

MANGOOLA OPEN CUT

GLENCORE



Visual Impact Management Plan

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Table of Contents

1.	Purpose	4
1.1	Introduction.....	4
1.2	Overview of Approved Operations	4
2.	Scope.....	8
2.1	Regulatory Requirements.....	8
2.2	VIMP Objectives.....	8
2.3	Roles and Responsibilities	10
2.4	Definitions	11
3.	Predicted Visual Impacts.....	12
3.1	Existing Visual Environment	12
3.2	Visual Impact Assessment	12
3.2.1	Visual Amenity.....	12
3.2.2	Lighting.....	13
4.	Visual Impact Criteria.....	16
4.1.1	Visual Mitigation Upon Request.....	16
5.	Visual Impact Management & Monitoring.....	16
5.1	Visual Management and Landscaping Strategy.....	16
5.1.1	Design Controls.....	16
5.1.2	Operational Controls.....	18
5.1.2.1	Visual Controls	18
5.1.2.2	Lighting Controls	18
5.1.3	Community Mitigation Controls	18
5.2	Visual Monitoring Program	19
5.2.1	Visual Mitigation Monitoring	19
5.2.2	Lighting Impact Monitoring Program.....	19
6.	Monitoring and Reporting.....	20
6.1	Reporting.....	20
6.2	Community Complaints.....	20
6.3	Incident and Non-Compliance Reporting.....	20
6.4	Corrective Actions	20
6.5	Access to Information	21
7.	Review and Improvement.....	21
8.	Document Information	21
8.1	Related Documents.....	21
8.2	Reference Information	22
8.3	Change Information	22

Appendix A - Stakeholder Consultation.....	23
Appendix B - EIS Photomontages and Radial Analysis.....	26
Appendix C - MCCO Additional Project Area Visual Management Measures	32
Appendix D - Typical Shrub Layer Seed Mix.....	39

1. Purpose

1.1 Introduction

This Visual Impact Management Plan (VIMP) has been prepared to satisfy the requirements of State Significant Development (SSD) 8642 for the mitigation and management of visual amenity and lighting impacts of mining operations at the Mangoola Coal Mine (Mangoola).

1.2 Overview of Approved Operations

Mangoola Coal Operations Pty Limited (Mangoola Coal) operates Mangoola as open cut coal mine near Wybong, approximately 20 kilometres west of Muswellbrook and approximately 10 kilometres north of Denman in the Muswellbrook Local Government Area (refer to **Figure 1**). Mangoola Coal has operated Mangoola since mining commenced at the site under Project Approval (PA) 06_0014 in September 2010.

In April 2021, SSD Consent (SSD 8642) was granted by the NSW Independent Planning Commission (IPCN) under Division 4.7 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the continued operations at Mangoola through to 2030. The approved Project Boundary for Mangoola is presented in **Figure 1**.

SSD 8642 provides approval for the following operations at Mangoola:

- Open cut mining, extracting up to 13.5 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal using truck and excavator mining methods through to 2030;
- Continued operations within the existing Mangoola mining area, including the use of existing infrastructure facilities;
- Mining operations in a new mining area located north of the existing Mangoola mining area and Wybong Road, to the south of Ridgeland Road and to the east of the 500 kilovolt (kV) Electricity Transmission Line (ETL);
- Construction of a haul road overpass over Wybong Road and Big Flat Creek;
- During the construction of the Wybong Road /Big Flat Creek Overpass, provide a temporary bypass of Wybong Road;
- Establishment of an out-of-pit overburden emplacement area in the MCCO Additional Project Area; and
- Realignment of a portion of Wybong Post Office Road or equivalent financial contribution to Council as per Condition B102 of SSD 8642. The Road Authority, Muswellbrook Shire Council (MSC), have indicated that all road closures are to be consistent with the recommendations of the **Muswellbrook Mine Affected Road Network Plan Review (MARNP)** (Bitzios Consulting 2020). As per Condition B102(b), Mangoola and MSC have reached agreement on a Road Closure and Works Deed, which outlines the agreed outcome to the surrounding road network. In summary, that Yarraman Road be upgraded from the corner of Wybong Post Office Road south for 1.5km inclusive of a flood mitigation crossing over Wybong Creek. Consistent with the Road Closure and Works Deed, Mangoola will support the objectives as per condition B102(b) as the preferred approach to addressing local road network issues associated with the closure of Wybong Post Office Road. For this reason, EIS recommendations pertaining to the Wybong Post Office Road realignment and associated visual bund/infill tree planting will no longer proceed.

Mining operations, coal handling and washing, rail load out and all associated activities operate on a 24 hours per day, seven days per week basis. However, the mobile gravel crushing plant is restricted to operate between 7 am and 6 pm Monday to Friday and between 8 am and 1pm on Saturdays, with no use of this plant permitted on public holidays or Sundays without the prior written approval of the Department. Blasting is typically undertaken between the hours of 9 am and 5 pm Monday to Saturday. No blasting is undertaken on Sundays or public holidays without the prior written approval of the Department.

A detailed description of the approved operations at Mangoola, is provided in Section 3 of the ***Mangoola Coal Continued Operations Project Environmental Impact Statement*** (EIS) (Umwelt, 2019). An overview of the visual amenity impact assessment findings can be found in Section 6.14 of the EIS.

Figure 2 illustrates the key features of the Mangoola mining operations approved under SSD 8642.

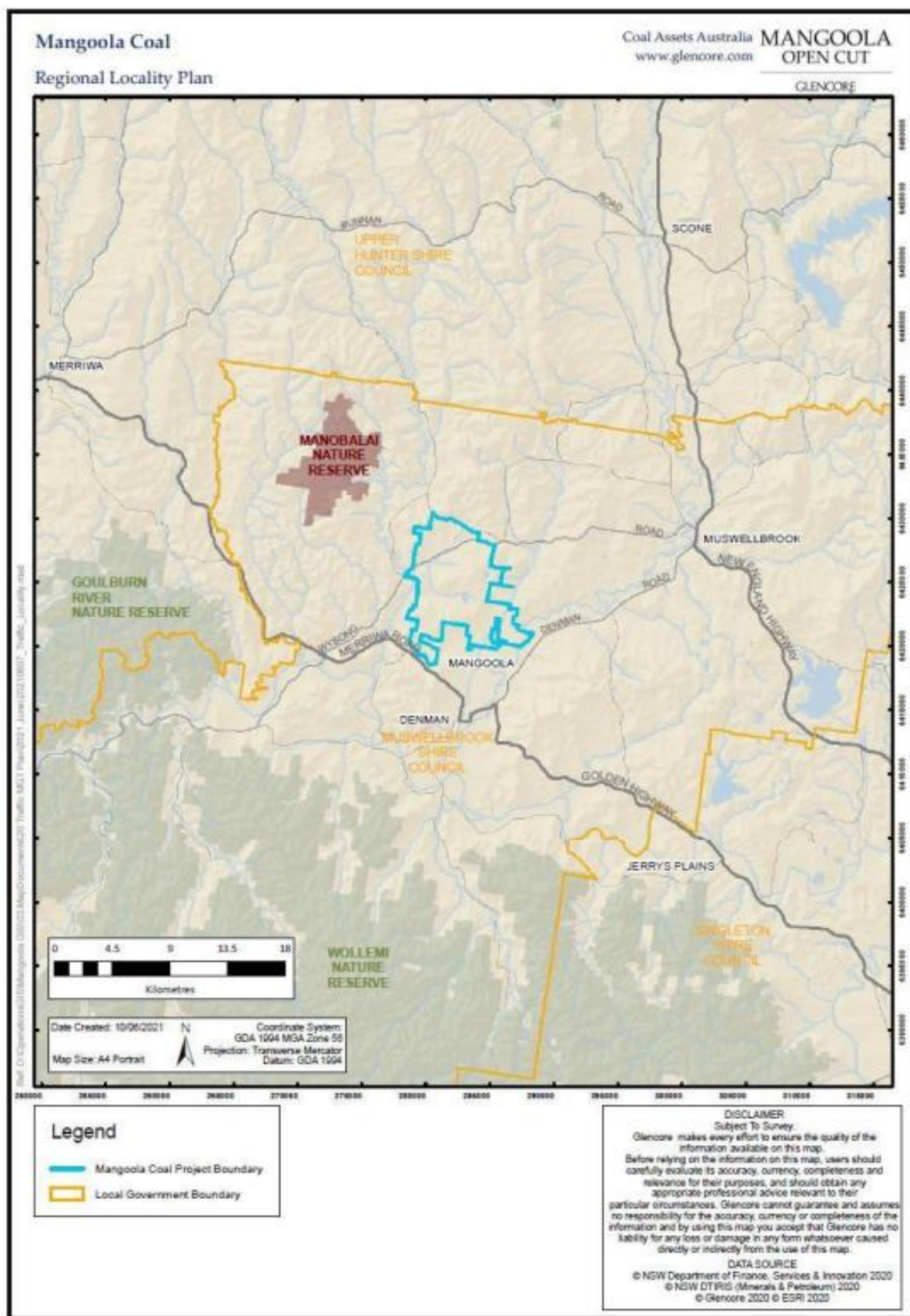


Figure 1 Regional Context

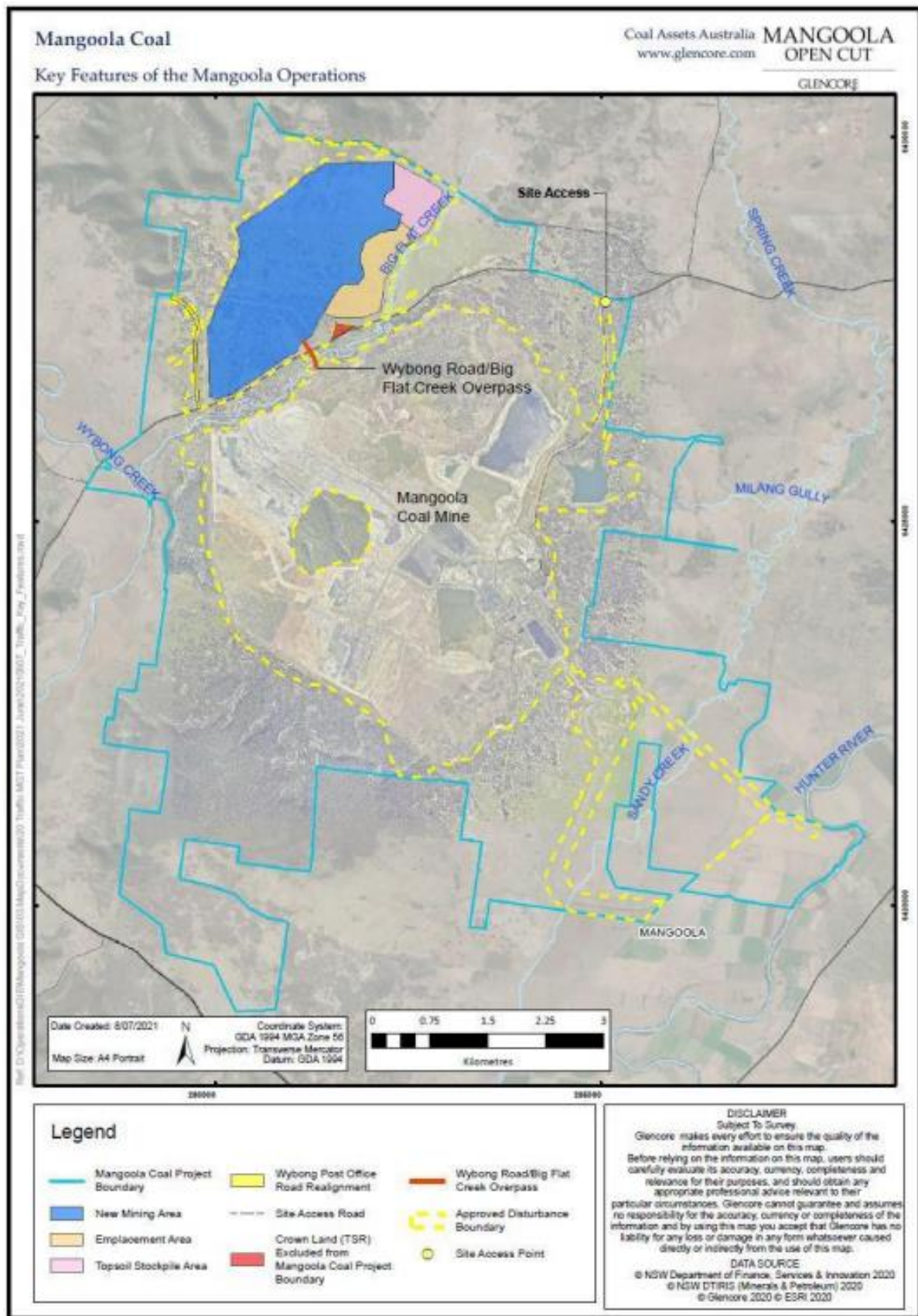


Figure 2 Key Features of the Mangoola Operation

2. Scope

2.1 Regulatory Requirements

As noted in **Section 1.2**, Mangoola Coal was issued SSD 8642 on 26 April 2021. Part B, Conditions B74 to B78 of SSD 8642 outline requirements for the mitigation and management of visual amenity and lighting impacts at Mangoola. Regulatory correspondence in relation to this VIMP is provided in **Appendix A**.

In accordance with the requirements of SSD 8642, this VIMP has been prepared by James Bailey & Associates who are suitably qualified and experienced persons (see **Appendix A**).

Scoping requirements from SSD 8642 relating specifically to this VIMP, and where they are addressed in this document, are provided in **Table 2-1**.

2.2 VIMP Objectives

The key objectives of this VIMP are as follows:

- Provide a summary of the visual environment surrounding Mangoola;
- Describe management measures to be implemented and maintained at Mangoola to minimise off-site visual amenity impacts for external receivers;
- Outline the process to be implemented for the monitoring, maintenance and reporting of the implementation and effectiveness of visual impact mitigation measures at Mangoola; and
- Provide a process for the management and response to stakeholder complaints in relation to visual amenity impacts.

Condition Ref	Condition Requirement	Section of this Document				
Part B, Condition B74	<p>The Applicant must implement additional visual impact mitigation measures, as described in the report titled <i>Anvil Hill Coal Mine Visual Impact Mitigation Report</i> (Hansen Bailey, 2008), if requested in writing by the residents in Table 8. These mitigation measures must be:</p> <p>(a) reasonable and feasible and aimed at reducing the visibility of the Mangoola Coal Project from significantly affected residences); and</p>	Section 4				
	<p>(b) implemented in consultation with the landowner and to the satisfaction of the Planning Secretary.</p> <table><tr><th colspan="2">Table 8: Visual Mitigation</th></tr><tr><th>Mitigation</th><th>Receiver ID</th></tr><tr><td>Visual Mitigation</td><td>104, 110, 124, 125A, 125B, 125C, 134A, 134D, 134C, 182, 183A, 183B, 183C, 191, 193, 200, 227, 240, 241A, 241B and 241C.</td></tr></table>		Table 8: Visual Mitigation		Mitigation	Receiver ID
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Visual Mitigation	104, 110, 124, 125A, 125B, 125C, 134A, 134D, 134C, 182, 183A, 183B, 183C, 191, 193, 200, 227, 240, 241A, 241B and 241C.					
Part B, Condition B75	<p>The Applicant must:</p> <p>(a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development;</p>	Section 3.2, Section 5				

Condition Ref	Condition Requirement	Section of this Document
	(b) take all reasonable steps to shield views of mining operations and associated equipment from users of public roads and privately-owned residences;	<i>Section 3.2, Section 5.1, Section 0</i>
	(c) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;	<i>Section 3.2.2, Section 3.2, Section 5.1, Section 0</i>
	(d) ensure no in-pit mobile lighting rigs shine directly above the horizontal or above the building line or any illuminated structure (except where required for emergency safety purposes);	<i>Section 5.1, Section 0</i>
	(e) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of <i>Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting</i> ;	<i>Section 2.3, Section 3.2.2</i>
	(f) implement a landscaping strategy to shield public views of the development that includes a road-side tree planting and/or maintenance schedule for all vegetation screens and bunds shown in Appendix 8 [of SSD 8642]; and	<i>Section 5.1, Section 0</i>
	(g) ensure that the visual appearance of any new buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.	<i>Section 3.2, Section 5.1.2</i>
Part B, Condition B76	B76. The Applicant must prepare a Visual Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	<i>Appendix A</i>
	(a) be prepared by a suitably qualified and experienced person/s;	<i>Appendix A</i>
	(b) describe the measures to be implemented to minimise and manage the visual and off-site impacts of the development;	<i>Section 5</i>
	(c) include a landscaping strategy to reasonably minimise or shield public views of the development (e.g. implementation of visual bunds to shield public views from the Wybong Post Office Rd realignment) from key vantage points in the public and/or private domain, that includes bunds, road-side tree planting and maintenance schedule; and	<i>Section 5.1</i>
	(d) include a program to monitor, maintain and report on the implementation and effectiveness of the visual impact mitigation measures to the satisfaction of the Planning Secretary.	<i>Section 0, Section 6</i>

Condition Ref	Condition Requirement	Section of this Document
Part B, Condition B77	The Applicant must not commence mining operations north of Wybong Road until the Visual Impact Management Plan is approved by the Planning Secretary.	Appendix A
Part B, Condition B78	The Applicant must implement the Visual Impact Management Plan as approved by the Planning Secretary.	Appendix A

Table 2-1 – SSD 8642 Approval Obligations, Visual Mitigation

2.3 Roles and Responsibilities

The roles and responsibilities of Mangoola Coal personnel in relation to visual amenity management and monitoring are outlined in **Table 2-2**.

Role	Responsibilities
Operations Manager	<ul style="list-style-type: none"> Approve sufficient resources for the implementation of this plan.
Mining / CHPP / Maintenance Manager	<ul style="list-style-type: none"> Maintain external lighting on plant and equipment generally in accordance with <i>Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting</i> (or latest version).
Production Superintendent	<ul style="list-style-type: none"> Regularly review and if necessary, update Lighting Plant Procedure.
Environment & Community Manager	<ul style="list-style-type: none"> Approve sufficient resources for the implementation of this plan; and Assist with reporting requirements as well as subsequent revisions of this VIMP.
Environment & Community Coordinator	<ul style="list-style-type: none"> Undertake the reporting and stakeholder engagement requirements outlined in this plan; Implement and review the effectiveness of visual mitigation bunds and vegetation screening; and Complete training as required to communicate the requirements of this plan to all relevant Mangoola Coal personnel and contractors.

Table 2-2 – Roles and Responsibilities

2.4 Definitions

A list of the terminology used in this VIMP is provided in **Table 2-3**.

Term	Definition
AHD	Australian Height Datum
CHPP	Coal Handling and Preparation Plant
DPE	NSW Department of Planning and Environment
EIS	<i>Mangoola Coal Continued Operations Project Environmental Impact Statement</i> (Umwelt, 2019)
ETL	Electricity Transmission Line
IPCN	NSW Independent Planning Commission
kV	Kilovolt
Mangoola	Mangoola Coal Mine
Mangoola Coal	Mangoola Coal Operations Pty Limited
MSC	Muswellbrook Shire Council
Mtpa	Million tonnes per annum
OEA	Overburden Emplacement Area
PA	Project Approval
ROM	Run of Mine
SSD	State Significant Development
VIMP	Visual Impact Management Plan (this document)

Table 2-3 – Terminology used within this VIMP

3. Predicted Visual Impacts

3.1 Existing Visual Environment

The existing visual environment surrounding Mangoola is dominated by remnant native bushland, rural-residential properties and land developed for a range of primary production activities including mixed cattle grazing and cropping on the Wybong Creek and Hunter River alluvial flats (to the west and south), viticulture (to the south-west and east) and small olive groves (to the north-west). The main topographic feature in the surrounding landscape is the series of undulating wooded hills and ridgeline which occur outside and to the north and north-west of the site. These vegetated hills rise to approximately 360 mAH and are elevated approximately 200 m above the surrounding lands, providing a visual barrier between Mangoola and the private land to the north, north-west and west of the site (refer *Figure 3*).

The areas developed to date within the approved disturbance boundary for Mangoola (refer *Figure 2*) include areas occupied mining land, overburden emplacement areas (OEA), industrial mine infrastructure, rehabilitated land and remnant native vegetation. Views of these site elements create a strong visual contrast with the surrounding agricultural lands from some viewing locations.

It is important to note that visual amenity measures have been completed at visual locations and private residences (where requested) under PA 06_0014 to date as well as visual screening surrounding the MCCO Additional Project Area prior to development of this plan. The EIS of potential impacts found that the MCCO Additional Project Area would not be visible from any private residences due to intervening topography and vegetation.

3.2 Visual Impact Assessment

3.2.1 Visual Amenity

An assessment of visual amenity impacts completed for the EIS reviewed potential visual effects from ten representative viewing locations surrounding the site (determined by radial analysis of topographical and Mangoola project data). The visual assessment locations are summarised in *Table 3-1* and shown on *Figure 3*. Photomontages completed for the EIS assessment locations that were predicted to have the highest potential for views of Mangoola operations are reproduced in *Appendix B*. Radial analyses and photomontages for all locations are available in Appendix 18 of the EIS.

Location	Description	EIS Additional Visual Mitigation(s)
1	Castlerock Road, representative of views from the church on Castlerock Road located to the east of the MCCO Additional Project Area.	Nil. Intervening topography predicted to shield views of the MCCO Additional Project Area.
2	Wybong Road, representative of views from a public vantage point located to the east of the MCCO Additional Project Area.	Tree screening and visual bund along sections of Wybong Road (see <i>Appendix C</i>) to minimise direct views.
3	Wybong Road / Wybong Post Office Road intersection, representative of	Tree screening and visual bund along sections of Wybong Road (see <i>Figure 2</i>) to minimise

Location	Description	EIS Additional Visual Mitigation(s)
	views from a public vantage point to the south of the MCCO Additional Project Area.	direct views. Visual screening along the realigned section of Wybong Post Office Road is no longer proposed as per <i>Section 1.2</i> .
4	Wybong Road, representative of views of the proposed Wybong Road / Big Flat Creek Overpass.	Visual bund along sections of Wybong Road (see <i>Appendix C Figure 2</i>) to minimise direct views.
5	Wybong Road, representative of views from a public vantage point to the west of the MCCO Additional Project Area.	Nil. Intervening remnant vegetation predicted to shield views of the Project area.
6	Yarraman Road, representative of views from a public vantage point to the south-west of the MCCO Additional Project Area.	Nil. Intervening remnant vegetation predicted to shield views of the MCCO Additional Project Area.
7	Yarraman Road / Wybong Post Office Road intersection, representative of views from a public vantage point to the west of the MCCO Additional Project Area.	Nil. Intervening topography predicted to shield views of the MCCO Additional Project Area.
8	Hidden Valley Row – representative of views from a public vantage point immediately to the north-east of the MCCO Additional Project Area.	Nil. Distant views of temporary topsoil stockpile only prior to rehabilitation to minimise visual effects.
9	Ridgeland Road - representative of views from a public vantage point immediately to the east of the MCCO Additional Project Area.	Tree screening along sections of Ridgeland Road (see <i>Appendix C</i>) to minimise direct views.
10	Golden Highway - representative of views from a public vantage point immediately to the south-west of the MCCO Additional Project Area.	Nil. Intervening topography predicted to shield views of the MCCO Additional Project Area.

Table 3-1 – Mangoola EIS Visual Assessment Mitigation Measures

3.2.2 Lighting

The visual assessment completed for the EIS (Umwelt, 2019) included a qualitative assessment of potential impacts from both direct and indirect (diffuse) lighting. This review confirmed that Mangoola operations contribute to a general diffuse light glow, which impacts on local night-time visual amenity.

Lighting sources at Mangoola include:

- Permanent infrastructure, including the CHPP, offices and workshops, and rail load out; and
- Mobile equipment headlights and mobile lighting plant required to ensure safe night-time operations.

- The EIS stated that no private residences are predicted to have direct views of Mangoola Coal Continued Operations Additional Project area, however it was noted that external lighting will be kept to a minimum where practicable and will be installed and maintained in accordance with the relevant Australian Standard (*Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting*) to minimise visibility and direct lighting impacts on external viewing locations (including private residences and local road users).

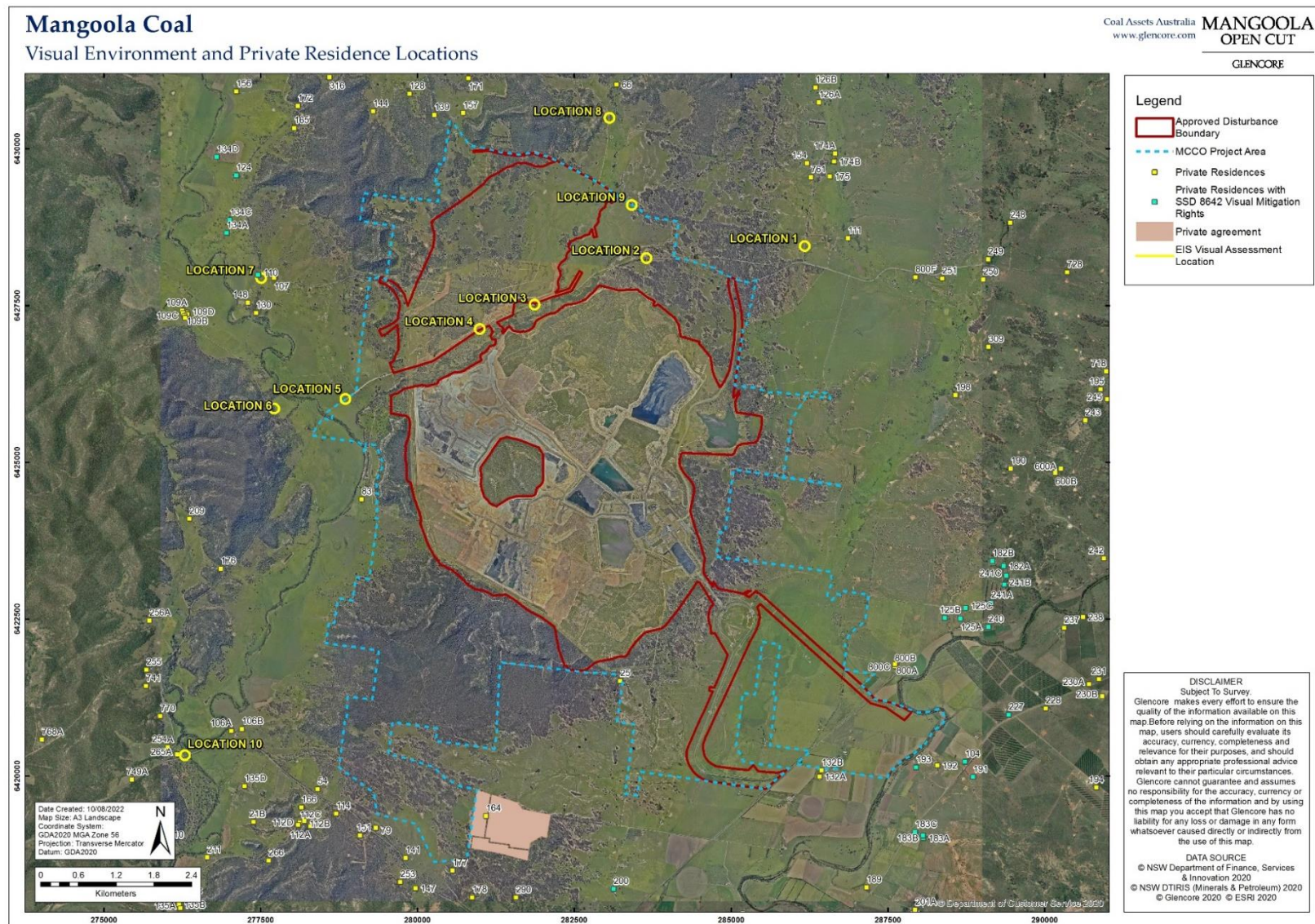


Figure 3 Visual Environment and Residence Locations

4. Visual Impact Criteria

4.1.1 Visual Mitigation Upon Request

In accordance with Condition B74 (Table 8) of SSD 8642, Mangoola Coal are required to implement reasonable and feasible measures to provide additional visual impact mitigation on request of the landholders identified in **Table 2-1**, in accordance with the recommendations of Hansen Bailey (2008).

As per the **Anvil Hill Visual Mitigation Report** (Hansen Bailey, 2008), examples of the types of measures that may be considered include:

- Additional tree planting close to the residence; or
- Installation of block out window blinds (where rooms are orientated towards the mine); or
- Other reasonable and feasible mitigation as agreed between Mangoola and the residence owner.

Mangoola Coal has provided correspondence to the relevant landholders communicating their rights to additional visual mitigation upon request on 14 August 2008, 4 July 2011 and on 25 March 2022. An example of the most recent March 2022 notification letter is provided in **Appendix A**.

Upon written request for visual mitigation, an inspection will be arranged with the landholder to assess and agree upon reasonable and feasible mitigation measures. These will be implemented in consultation with the landholder and to the satisfaction of the Planning Secretary.

There have been no landholder requests for additional visual impact mitigation as of July 2022 under SSD 8642.

5. Visual Impact Management & Monitoring

5.1 Visual Management and Landscaping Strategy

5.1.1 Design Controls

The MCCO Additional Project Area has been designed so there are no direct views of operational areas available from any private residence due to intervening topography and vegetation. Specific design control commitments adopted to minimise visual impacts from other public viewing locations (such as public roads) include:

- Progressive rehabilitation of OEAs, using the same successful rehabilitation methods used south of Wybong Road, to reduce duration of visible soil exposure, including prioritising the outer faces visible from external viewing locations and the use of temporary rehabilitation as appropriate.
- Allowance for implementation of a final landform that conforms with the natural environment by using industry leading natural landform design principles and revegetation techniques.
- Development of visual bunding on sections on Wybong Road to provide additional mitigation of exposed views towards Mangoola (as per Appendix 8 of SSD 8642). The location, size and typical cross section of these bunds, are shown in **Appendix C** - figures (**Figure 10** and **Figure 11**). Visual bunds will take the form of nominally 3.5m high earthen embankments with the external batter of the bund at 1V:3H. Once shaped, the bunds will be topsoiled (nominal depth of 100mm),

ripped along contour (for scour protection) and hydroseeded with cover crop/native grasses and a native seed mix of shrubs which will provide approximately 2-5m of additional visual mitigation on the visual bunding (refer to typical seed mix in **Appendix D** -). Supplementary canopy species tubestock may also be planted where possible (allowing for necessary distance from powerlines). Further detail of timing of bund construction is included below:

- **Visual Bund 1** (and infill tree planting) associated with the Wybong Post Office Road realignment – this is no longer being constructed as described in **Section 1.2**.
 - **Visual Bund 2** – under construction at the time of preparing the VIMP and due for completion in 2022 (works are subject to change due to various factors such as weather).
 - **Visual Bund 3** – construction is due for completion in late 2022/early 2023 (works are subject to change due to various factors such as weather).
 - **Visual Bund 4** – under construction at the time of preparing the VIMP and due for completion in 2022 (works are subject to change due to various factors such as weather).
 - **Other visual relief (drain/levee)** – some visual relief may be gained by the eastern portion of the clean water diversion drain adjacent to Ridglands Road (nominally up to 5m high) and sections of the flood levee along Wybong Road (sections are nominally up to 3m high). The locations of these are also shown in **Figure 10 of Appendix C** -.
- Planting/seeding of tree screens along the following road sections (see **Appendix C** - figures) to reduce the availability of direct views of mining operations by road users:
 - **Wybong Road (East and West):** fenced, prepared and planted with 3470 tubestock of native shrub and tree species in 2020 and maintained since. It is noted some areas were inundated with water and planted when access was available in 2021 (a further 460 tubestock were planted). The far eastern screen is along a naturally saline watercourse. This area will be planted with salt and water tolerant species in Spring/Summer of 2022 when ground conditions have improved following two above average rainfall years.
 - **Ridglands Road:** these screens are scheduled to be planted when the 11kV powerline and underground services have been relocated as it passes through this area. Tree screen plantings will be established so as not to interfere with powerline easement. This will commence late 2022 and be completed early 2023 (pending ground conditions).
 - **Yarraman Road (additional opportunistic planting):** Intervening remnant vegetation is predicted to shield views of the MCCO Additional Project Area from the Yarraman Road visual assessment location 6 with no further mitigation measures proposed in the EIS. Mangoola has opportunistically planted these screens to further improve visual amenity of the area. These were fenced, prepared and seeded in late 2018/early 2019 but due to poor germination during drought, the areas were planted with 1200 tubestock in 2020 as shown in Appendix C.
 - **Wybong PO Road:** As discussed, the Wybong PO Road realignment is no longer proposed so the associated tree screening is no longer applicable as further described in **Section 1.2**. These areas will be maintained as per **Section 5.2.1**. Tree screens will benefit from about two years of growth before screening benefits will be realised.

5.1.2 Operational Controls

5.1.2.1 Visual Controls

The location of existing tree screens and those to be developed in accordance with the EIS are shown in **Appendix C** except for the Wybong Post Office Road visual bund and infill tree planting which is no longer proposed as per **Section 1.2**.

The locations where visual bunding is currently being developed (July 2022) are shown in **Appendix C**. These bunds will be seeded as soon as practicable following shaping and topsoiling and maintained to promote the development of vegetation in these areas.

The MCCO Project proposed no change to the approved Mangoola infrastructure areas south of Wybong Road including workshops, CHPP and coal handling infrastructure or rail transport infrastructure. This includes no changes proposed to the existing fixed lighting arrangements. The MCCO Project includes construction of the Wybong Road and Big Flat Creek haul road overpass, construction of water truck fill points and relocation of mining support infrastructure and services from time to time as mining progresses.

The siting and visual appearance of any new or relocated portable buildings, structures, facilities or works (including paint colours and specifications where relevant) are developed with the aim of blending as far as possible with the surrounding landscape. These considerations will be addressed during the design and planning phase.

5.1.2.2 Lighting Controls

As outlined above, the MCCO Project proposes no change to the existing infrastructure areas and fixed lighting. The process for selecting and positioning mobile lighting plants to minimise lighting impacts to private residences and public road users is documented in the Mangoola Lighting Plant Procedure. This procedure provides:

- Factors to be considered in the siting of mobile lighting sources including that no in-pit mobile lighting plants shine directly above the pit wall and other mobile lighting plants do not shine directly above the horizontal (except where required for emergency safety purposes);
- Mapping of local public road and residential receptor locations;
- *MANOC-1772150304-4139 Lighting Inspection Form* for off-site review of lighting impacts as required; and
- A process to respond to community lighting complaints.

5.1.3 Community Mitigation Controls

As noted in **Section 4**, Mangoola implement reasonable and feasible measures to provide additional visual impact mitigation on request of the landholders identified in Condition B74 (Table 8) of SSD 8642, in accordance with Hansen Bailey (2008).

Mangoola Coal will also respond to community complaints regarding visual and lighting impacts as outlined in **Section 6.2**.

5.2 Visual Monitoring Program

5.2.1 Visual Mitigation Monitoring

Monitoring and review of visual mitigation measures is undertaken through:

- The visual bund construction will be in accordance with construction drawings and Appendix 8 of SSD 8642 (with exception of the Wybong PO Road realignment bund that is no longer proposed as discussed in **Section 5.1**). Development of the visual bunds will be reported in the Annual Review until completion.
- Internal annual inspections for tree screens and vegetation on visual bunds to confirm any maintenance requirements. The inspections will generally include an assessment of the following:
 - Tree mortality (and the requirement to undertake supplementary replacement plantings);
 - Weed infestation;
 - The requirement for supplementary watering;
 - Condition of any fences associated with protection of tree screens; and
 - Condition of the weed guard where used.
- External annual visual impact assessment at locations 2, 4 and 9 to validate MCCO Additional Project Area with Year 3 / Year 8 / Final Landform montages as per Appendix 18 of the EIS; and
- The investigation process for any visual and lighting complaints.

Corrective actions identified during visual monitoring will be undertaken to address any issues.

5.2.2 Lighting Impact Monitoring Program

As noted in **Section 5.1.2.2**, the **Mangoola Lighting Plant Procedure** references an inspection form available for the assessment of off-site lighting impacts from key viewing locations to monitor the siting and orientation of mobile lighting plant as required.

Any new fixed external lighting will be installed and maintained in accordance with *Australian Standard AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting*.

Mangoola Coal will also undertake ongoing lighting inspections to confirm that lighting is sited and maintained generally in accordance with the lighting requirements of SSD 8642.

6. Monitoring and Reporting

6.1 Reporting

Mangoola Coal provides an update on visual and lighting impact management and improvements in the site Annual Review. Compliance with the visual and lighting mitigation measures is also reviewed during the Independent Environmental Audit process required under SSD 8642.

A summary of complaints received and actions taken is presented to the Mangoola Community Consultative Committee (CCC) as part of regular operational performance reviews. Mangoola CCC minutes and the site community complaints register are made available on the Mangoola Coal website and reported in the Annual Review.

6.2 Community Complaints

Mangoola Coal will maintain a centralised location to record details of relevant external stakeholder communications. A Community Response Line (1800 014 339) will be in operation 24 hours per day, seven days a week and will be regularly advertised in a local newspaper. Complaints will be recorded and investigated. Follow up communication with the complainant will be undertaken to explain the outcome of complaint investigations where requested. A monthly summary of complaints will be uploaded to the Mangoola website.

6.3 Incident and Non-Compliance Reporting

The *MANOC-1772150304-4652 Environmental Management Strategy* outlines the process for managing environmental incidents and non-compliances. The process involves recording, notifying and investigating incidents in accordance with statutory and internal requirements and implementing corrective/preventative actions, if required.

Within seven days of becoming aware of a non-compliance, Mangoola Coal will notify DPE of a non-compliance. The notification will be made in writing to and identify the development (including the development application number and name), set out the conditions of the consent that the Development is non-compliant with, why does it not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

6.4 Corrective Actions

The *MANOC-1772150304-1531 Mangoola Coal Change Management Procedure* and the *GCAA-625378177-9979 GCAA Change Standard* will be used to identify any proposed changes to existing activities that have the potential to cause visual impacts, or where additional visual impact mitigation is required outside of the scope of that predicted in the EIS or required under SSD 8642.

The change management process will involve at least:

- Identification of the change;
- Assessment of the risk associated with the change and develop a risk treatment plan;
- Approval of the change subject to risk treatment;
- Communication and implementation of the change and the risk treatment actions;
- Monitoring and evaluation of the change and risk treatment plan;

- Documentation of the change; and
- Review of the effectiveness of the implemented change.

6.5 Access to Information

In accordance with Condition D17 of SSD 8642, a copy of this document will be made available on the Mangoola website, following approval by DPE.

7. Review and Improvement

This plan was prepared by a suitably qualified and experienced person in consultation with the Planning Secretary. The VIMP will be reviewed periodically as required following changes to the site's approval requirements every three years at a minimum. Mangoola Coal will review, and if necessary, revise the VIMP within three months of:

- The submission of an incident report;
- The submission of an Annual Review;
- The submission of an Independent Environmental Audit;
- Any modification to the conditions of the consent; or
- Notification of a change in development phase.

Mangoola Coal will also undertake an annual review of the Environment and Community risk assessment and review visual impact risks. This risk assessment is to ensure any environmental risks such as visual are appropriately managed.

8. Document Information

8.1 Related Documents

Related documents, listed in **Table 8-1** below, are *documents* directly related to or referenced from within this document.

Number	Title
GCAA-625378177-9979	GCAA Change Standard
MANOC-1772150304-4652	Mangoola Coal Environmental Management Strategy
MANOC-1772150304-1531	Mangoola Coal Change Management Procedure
MANOC-1772150304-138	Lighting Plant Procedure

Number	Title
MANOC-1772150304-4139	Lighting Inspection Form
MANOC-1772150304-825	Community Complaints Management Procedure

Table 8-1 – Related Documents

8.2 Reference Information

Reference information, listed in **Table 8-2** below, is *information* that is directly referred to for the development of this document.

Reference	Title
Hansen Bailey (2008)	<i>Anvil Hill Coal Mine Visual Impact Mitigation Report</i>
Muswellbrook Shire Council (2020)	<i>Mine Affected Roads Network Plan</i>
Umwelt (2019)	<i>Mangoola Coal Continued Operations Project Environmental Impact Statement</i>
Umwelt (2019)	<i>Mangoola Coal Continued Operations Project Response to Submissions</i>
Standards Australia (2021)	<i>Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting</i>

Table 8-2 – Reference Information

8.3 Change Information

A summary of the current change information for this VIMP is provided in **Table 8-3**.

Version	Date	Change Details
1.0	[Effective Date]	New document as required by SSD 8642 prior to commencement of mining. Submitted to DPE 12/08/22. Comments received from DPE 30/08/22 Requiring Response by 16/9/2022. Re-submitted with DPE comments addressed 15/9/22. Comments mainly related to additional detail around the visual controls, monitoring and type of visual mitigation offered.

Table 8-3 – Change Information

Appendix A - Stakeholder Consultation



10 August 2022

Sam Palmer
Environment and Community Manager
Mangoola Coal
PO Box 495
MUSWELLBROOK NSW 2333

Attention: Sam Palmer

Dear Sam

MANGOOLA COAL VISUAL IMPACT MANAGEMENT PLAN CAPABILITY STATEMENT

James Bailey & Associates (JBA), which has recently become a member of the Xenith Consulting Group, is a Hunter Valley based environmental consultancy specialising in the project management of environmental impact assessments (EIS) and stakeholder consultation programs for State Significant Developments (SSD). JBA also regularly assists its clients with the preparation of post approvals documents (including Visual Impact / Landscape Management Plans) required under SSD approval conditions.

JBA has assisted in the preparation of visual impact assessments, visual impact management plans, lighting audits and reviews for a number of its clients in the NSW mining sector, including Boggabri Coal, Bengalla Mine, Bulga Coal, Hunter Valley Operations, Integra Underground Mine and Mount Owen Glendell Operations. JBA (as Hansen Bailey) also prepared the *Anvil Hill Coal Mine Visual Impact Mitigation Report* (2008), as referred to within Condition B74 of Mangoola Coal SSD 8642.

JBA is therefore well placed as a suitably qualified and experienced party to assist Mangoola Coal in the preparation of the site Visual Impact Management Plan (VIMP) required under Condition B76 of SSD 8642.

CV's highlighting relevant experience of the JBA personnel involved in the preparation of the VIMP for the Mangoola Coal Mine are provided as **Attachment A**.

Please do not hesitate to contact me on 02 6536 2999 if you need anything further on this matter.

Regards
JAMES BAILEY & ASSOCIATES

James Bailey
Manager



6/127-129 John Street
Singleton NSW 2330

(02) 6536 2999

baileyassociates.com.au

ABN 40 644 809 889

MANGOOLA OPEN CUT

GLENCORE

24 March 2022

Dear

Re: Notification of Visual Mitigation Rights under Development Consent SSD 8642.

On the 26th April, The Independent Planning Commission NSW (IPC), as the declared consent authority¹, approved with conditions, the development application for the Mangoola Coal Continued Operations Project under Section 4.36 of the *Environmental Planning and Assessment Act 1979*.

The approval is subject to conditions set out in the Mangoola Coal Continued Operations Project SSD Development Consent found at: <https://www.ipcnsw.gov.au/projects/2020/12/mangoola-coal-continued-operations-project-ssd-8642>.

Condition 74 of Development Consent SSD 8642 states:

VISUAL

B74. The Applicant must implement additional visual impact mitigation measures, as described in the report titled *Anvil Hill Coal Mine Visual Impact Mitigation Report* (Hansen Bailey 2008), if requested in writing by the residents in Table 8. These mitigation measures must be:

- (a) reasonable and feasible and aimed at reducing the visibility of the Mangoola Coal Project from significantly affected residences; and
- (b) implemented in consultation with the landowner and to the satisfaction of the Planning Secretary.

Table 8: Visual Mitigation

Mitigation	Receiver ID
Visual Mitigation	104, 110, 124, 125A, 125B, 125C, 134A, 134D, 134C, 182, 183A, 183B, 183C, 191, 193, 200, 227, 240, 241A, 241B and 241C.

As the owner of Receiver ID 104, you are hereby notified of your right to request reasonable and feasible visual mitigation measures for your residence.

Requests for visual mitigation measures to the residence must be made **in writing** to:

Sam Palmer
Mangoola Coal
PO Box 495,
Muswellbrook, NSW, 2333

Or emailed to: mangoolaenquiries@glencore.com.au

¹ The Independent Planning Commission NSW (IPC) is the declared consent authority under clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* and section 4.5(a) of the *Environmental Planning and Assessment Act, 1979*.

PO Box 495 · Muswellbrook · NSW 2333 · Australia
Wybong Road · Muswellbrook · NSW 2333 · Australia
Tel +61 2 6549 5500 · Fax +61 2 6549 5655 · Web www.glencore.com.au
Mangoola Coal Operations Pty Limited ABN 54 127 535 755

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Appendix B - EIS Photomontages and Radial Analysis

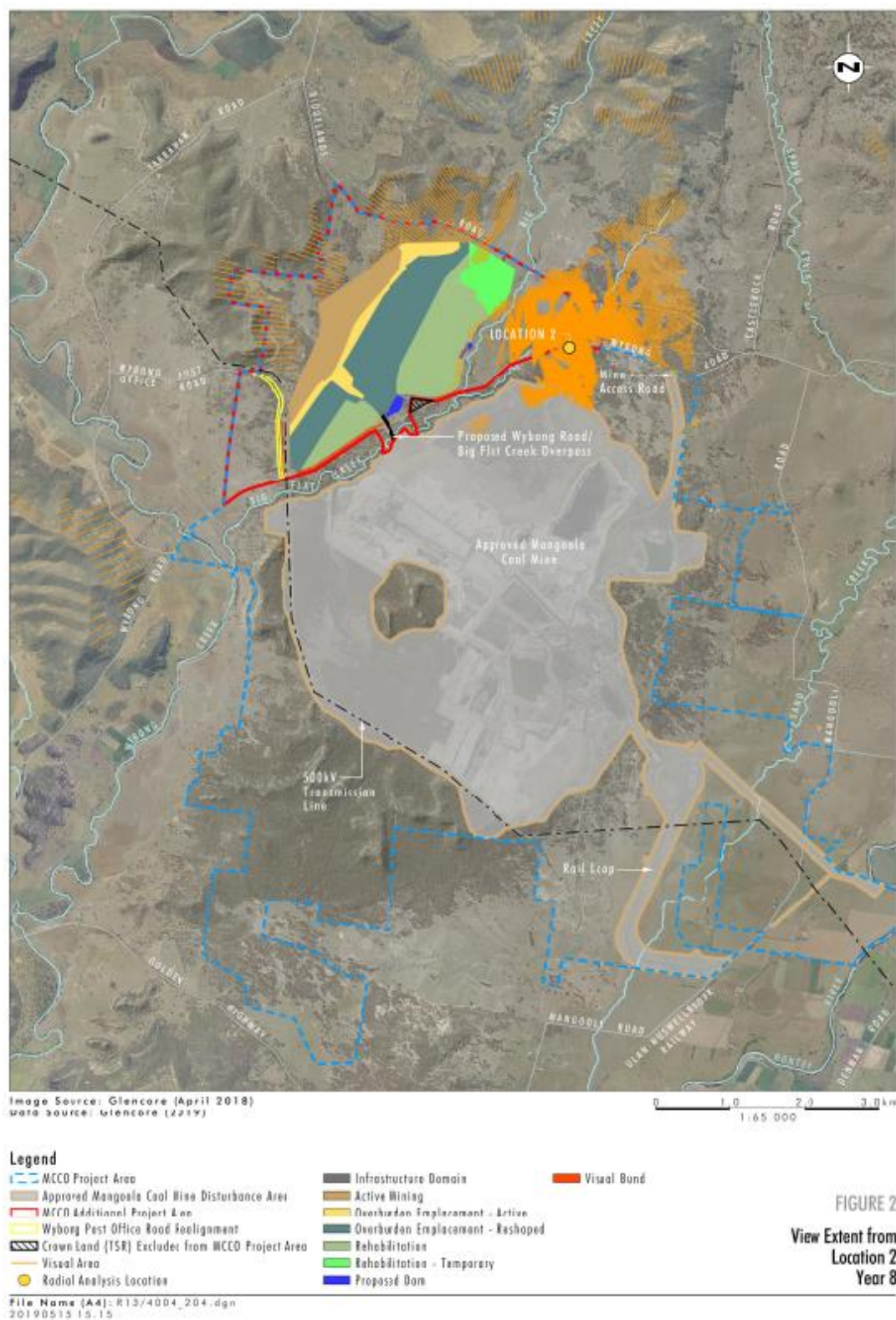


Figure 4 View Extent from EIS Visual Assessment Location 2 (Umwelt, 2019)

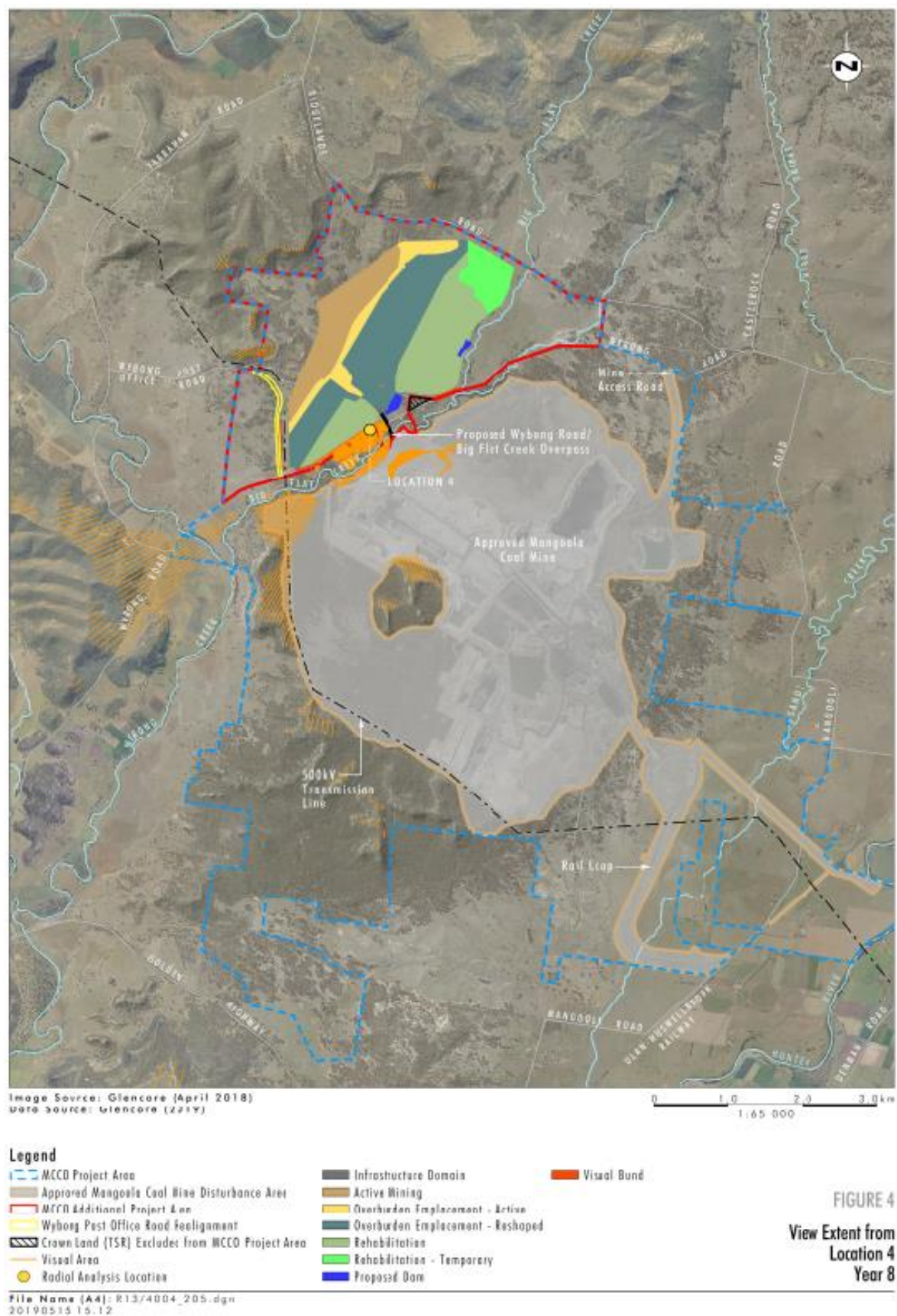


Figure 5 View Extent from EIS Visual Assessment Location 4 (Umwelt, 2019)

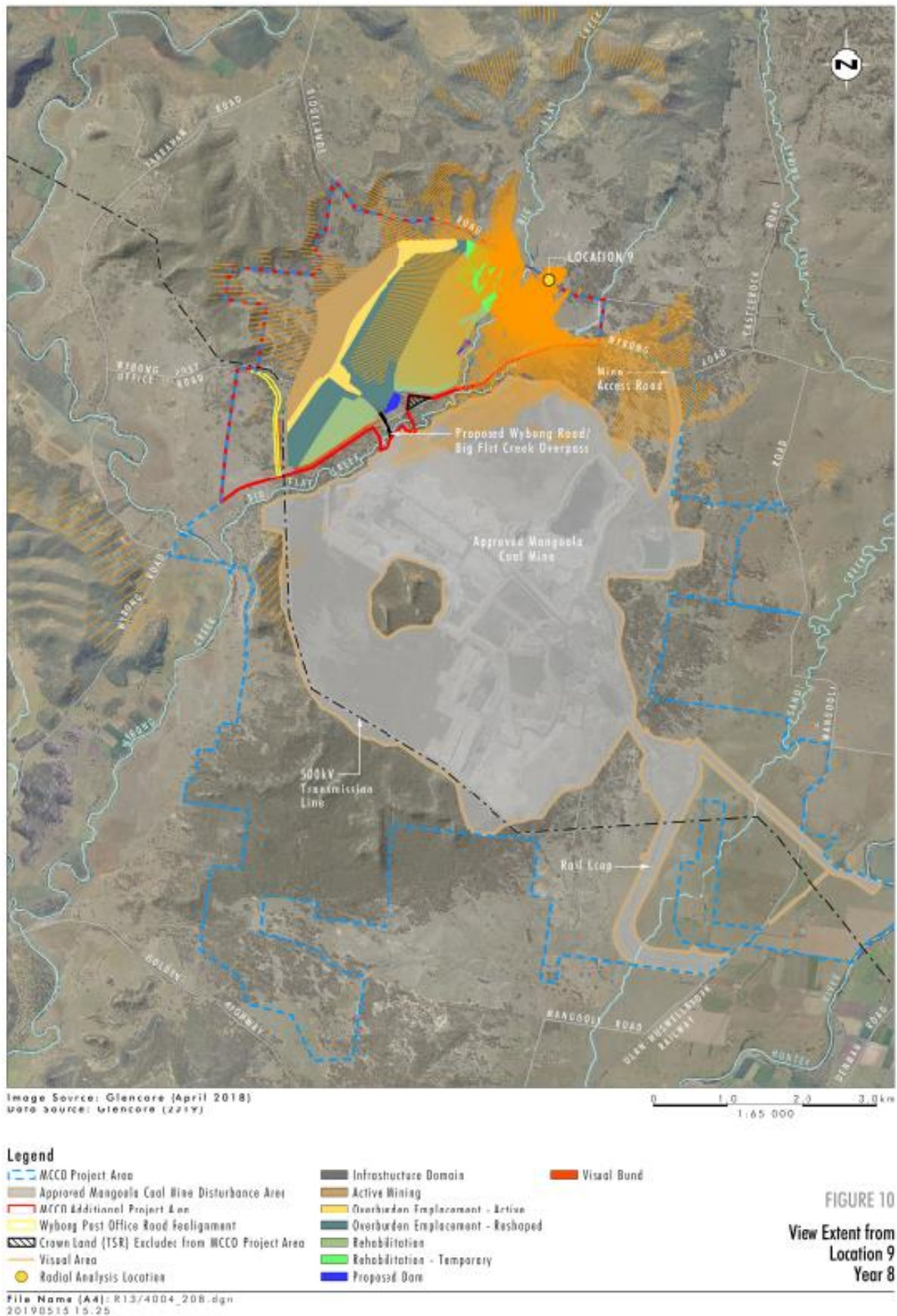


Figure 6 View Extent from Visual Assessment Location 9 (Umwelt, 2019)

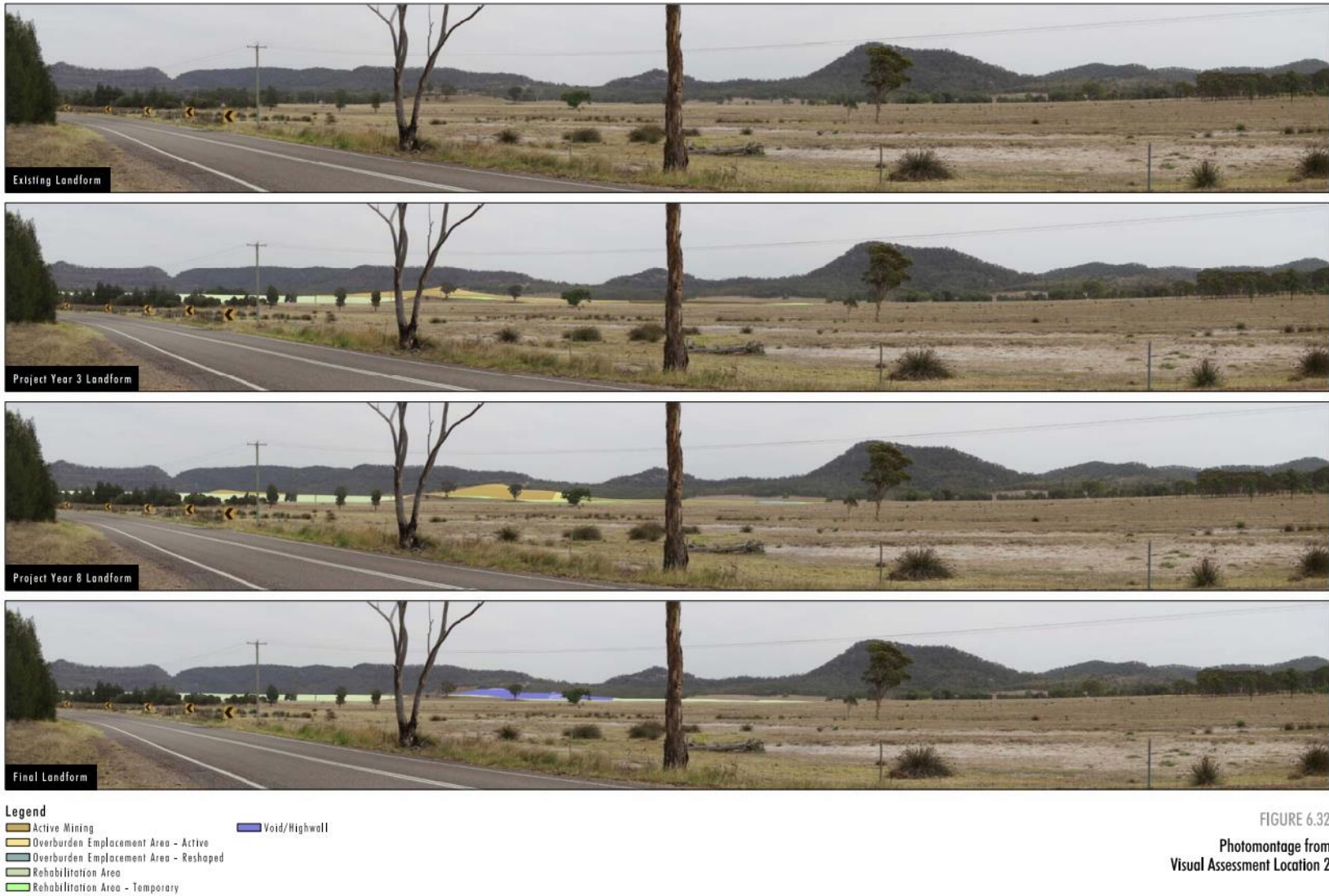


FIGURE 6.32
Photomontage from
Visual Assessment Location 2

Figure 7 EIS Visual Assessment Location 2 (Umwelt, 2019)



Figure 8 EIS Visual Assessment Location 4 (Umwelt, 2019)

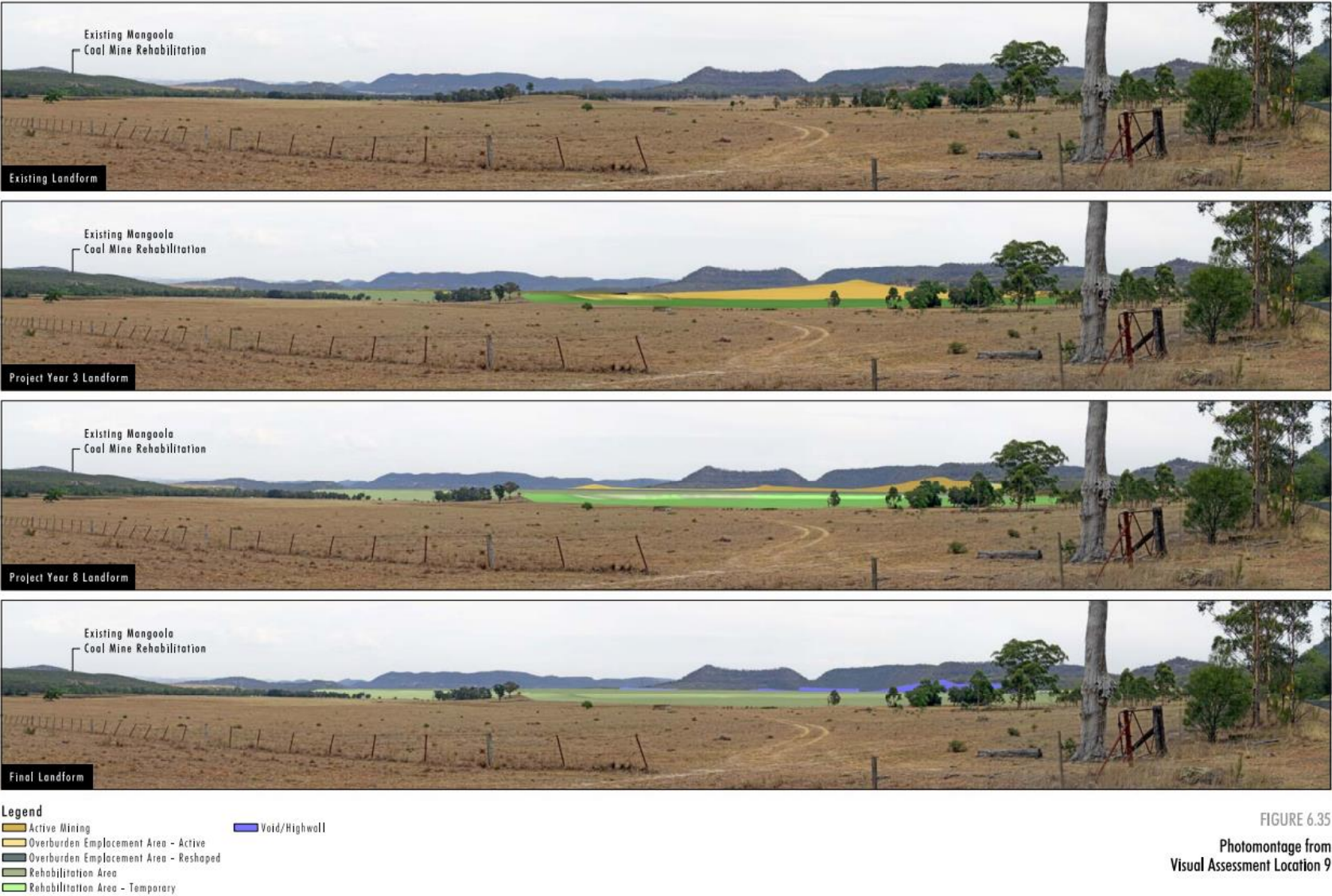


FIGURE 6.35
Photomontage from
Visual Assessment Location 9

Figure 9 EIS Visual Assessment Location 9 (Umwelt, 2019)

Appendix C - MCCO Additional Project Area Visual Management Measures

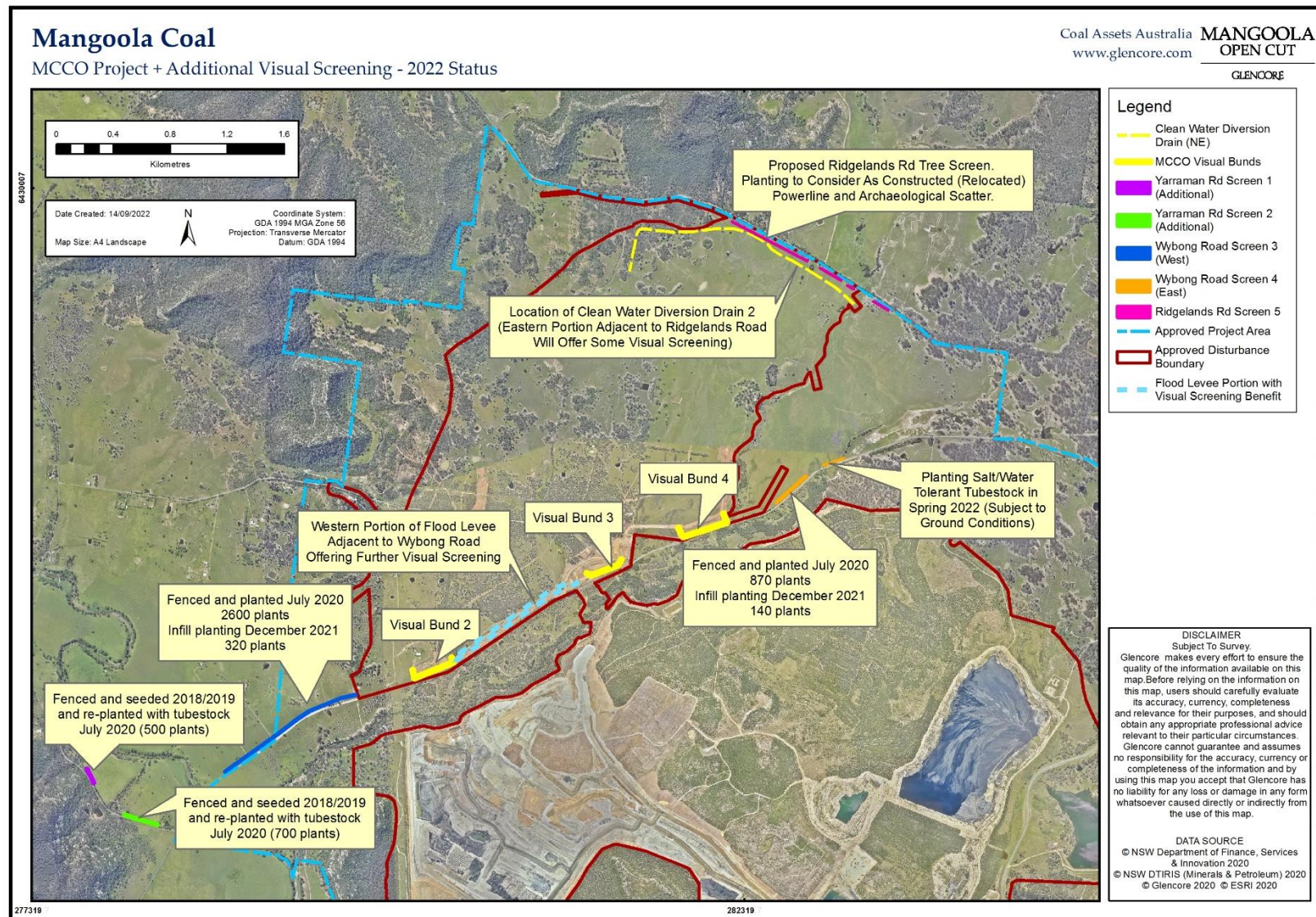


Figure 10 MCCO Project and Additional Visual Screening Measures (2022 Status)

Number: MANOC-1276546935-5
Owner:

Status:
Version:

Effective:
Review:

Page 33 of 39

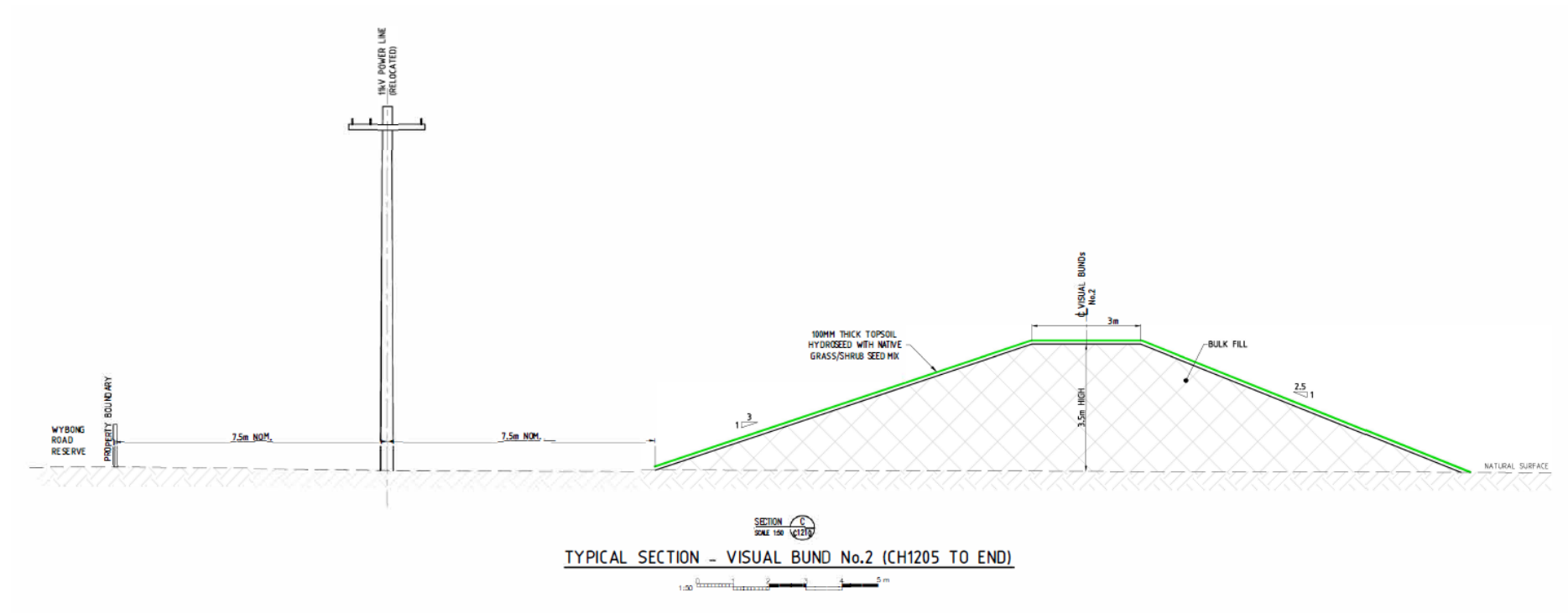


Figure 11 Typical Cross Section of Visual Bunds (Bund 2 Displayed)

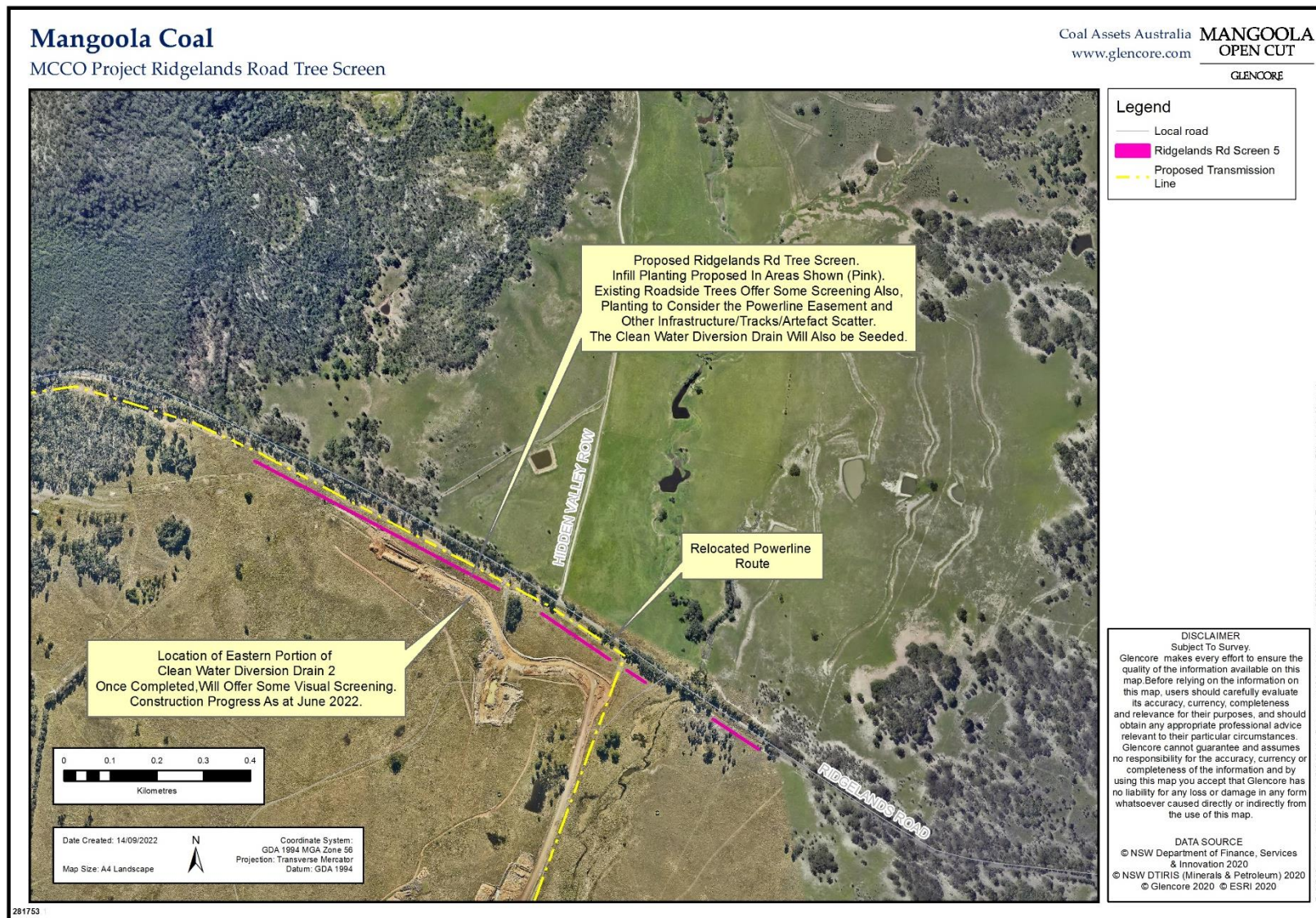


Figure 12 Ridglands Road Tree Screen

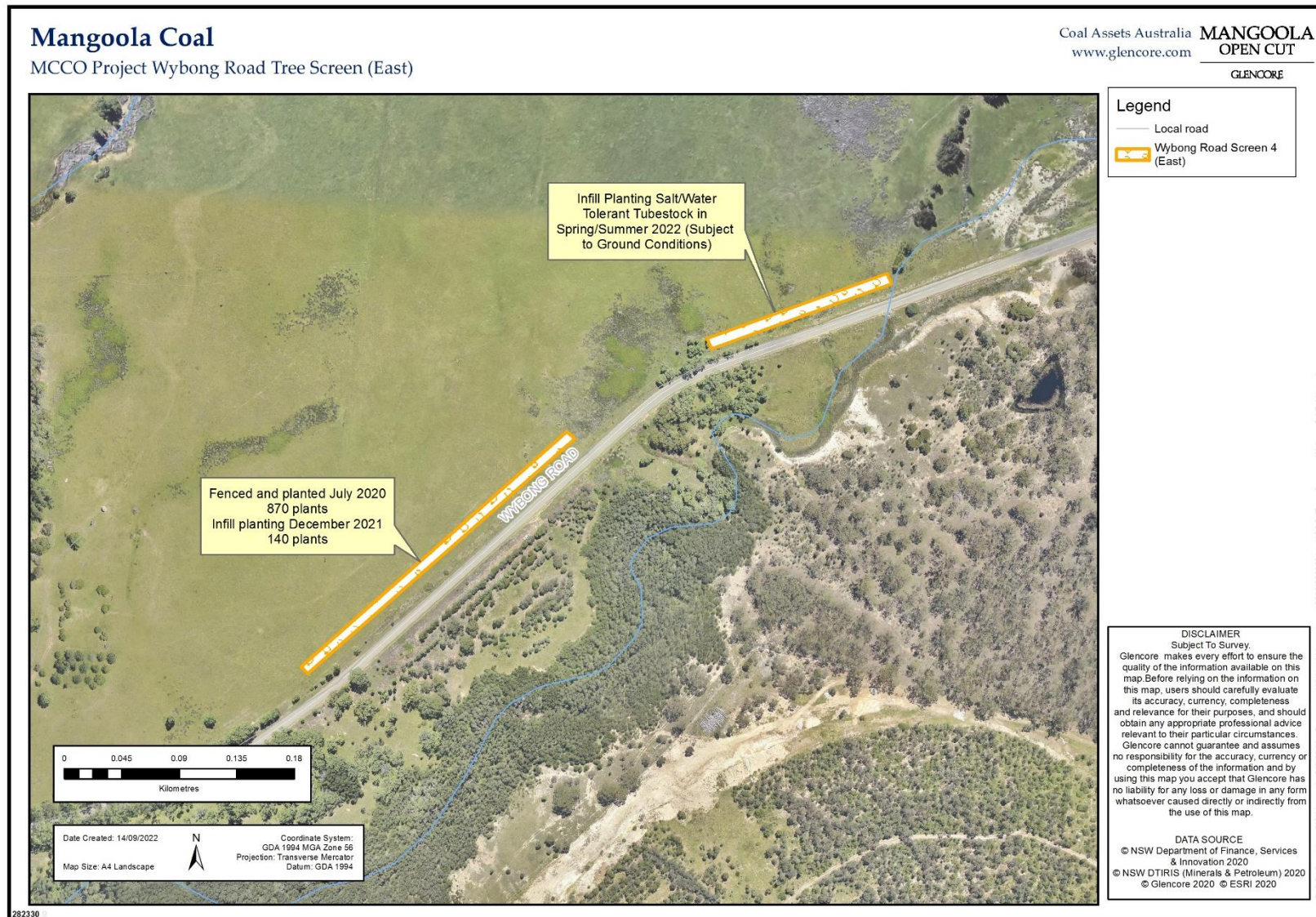


Figure 13 Wybong Road (East) Tree Screen

Number: MANOC-1276546935-5
Owner:

Status:
Version:

Effective:
Review:

Page 36 of 39

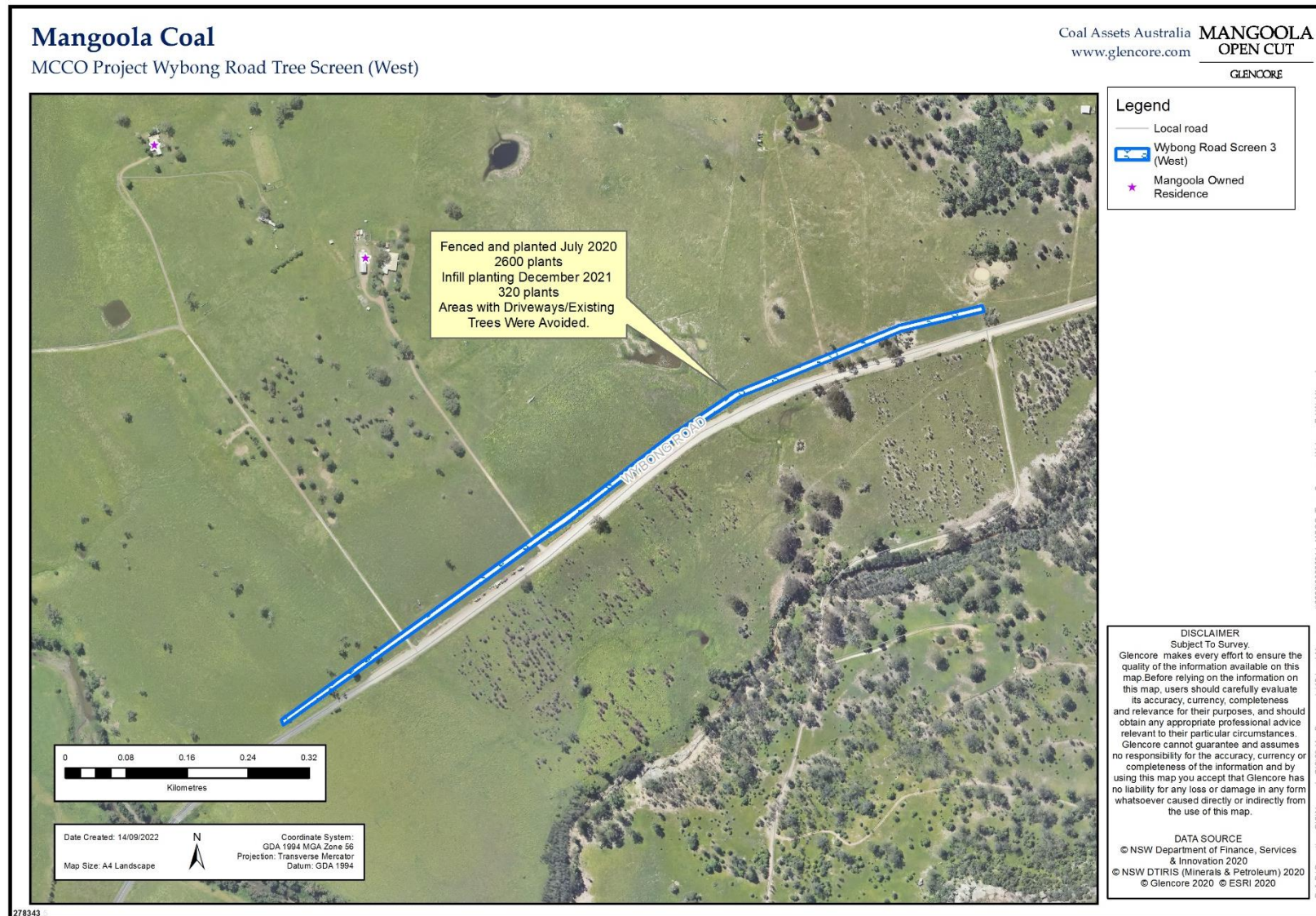


Figure 14 Wybong Road (West) Tree Screen

Number: MANOC-1276546935-5
Owner:

Status:
Version:

Effective:
Review:

Page 37 of 39

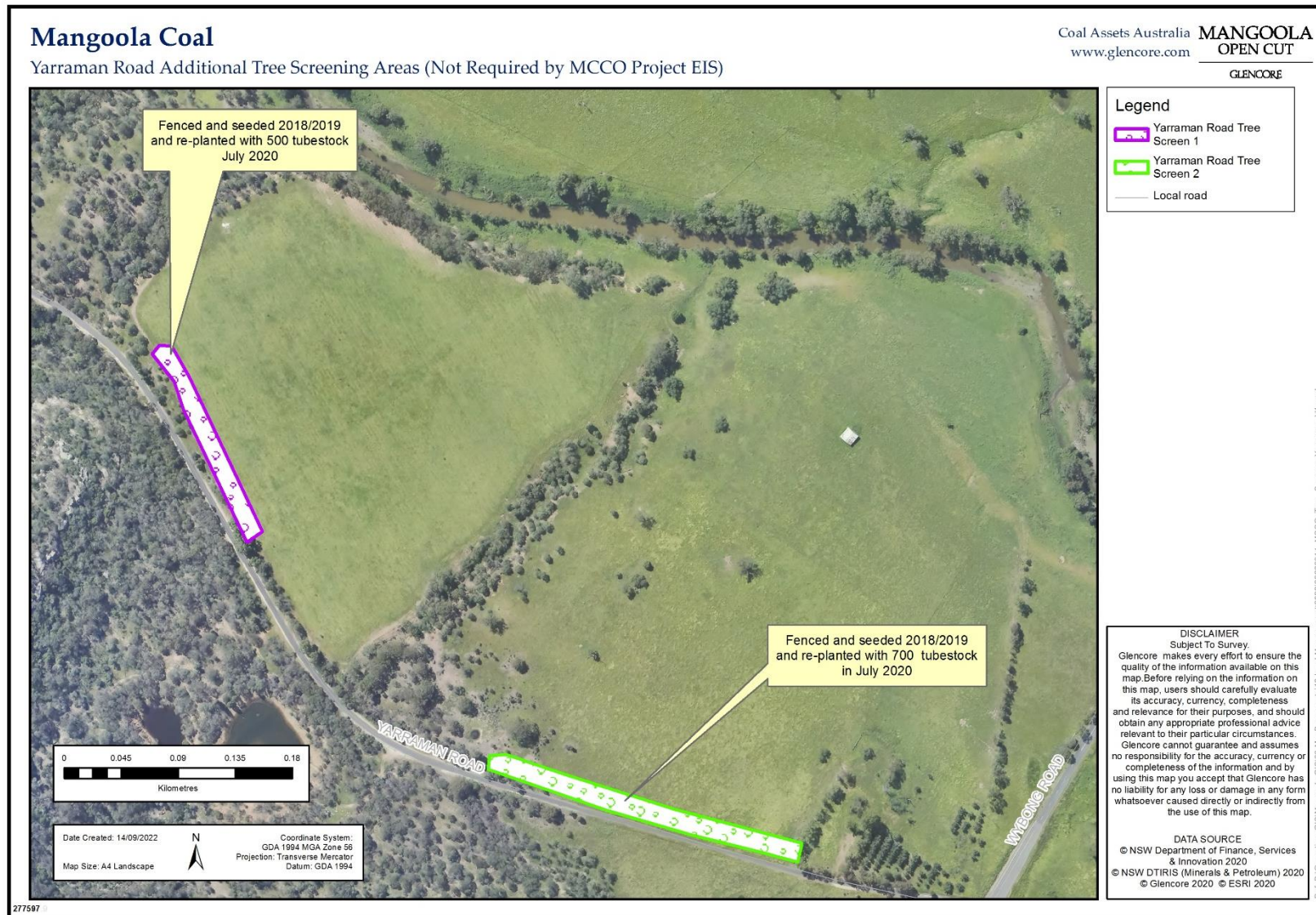


Figure 15 Yarraman Road (Additional) Tree Screens

Number: MANOC-1276546935-5
Owner:

Status:
Version:

Effective:
Review:

Page 38 of 39

Appendix D - Typical Shrub Layer Seed Mix

The following native shrub layer mix is estimated to offer an additional 2-5m screening benefit above the surface level to which the seed is applied.

Species	Per hectare	Seed Source
<i>A. falcata</i>	0.2	Mangoola
<i>A. decora</i>	0.2	Mangoola
<i>A. parvipinnula</i>	0.1	Mangoola
<i>A. spectabilis</i>	0.01	Mangoola
<i>A. pilligera</i>	0.03	Mangoola
<i>Dodonaea viscosa ssp viscosa</i>	0.1	Sourced
<i>Dodonaea viscosa ssp cuneata</i>	0.02	Sourced
<i>Allocasuarina distyla</i>	0.05	Sourced
<i>Indigofera australis</i>	0.05	Sourced
<i>Myoporum montanum</i>	0.05	Sourced
<i>Bursaria spinosa</i>	0.05	Sourced
<i>Kunzea occidentalis</i>	0.05	Mangoola
<i>Daviesia genistifolia</i>	0.02	Mangoola
<i>Senna artemisioides</i>	0.05	Mangoola
<i>Hardenbergia violacea</i>	0.02	Sourced