale structures.	Large scale industrial landscape - <i>'Margam Works comprise of large-scale heavy industry'</i> .	Low

Factors affecting sensitivity	Lower Sensitivity to proposed development	Higher Sensitivity to proposed development	Explanation	Judgement
Landform	Smooth regular flowing, flat or uniform landscapes	Dramatic, rugged and complex landscapes	Although not immediately apparent due to the varying height of the industrial infrastructure, this is a flat, low-lying landscape.	Low
Openness/enclosure	Open and exposed landscapes	Enclosed and sheltered landscapes	The large scale industrial built form provides a degree of enclosure within the site, however its topographically flat location makes it open externally.	Medium
Land cover	Extensive areas of simple or regular landcover (including intensive farming and forestry)	Complex, intimate or mosaic cover	Mosaic landscape of brownfield land and remaining steelworks and associated infrastructure.	Low
Complexity and patterns	Simple and sweeping lines, linear feature and patterns	Complex or irregular patterns	Buildings and structures associated with the steelworks are consistent in their industrial pattern.	Low
Built Environment	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements	Established, traditional or historic built character	An existing industrial area.	Low
Views intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	The site lies on the flat coastal plain and has substantial visibility in and out, albeit the existing industry reduces the extent of views considerably.	Medium
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes without distinctive landform or horizon	Areas with strong features, focal points that define the setting or skyline	The site is part of a wider industrial landscape that is a strong local feature and creates a characteristic skyline, albeit the proposed development is at ground level only.	Low
Overall Judgement of Susceptibility				Low
Overall Judgement of Sensitivity				Low

APPENDIX 4: 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. Consultation was undertaken with Neath and Port Talbot County Borough Council (NPTCBC) and Natural Resources Wales (NRW) between January and April 2022 regarding the now superseded Cronus scheme and again with the Council with regard to the proposed Electric Arc Furnace in March 2024.
3. A site visit was undertaken in March 2024 by Stephenson Halliday to check whether the existing photography could be made use of. Following the site visit it was concluded that the seven of previous viewpoints remained relevant for the Proposed Development.

Views:

Viewpoint Description	Notes	Visibility
Vp 1 Public footpath close to Margam Sands	1.2 km north	ZTV indicated no potential visibility, field work confirmed views are unavailable
Vp 2 Tata Steel Recreation Ground/Abbotts Close	1.3 km east	ZTV indicated no potential visibility, field work confirmed views are unavailable
Vp 3 Morfa Avenue, Margam	1.6 km northeast	ZTV indicated no potential visibility, field work confirmed views are unavailable
Vp 4 Wales Coast Path Braided Route	2 km west	ZTV indicated limited potential visibility, field work confirmed views are available
Vp 5 Margam Country Park	2 km east	ZTV indicated limited potential visibility, field work confirmed views are unavailable
Vp 6 Ogwr Ridgeway Walk	3.4 km east	ZTV indicated limited potential visibility, field work confirmed views are available
Vp 7 Wales Coast Path near Mynydd Brombil	2.5 km east	ZTV indicated limited potential visibility, field work confirmed views are unavailable

4. The locations of the seven viewpoints are shown on Figures 1 to 5. Annotated photographs are provided to illustrate the existing view at each viewpoint location and the likely extent of the proposed development within the view. As illustrated by the annotated photographs, and described in Table 1 above, only viewpoints 4 and 6 would have any views of the Proposed Development. The remaining viewpoints are therefore not considered further within this LVA. A summary of the viewpoint analysis is provided in the LVA report, Section 6.3 and Table 6.
5. This viewpoint analysis describes the baseline view at the viewpoint and considers the nature of the predicted change in the view. The scale of the change as described in this analysis is then reported in LVA report, Section 6.3 and Table 6. 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). The scale,

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 provided in the LVA Section 6.4.

6. The visual assessment takes into account the screening effect of intervening landform, vegetation and built form and the potential for changes to those abseilone features. It assumes 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/Seascape Character
4	Wales Coastal Path, Braided Route LCA6: Mynydd Bromil, Mynydd Emroch & Mynydd Dinas	Wide panoramic views towards the site from the scarp slope across the flat coastal plain of Margam Marshes and out to the wide expanse of Swansea Bay and the Mumbles. The area of existing industrial development defines the coast at this location.	Construction: Views would be available for the whole site throughout the construction and decommissioning phases which would require the removal of the vegetated spoil mound and overall site levelling. Operation: There would be views of the proposed development set within the extents of existing industry on the coastal plain. The development would remain below the horizon.	Construction: There would be an increase in activity and built form throughout the construction and decommissioning period, albeit in the context of an existing working industrial landscape. Operation: The proposed development would be perceived as part of the existing industrial complex within a different landscape character type. The increased quantum of development would not result in an increased perception of industry within the landscape, albeit there would be a very small perceived loss of vegetation within the Site, and there would be no change in the Mynydd Bromil, Mynydd Emroch & Mynydd Dinas LCA 6.
6	Ogwr Ridgeway Walk LCA3: Margam Country Park	Wide panoramic views towards the site from the upper deer park above the scarp slope across the flat coastal plain and out to the wide expanse of Swansea Bay and the Mumbles.	Construction: Views of the site would be available throughout the construction and decommissioning phases, albeit existing built form may partially screen some views of the removal of the vegetated spoil mound and overall site levelling. Operation: Views would be available of the proposed development from the upper deer park, viewed within the extents of existing industry within the coastal plain.	Construction: There would be an increase in activity and built form throughout the construction and decommissioning period, albeit in the context of an existing working industrial landscape. Operation: The proposed development would be perceived as part of the existing industrial complex within a different landscape character type. The increased quantum of development would not result in an increased perception of industry within the landscape and there would be no change in character within the LCA3.



Approximate extents of hardstanding area screened from view

VIEW FLAT AT A COMFORTABLE ARM'S LENGTH
IF VIEWING THIS IMAGE ON A SCREEN, ENLARGE TO FULL SCREEN HEIGHT



VIEW FLAT AT A COMFORTABLE ARM'S LENGTH
IF VIEWING THIS IMAGE ON A SCREEN, ENLARGE TO FULL SCREEN HEIGHT



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VIEW FLAT AT A COMFORTABLE ARM'S LENGTH
IF VIEWING THIS IMAGE ON A SCREEN, ENLARGE TO FULL SCREEN HEIGHT



Approximate
location of
hardstanding
area

VIEW FLAT AT A COMFORTABLE ARM'S LENGTH
IF VIEWING THIS IMAGE ON A SCREEN, ENLARGE TO FULL SCREEN HEIGHT



Approximate location of
hardstanding area screened
from view

VIEW FLAT AT A COMFORTABLE ARM'S LENGTH
IF VIEWING THIS IMAGE ON A SCREEN, ENLARGE TO FULL SCREEN HEIGHT