

Visual Impact Assessment

Greenbushes Lithium Mine: Additional Waste Rock Landforms and Salt Water Gully Dam



Prepared for Talison Lithium Australia Pty Ltd

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Executive Summary

Talison Lithium Australia Pty Ltd (Talison), operate the Greenbushes Lithium Operations, located in the Shire of Bridgetown-Greenbushes, immediately adjacent to the town of Greenbushes, approximately 240 km south of Perth in Western Australia. The operations comprise a mine, various mineral processing facilities and supporting infrastructure.

Talison is proposing to expand the Mine Development Envelope associated with the current Ministerial Statement (M1111), to include expansion for additional Waste Rock Landforms and a water storage dam. This expansion (the Proposal) will be referred to the WA Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection and Biodiversity Conservation Act 1986*. As part of this referral the social surroundings of the Proposal are likely to be a key Environmental Factor assessed, which includes an analysis of the potential impacts to the visual amenity of the area resulting from Proposal implementation.

This Visual Impact Assessment (VIA) has been undertaken to identify and describe the likely impacts of the Proposal to the visual amenity of the area surrounding the Proposal, and the impact on affected stakeholders. The report identifies the existing landscape characteristics, and provides assessment as to the significance of the likely change in appearance of the landscape resulting from the Proposal.

A number of key viewpoints were selected for assessment, based on the likely receptors and land accessibility. The VIA indicates that the Proposal will increase the proportion of land allocated to mining within the Greenbushes area and will increase the visibility of the mining operations to local residents, workers, tourists and Traditional Owners.

The Project scale is large, however there are no specific sensitive views or landscapes that require specific protection, and the existing visual landscape is generally representative of the wider regional area. Mitigation strategies have been proposed to minimise the impact on local visual amenity resulting from Proposal implementation.





Table of Contents

1	Intro	ntroduction1			
	1.1	Background1			
	1.2	Propos	ed Development		
	1.3	Scope	and Purpose1		
2	Appr	oach an	d Methodology4		
	2.1	Princip	les of Visual Assessment 4		
	2.2	Visibili	4		
	2.3	Viewpo	pint Assessment		
3	Existi	Existing Visual Landscape and Environment6			
	3.1	Site Overview			
	3.2	Landscape Character Types			
	3.3	Landscape Character Units			
		3.3.1	Natural Landscape Character Unit7		
		3.3.2	Rural Landscape Character Unit7		
		3.3.3	Built Landscape Character Unit7		
	3.4	Landsc	Landscape Values		
		3.4.1	Stakeholders		
		3.4.2	Landscape Access and Experience		
		3.4.3	Policy and Framework9		
4	Asses	sessment of Visual Landscape Post-Development10			
	4.1	Viewsh	ed Analysis Mapping10		
	4.2	Receptor Impact Assessment13			
		4.2.1	Viewpoint 450/453		
		4.2.2	Viewpoint 203		
		4.2.3	Viewpoint 901/906		
		4.2.4	Viewpoint 433		
		4.2.5	Viewpoint 422/42814		
		4.2.6	Viewpoint 812/81714		
		4.2.7	Viewpoint 926		
		4.2.8	SWH Viewpoint 1411		
		4.2.9	SWH Viewpoint 2516		
	4.3	Impacts to Landscape Character17			
		4.3.1	Natural		
		4.3.2	Rural17		



4.3.3 Built 17

5	Visual Mitigation and Management Measures	18
6	Conclusion	19
7	References	20

Tables

Table 3-1: Predicted Stakeholder Impacts
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Figures

Figure 1-1: Proposal Location	2
Figure 1-2: Proposal Layout	
Figure 4-1: S2 WRL Visibility	
Figure 4-2: S8 WRL Visibility	
Figure 4-3: Viewpoint Locations	16

Appendices

APPENDIX A Proposal Photomontages



1 Introduction

1.1 Background

Talison Lithium Australia Pty Ltd (Talison), operate the Greenbushes Lithium Operations (Mine; Site; Operations), located in the Shire of Bridgetown-Greenbushes, immediately adjacent to the town of Greenbushes, approximately 240 km south of Perth in Western Australia (Figure 1-1). The operations comprise a mine, various mineral processing facilities and supporting infrastructure.

1.2 Proposed Development

Talison is proposing to expand the Mine Development Envelope (MDE) associated with the current Ministerial Statement (M1111), to include expansion for additional Waste Rock Landforms (WRLs) and a water storage dam (Figure 1-2). The works proposed (the Proposal) includes:

- Expansion of the existing Floyds Waste Rock Landform (Floyds WRL) through construction of the Floyds South (S2) Waste Rock Landform (S2 WRL) within the existing MDE;
- Construction and operation of the S8 Waste Rock Landform (S8 WRL) to the east of the existing MDE; and
- Expansion of existing agricultural dams to create a larger Water Dam (SWG Dam) located within Salt Water Gully (SWG) northeast of the existing MDE.

Additional supporting infrastructure will also be required for the Proposal, including a crossing over the South Western Highway, laydown and workshop areas, and rehabilitation material stockpiles.

This Proposal is being referred to the Environmental Protection Authority (EPA) as a significant amendment to a proposal under Section 38 of the *Environmental Protection Act 1986* (EP Act).

1.3 Scope and Purpose

The Environmental Factor of Social surroundings is expected to be a key factor for the Proposal, given the proximity to a number of residential landholders, the town of Greenbushes, and the major transport route of South Western Highway. This Visual Impact Assessment (VIA) has been prepared to determine the likely visual amenity impact of the Proposal on the surrounding landscape, with particular focus on nearby residential landholders, as well as the impact to users of the South Western Highway. The assessment also provides recommendations on design to allow management of the potential visual impact of the Proposal.

The outcomes from this VIA are intended to develop management measures, as far as reasonably practicable, in line with regional visual management objectives. This VIA, along with a suite of environmental impact studies will support the assessment of the Proposal (ERD) by the EPA. Steps undertaken during this VIA include:

- Describe and document the visual landscape character of the site and surrounding area;
- Assess the potential visual impact of the proposed development; and
- Discuss the consistency with the local landscape.

Given the progression of the design of the Proposal, the impact of the WRLs is the main component assessed. As the South Western Highway crossing and design is yet to be finalised, this has not been assessed in detail in this VIA. Outcomes of this VIA will be refined as the design is further developed.



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2 Approach and Methodology

The methodology of the approach has been developed based on the characteristics of the study area, land access and availability, and requirements for assessment of the Proposal under the EP Act. Relevant aspects for assessment include the aesthetic, cultural, economic and social surroundings of the people potentially impacted by the Proposal.

This VIA has been prepared with reference to the Visual Landscape Planning in Western Australia: A Manual for Evaluation Assessment, Siting and Design (WAPC, 2007) guideline, and comprises several key steps:

- Existing Visual Landscape and environment evaluation;
- Assessment of the visual landscape post development; and
- Provide assessment of opportunities to minimise the potential visual impact of the Proposal.

The methodology of this VIA involves identification of existing landscape characteristics, visibility analysis, and an assessment of the likely changes and impacts of the Proposal on the specific viewpoints as well as the broader landscape. The assessment also includes identification of groups of stakeholders that may be impacted by the development of the Proposal infrastructure.

2.1 **Principles of Visual Assessment**

General principles for visual amenity assessment have been developed in the Guidance Note for Landscape and Visual Assessment (AILA, 2018). Common principles that determine scenic preference and the importance of views include:

- Water and other natural elements are generally preferred over urban or developed scenes;
- Mountains and hills are preferred over flat land;
- Diversity is generally preferred over uniformity
- Consistence and balance are also preferred;
- Discordant elements which contrast markedly with their surroundings are often regarded as having a detrimental impact on amenity; and
- Views from public spaces are valued more than views only available from private residences.

These principles are used to assess the degree of impact to potentially affected stakeholders, in determining the reasonable expectations of affected persons.

2.2 Visibility

Visibility is a key aspect of assessment to enable a thorough understanding of the likely impacts on visual amenity from the Proposal. The visibility of the Proposal has been assessed through a visibility corridor approach, based on nearby residential premises and public locations. A Digital Terrain Model (DTM) was developed using contour data that encompassed the proposed development sites. This data was then analysed within a 3D visualisation and Geographic Information System (GIS) package. An aerial image was overlaid to give a more realistic impression of the actual landscape.

A Visibility Analysis was then carried out to determine if the selected receptors had visibility of the proposed new mine infrastructure. This was depicted by an indicative colour coded Visibility Corridor.



Final 3D Designs of the Mine Services Area, Tailings Storage Facility 4 (TSF4) and Floyds Waste Landform were then included to generate a 3D Overview of the entire site.

2.3 Viewpoint Assessment

A number of viewpoints were identified based on receptor locations, accessibility, and proximity to the Proposal. Viewing distance will result in variability of views, with the Proposal occupying a relatively smaller area of the landscape view with increasing viewer distance. The majority of viewpoints are located along public roads, within the vicinity of local residential properties. Following stakeholder engagement, additional viewpoints may be assessed where requested.

Geo-referenced photographs were taken at the selected locations, and the potential visibility and likely appearance of the Proposal was assessed through development of photomontages. Assessment of the likely significance of the impact was undertaken for each viewpoint.

The assessment undertaken also includes review of potential measures that can be undertaken to minimise the visual impact of the Proposal.



3 Existing Visual Landscape and Environment

This assessment begins by describing the existing environment within the Proposal area in terms of the existing landscape character and values. The landscape character is evaluated based on the local receptors and how the landscape may be experienced and valued by these receptors, involving assessment of both natural and modified landscapes within the Proposal vicinity.

3.1 Site Overview

The Proposal is located immediately adjacent to the existing Greenbushes lithium mine in the Shire of Bridgetown-Greenbushes in WA. It is located approximately 250 km south of Perth, and 80 km east of Bunbury. The town of Greenbushes is located immediately to the north of the existing Greenbushes lithium mine, with surrounding land uses being a mix of residential, agriculture and forestry industries, with parts of the Proposal area allocated as State Forest and crown land reserves. The south west is also a popular tourist destination, with the South Western Highway connecting Perth to the south western region.

The existing landscape of the Proposal area consists of undulating hills, with a mix of cleared land, native vegetation, and plantations. Changes to the landscape will include removal of vegetation and farmland, to be replaced with mining infrastructure including WRLs, a water dam, and other supporting elements such as roads, pipelines, laydown areas and rehabilitation material stockpiles.

3.2 Landscape Character Types

The Proposal area has been assessed and allocated based on the landscape character types outlined in *Reading the Remote: Landscape Characters of Western Australia* (CALM, 1994). The Proposal is located within the Darling Plateau Landscape Character Type, and the Darling Uplands Sub-type.

The Darling Plateau Landscape Character Type consists of a deeply dissected rolling landscape to the east of the scarp itself, which is the surface expression of the Darling fault. It contains major river valleys, numerous rough granitic outcrops and valuable water reservoirs. The dominant visual characteristics include extensive areas of tall Jarrah Forest with enclosed views, framed by trees and the rolling landscape.

The Darling Uplands subtype has an undulating land surface with orange lateritic soils and pea gravels, with extensive areas of forest. Features often include steep sided valleys and extruding granite outcrops of boulders. Jarrah forests within the Darling Uplands region also provide popular recreational amenity, including areas for picnics and barbeques, scenic drives, and walk trails, as well as activities relating to the major rivers such as boating, fishing and kayaking. Mining of a number of resources has been undertaken within this region, including significant historical tin mining within the Greenbushes leases. Bauxite, tin and tantalum mining have been undertaken over vast areas of this region, as well as quarries for extraction of blue metal and gravels.

The Proposal area is located in an area which is distinctly rolling and where views are often more open can be considered picturesque. The Proposal area contains both areas of native vegetation including State Forest, as well as cleared farmland. The Proposal area contains two watercourses that dissect the surface, and have contributed to weathering in the area.



3.3 Landscape Character Units

Landscape character units (LCUs) are utilised to describe the appearance of the basic landscape elements including major landforms, vegetation types, land uses and water bodies within the region. While Landscape Character Types describe regional similarities, the LCUs provide a more local scale description of the areas in the vicinity of the Proposal. Three LCUs have been identified within the Proposal area and surrounds, in line with descriptions provided within the Visual Landscape Planning Manual (WAPC, 2007).

- Natural Landscape
- Rural Landscape; and
- Built Landscape.

The Proposal area is dominated by natural and rural LCUs, with the town of Greenbushes located to the north of the site allocated as part of the urban LCU. Detail on each LCU is outlined in the sections below.

3.3.1 Natural Landscape Character Unit

The natural LCU is one of the dominant units in the Proposal area, as well as the surrounds of the Greenbushes mine. The landscape consists of undulating ridges and hill crests formed on laterite and gneiss, with loamy or sandy gravels, and loamy earths. (Onshore Environmental, 2024) Vegetation within this LCU consists of Jarrah-Marri Forest on laterite gravels. Within the Proposal area, the larger consolidated blocks of native vegetation within the natural LCU are considered to be in good to very good condition, with historical logging of native hardwood, *Phytophthora* dieback infestations and other minor mining disturbances contributing to degradation of vegetation.

The natural LCU also includes a number of natural waterways within the region, however many of the waterways local to the Proposal have been dammed and are considered part of the rural LCU.

3.3.2 Rural Landscape Character Unit

The rural LCU dominates the eastern section of the Proposal area, which consists of large areas of cleared land on undulating hills, sloping towards valleys and local waterways. Little native vegetation remains within these areas, with only small patches of vegetation and individual trees remaining.

The rural LCU also contains farm dams including a number of smaller dams installed along the Lyons River to retain water for livestock. Farm buildings including homesteads and sheds are also present within this LCU, as well as irregular fencing surrounding cleared paddocks.

3.3.3 Built Landscape Character Unit

The built LCU in the region includes a number of distinct areas. The town of Greenbushes is located immediately to the north of the existing mine site, and consists of residential buildings with varying size, shape and texture, as well as accompanying roads (including South Western Highway), powerlines parks and footpaths.

The existing mine infrastructure has also been incorporated into the built LCU, with major features including mining landforms such as tailings storage facilities and waste rock landforms. Other infrastructure included within this LCU includes buildings, roads, processing areas, and powerlines. This infrastructure is included as part of the baseline conditions during assessment.



3.4 Landscape Values

3.4.1 Stakeholders

The groups of stakeholders most likely to be affected by the changes in visual amenity resulting from the Proposal include:

- Residents of the region;
- Traditional owners of the Proposal lands;
- Local workers and contractors within the region;
- Visitors to the region including tourists and people passing through the area.

Landscape appreciation is based largely on the landscape features visible from public lookouts, private residences and local roads including the South Western Highway. Each stakeholder group has been assessed based on the relative number of stakeholders affected, and the likely visual amenity expectations of each group. A stakeholder impact level has been assigned to each stakeholder group.

Stakeholder Group	Relative Numbers	Likely Visual Amenity Expectations	Stakeholder Impact Level
Residents of the Region	Medium	High	High
Traditional Owners	Medium	High	High
Local workers and contractors	Medium	Low	Low
Visitors and tourists	High	Medium	High

Table 3-1: Predicted Stakeholder Impacts

3.4.2 Landscape Access and Experience

The landscape is generally easily accessed, with numerous public and private roads in the area, including the South Western Highway immediately adjacent to the Proposal. The Proposal is also likely to be visible from a number of residential properties and rural businesses.

Although mining has been prevalent in the Greenbushes area since the 1800's, rural qualities of the land are also highly valued by residents. Significant views of the area are dominated by open paddocks as the vast views are not blocked by vegetation.



3.4.3 Policy and Framework

3.4.3.1 *Environmental Protection Act 1986*

Visual amenity is considered during assessment of Proposals under Part IV of the EP Act considered under the "Social Surroundings" Environmental Factor. The Environmental Factor Guideline for social surroundings (EPA, 2023) notes the objective of the EPA is "to protect social surroundings from significant harm". This includes visual amenity, which is generally assessed in areas with rich heritage, cultural or social significance due to their natural features or scenic quality.

3.4.3.2 State Planning Strategy 2050

The State Planning Strategy 2050 (WAPC, 2014) sets a clear vision for the State of WA through development of an overarching plan. The strategy identifies South West Australia as a global biodiversity hotspot that includes Mediterranean-type forests, woodlands and scrub eco-regions, and asserts that mining and downstream processing will be a key economic driver for the South West sector. The Strategy requires a balance between maintaining the biodiversity of the region while allowing opportunities for economic growth and development.

The Strategy is also supported by the South West Regional Planning and Infrastructure Framework, which outlines the vision for the south west to be "a region that generates high standards of social amenity, diverse economic activities and high-quality food, supported by effective and efficient infrastructure and at the same time preserving and enhancing the natural environment".



4 Assessment of Visual Landscape Post-Development

4.1 Viewshed Analysis Mapping

The likely visibility of the Proposal from a number of receptor locations was modelled for the study area using a digital terrain model which incorporates existing vegetation, buildings, landforms and surrounding topography. The model incorporated likely visibility of the final designs of the S8 landform, and the S2 extension of the existing Floyds landform. The visibility map for each of the proposed landforms is provided in Figure 4-1 and Figure 4-2 below and shows areas where the infrastructure would likely be visible in green.

The model shows that the landforms will likely be visible from the majority of selected receptors, with only two receptors having no visibility of the proposed WRLs. This is likely due to the height of the landforms matching other high points in the area, as well as the relatively elevated position of many of the receptors.







4.2 Receptor Impact Assessment

Seven locations have been assessed for impact, based on likely receptor viewpoints (Figure 4-3). Visualisations of each viewpoint are provided in Appendix A, and the viewpoints are individually discussed in the sections below.

4.2.1 Viewpoint 450/453

Viewpoint 450/453 is located on Catterick Road, approximately 1.7 km north east of the proposed S8 WRL. Catterick Road is a small local road, with minimal traffic outside of local residents and workers. The view from this road includes a flat cleared paddock, with sections of native vegetation and pine plantation visible in the distance. The view from this road is often obscured by trees from native patches of bushland as well as plantation trees. As such, the visual analysis indicates that the Proposal is not likely to be visible from this viewpoint.

4.2.2 Viewpoint 203

Viewpoint 203 is located on the corner of Hester-Cascades Road and Haines Road, approximately 2 km to the south east of the proposed S8 WRL. Hester Cascades Road and Haines Road are both local roads with minimal traffic other than local landowners and workers. There are residential properties located within the vicinity of viewpoint 203, with views expected to be representative of the immediate area.

Viewpoint 203 presents a view of undulating paddocks with numerous patches of native trees. The view is significant, with hills in the distance visible between patches of trees. The visual impact analysis indicates that the southern section of the S8 WRL is likely to be visible from the viewpoint, although the landform is partially obscured by the tree line. The landform is not likely to significantly alter the view from this viewpoint, however any changes to the tree line may increase the visual impact of the Proposal.

4.2.3 Viewpoint 901/906

Viewpoint 901/906 is located on Hester-Cascades Road, approximately 800 m to the south east of the proposed S8 WRL. As noted above Hester-Cascades Road is a local road, with traffic mainly constrained to only local landholders and workers. The view from this location will be representative of the view from local residential premises.

The view from viewpoint 901/906 shows mostly cleared paddocks, with undulating hills and sparse pockets of native trees and shrubs. The view is limited given the hills in the foreground. The visual analysis indicates that the southern section of the S8 landform will be visible over the top of the hills in the foreground. The landform is relatively close to this viewpoint and will likely be a significant feature of the landscape from this viewpoint, particularly prior to rehabilitation.

4.2.4 Viewpoint 433

Viewpoint 433 is located along Hester-Cascades Road, approximately 200 m to the south of the proposed S8 WRL. As noted above Hester-Cascades Road is a local road, with traffic mainly constrained to local landholders and workers. The view from this location will be representative of the view from local residential premises.

The view from viewpoint 433 shows mostly cleared paddocks, with undulating hills and sparse pockets of native trees and shrubs. Cascades Gully is visible in the foreground, with tree tops visible from trees



located on the opposite slope of the hill. The predicted view from viewpoint 433 indicates the visual landscape from this location will be significantly impacted by the construction of the S8 WRL, with the WRL extending across the entire horizon above the hill in the foreground. The WRL is likely to be visible from early in the construction phase of the Proposal, given the close location of the WRL footprint to the viewpoint.

4.2.5 Viewpoint 422/428

Viewpoint 422/428 is located along Hester-Cascades Road, approximately 200 m to the south of the proposed S8 WRL. As noted above Hester-Cascades Road is a local road, with traffic mainly constrained to only local landholders and workers. The view from this location will be representative of the view from local residential premises.

The view from viewpoint 422/428 is similar to the view from viewpoint 433, and shows Cascades Gully, surrounded by cleared paddocks with native and planted trees and shrubs. The predicted view from viewpoint 422/428 indicates the visual landscape from this location will be significantly impacted by the construction of the S8 WRL, with the WRL extending across the majority of the horizon. The WRL is likely to be visible from early in the construction phase of the Proposal, given the close location of the WRL footprint to the viewpoint.

4.2.6 Viewpoint 812/817

Viewpoint 812/817 is located along Catterick Road, approximately 900 m to the north of the proposed SWG Dam, with the proposed S8 WRL immediately adjacent to the dam. Catterick Road is a small local road, with minimal traffic outside of local residents and workers. The view from this location is intended to be representative of the view from local residential premises.

The existing view from viewpoint 812/817 shows relatively flat paddocks, with native vegetation in the foreground, and a view of farm buildings and planted trees. The view from this location is vast, and vegetated hills in the distance can also be seen from this viewpoint. The predicted views from this location indicate that both the S8 WRL and Floyds WRL are likely to be visible, significantly altering the landscape at this viewpoint.

4.2.7 Viewpoint 926

Viewpoint 926 is located along Catterick Road, approximately 900 m to the north of the proposed SWG Dam, with the proposed S8 WRL immediately adjacent to the dam. As noted above, Catterick Road is a small local road, with minimal traffic outside of local residents and workers. The view from this location is intended to be representative of the view from local residential premises.

The existing view from Viewpoint 926 includes relatively flat open paddocks, with planted trees and native vegetation in the midground. The existing Greenbushes mine is clearly visible in the background, with the Floyds WRL extending above the treeline. The predicted view from the extension of the Floyds WRL will increase the proportion of the mine visible from this viewpoint. The WRL will be visible across the entire horizon and will be a significant feature in the local landscape.

4.2.8 SWH Viewpoint 1411

Viewpoint 1411 is located along the South Western Highway on the corner of Forest Park Avenue, in a location to the south of the existing Greenbushes mine. South Western Highway is a relatively busy



route, being one of the main throughfares in the south west region. Traffic consists of local residents and workers, as well as tourists.

The view from this location encompasses farmland on both sides of the South Western Highway, with patches of immature vegetation screening more distant views. The road reserve along the South Western Highway frequently contains tall vegetation, that acts as a visual barrier and restricts wider views, as is evident on the other side of South Western Highway in this visualisation.

The S2 WRL will be a significant part of the visible landscape from this viewpoint, and will likely dominate the landscape along the South Western Highway, particularly the S8 landform to the east. The vegetation along this section of the highway is relatively sparse and enables visibility of the S2 WRL from the south.

4.2.9 SWH Viewpoint 2516

Viewpoint 2516 is located along the South Western Highway between Forest Park Avenue and Hester Cascades Road, to the south and east of the existing Greenbushes mine. As noted above, South Western Highway is a relatively busy route, being one of the main throughfares in the south west region. Traffic generally consists of local residents and workers, as well as tourists.

The view from this location encompasses farmland on both sides of the South Western Highway, with patches of vegetation within the paddocks. Vegetation can also be seen along the ridge on the horizon. The road reserve along this section of the South Western Highway is bare, with minimal screening potential.

Both of the proposed WRLs will be visible from this viewpoint, and will likely dominate the landscape along the route, particularly the S8 landform to the east. The western side of the South Western Highway is more densely vegetated and effectively restricts views of the existing Floyds WRL. This screen is likely to also minimise views of the S2 extension of the Floyds WRL. However the vegetation on the eastern side of the highway is sparser and enables much higher visibility of the S8 WRL from the south. The distance between the roadside and existing vegetation limits the screening potential of the trees, as the viewshed is not effectively narrowed, and it is likely that the S2 WRL will be highly visible from this location.







4.3 Impacts to Landscape Character

The visual impact assessment indicates that the Proposal is likely to be highly visible from surrounding rural properties and from the South Western Highway. The sections below outline the impacts in context of the identified landscape character types.

4.3.1 Natural

The natural landscape type generally consists of relatively dense forest, which works to restrict the field of view and minimise impacts to the broader landscape. The Proposal results in the replacement of some natural areas with built infrastructure, and will therefore remove visual restrictions in some areas. Where receptors have an area of native vegetation between the Proposal and receptor site, the Proposal infrastructure will be less visible, and it is therefore recommended that where possible a buffer of native vegetation is retained between key receptor sites and the Proposal infrastructure.

4.3.2 Rural

The rural landscape character generally consists of wide views of majority cleared farmland, often with views spanning a significant distance. Given the location of the Proposal in very close proximity to areas with a rural landscape character type and the proposed height of the landforms, impacts to the visual amenity of rural areas within the vicinity of the Proposal are likely to be significant. Impacts will be mitigated by existing vegetation blocking the view of the proposed landforms in some areas, however the landforms and in particular the S8 landform are likely to become significant landscape features for rural properties within the vicinity of the Greenbushes mine.

4.3.3 Built

The built landscape within the area is dominated by the existing Greenbushes mine, as well as the town of Greenbushes. The South Western Highway is also a significant component of the built environment in the area. The highway is the main receptor of impacts from the Proposal, given the close proximity of the landforms, and the crossing required. Impacts will be noted by regular users of the road, as well as tourists and other road users. Views will likely change during construction of the Proposal, from rural fields to mining landforms and supporting infrastructure.

The town of Greenbushes is located on the northern side of the existing mine, and so is effectively shielded from the visual impacts of the Proposal. No significant visual impacts are expected for residents of the town.

The Proposal is an extension of the existing mine environment, and impacts from the Greenbushes mine are not expected to be significant given the existing visual landscape also contains built infrastructure.



5 Visual Mitigation and Management Measures

The undulating nature of the landscape and dense vegetation in certain areas provides natural mitigation for visual impacts in some locations. However, the Proposal is likely to significantly alter the visual landscape in other locations, and additional mitigation strategies can be utilised to further minimise the impact of the Proposal on receptors.

The southern section of the South Western Highway is likely to be the area with the most significant visual impact, given the lack of existing screening vegetation, open views, and a higher volume of traffic / road users. Significant visual appearance changes will also be noted at a number of additional viewpoints, however given these areas will likely affect fewer receptors the impact is lessened.

Talison has an existing Visual Impact Management and Rehabilitation Plan (VIMRP), which is utilised to understand the Project impacts and ensure mitigation strategies are in place to meet the outcomes described in this plan. Outcomes and objectives from this plan can also be used to inform additional mitigation strategies for the Proposal.

Mitigation strategies that can be adopted to minimise impacts on the visual amenity of the area include:

- Maintenance of vegetation within road reserves to act as a screen;
- Planting fast growing vegetation along road reserves that are currently cleared, with particular focus along the southern portion of South Western Highway adjacent to Proposal infrastructure;
- Consider schedules in construction of the WRLs, to minimise height for as long as practicable;
- Undertake progressive rehabilitation as soon as practicable, with a focus on slopes that will be visible to stakeholders; and
- Update the VIMRP to incorporate visual impacts from the expansion Proposal.

Additionally, although not assessed in detail as part of this VIA, consideration as to lighting design and operation to minimise night-time impacts on local stakeholders.



6 Conclusion

The Proposal will increase the proportion of land allocated to mining within the Greenbushes area and will increase the visibility of the mining operations to local and regional residents, workers, tourists, and Traditional Owners. The Project scale is large, however there are no specific sensitive views or landscapes that require specific protection, and the existing visual landscape is generally representative of the wider regional area.

The Proposal has been designed to minimise overall environmental impact, of which visual amenity is one aspect. The scenic values of the area will be impacted by the Proposal, however with implementation of the proposed mitigation strategies, the impact can be minimised in order to meet the EPA objective *"to protect social surroundings from significant harm"* in relation to visual amenity.

7 **References**

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APPENDIX A Proposal Photomontages

Viewpoint 450/453 - Photo (2023)



Viewpoint 450/453 - Predicted Landform (2025)



Viewpoint 203 - Photo (2023)



Viewpoint 901/906 - Photo (2023)



Viewpoint 901/906 - Predicted Landform (2025)



Viewpoint 433 - Photo (2023)



Viewpoint 422/428 - Photo (2023)

Viewpoint 422/428 - Predicted Landform (2025)

Viewpoint 812/817 - Photo (2023)

Viewpoint 926 - Photo (2023)

Viewpoint 1411 - Photo (2025)

Viewpoint 1411 - Predicted Landform (2025)

Viewpoint 2516 - Photo (2025)

Assets | Engineering | Environment | Noise | Spatial | Waste

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