

MANGOOLA OPEN CUT

GLENCORE



Traffic Management Plan

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Table of Contents

1.	Introduction	4
1.1	Overview of Approved Operations	4
1.2	Purpose and Scope.....	7
1.3	Objectives.....	7
1.4	Regulatory Requirements	7
1.4.1	Development Consent.....	7
1.4.1	Roads Act 1993 Approvals.....	8
2.	Consultation.....	10
2.1.1	Consultation with Transport for NSW	10
2.1.2	Consultation with Muswellbrook Shire Council	11
2.1.3	Consultation with Department of Planning, Industry and Environment	11
3.	Surrounding Road Network	12
3.1	Key Roads	12
3.1.1	Wybong Road	14
3.1.2	Bengalla Road.....	15
3.1.3	Thomas Mitchell Drive	15
3.1.4	Denman Road.....	16
3.1.5	Golden Highway	17
3.1.6	Wybong Post Office Road.....	17
3.2	Intersection Operation.....	19
4.	Access Restrictions	19
4.1	Over Dimensional and Heavy Vehicle Access	19
4.2	Project Related Traffic.....	20
5.	Road Interactions and Closures	22
5.1	Local Road Interactions - Construction	22
5.2	Road Closures - Construction.....	24
5.3	Road Closures - Blasting.....	25
6.	Vehicles and Transport Routes	26
6.1	Operational Vehicles	26
6.1.1	Mine Employees.....	26
6.1.2	Heavy Vehicles	28
6.2	Construction Vehicles	29
7.	Access and Parking Arrangements.....	31
7.1	Access.....	31
7.2	Parking.....	31
7.2.1	Operational	31
7.2.2	Construction Parking.....	33

8.	Drivers Code of Conduct.....	33
8.1	NSW Road Rules & General Exceptions	33
8.2	Related Traffic Local Road Policy	33
8.3	Fatigue Management	34
8.4	Conduct and Discipline.....	35
9.	Managing Interactions with Public Transport	35
10.	Flood Warning Signage.....	36
11.	Dilapidation Protocols	39
12.	Training	39
13.	Community Engagement	40
14.	Measurement and Evaluation	43
14.1	Traffic monitoring	43
14.2	Complaint management	43
14.3	Access to information	43
14.4	Reporting and Records.....	44
15.	Review and Improvement	46
15.1	Periodic Review	46
15.2	Continuous Improvement	46
16.	Document Information.....	47
16.1	Related Documents	47
16.2	Change Information	47
16.3	References.....	47
Appendix A - Authority Correspondence		49
Appendix B - Evidence of Consultation		53
Appendix C - Other SSD 8642 Conditions		59

1. Introduction

1.1 Overview of Approved Operations

Mangoola Coal Operations Pty Limited (Mangoola) operates an open cut coal mine located 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 has operated Mangoola Coal Mine under Project Approval (PA) 06_0014 since mining commenced at the site in September 2010.

In April 2021, Mangoola was granted Development Consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for State Significant Development (SSD) 8642 by the NSW Independent Planning Commission (IPC) for continued operations at the Mangoola Coal Mine. SSD 8642 enables the continuation of mining at Mangoola Coal Mine at up to 13.5 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal through to 2030. The Project Boundary for Mangoola Coal Mine is presented in **Figure 1**.

In accordance with SSD 8642, operations permitted to be undertaken at Mangoola Coal Mine generally comprise:

- Open cut mining at up to 13.5 Mtpa ROM coal using truck and excavator mining methods through to 2030.
- Continued operations within the existing Mangoola Coal Mine including the use of existing infrastructure facilities.
- Mining operations in a new mining area located north of the existing Mangoola Coal Mine, Wybong Road, south of Ridgeland Road and east of the 500 kilovolt (kV) Electricity Transmission Line (ETL).
- Construction of a haul road overpass over Big Flat Creek and Wybong Road.
- During the construction of the Wybong Road/Big Flat Creek Overpass it is proposed to provide a temporary bypass of Wybong Road (see **Section 5.1**).
- Establishment of an out-of-pit overburden emplacement area.
- Realignment of a portion of Wybong Post Office Road or provide a financial contribution to Council at least equivalent to the cost of the works identified to relocate Wybong Post Office Road (see **Section 3.1.6**).

Figure 2 illustrates the key features of the Mangoola operation as approved by SSD 8642.

A detailed project description associated with SSD 8642 is provided in Chapter 3 of the **Mangoola Coal Continued Operations (MCCO) Project Environmental Impact Statement** (EIS) (EIS; Umwelt, 2019). The MCCO Project EIS was supported by a **Traffic and Transport Impact Assessment** (TTIA) (GHD 2019). The TTIA findings and mitigation measures relevant to the preparation of this Traffic Management Plan (TMP) have been incorporated into this document.

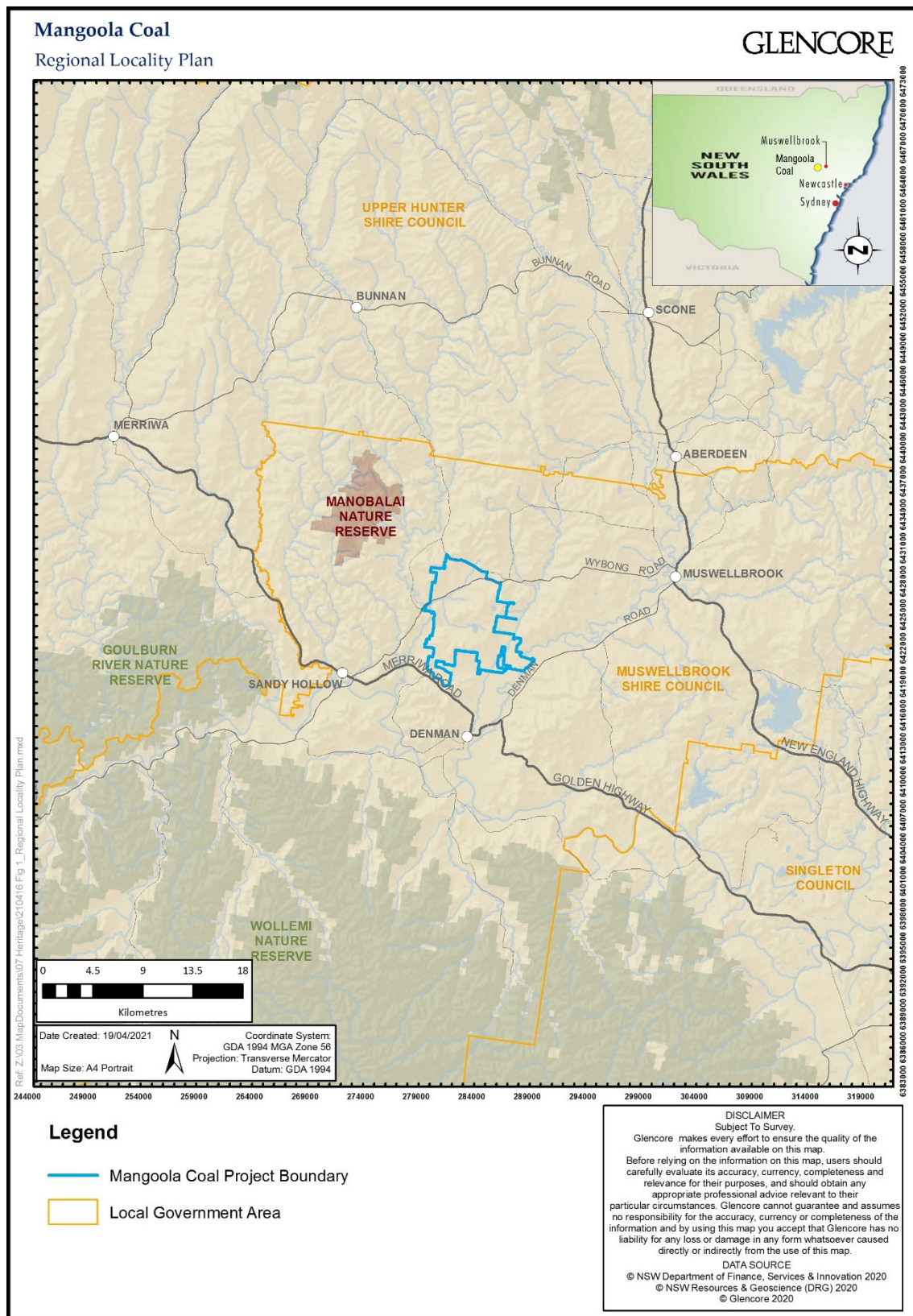


Figure 1 Regional Context

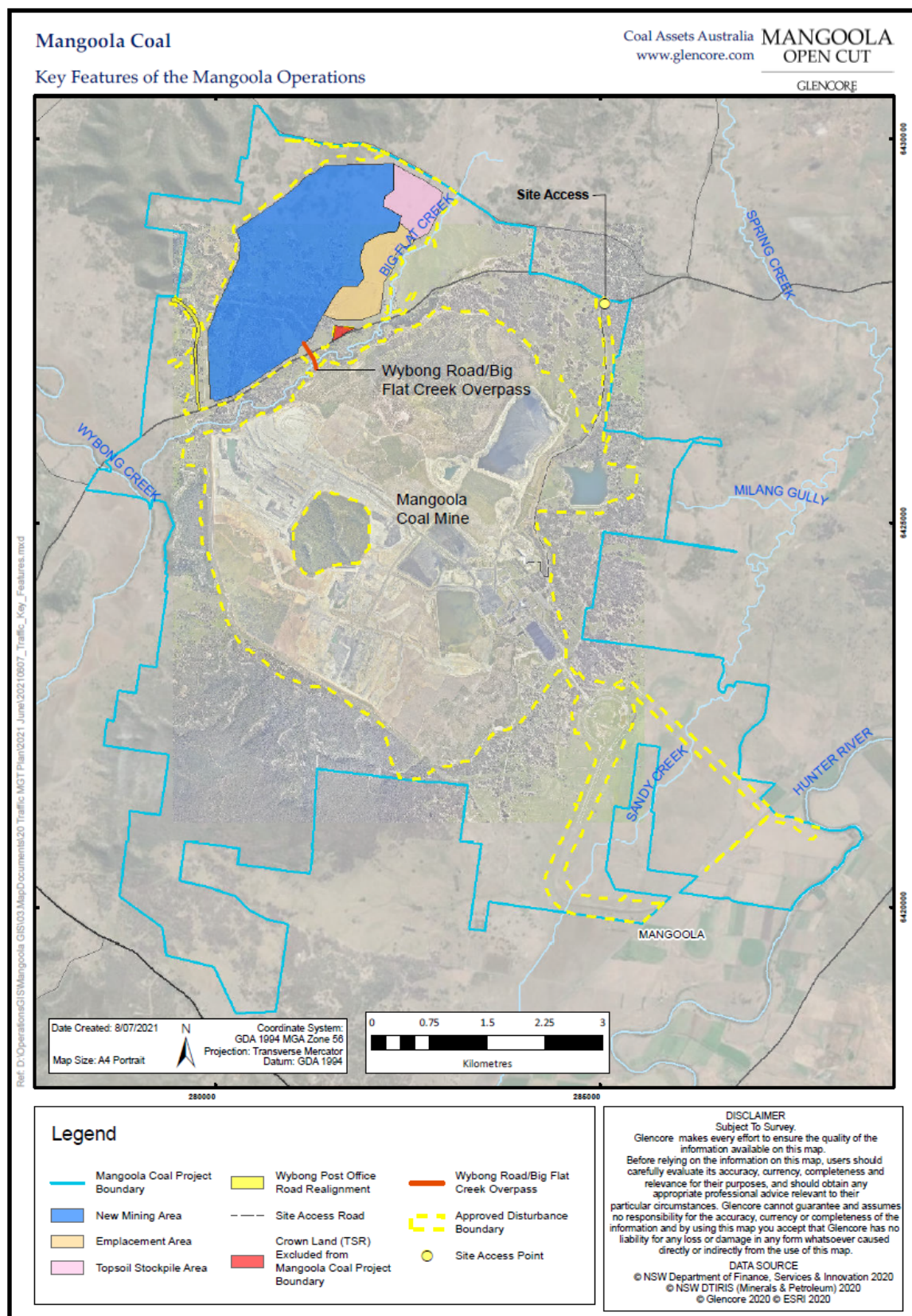


Figure 2 Key Features of the Mangoola Operation

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Page 6 of 65

1.2 Purpose and Scope

This TMP has been prepared to address Condition B104 of SSD 8642 and sets out the procedures for traffic related activities associated with Mangoola Coal Mine.

In accordance with Condition B104(a) of SSD 8642, this TMP has been prepared by Mark Lucas, a Senior Transport Planner of GHD, who has been endorsed by the Planning Secretary as a suitably qualified and experienced person (see the endorsement in **Appendix A**). This TMP fulfils the requirements of SSD 8642, under which Mangoola operates, and other relevant regulatory requirements that are applicable to Mangoola Coal Mine (refer to **Section 1.4**).

As required by Condition B106 of SSD 8642, Mangoola will not commence mining operations north of Wybong Road until this TMP is approved by the Planning Secretary. Mangoola will implement this TMP as approved by the Planning Secretary.

Condition B104(b) of SSD 8642 requires that the TMP is prepared in consultation with Transport for NSW (TfNSW) and Muswellbrook Shire Council (MSC) as the road authority for the local road network (refer to **Section 2**).

1.3 Objectives

The primary objectives of this TMP are to:

- Detail the transport routes and vehicle types (as far as reasonably practical) associated with the operation of the Mangoola Coal Mine and the construction of infrastructure and associated enabling works, over time to support Mangoola Coal Mine until 2030.
- Identify the code of conduct for employees and contractors accessing and egressing the Mangoola Coal Mine.
- Identify and describe the traffic related procedures during the construction, operation and decommissioning phases of the development.
- Identify measures to mitigate traffic safety issues and disruption to local road users.

1.4 Regulatory Requirements

1.4.1 Development Consent

Condition B104 of the Development Consent for SSD 8642 stipulates the requirements related to the development of a TMP for Mangoola Coal Mine. The requirements of Condition B104 are summarised in **Table 1-1**, including reference to where each requirement of the condition has been addressed within this TMP.

The MCCO Project EIS (Umwelt, 2019) considers the outcomes of the TTIA (GHD 2019) and other EIS material as defined by SSD 8642, and the commitments from these documents are presented **Table 1-2**, including reference to where each commitment has been addressed within this TMP.

Additional requirements of SSD 8642 that relate to this TMP are provided in **Appendix C**.

1.4.1 Roads Act 1993 Approvals

Mangoola has sought approval from MSC, as the relevant roads authority under s138 of the *Road Act 1993* (Roads Act), for activities on and in connection with public roads associated with SSD 8642 (s138 Application). Mangoola will address any special conditions issued as part of the s138 Application.

Mangoola has also sought approval under Part 4 of the Roads Act for the necessary closure of the impacted portion of Wybong Post Office Road (see *Section 3.1.6*).

Table 1-1 - SSD 8642 Conditions

Condition	Condition Details	TMP Section
B104	The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	
B104(a)	be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;	<i>Section 1.2 and Appendix A</i>
B104 (b)	be prepared in consultation with TfNSW and Council;	<i>Section 2.1.1, Section 2.1.2 and Appendix B</i>
B104 (c)	include details of all transport routes and traffic types to be used for development related traffic.	<i>Section 4.2 and Section 6</i>
B104 (d)	include details of flood warning signage, including flood depth indicators, in the vicinity of the haul road overpass.	<i>Section 10</i>
B104 (e)	include a protocol for undertaking pre and post-dilapidation surveys and repairing any roads identified in the dilapidation surveys to have been damaged during construction and/or decommissioning works.	<i>Section 11</i>
B104 (f)	include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during the construction, operation and decommissioning phases of the development, including:	
(i)	temporary traffic controls, including detours and signage (where relevant)	<i>Section 5.2, Section 7.1 and Section 10</i>
(ii)	notifying the local community about development-related traffic impacts	<i>Section 13</i>
(iii)	minimising potential for conflict with school buses and stock movements	<i>Section 9</i>
(iv)	access and car parking arrangements	<i>Section 7</i>
(v)	staggering shift changes with other mining operations in the locality, where practicable, to minimise impacts during AM and PM peak traffic periods;	<i>Section 6.1</i>
(vi)	responding to any emergency repair requirements or maintenance during construction and/or decommissioning	<i>Section 6.2</i>
(vii)	a traffic management system for managing over-dimensional vehicles	<i>Section 6.2</i>
B104 (g)	include a Drivers' Code of Conduct that includes procedures to ensure that drivers	
(i)	adhere to posted speed limits or other required travelling speeds	<i>Section 8</i>

Condition	Condition Details	TMP Section
(ii)	adhere to the designated transport routes	<i>Section 8</i>
(iii)	Implement safe driving practices	<i>Section 8</i>

Table 1-2 - EIS Environmental Management and Monitoring Measures

Commitment Details	TMP Section
Mangoola will construct the proposed Wybong Post Office Road realignment prior to tying it in with the existing road network (i.e. Wybong Road and section of the existing road not being realigned) to minimise disruption to the traffic during the construction phase.*	<i>Section 3.1.6 and Section 5.2</i>
To guide traffic management during the construction phase a Construction Traffic Management Plan (CTMP) will be prepared in consultation with MSC prior to construction commencing. The CTMP will include:	
○ traffic control measures in work areas.	<i>Section 5.2</i>
○ restrictions on the delivery of heavy plant and materials to site.	<i>Section 4.3, Section 5 and Section 6.2</i>
○ identify the appropriate entry/exit points for the proposed construction compound area(s), i.e. Wybong Road, Wybong Post Office Road and Ridgeland Road.	<i>Section 5.1 and Section 7.1</i>
○ advising motorists of the change in traffic conditions associated with the work.	<i>Section 5.2</i>
Mangoola will maintain the current traffic restrictions, which include no Mangoola Coal Mine related traffic using Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road to get to or from the site, except for in an emergency to avoid the loss of lives, property and/or environmental harm.	<i>Section 4</i>

*Subject to consultation with Muswellbrook Shire Council as the roads authority under the Roads Act 1993 and condition B102 (see *Section 3.1.6*).

1.5 Roles and Responsibilities

The relevant roles and responsibilities associated with this TMP are outlined in *Table 1-3*.

Table 1-3 - Roles and Responsibilities

Role	Responsibility
Operations Manager	<ul style="list-style-type: none"> Maintain a working knowledge of this TMP and facilitate the implementation of it. Responsible for providing adequate resources for the implementation of this TMP.

Role	Responsibility
Environment & Community Manager	<ul style="list-style-type: none"> Implement and provide for appropriate review and, where necessary, update of the TMP as per SSD 8642. Responsible for providing community updates about the TMP and information about any planned road closures or diversions or applicable construction related activities.
Environmental Site Representatives	<ul style="list-style-type: none"> Responsible for coordinating the day-to-day implementation of this TMP.
All employees and contractors	<ul style="list-style-type: none"> Undertake all activities in accordance with this plan. Comply with the management measures in this plan. Participate in relevant training.

2. Consultation

This section outlines the consultation undertaken during the development of this TMP.

In accordance with Condition A22(a) of SSD 8642, consultation has been undertaken with Transport for NSW (TfNSW) and MSC prior to the submission of the TMP to the Department of Planning, Industry and Environment (DPIE) as outlined in the following sections. Furthermore, in accordance with Condition A22(b) of SSD 8642, details of the consultation undertaken and the outcomes of that consultation is summarised below and detailed in **Appendix B**.

2.1.1 Consultation with Transport for NSW

In relation to Mangoola obtaining approval under the Roads Act for SSD 8642 construction activities, additional consultation with TfNSW and MSC has been conducted regarding the final details of the haul road overpass on Wybong Road. This consultation was completed to confirm the current design meets the expectations of the relevant road authority and maintains sufficient dimensions to enable the ongoing use of Wybong Road by Over Sized Over Mass (OSOM) vehicles. Specifically, further details of the vertical clearances and width envelopes provided by the proposed design has been provided to both TfNSW and MSC.

For context as to the use and expectations of OSOM vehicles on Wybong Road, in their submission following the public exhibition of the MCCO Project EIS (Umwelt 2019) MSC indicated that:

‘Council records indicate that of the 95 + OSOM approvals for the use of Wybong Road from January 2019 to June 2019, 62 truck movements were in excess of 5.4m height, with the average being 5.8m high. The largest vehicle that has recently travelled on this part of Wybong Road measured 9.5m wide and 5.8m high.’ (MSC 2019).

In more recent email correspondence dated 18 June 2021 between MSC and TfNSW, TfNSW confirmed that from their records there were multiple loads approaching 10 m wide with the largest also approximately 6m in height and therefore require a minimum vertical clearance of 6.3m (10m width envelope).

The final design adopted by Mangoola provides a vertical clearance of 6.3m (10m width envelope) as required by TfNSW and further enables a vertical clearance 6.5m (9m width envelope). It is noted this design is the same as that included in the work undertaken and approved as part of SSD 8642.

TfNSW have stated that they are satisfied with the current design of the overpass, and as a result MSC are satisfied that approval under the *Roads Act 1993* can be granted consistent with this position.

A copy of the draft TMP was provided to TfNSW on 21 July 2021, with an invitation to provide comment. TfNSW subsequently provided a response on 27 August 2021 indicating no amendments to the document. A record of consultation undertaken with TfNSW is included in **Appendix B**.

2.1.2 Consultation with Muswellbrook Shire Council

Since the granting of SSD 8642 consultation with MSC has been ongoing regarding traffic and transport related matters primarily associated with obtaining the relevant approvals under the Roads Act. As discussed in **Section 2.1.1**, MSC have indicated that the current design of the haul road overpass including the vertical clearances and associated width envelopes are satisfactory.

A copy of the draft TMP was provided to MSC on 21 July 2021, with an invitation to provide comment. A further follow up email was provided to MSC on 25 August 2021 seeking feedback however to date no response from MSC was provided in relation to the first draft of the TMP.

In the period May – November 2021 Mangoola and MSC have engaged constructively regarding the MCCO Project's interactions with Council roads. Numerous meetings were held in this period in relation to securing the necessary approvals under the Roads Act to facilitate construction related road activities. In November 2021, Mangoola and MSC reached agreement on a Road Closure and Works Deed, which sets out the obligations of both parties in respect to interactions between SSD 8642 and matters pertinent to MSC.

This TMP has been updated, where necessary, to reflect the agreed position of both Mangoola and MSC as described in the Road Closure and Works Deed. Further detail in relation to the agreed outcomes in respect to SSD 8642 Condition B102 is discussed in **Section 3.1.6**.

A copy of the revised TMP was provided to MSC on 11 November 2021 and a subsequent response provided by MSC on 18 November 2021. This TMP has been updated in response to the feedback received from MSC received on 18 November 2021. A summary of the response received from MSC and how each item has been addressed in this TMP is provided in **Appendix B** along with a record of consultation undertaken with MSC.

2.1.3 Consultation with Department of Planning, Industry and Environment

On 20 May 2021 DPIE, as a nominee of the Planning Secretary, endorsed the appointment of Mr Mark Lucas as a suitably qualified and experienced person to undertake the preparation of this TMP. A copy of the endorsement correspondence is provided in **Appendix A**.

Following the review of the draft TMP by TfNSW and MSC as outlined in **Section 2.1.1** and **Section 2.1.2**, respectively, the TMP was submitted to DPIE on 31 August 2021 for review and approval (see **Appendix A**).

DPIE provided a response to the draft TMP on 25 October 2021 (see **Appendix A**). This TMP has been updated to reflect this feedback, including a feedback received from MSC as noted above, and was resubmitted to DPIE on 19 November 2021 for final review and approval.

3. Surrounding Road Network

3.1 Key Roads

The key roads in proximity to the Mangoola Coal Mine include:

- Wybong Road
- Bengalla Road
- Thomas Mitchell Drive
- Denman Road
- Golden Highway
- Wybong Post Office Road

Each of the abovementioned roads are described in the following sections.

Other roads in the vicinity of Mangoola Coal Mine relevant to this plan include the Golden Highway Mangoola Road, Castlerock Road, Ridgeland Road, Reedy Creek Road, Kayuga Road, Roxburgh Road and Edderton Road.

Condition B97 of SSD 8642 provides that after the commencement of construction, Mangoola will contribute to the upgrade and maintenance of Thomas Mitchell Drive, and the upgrade of the Thomas Mitchell Drive/Denman Road intersection, proportionate to its impact (based on usage) on that infrastructure in accordance with the *Thomas Mitchell Drive Contributions Study* (TMD Contributions Study) (GHD 2015)¹. To this end, Mangoola has fulfilled all currently required financial contributions as required by the TMD Contributions Study. Mangoola will continue to contribute as necessary based on the requirements of the TMD Contributions Study.

The upgrade of the Thomas Mitchell Drive/Denman Road intersection is primarily associated with another mining company, and it is understood the timeframe for completion of the intersection upgrade has been extended to 31 December 2022. As required by Condition B97, within three months of the completion of the intersection upgrade to the satisfaction of TfNSW and MSC, Mangoola will provide the calculated financial contribution, in accordance with the TMD Contributions Study, to the relevant road authority undertaking the works (or if another mining company is undertaking the works, to that mining company).

Mangoola also has an established Voluntary Planning Agreement (VPA) with MSC. In addition to contributions made as arising from the TMD Contributions Study, the VPA provides approximately \$300,000pa (subject to Consumer Price Index indexation) for road maintenance measures on Wybong Road and other general mine affected road maintenance works.

An overview of the road network surrounding Mangoola Coal Mine is provided in *Figure 3*.

¹ As amended by the supplementary report dated August 2018 (or its latest version as amended from time to time).

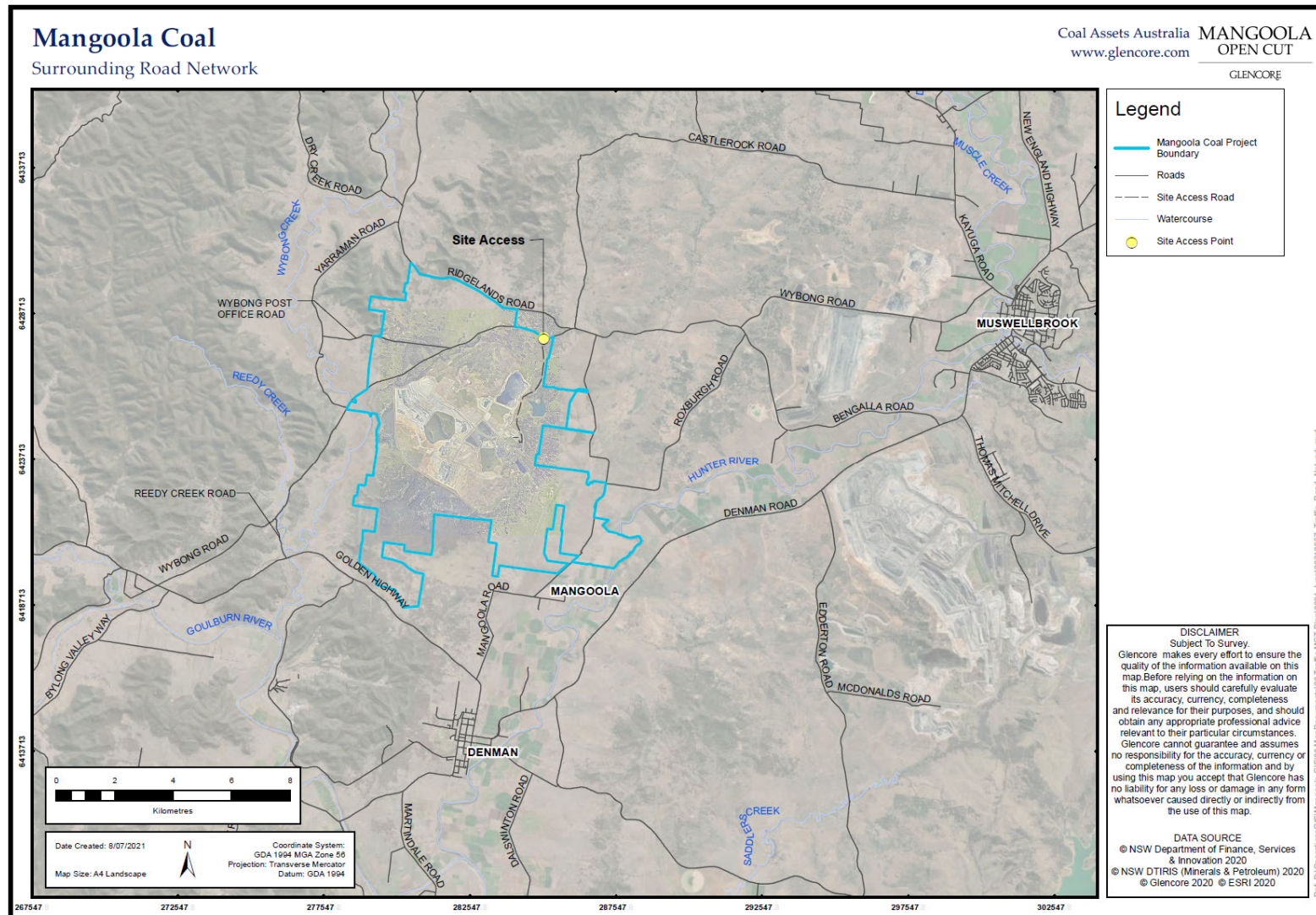


Figure 3 Surrounding Road Network

3.1.1 Wybong Road

Wybong Road (refer to **Figure 4**) functions as a local OSOM route, and it is a key road within the regions local heavy vehicle network of roads connecting Kayuga Road at Muswellbrook, and the Golden Highway at Sandy Hollow. Wybong Road typically has a speed limit of 100 km/h.

Wybong Road connects to Bengalla Road at a give-way controlled junction with an altered alignment where Bengalla Road – Wybong Road (west of Bengalla Road) forms the major road. Within the region, the local heavy vehicle network, which includes Wybong Road (west) plays an important role in facilitating the movement of OSOM vehicles across the region, particularly in the short to medium term (for the period of Mangoola's operation) prior to the completion of any future bypass of Muswellbrook or upgrade of the Denman Bridge on the Goldern Highway over the Hunter River.

A gross load limit of 12 tonnes applies to the eastern section of Wybong Road (between Bengalla Road and Kayuga Road).

The Mangoola Coal Mine Access Road intersects Wybong Road at a priority controlled intersection. The intersection includes a rural auxiliary left turn lane (AUL) and a rural auxiliary right turn treatment (AUR) to allow through vehicles to pass vehicles turning right into Mangoola Coal Mine.



Figure 4 Wybong Road looking west towards Mangoola Coal Mine Access Road

3.1.2 Bengalla Road

Bengalla Road (refer to **Figure 5**) functions as a local OSOM route road that provides a connection between Wybong Road to the north and Denman Road to the south. Along with the western side of Wybong Road (to the west of the intersection with Bengalla Road), Bengalla Road provides a heavy vehicle traffic route, including for mine traffic, to the New England Highway south of Muswellbrook (via Thomas Mitchell Drive). Bengalla Road has single traffic lanes in each direction and provides direct access to the Bengalla Mine. The sign-posted speed limit on Bengalla Road is 100 km/h.



Figure 5 Bengalla Road looking south towards Denman Road

3.1.3 Thomas Mitchell Drive

Thomas Mitchell Drive (refer to **Figure 6**) functions as a local road that provides a connection between Denman Road and the New England Highway, which enables vehicles to bypass Muswellbrook. It provides direct access to the Muswellbrook Industrial Estate, the Mt Arthur Coal Mine and the Maxwell Infrastructure site (previously referred to as the Drayton Mine).

Thomas Mitchell Drive has a single traffic lane in each direction with a sign-posted speed limit of 80 km/h for the northern section through the industrial estate and near Denman Road. The speed limit along Thomas Mitchell Drive is generally 100 km/h for the southern section, connecting to New England Highway.



Figure 6 Thomas Mitchell Drive looking west towards Denman Road

3.1.4 Denman Road

Denman Road (refer to **Figure 7**) functions as a sub-arterial road connecting to Sydney Street at Muswellbrook and continuing west to the Golden Highway near Denman. Denman Road is typically constructed to a rural highway standard, with single traffic lanes in each direction and additional turn lanes at key intersections. The posted speed limit is 100 km/h, west of Bengalla Road, and 80 km/h, east of Bengalla Road (to Muswellbrook).



Figure 7 Denman Road looking west from Bengalla Road

3.1.5 Golden Highway

The Golden Highway (B84, refer to **Figure 8**) functions as a sub-arterial road connecting Dubbo and Newcastle. The Golden Highway is typically constructed to a rural highway standard, with single traffic lanes in each direction and additional turn lanes at key intersections. The sign-posted speed limit along the Golden Highway is generally 100 km/h.



Figure 8 Golden Highway looking east from Wybong Road

3.1.6 Wybong Post Office Road

Wybong Post Office Road (refer to **Figure 9**) is a local road connecting Yarraman Road and Wybong Road that has a carriageway width of approximately 4.5 m and provides bi-directional traffic flows.

Wybong Post Office Road forms a priority controlled intersection with Wybong Road.

Wybong Post Office Road is in relatively poor condition. Wybong Post Office Road intersects Wybong Road at an angle less than 70 degrees, which does not comply with Austroads Design Guidelines.

To facilitate construction activities in advance of mining, Mangoola requires the closure of the eastern half of Wybong Post Office Road between Wybong Road and the approximate extent of the Approved Disturbance Boundary (refer to **Figure 2**).

Condition B102 of SSD 8642 states:

Prior to undertaking mining operation within 200 m of Wybong Post Office Road, unless otherwise agreed to by the Planning Secretary. The Applicant must close the affected section of Wybong Post Office Road and either:

(a) realign the affected section of Wybong Post Office Road as described in the EIS and shown conceptually in Appendix 2, to the satisfaction of the applicable roads authority; or

(b) provide a financial contribution to Council at least equivalent to the cost of the works identified in subparagraph (a) that is to be directed towards the implementation of Council's preferred approach to addressing road network issues associated with the closure of the affected section of Wybong Post Office Road.

MSC have adopted the **Muswellbrook Mine Affected Road Network Plan Review (MARNP)** (Bitzios Consulting 2020). The MARNP identifies that the realignment of Wybong Post Office Road is not the preferred approach to addressing local road network issues associated with the closure of Wybong Post Office Road. MSC have indicated that all road closures are to be consistent with the recommendations of the MARNP, and as outlined in **Section 2.1.2**, Mangoola and MSC have reached agreement on a Road Closure and Works Deed, which outlines the agreed outcome to the surrounding road network. Consistent with the Road Closure and Works Deed, Mangoola will support the objectives as per condition B102(b), described above, as the preferred approach to addressing local road network issues associated with the closure of Wybong Post Office Road.

In accordance with SSD 8642 Condition B103, if there is any dispute between the Applicant and Council in implementing the requirements for Condition B102, then either party may refer the matter to the Planning Secretary for resolution.



Figure 9 Wybong Post Office Road Looking West

3.2 Intersection Operation

As part of the works undertaken in the TTIA, SIDRA (micro-analytical traffic engineering software) intersection modelling was completed in the AM and PM road network peak for the following intersections:

- Golden Highway / Wybong Road.
- Wybong Road / the Mangoola Coal Mine Access Road.
- Denman Road / Bengalla Road.
- Denman Road / Thomas Mitchell Drive.

SIDRA calculates the amount of delay to vehicles using an intersection and, amongst other performance measures, gives a Level of Service (LoS) rating, which indicates the relative performance of traffic movements within the intersection.

The SIDRA modelling indicated that the intersections of interest are expected to operate with a good level of service and minor delays, currently and in the 2022 horizon, accounting for the construction and operational vehicles associated with the Mangoola Coal Mine.

4. Access Restrictions

Primary access to Mangoola Coal Mine is off Wybong Road from the east via Bengalla Road or west via the Golden Highway. SSD 8642 Conditions B98-B101 outline restrictions that apply in regard to heavy vehicle access and the use of some local roads as outlined in the following sections.

Further details regarding the breakdown of road usage is provided in *Section 6*.

4.1 Over Dimensional and Heavy Vehicle Access

All over dimensional vehicle access to and from the site is via Wybong Road east of the mine access road, unless the applicable roads authority agrees otherwise.

Instances may occur, subject to approval from the road authority during operation that may require heavy vehicles to access Mangoola from Wybong Road (west), for example when road upgrades or other road blockages are occurring, or for emergency access purposes.

As per condition B100 of SSD 8642, project related heavy vehicle traffic must not use Wybong Road west of the Mine Access Road (to the intersection with the Golden Highway) to access the site, except during construction and decommissioning, or in an emergency to avoid loss of lives, property and/or prevent environmental harm.

A summary of restrictions on transport routes is presented in *Figure 11*.

Any movement of over dimensional vehicles will be undertaken in accordance with TfNSW, the National Heavy Vehicle Regulator Guidelines and local road authority requirements. This may include the preparation and approval of a NSW Load Declaration Form (see <https://roads-waterways.transport.nsw.gov.au/documents/about/forms/45071986-osom-load-declaration.pdf>).

Some of the key specifications of this guideline include:

- Pilot and escort vehicles will be used to provide other road users with an advance warning that the vehicle ahead is over dimensional.

- Over dimensional vehicles shall not travel roads damaged by floods, submergence, mine subsidence or earthquakes.

All relevant Mangoola personnel will be made aware of restrictions of over dimensional and heavy vehicles performing deliveries to the site as required by the conditions of consent and as detailed in **Section 4.2**.

4.2 Project Related Traffic

All Mangoola related traffic must not use the following roads to access Mangoola Coal Mine to get to and from the site unless in an emergency to avoid loss of lives, property and/or prevent environmental harm:

- Reedy Creek Road
- Mangoola Road
- Roxburgh Road
- Castlerock Road

This restriction does not apply to any employees that reside on Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road or the infrequent use of the roads for consultation with neighbouring landowners, environmental monitoring, and inspection and maintenance of nearby infrastructure.

A summary of restrictions on transport routes is presented in **Figure 11**.

Signage has been placed on the restricted roads listed above, to inform Mangoola Coal Mine traffic not to use them. An example of this signage on Reedy Creek Road is displayed in **Figure 10**.

All employees and contractors of Mangoola are subject to induction training which identifies roads that are restricted for use (see **Section 12**) and obligations under SSD 8642.



Figure 10 Example of Site Access Restriction Road Use Signage (Reedy Creek Road)

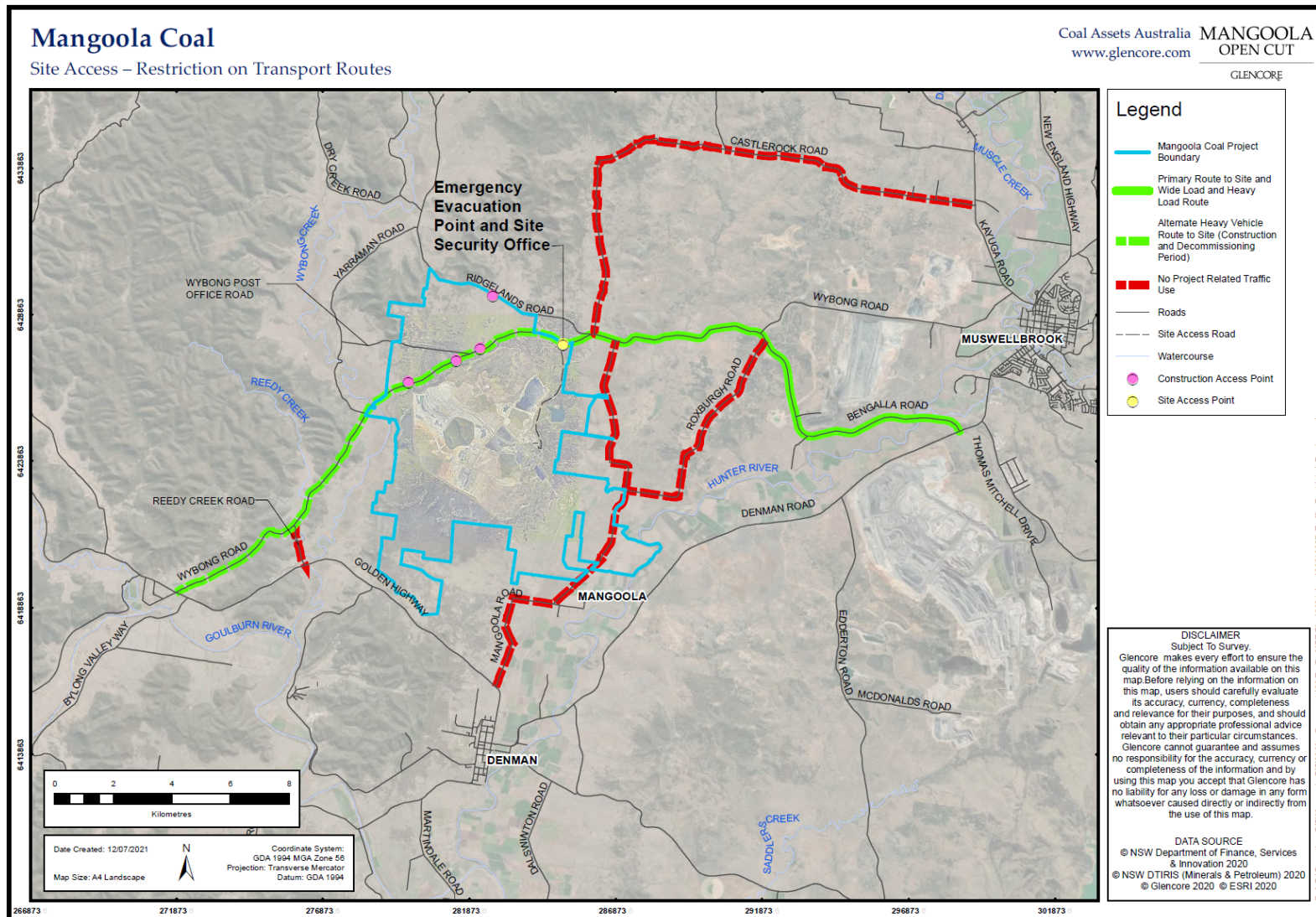


Figure 11 Site Access – Restriction on Transport Routes

5. Road Interactions and Closures

5.1 Local Road Interactions - Construction

The construction activities associated with the establishment of the new mining area north of Wybong Road are displayed in **Figure 12**.

Over the life of the Mangoola Coal Mine further construction activities may be required to maintain the operation. This management plan applies to all construction activities, and where required, further consultation with the relevant roads authority or other stakeholders may be required.

It is noted that:

- The construction activities detailed in **Figure 12** assumes that Wybong Post Office Road is realigned (this is not proposed to occur, see **Section 3.1.6**).
- Access off Ridgeland's Road is intended to be a relatively minor construction access location and will only be permitted through the location as shown on **Figure 12** for the purpose of construction of 11KV electricity and mobilization of plant and equipment. During the construction period, and beyond, ongoing access to Mangoola land from Ridgeland's Road is required for purposes such as land management, environmental monitoring, emergency purposes or inspections (see **Section 7.1**).
- As displayed in the inset, during the construction of the Wybong Road/Big Flat Creek Overpass it is proposed to provide a temporary bypass of Wybong Road adjacent to the proposed work zone. The construction of the temporary bypass will support access/egress to and from the site for construction vehicles while minimising delays to vehicles travelling on Wybong Road. Vehicles exiting construction work areas onto the Wybong Road temporary bypass will give way to road users unless subject to Traffic Control.

As discussed in **Section 1.4.1**, Mangoola have sought approval under s138 of the Road Act for activities on and in connection with public roads associated with SSD 8642.



5.2 Road Closures - Construction

MSC, as the roads authority, has control over the impacted roads, and any proposal to close roads requires MSC's permission. Mangoola intends to minimise disruption to normal traffic conditions through the application of traffic control measures in accordance with Austroads Guides to Temporary Traffic Management and TfNSW's Traffic Control at Worksites Technical Manual.

As noted in **Section 3.1.6**, to facilitate construction activities in advance of mining, Mangoola requires the closure of the eastern half of Wybong Post Office Road between Wybong Road and the approximate extent of the Approved Disturbance Boundary (refer to **Figure 2**). Mangoola will seek approval from MSC under the Roads Act for the temporary and permanent closure of the affected portion of Wybong Post Office Road.

In addition to the temporary and permanent closure of Wybong Post Office Road described above, the following activities may require temporary road closures that may impact local roads during the construction activities associated with the establishment of the new mining area north of Wybong Road. Traffic will be controlled at these sites in accordance with the required standards and Traffic Guidance Schemes² (TGS) will be developed and submitted to the relevant road authority for acceptance:

- Potential for short road closures setting up initial access points off Wybong Road and Wybong Post Office Road.
- Road closures, or minor detours, of Wybong Road tying in the bypass road around the haul road crossing construction site.
- Road closures, or minor detours, of Wybong Road tying in the completed Wybong Road crossing back into Wybong Road near the end of the works.
- Short road closures of various roads to bring over dimensional loads into construction access points.
- Potential short road closures to allow construction equipment to cross Wybong Road to transfer equipment around the site between construction work areas.
- Road closures associated with the civil works for vegetation mulching close to the road corridor.
- Road closures associated with the power line works such as vegetation mulching close to the road corridor, trimming of trees close to the road corridor, removal of redundant power lines across public roads.
- Other temporary road closures, or minor detours, required to facilitate construction activities.

Prior to construction works, the construction contractor will prepare a TGS for each of the required road closures to advise motorists of changes in the road network conditions/operation or the expected vehicle movements to/from the site.

The TGS will be developed in accordance with the **TfNSW Traffic Control at Works Sites Technical Manual** and **AS1742.3 – Traffic Control for Works on Roads**. The TGS will be subject to consultation and acceptance from the relevant road authority.

The associated TGS road signage will inform drivers of works activities in the area.

² Traffic Guidance Schemes were previously referred to as Traffic Control Plans.

In accordance with TfNSW specifications, during construction, the contractor shall each morning, prior to commencing work, ensure all signage is erected in accordance with the TGS and is clearly visible to motorists. Each evening, upon completion of work, the contractor is to ensure signage is either covered or removed as required, or appropriate for the stage of the works.

If required, traffic controllers shall be monitoring the site during construction deliveries entering and exiting from the site to ensure that people and vehicles in the vicinity of the site are protected from heavy vehicles movements.

Any temporary traffic controls, signage or works within a public road corridor must have approval under s138 Road Act.

5.3 Road Closures - Blasting

Blasting in the mining area south of Wybong Road will continue to be conducted as per applicable procedures and the approved Mangoola Coal Blast Management Plan.

In accordance with conditions of consent and EPL 12894, Mangoola Coal must only carry out blasting between 9.00 am and 5.00 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the EPA. Supplementary restrictions may also apply when blasting is planned within 500 metres of any local road. These conditions include:

- Confining blasts between 10.00 am and 2.00 pm weekdays (to minimise disruptions to the school bus); and
- Mangoola will close any public road within 500 metres of the boundary of a blast on the mine site while firing a blast. This radius may be increased if the risk of fly-rock is considered high, or where there is any other potential risk to road users, or any other environmental factor that requires road closure.

There is a provision to abort blasting, and associated road closures, if an emergency services vehicles is known to be on approach.

In accordance with Condition B24 of SSD 8642, no blasting will occur in the new mining area north of Wybong Road until the Blast Management Plan has been updated and approved by the Planning Secretary.

6. Vehicles and Transport Routes

6.1 Operational Vehicles

6.1.1 Mine Employees

As at 2021 a breakdown of the residential locations of employees (29 March 2021) are displayed in **Table 6-1**.

Table 6-1 - Employee Residential Data

Location	Portion of Employees
Muswellbrook	46%
Singleton	15%
Denman	14%
Scone	12%
Merriwa	7%
Aberdeen	6%

The following was assessed for employees journeys to and from the Mangoola Coal Mine (accounting for the access restrictions detailed in **Section 3.2** of this report) (TTIA, GHD 2019):

- Workers residing in Muswellbrook will access the site via Denman Road, Bengalla Road and Wybong Road with:
 - 50 percent will access the site via Denman Road and Bengalla Road.
 - 50 percent will access the site via Kayuga Road and Wybong Road.
- Workers residing in Singleton will access the site via Thomas Mitchell Drive, Denman Road, Bengalla Road and Wybong Road.
- Workers residing in Denman will access the site via the Golden Highway and Wybong Road.
- Workers residing in Scone will access the site via the New England Highway, Kayuga Road and Wybong Road.
- Workers residing in Merriwa will access the site via the Golden Highway and Wybong Road.
- Workers residing in Aberdeen will access the site via the New England Highway, Kayuga Road and Wybong Road.

The key routes of employees accessing and egressing the Mangoola Coal Mine is displayed in **Figure 13**.

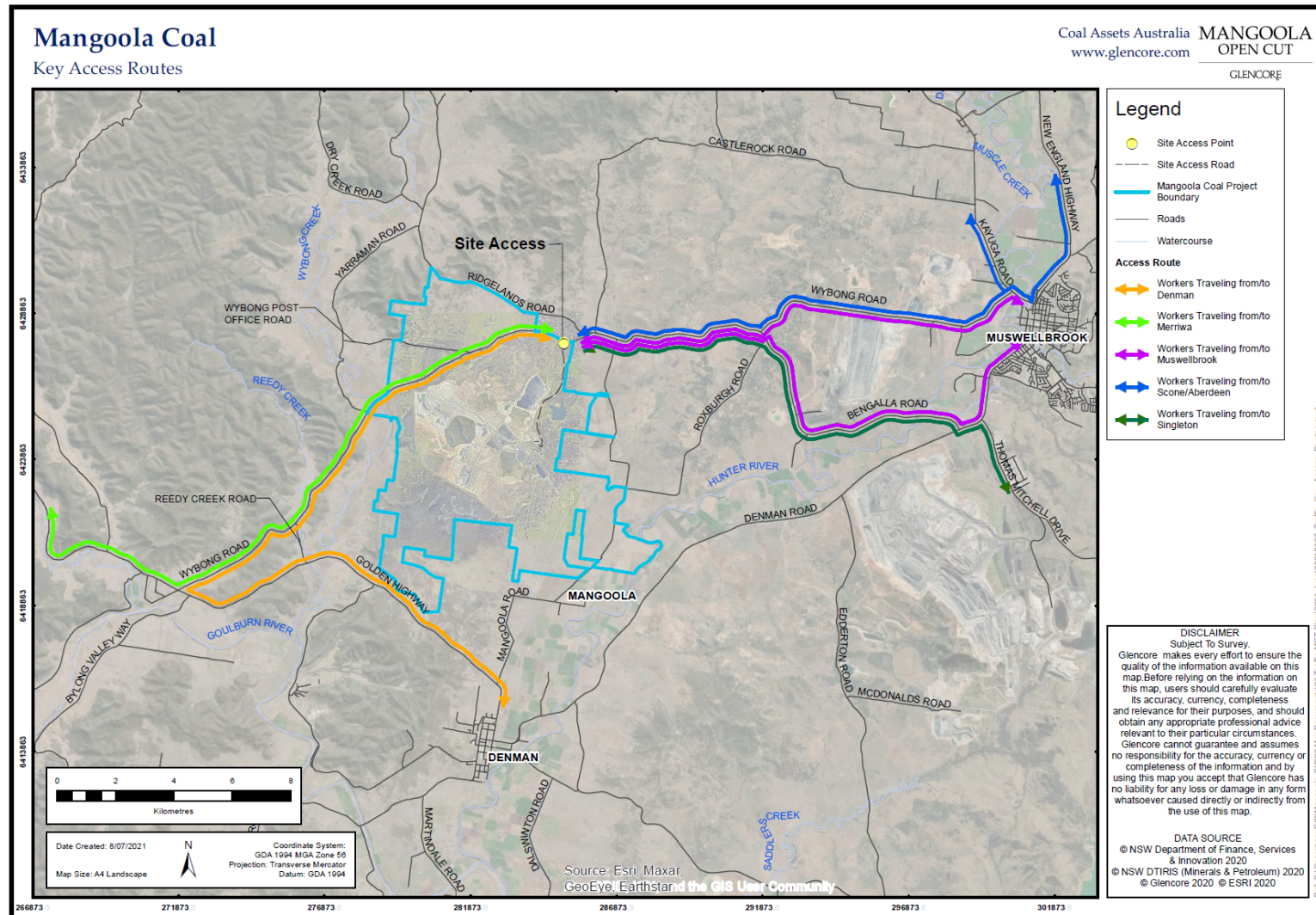


Figure 13 Key Access Routes

The Mangoola Coal Mine is approved for 480 full-time equivalent (FTE) operational personnel.

Mangoola utilises a four-panel roster in 12 hour shifts, as follows:

- 6:30 am start time and a 6:50 pm finish time for dayshift rostered people.
- 6:30 pm start time and a 6:50 am finish time for nightshift rostered people.

Accordingly, operational personnel typically access and egress the site outside peak periods of road network operation.

Support staff typically work weekdays and arrive at Mangoola between 5:00 am – 7:30 am and depart between 4:00 pm – 6:30 pm.

As detailed in **Table 1-1**, condition B104(f)(v) required measures be implemented to consider ‘staggering shift changes with other mining operations in the locality, where practicable, to minimise impacts during AM and PM peak traffic periods’.

As identified in prior traffic assessments undertaken (TTIA, GHD 2019), the good operation of the intersection and roads in proximity to the Mangoola Coal Mine, (as detailed in **Section 3.2**) the organisation of staggered start/finish times of mines in the Hunter Valley is not considered to be necessary.

Mangoola will monitor the potential for impact to local road users and, should it be necessary, implement measures, where practicable, to minimise impacts in consultation with other mining operations in the locality and the road authority.

6.1.2 Heavy Vehicles

All coal produced at Mangoola Coal Mine is transported via rail on the Hunter Valley rail network with an approved capacity of up to ten laden trains per day. The use of rail services for the transportation of coal negates the requirement for coal to be transported via heavy vehicles on local roads.

The types and frequency of heavy vehicles associated with the operation of the Mangoola Coal Mine vary on a daily basis, but the following are typical for deliveries:

- Equipment parts supplier: two runs a day, ten tonne truck (Monday - Friday).
- General freight: one run a day, ten tonne truck.
- Urgent freight: various times and runs however estimated at one run a day, eight tonne flatbed truck
- Engineering supplies: three to four deliveries a week, curtained eight tonne truck.
- Exploration/drilling contractors: works typically completed within a set time period with an initial delivery to site and then decommissioning from site, of drill rig (tracked or wheeled vehicle) and supporting equipment typically of rigid truck, indicatively 27.0t Concessional Mass Limits Total Combination Mass. Ongoing access is then limited typically to light vehicles with occasional (weekly) rigid truck deliveries of supplies.
- Miscellaneous deliveries: three to four deliveries a week, eight tonne flatbed truck.
- Bottled water: once a fortnight, eight tonne truck.
- Gas deliveries: once a week, 11 tonne truck.
- Oil deliveries: once a week, 11 tonne truck.
- Bulk diesel: average of two B-Double tankers per day.

Number: MANOC-1276546935-5

Status: Draft

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: 1

Review: [Planned
Review Date]

Page 28 of 65

- Bulk lubricant deliveries: approximately one tanker per week.
- Oil tanker (delivery and removal): approximately one per week, ten tonne truck.
- Magnetite deliveries: four to eight deliveries per month, 31-42 tonnes per delivery.
- Flocculant deliveries: two to four deliveries per month of 3.5 - 7.5 tonnes per delivery.
- Stemming (gravel for filling blast holes): approximately four truck and dog truck deliveries per day (~30 tonne each).
- Blasting material: three to four deliveries per day on B-Double trucks.
- Potable water deliveries: once per day, 10,000 litre loads average.
- Cranes: use of cranes of various sizes and capacity to facilitate planned works on site, requirement is dependent on the site workload estimated as 1 to 2 movements per day when works are occurring.

In summary:

- The operation of Mangoola Coal Mine generates the use of service vehicles for deliveries in sizes ranging from 8 tonne trucks to B-Doubles and includes cranes.
- Typically up to 36 heavy vehicle movements (18 inbound and 18 outbound) at Mangoola Coal Mine per day.

Additionally, a small number of over dimensional vehicles are expected to be generated during the operational period associated with the delivery of plant and equipment to and from the site.

As per the process described in **Section 4.1** any movement of over dimensional vehicles will be undertaken in accordance with TfNSW, the National Heavy Vehicle Regulator Guidelines and any local road authority requirements. This may include the preparation and approval of a NSW Load Declaration Form.

For all heavy vehicles, in accordance with the conditions of consent (detailed in **Section 3.2**) it is required that all heavy vehicles will access/egress the Mangoola Coal Mine from Wybong Road east of the Mangoola Coal Mine Access Road.

All employees and contractors are required to adhere to Mangoola's drivers' codes of conduct detailed in **Section 8** of this report.

6.2 Construction Vehicles

During the construction activities associated with the establishment of the new mining area north of Wybong Road, the following vehicle activity is expected and has been assessed in the TTIA (2019) prepared by GHD:

- A likely (maximum) construction workforce of approximately 145 persons.
- An average of 30 heavy vehicle movements (inbound and outbound) per day over the course of the construction period. A peak of approximately 70 heavy vehicle movements (inbound and outbound) per day.

Construction staff will be inducted and required to adhere to the access restrictions detailed in **Section 4** and the driver code of conduct detailed in **Section 8** of this report.

Number: MANOC-1276546935-5

Status: Draft

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: 1

Review: [Planned
Review Date]

Page 29 of 65

Construction staff will generally arrive at the site in the morning peak and exit the site in the afternoon peak, while the heavy vehicle activity will be distributed over the course of the day.

The types of heavy vehicles required for the establishment of the new mining area north of Wybong Road is expected to include but not be limited to:

- Compactors
- Tipper trucks
- Dump trucks
- Graders
- Concrete trucks
- Excavators
- Bucket trucks
- Crane trucks
- Gravel trucks
- Exploration/drilling rigs

Gravel trucks are primarily related to internal and external road construction. The majority of gravel will be sourced “internally” from within the Mangoola Coal Mine and prior to the completion of the haul road overpass over Wybong Road and Big Flat Creek. Gravel required for construction in the MCCO Additional Project Area will be transported via road truck along the existing Mangoola site access road and a section of Wybong Road.

A small number of over dimensional vehicles are expected to be generated during the construction period. Some of these would involve the delivery of plant and equipment to the construction site.

Condition B97 of SSD 8642 states that all over dimensional vehicles are required to access the site via Wybong Road to the east of the mine access road. All drivers of construction vehicles will be informed of the site access restrictions, as detailed in **Section 4**.

In circumstances where emergency repair or maintenance is required during construction or decommissioning of the infrastructure at Mangoola Coal Mine, the associated vehicles would access the construction site in accordance with the available road network and the designated site restrictions.

7. Access and Parking Arrangements

7.1 Access

All access to the Mangoola Coal Mine for operational requirements is via the Mine Access Road (refer to **Figure 11**). The Mine Access Road intersects Wybong Road at a priority controlled intersection. The intersection includes a rural auxiliary left turn lane (AUL) and a rural auxiliary right turn treatment (AUR) to allow through vehicles to pass vehicles turning right into Mangoola Coal Mine.

New access points, or upgrades to existing access points, will also be established on Wybong Road and Ridgeland Road to allow for construction access during the establishment of the new mining area north of Wybong Road. Egress from these access points will be established based on the MSC Rural Property Access standard design drawing (MSC July 2012). Following completion of construction activities, these points of access will be maintained for emergency services, environmental monitoring and property management and then later during the decommissioning phase as required.

Existing access points off roads surrounding Mangoola to access Mangoola owned land for purposes such as land management, environmental monitoring, emergency purposes or inspections will continue to be utilised as required.

7.2 Parking

7.2.1 Operational

The Mangoola Coal Mine provides three parking areas for staff and visitors. The main car park and adjoining overflow parking area are displayed in **Figure 14**.

The main parking area is sealed and provides:

- 165 standard parking spaces.
- Two parking spaces for the mobility impaired.
- Three ten-minute time-restricted parking spaces.

The overflow parking area is unsealed (with a gravel surface) and provides 56 spaces.

Generally, there is significant capacity at these car-parking areas to account for operational related vehicles.

The second overflow parking area located adjacent to the Coal Handling Processing Plant (CHPP) is displayed in **Figure 14**.

The second overflow parking area provides approximately 150 parking spaces and is used by a small number of employees and/or contractors at the CHPP, and typically provides significant spare capacity.

No additional management measures are proposed to the provision or use of the car parking areas within the Mangoola Coal Mine.

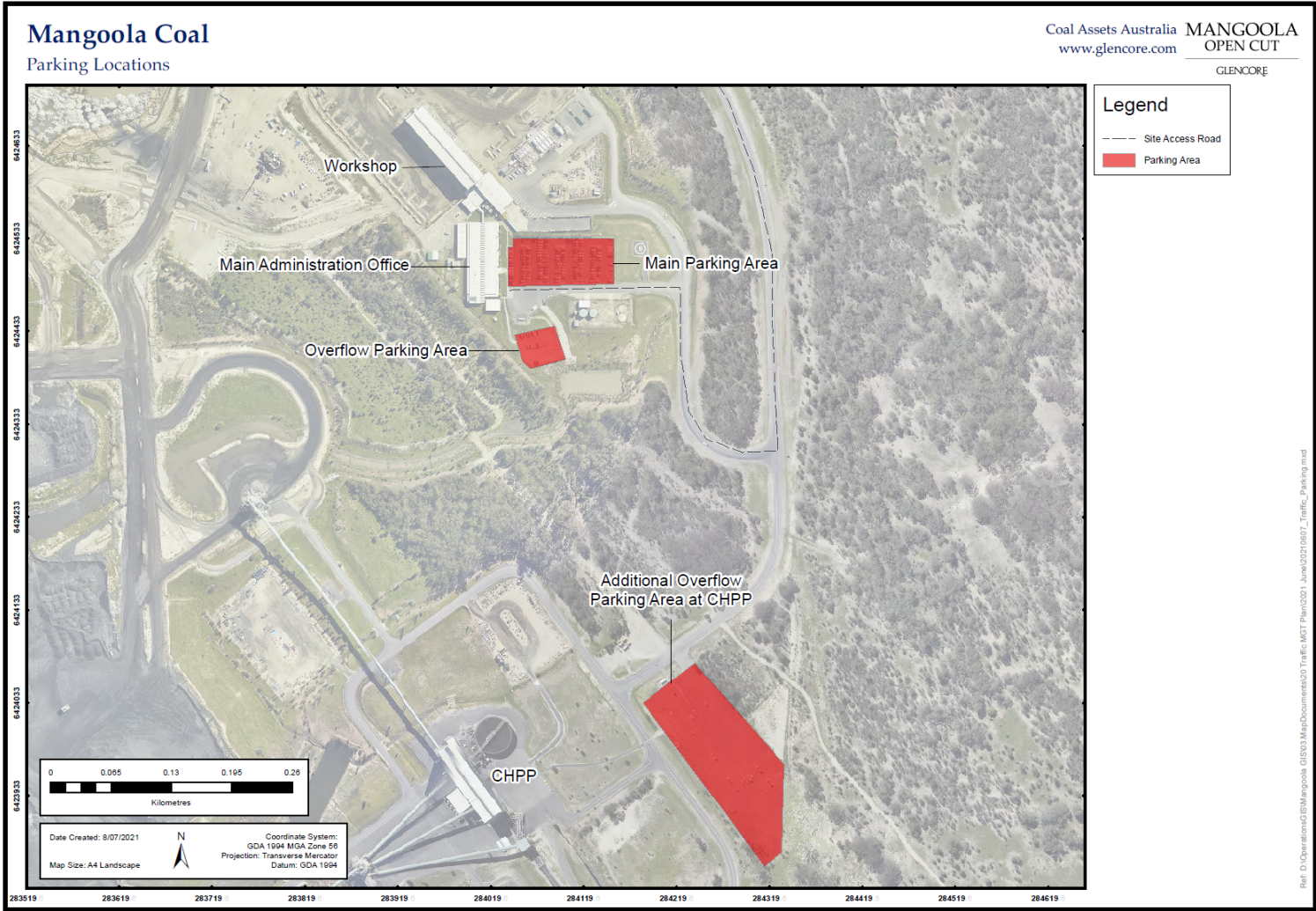


Figure 14 Parking Facilities

7.2.2 Construction Parking

As stated in **Section 6.2**, a likely (maximum) construction workforce of approximately 145 persons is expected.

Off-site construction areas will be serviced by parking areas to be established by the construction contractors, separate from the existing parking areas on-site at the mine. Targeted construction car parking areas will be required and are likely to be associated with the Wybong Road/Big Flat Creek crossing area and the planned access from Wybong Post Office Road, as displayed in **Figure 12**.

The existing parking areas at Mangoola Coal Mine will also be utilised by the construction workforce to access the project office/administration building where required.

8. Drivers Code of Conduct

8.1 NSW Road Rules & General Exceptions

Employees and contractors at the Mangoola Coal Mine are instructed to adhere to NSW Road Rules. As described in **Section 12**, employees are subject to an induction that includes etiquette considerations such as following road rules, not speeding, courteous overtaking and courteous behaviour, including when following a school bus.

Incidents involving traffic and pedestrians are investigated and reported, where required, at Mangoola Coal Mine in accordance with the internal and external reporting procedure contained within the *Mangoola Environmental Management Strategy* and the requirements contained in Conditions D9 and D10 of SSD 8642.

The process for dispute resolution will be as defined in the “Community Complaints and Dispute Resolution” section of the *Mangoola Environmental Management Strategy* and as per *Condition D5(h)(ii) of SSD 8642*.

8.2 Related Traffic Local Road Policy

A *Related Traffic Local Road Policy* has been prepared by Mangoola for the Mangoola Coal Mine to ensure employees and contractors are aware of restrictions applying to mine related traffic on the nominated haulage routes as described in **Section 4**. The *Related Traffic Local Road Policy*:

- Applies to all employees and contractors who work at Mangoola Coal or provide supplies or services to the mine.
- Describes the site access restrictions detailed in **Section 4** of this report.
- Describes the training and communication associated with the policy including inductions, refreshers and signage.
- Identifies the procedures for investigating any breaches to the access restrictions. Further, it states that any contractors found to have breached the restrictions may have their access entitlements revoked.

8.3 Fatigue Management

A *Fatigue Management Procedure* has been prepared by Mangoola for the Mangoola Coal Mine, to support the health and safety of employees and contractors. The procedure includes a Fatigue Risk Management System (FRMS), to assess the work-related hazards associated with fatigue, implement controls to manage fatigue along with fatigue monitoring and review activities. An overview of the FRMS for the Mangoola Coal Mine is represented in **Figure 15**.

Additionally, Mangoola employees and permanent contractors living outside the Muswellbrook Local Government Area complete an individual *Journey Management Plan* which outlines the hazards posed by their own journey to and from Mangoola along with suitable controls to ensure their safety, and that of other road users. Employees are required to update their *Journey Management Plan* annually, detailing potential risks/hazards on their regular journey to and from work. Key risks factors include:

- Combined work and commute time that exceeds 14 consecutive hours.
- Exceeding 16 hours of “wakefulness” whilst in control of a vehicle.
- Shift patterns, that may require an employee to start work prior to 4:00 am.
- The key requirements included in the Journey Management Plan are:
 - No alcohol or drugs while working or driving.
 - Wear your seatbelt.
 - Do not use a phone or exceed speed limits.
 - Respond preventatively to early signs of fatigue.

The *Journey Management Plan* includes controls, strategies and treatments to mitigate any identified risks.

It is noted that the site familiarisation training includes the designated work hour guidelines and fatigue management strategies.

As part of the management plan, all contractors/construction workers are required to:

- Complete a job management plan that identifies specific hazard and risk treatments.
- Undertake inductions, including Mangoola’s designated work hour guidelines and fatigue management strategies.

Work hour guidelines, which are applicable to employees and contractors include:

- Work shifts longer than 12.5 hours must be approved by a supervisor following the completion of a formal fatigue check.
- No persons are permitted to be on-site for more than 16 hours within a 24 hour period.
- Total time worked by an individual must not exceed 75 hours in a seven day period.
- All staff must be given a thirty-minute break in any work period of up to 10.5 hours.

Fatigue management strategies include:

- Undertaking physical activity and stretches.
- Alter the environment, i.e. light, ventilation and temperature.
- Seek support from management.

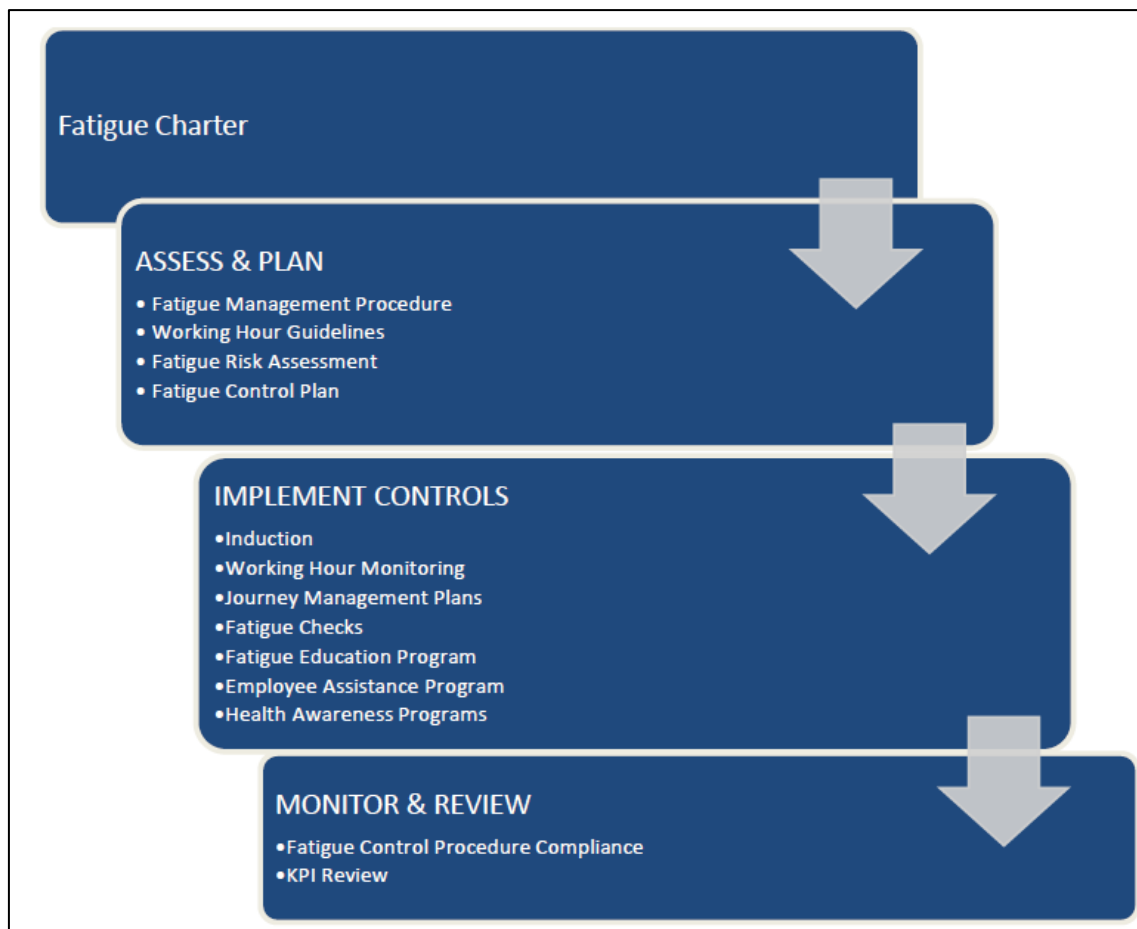


Figure 15 Mangoola Coal Mine Fatigue Risk Management System

8.4 Conduct and Discipline

A *Conduct and Discipline Procedure* has been prepared by Mangoola for the Mangoola Coal Mine. The *Conduct and Discipline Procedure* identifies the level of disciplinary action when a Mangoola employee or contractor breaches the expected standards of behaviour.

Employees that put the safety or wellbeing of a person at risk (such as unsafe driving behaviours) will be censured in accordance with the criteria included in the procedure.

9. Managing Interactions with Public Transport

Osborn's Transport operates two school bus service between Sandy Hollow and Muswellbrook that traverses Wybong Post Office Road, Yarraman Road, Ridgeland's Road and Wybong Road, with two morning and two afternoon school bus services on weekdays.

Additionally, the Catholic School Office provides a single morning and afternoon bus service between Merriwa and St Joseph's High School in Aberdeen that traverses Wybong Road.

In accordance with the standard hours for construction specified by the NSW Environmental Protection Agency, and the operational shift start and finish times described in **Section 6.1.1**, workers will generally access and egress the construction sites and Mine Access Road before and after school bus services traverse Wybong Road.

Heavy vehicles associated with the construction activities will access/egress the construction sites over the course of the day. As identified in prior traffic assessments undertaken (GHD 2019), analysis indicates that during peak periods of construction, up to 12 trucks (including gravel trucks) will access/egress the construction site every hour. This equates to an inbound and outbound truck movement every five minutes during peak periods of construction accessing/egressing construction locations as shown on **Figure 12**. Accordingly, construction heavy vehicle movements are expected to fall within typical fluctuations of daily traffic movements and therefore not adversely alter the existing operation of school buses or stock movements in proximity to the Mangoola Coal Mine. Regardless, construction heavy vehicle traffic is not to operate on Wybong Road, Ridgeland Road and Wybong Post Office Road (unless closed) in the vicinity of the Project area during the school bus times.

The current egress from the Mangoola Coal Mine onto Wybong Road is Give Way priority controlled. Any construction compounds accessed from Wybong Road will provide control measures and appropriate sight visibility and will be subject to approval under the Roads Act by MSC as the relevant road authority.

Therefore, all construction and operational vehicles will be required to give way to vehicles on Wybong Road, including school buses and stock movements.

Conflicts between the construction and operational traffic volumes and school buses/stock movements are expected to be negligible, and Mangoola will address any special conditions issued as part of the s138 Application (see **Section 1.4.1**).

As discussed in **Section 8.1**, the Mangoola Open Cut Site Familiarisation training inform staff and contractors that they behave courteously when following a school bus.

As part of their induction, individuals associated with the construction of the MCCO Project will be informed about the timing of school bus services on Wybong Road and be instructed to behave in a courteous manner towards these vehicles.

10. Flood Warning Signage

As part of the MCCO Project EIS, a **Surface Water Impact Assessment** (SWIA) (HEC 2019) was undertaken to assess the likely impacts of MCCO Project in surface water resources within and downstream of the project area.

Flood modelling was undertaken for local waterways as part of the SWIA, accounting for a one in a thousand Annual Exceedance Probability (AEP) flood event, as displayed in **Figure 16**.

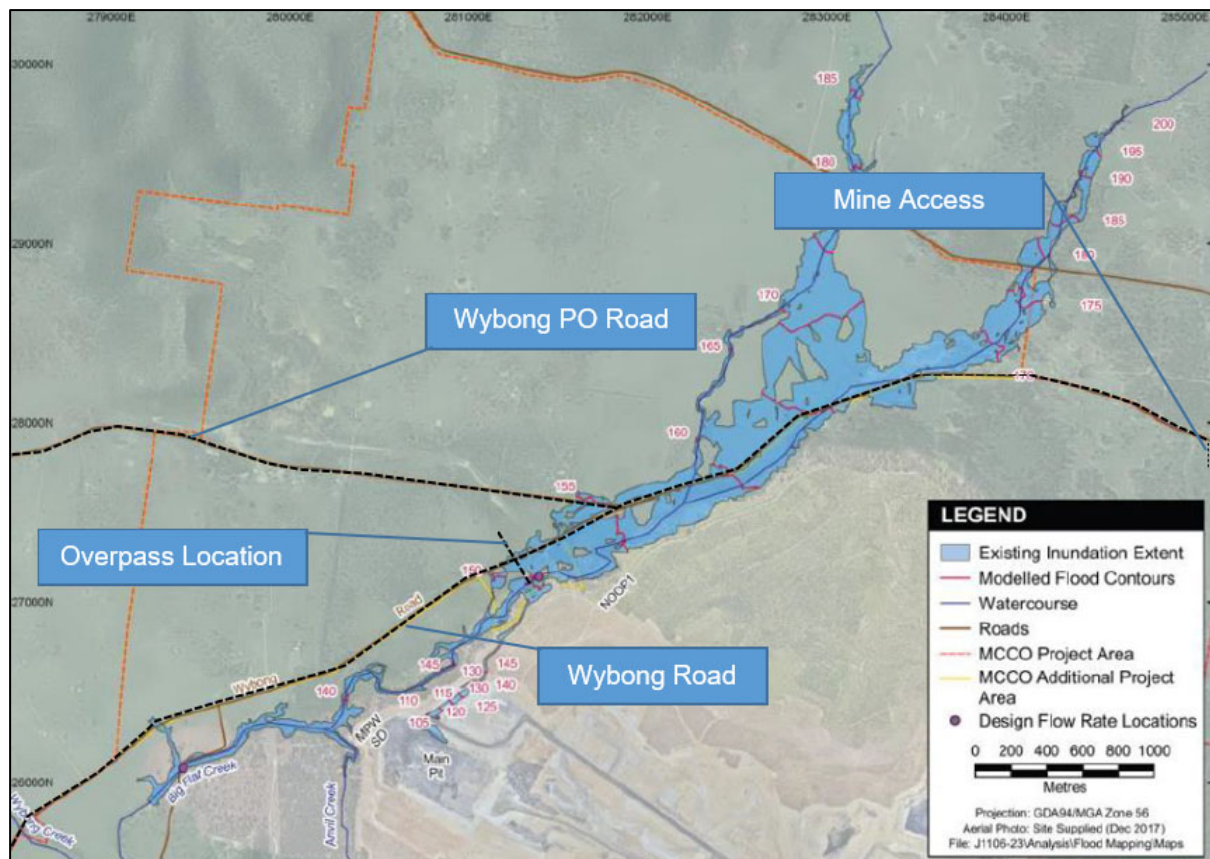


Figure 16 Predicted Flood Extents (1:1000) AEP

The data in **Figure 16** indicates that during a one in a thousand AEP event, some flooding is expected to occur on Wybong Road to the west of the mine access road. This includes the location for the haul road overpass over Big Flat Creek and Wybong Road.

The MCCO Project includes the construction of a water management system to manage sediment laden water runoff, divert clean water catchment, provide flood protection from Big Flat Creek and provide for reticulation of mine water. The water management system will be connected to that of the existing mine.

With respect to the proposed overpass across Wybong Road, the SWIA indicates that:

- For the purposes of hydraulic modelling, the assessment of the overpass included three metre culverts, within a conventional earthfill embankment.
- For a 1:1000 AEP year event, the proposed increased inundation area extends further downstream.
- Appropriate flood warning signage, including flood depth indicators be installed along Wybong Road, as a safety measure, in the vicinity of the overpass.

It is noted that flood warning signage is currently located on the roads in proximity to the Mangoola Coal Mine, an example of which (on Yarraman Road) is displayed in **Figure 17**.



Figure 17 Flood Water Signage on Yarraman Road

In accordance with the recommendations from the SWIA, additional warning signage and flood indicators to Australian Standard **AS1742.2 – 2009 Manual of uniform traffic control devices** will be placed on Wybong Road in two locations in proximity to the eastern and western approaches to the proposed overpass, which will allow vehicles to turn around if flooding occurs that will endanger drivers and their passengers.

In accordance with the inundation extent displayed in Figure 16, potential locations for flood warning signs on Wybong Road include:

- To the east in proximity to the Mangoola Coal Mine access road.
- To the west in proximity to Reedy Creek Road.

However, the final placement of the sign is to be determined in consultation with MSC and likely based on probable depth relevant to the deepest point potential encountered. Depending upon the depth and spread of the flood area, depth indicators may be positioned in several locations along the road extent.

Appropriate signage arrangements and locations will be developed and agreed in consultation with MSC.

11. Dilapidation Protocols

Dilapidation surveys consist of visual inspection of a road network undertaken to assess the condition of the pavements and associated infrastructure across the area. The aim of the dilapidation surveys is to establish the increase in traffic load and the change in pavement condition due to construction/decommissioning related traffic. The inspections are to be undertaken generally in accordance with the Austroads publication *Guide to Pavement Technology Part 5 Pavement Evaluation and Treatment Design* (Austroads Guide). The Guide provides a common reference system for describing the condition of road pavements by an observer on foot, relying on visual observation and lists the various functional and structural modes of failure that can occur in wearing surfaces and pavements.

Dilapidation surveys will be undertaken in accordance with the specifications detailed in SSD 8642 Condition B94 and consistent with the Road Closure and Works Deed (see [Section 2.1.2](#)). The extent and timing requirements for dilapidation surveys to be undertaken is summarised in [Table 11-1](#). In accordance with Condition B96 of SSD 8642, if there is a dispute about the scope of any remedial works or the implementation of the works, then either party may refer the matter to the Planning Secretary for resolution.

Table 11-1 Dilapidation Survey Timing and Extent

Objective	Applicable Roads	Timing
Mangoola will prepare a pre-dilapidation survey of the road transport routes	Wybong Road (between Golden Highway and Bengalla Road/Wybong Road intersection)	Prior to commencement of bulk construction material delivery.
Mangoola will prepare a post-dilapidation survey of the road transport routes*		Within 1 month of the completion of construction or decommissioning works, or other timeframe agreed by the applicable roads authority.
Mangoola will rehabilitate and/or make good any construction and decommissioning related damage identified in the post-dilapidation survey identified above	Where identified in post-dilapidation survey.	Within 2 months of completing the post dilapidation survey, or other timeframe agreed by the applicable roads authority.

**The post-dilapidation survey of the road transport routes of the road between the western edge of Project Boundary and the Golden Highway would only be completed if this section of road is used by Mangoola heavy vehicles during the construction and/or decommissioning period.*

12. Training

Training is provided to Mangoola employees and contractors in relation to the management of behaviour on-site and journeys to and from the mine. Training includes the following:

Number: MANOC-1276546935-5
Owner: [Owner (Office)]

Status: Draft
Version: 1

Effective: [Effective Date]
Review: [Planned Review Date]

Page 39 of 65

- **Glencore Generic Induction** training for all employees and contractors working at any Glencore operation, which includes:
 - Company fitness for work requirements including impairment related to drugs or alcohol.
 - Fatigue causes and management strategies.
 - A short assessment of the data included in the training.
- **Mangoola Site Familiarisation** training for all employees and contractors working at any Glencore operation, which includes:
 - The restricted public roads and alternative routes.
 - Access points to the mine.
 - Employee behaviour and safety obligations.
 - Alcohol and drug testing requirements/procedures.
 - Fatigue management procedures including maximum hours of work, consecutive nightshifts and trigger events for a Supervisor fatigue check such as leaving site at times of higher likelihood of a vehicle crash (10 p.m. – 6 a.m).
 - Incident and hazard reporting procedures.
 - Etiquette considerations such as following road rules, not speeding, courteous overtaking and courteous behaviour when following a school bus.
 - A short assessment of the data included in the training.
- Additional targeted training for key selected employees e.g. supervisors.
- Other forms of communication and training including via workforce Training Days as required, Glencore Communications (GCOMs) and toolbox talks.

All visitors to the Mangoola Coal Mine are required to undertake a **Visitor Induction** which includes details of the use of the restricted roads in proximity to the mine, as described in **Section 3.2** of this report and a short assessment of the data included in the induction.

Training records are maintained as per Mangoola Coal Mine's **MANOC-1772150304-1435 Document Control Procedure**.

13. Community Engagement

Mangoola provides regular (quarterly) Community Newsletters to residents living in proximity to the Mangoola Coal Mine (see **Figure 19**). These newsletters provide updates to residents with respect to the Mangoola Coal Mine activities, future construction and other mine related news. Where additional information is required to be communicated, additional newsletters are prepared to highlight a specific topic or to provide additional detail.

In addition to being delivered to the surrounding landowners, all newsletters prepared for Mangoola are uploaded to the company website available here (<https://www.glencore.com.au/operations-and-projects/coal/current-operations/mangoola-open-cut/community-documents>).

As described in **Section 5.1**, Mangoola will close any public road within 500 metres of the boundary of a blast on the mine site while firing a blast.

Mangoola also provide a community complaints and enquiries call line, that is open 24 hours per day, seven days a week. The line provides details of expected blasting activity at the mine.

Glencore's *Closing Public Roads – Mining Procedure* specifies that road closures undertaken by Mangoola Coal will be advertised in the local newspapers (such as the Muswellbrook Chronicle, Hunter River Times and Hunter Valley News) one week prior to the planned blast. An example of this type of notice provided in the Hunter River Times is provided in *Figure 18*. Additionally, Mangoola provides notification to MSC regarding any blast requiring the closure of a public road. These blast notices are then displayed on the MSC website specifying the date and time of expected blasts.

It is noted that Mangoola undertakes communications with other mines in the Hunter Valley in the locality, so they can keep each other informed about any proposed temporary changes to the road network, associated with proposed mine upgrades.

Mangoola will continue to provide local residents updates with respect to the construction and operational phases of activities at Mangoola Coal Mine. This will include details of any temporary road closures during construction that may alter their typical journeys and result in additional travel time. As part of obtaining the relevant approvals under the Roads Act Mangoola will consult with MSC regarding any additional communication requirements.



Figure 18 Mangoola Mine Community Response and Blasting Information Public Notice
(example only and text may be subject to change)

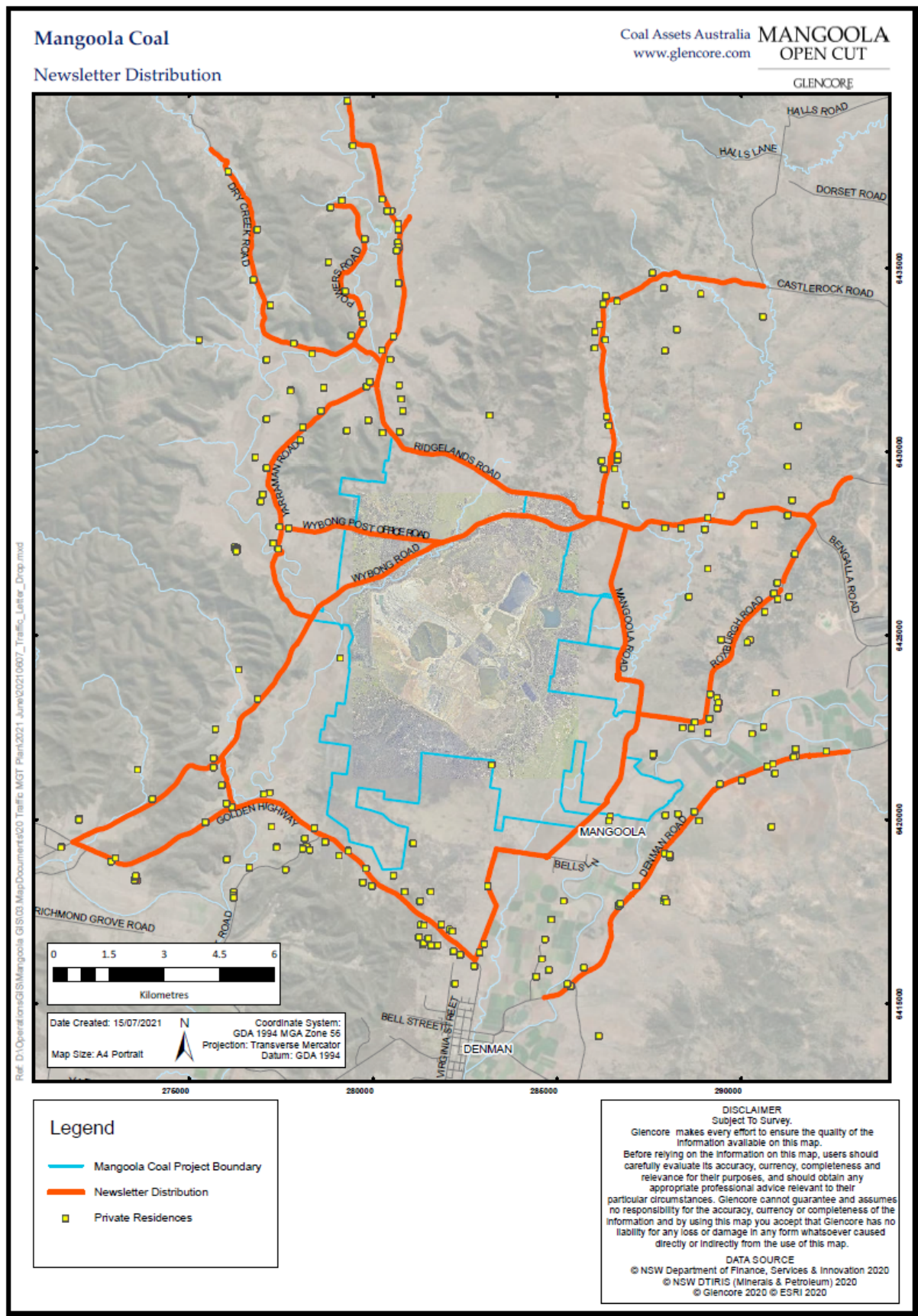


Figure 19 Residential Newsletter Delivery Locations

14. Measurement and Evaluation

14.1 Traffic monitoring

In accordance with SSD 8642 Condition D5(e) Mangoola will track and review construction and operational related vehicle movements to ensure the accuracy of the assumptions presented in the MCCO Project EIS and in consideration of the total approved workforce numbers. The Annual review will include a discussion of the construction and operational traffic matters in respect to the development (see **Table 14-1**).

Sporadic traffic monitoring of Reedy Creek, Mangoola, Roxburgh or Castlerock roads by Mangoola personnel will also occur during construction and operations to maintain compliance with SSD 8642 Condition B99. Additional road access monitoring may also occur in response to a community complaint.

Where an exceedance of the criteria or performance measure has occurred, Mangoola will, at the earliest convenience implement reasonable remediation measures as directed by the Planning Secretary.

14.2 Complaint management

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, investigated and managed in accordance with the Mangoola Coal Environmental Management System. Follow up communication with the complainant will be undertaken to explain the outcome of complaint investigations. A monthly summary of complaints will be uploaded to the website as per Condition D17(a)(x) of SSD 8642.

14.3 Access to information

As required by Condition D17, the following documents and information will be made publicly available via Mangoola's website (www.mangoolamine.com.au):

- The approved Traffic Management Plan;
- Minutes of the Community Consultative Committee (CCC) meetings;
- The Annual Review which will include a construction and operational traffic related discussion (see **Table 14-1**);
- Contact details to enquire about the development or to make a complaint;
- Complaints register, updated monthly;
- Mangoola Open Cut will maintain a centralised location to record details of relevant external stakeholder communications.

A summary of the progress of the development will also be presented at the Mangoola CCC meetings. Performance monitoring, which includes an assessment of the effectiveness of controls and compliance with the relevant SSD 8642 conditions, may be discussed at CCC meetings where traffic related complaints occur.

14.4 Reporting and Records

A summary of the statutory reporting requirements is provided in **Table 14-1**.

Table 14-1 Reporting requirements

SSD 8642 Condition	Reporting requirements	Timeframe
D9	The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Immediately
D10	Notify the Department of a non-compliance in writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of SSD 8642 that the development is non-compliant with, why it does 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.	Within 7 days of becoming aware of the non-compliance*
D11	<p>Mangoola must submit an Annual Review report which provides a review of the environmental performance of the Mangoola Coal Mine.</p> <p>The Annual Review will include a discussion of the construction and operational traffic matters in respect to the development and predictions made in the MCCO Project EIS.</p> <p>The Annual Review will identify any traffic non-compliance over the previous calendar year and describe what actions were (or are being) taken to rectify it and avoid reoccurrence.</p> <p>The Annual Review report will also describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.</p>	By the end of March each year (or other timeframe agreed by the Planning Secretary)
D12	Annual Review report must be submitted to Council and made available to the CCC and any interested person upon request.	None specified
D13 and D14	<p>Mangoola will commission and pay the full cost of an Independent Environmental Audit (IEA) of the development. With relevance to this TMP, the audit must:</p> <ul style="list-style-type: none"> - be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; - be carried out in consultation with the relevant agencies and the CCC; - assess the environmental performance of the development and whether it is complying with the relevant requirements in SSD 8642 including any assessment, strategy, plan or program required under SSD 8642; - review the adequacy of any approved strategy, plan or program required under SSD 8642; - recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under SSD 8642; and - be conducted and reported to the satisfaction of the Planning Secretary. 	<p>IEA to be commissioned within one year of commencement of development and every three years after.</p> <p>IEA report to be submitted to the Planning Secretary within 3 months of commencing the IEA.</p>

SSD 8642 Condition	Reporting requirements	Timeframe
D17 a(vi) and (vii) of SSD 8642	<p>Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must:</p> <ul style="list-style-type: none"> (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website: (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (xi) Annual Reviews of the development 	Prior to commencement of construction

*A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

15. Review and Improvement

15.1 Periodic Review

The TMP will be subject to periodic review as per Conditions D7 and D8 of SSD 8642. The suitability of this TMP must be reviewed within three months of:

- The submission of an incident report;
- The submission of an Annual Review;
- The submission of an Independent Environmental Audit;
- The approval of any modification of the conditions of SSD 8642; or
- Notification of a change in development phase (as per Condition A13 of SSD 8642).

A review of the TMP is also required to either improve the environmental performance of the development or comply with a direction as per Condition A3 of SSD 8642.

In accordance with Condition D8, the revised TMP must be submitted to the Planning Secretary for approval within six weeks of the review. A summary of the TMP review history is maintained as per *Section 16.2*.

15.2 Continuous Improvement

Mangoola will investigate and implement ways to continuously improve the environmental performance of the site over time. Mangoola will continue to monitor best practice activities for road transport and will consider traffic monitoring surveys including any recommendations proposed. Outcomes of improvements over time, monitoring results, and complaints management and responses will be documented in the Annual Review.

16. Document Information

Relevant legislation, standards and other reference information must be regularly reviewed and monitored for updates and will be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information.

16.1 Related Documents

Related documents, listed in **Table 16-1** below, are *documents* directly related to or referenced from within this document.

Table 16-1 – Related documents

Number	Document Number	Document Title
1	NA	<i>Mangoola Site Familiarisation training</i>
2	MANOC-1772150304-4652	<i>Mangoola Environmental Management Strategy</i>
3	MANOC-1772150304-2582	<i>Related Traffic Local Road Policy</i>
4	MANOC-1772150304-92	<i>Fatigue Management Procedure</i>
5	MANOC-1772150304-4810	<i>Journey Management Plan</i>
6	MANOC-1772150304-86	<i>Conduct and Discipline Procedure</i>
7	MANOC-1772150304-208	<i>Closing Public Roads – Mining Procedure</i>
8	MANOC-1772150304-4601	<i>Blast Management Plan</i>

16.2 Change Information

Full details of the document history will be recorded in the document control register, by version, as shown in **Table 16-2**.

Table 16-2 – Change information

Version	Date	Change Details
1	[Effective Date]	New document prepared to address SSD 8642 Condition B104

16.3 References

Mangoola Coal Continued Operations Project Traffic and Transport Impact Assessment (GHD 2019)

Number: MANOC-1276546935-5
Owner: [Owner (Office)]

Status: Draft
Version: 1

Effective: [Effective Date]
Review: [Planned Review Date]

Page 47 of 65

Mangoola Coal Continued Operations (MCCO) Project Environmental Impact Statement (Umwelt 2019)

AS1742.2-2009 Manual of uniform traffic control devices Part 2: Traffic control devices for general use (2009)

Traffic control at work sites Technical Manual (Transport for NSW 2020)

Guide to Pavement Technology Part 5 Pavement Evaluation and Treatment Design (Austroads 2019)

Appendix A - Authority Correspondence



Planning,
Industry &
Environment

Mr Nathan Lane
Environment and Community Coordinator
Mangoola Coal Operations Pty Ltd
PO Box 495
Muswellbrook NSW 2333

20/05/2021

Dear Mr Lane

**Mangoola Coal Continued Operations Project (SSD 8642)
Endorsement of Experts**

I refer to your request for the Planning Secretary's approval of suitably qualified persons to prepare Noise and Traffic Management Plans for the Mangoola Continued Operations Project as required under conditions B8 and B104 of SSD 8642 respectively.

The Department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Planning Secretary approves the appointment of the following suitably qualified experts:

- Ms Katie Teyhan (Noise Management Plan); and
- Mr Mark Lucas (Traffic Management Plan).

Further to the above, the Department confirms that this endorsement extends to future reviews of the respective management plans. Noting that minor revisions which do not influence agreed management strategies (e.g. administrative changes) may be completed without input from the above experts.

If you wish to discuss the matter further, please contact Joe Fittell on 4908 6896.

Yours sincerely

Matthew Sprott
Director
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary

4 Parramatta Square, 12 Darcy Street, Parramatta 2150 | dpie.nsw.gov.au | 1

MANGOOLA OPEN CUT

GLENCORE

31 August 2021

Planning Secretary
Department of Planning, Industry and Environment

Via: Major Projects Planning Portal

Dear Sir/Madam,

Re: Submission of the Traffic Management Plan (TMP) in accordance with Condition B104 of SSD 8642

On 26 April 2021 the Independent Planning Commission (IPC) approved the Mangoola Coal Continued Operations (MCCO) Project under Part 4 of the *Environmental Planning and Assessment Act 1979* and issued Development Consent for State Significant Development (SSD) 8642. Please find attached to this correspondence the Mangoola TMP prepared in accordance with Condition B104 of SSD 8642. Condition B104(a) and (b) of SSD 8642 state:

B104. The Applicant must prepare an Traffic Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:

- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;*
- (b) be prepared in consultation with TfNSW and Council*

The TMP has been prepared by Mark Lucas, Principal Transport Planner at GHD whose appointment has been endorsed by the Planning Secretary. Details regarding the consultation undertaken with TfNSW and Council is contained within the TMP. It is noted that despite several attempts to receive feedback from Council in relation to the draft TMP no response has been provided.

Please note that all document control information will be populated with the Departments letter of approval once received, prior to publishing on our website.

Please feel free to contact me at any stage if you would like any further information in relation to the content of this correspondence. I look forward to your response.

Regards,



Nathan Lane
Environment and Community Manager
Mangoola Coal – A Glencore managed company
Tel: +61 2 6549 5503
Mob: +61 400 794 425
Fax: +61 2 6549 5655
E: nathan.lane@glencore.com.au
Attach: Mangoola Traffic Management Plan

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T + 61 2 6549 5500 F + 61 2 6549 5655 www.glencore.com
Mangoola Coal Operations Pty Ltd ABN 54 127 535 755



Planning,
Industry &
Environment

Nathan Lane
Environment and Community Manager
Mangoola Coal Operations Pty Limited
PO Box 495
Muswellbrook, NSW, 2333

25/10/2021

Dear Mr. Lane

Mangoola Continued Operations (SSD-8642)
Traffic Management Plan - Request for Additional Information

We require additional information relating to the Traffic Management Plan submitted under the conditions of Development Consent for the Mangoola Continued Operation project.

Please submit a revised document that addresses the comments in the attached feedback table.

Should these comments be addressed the Traffic Management Plan may be conditionally approved dependant on addressing feedback from Muswellbrook Shire Council consistent with completion of the Agreement and the outcomes of the TMD Contributions Study.

Please provide the information or notify us that you will not provide the information by Friday 12 November 2021. If this timeframe is not achievable, please provide and commit to an alternative timeframe for providing this information.

If you have any questions, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

A handwritten signature in black ink, appearing to read 'W Jones'.

Wayne Jones
Team Leader - Post Approval
Resource Assessments

4 Parramatta Square, 12 Darcy Street Parramatta 2150 | dpi.nsw.gov.au | 1

Appendix B - Evidence of Consultation

Table 1 provides evidence of consultation as per Condition A22 of SSD 8642 and includes:

- Outcomes of that consultation, matters resolved and unresolved; and
- Details of any disagreement remaining between the party consulted and Mangoola and how Mangoola has addressed the matters not resolved.

Table 1 Evidence of Consultation

Party Consulted	Trigger for Consultation	Consultation Details			
		Date, Time and Format of Consultation Event	Outcomes	Matters Resolved	Matters Unresolved (and how these have been addressed)
TfNSW & MSC	<i>Road Act 1993</i> approvals in relation to the construction of the Wybong Road haul road overpass	18 June 2021 (email)	TfNSW have stated that they are satisfied with the current design of the overpass, and as a result MSC are satisfied that approval under the <i>Roads Act 1993</i> can be granted consistent with this position.		
TfNSW	Draft TMP review	21 July 2021 Issue of draft TMP with cover letter (see below)	Response received on 27 August 2021 stating TfNSW have reviewed the draft TMP provided on 21/07/2021 and have no amendments to the document (see response provided below).	No Change to TMP required	
MSC	Draft TMP review	21 July 2021 Issue of draft TMP with cover letter (see below)	No response provided		
MSC	<i>Road Act 1993</i> approval discussions	Various	Consultation between MSC and Mangoola is ongoing in relation to securing the	No Change to TMP required	

Number: MANOC-1276546935-5
Owner: [Owner (Office)]

Status: Draft
Version: 1

Effective: [Effective Date]
Review: [Planned Review Date]

Page 53 of 65

Party Consulted	Trigger for Consultation	Consultation Details			
		Date, Time and Format of Consultation Event	Outcomes	Matters Resolved	Matters Unresolved (and how these have been addressed)
			necessary approvals under the <i>Roads Act 1993</i> to facilitate construction related road activities.		
MSC	Draft TMP review	25 August 2021 Follow up call and email to confirm if MSC had any comments on the draft TMP	No response provided	No Change to TMP required	
MSC	Updated draft TMP provided for review. TMP updated to reflect the intent of the Road Works and Closure Deed.	11 November 2021			
MSC	Discussions regarding terms of the Road Works and Closure Deed	Multiple meetings in the period May – November 2021	Discussions centred around interactions with MSC and matters pertaining to the Roads Act 1993. In November 2021, Mangoola and MSC reached agreement on a Road Closure and Works Deed.	Matters pertaining to the <i>Roads Act 1993</i> .	Nil
MSC	Revised Draft TMP review	11 November 2021	Response provided 18 November 2021 relating to: <ul style="list-style-type: none"> Construction access from Ridgeland's Road (see <i>Section 5.1</i>) 	TMP updated in response to MSC comments	

Party Consulted	Trigger for Consultation	Consultation Details			
		Date, Time and Format of Consultation Event	Outcomes	Matters Resolved	Matters Unresolved (and how these have been addressed)
			<ul style="list-style-type: none"> Clarification regarding prioritising public vehicle movements on the Wybong Road temporary bypass (see <i>Section 5.1</i>) Construction access point standard construction as per MSC MSC Rural Property Access standard drawing (see <i>Section 7.1</i>) Managing interactions between construction traffic and local school buses (<i>Section 9</i>) 		

Correspondence with Transport for NSW

MANGOOLA OPEN CUT

GLENCORE

21 July 2021

Kate Leonard
Development Assessment Officer
Transport for NSW

Via Email: development.hunter@transport.nsw.gov.au

Dear Ms Leonard,

Re: Mangoola Coal Operations Pty Limited (SSD 8642) – Draft Traffic Management Plan (TMP) –
Invitation for Comment

On 26 April 2021 the Independent Planning Commission (IPC) approved the Mangoola Coal Continued Operations (MCCO) Project under Part 4 of the *Environmental Planning and Assessment Act 1979* and issued Development Consent for State Significant Development (SSD) 8642. Condition B104 of SSD 8642 states:

B104. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;*
- (b) be prepared in consultation with TfNSW and Council;*

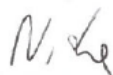
In this regard, attached to this correspondence is a copy of the draft *Traffic Management Plan (TMP)*. The draft TMP has been prepared by Mr Mark Lucas, Senior Transport Planner at GHD, who's appointment has been endorsed by the Planning Secretary of Department of Planning, Industry and Environment on 20 May 2021.

It is kindly requested that your Department please review and provide any feedback on the draft TMP by 11 August 2021.

Please feel free to contact myself at any stage if you would like any further information in relation to the content of this correspondence or the draft TMP.

We look forward to your response.

Regards,



Nathan Lane
Environment and Community Manager
Mangoola Coal – A Glencore managed company
Tel: +61 2 6549 5503
Mob: +61 400 794 425
E: nathan.lane@glencore.com.au

Attached: Draft Mangoola Traffic Management Plan

PO Box 495, Muswellbrook, NSW 2333
Wybong Road, Muswellbrook, NSW 2333
T + 61 2 6549 5500 F + 61 2 6549 5655 www.glencore.com
Mangoola Coal Operations Pty Ltd ABN 54 127 535 755

Martin, Jason (Mangoola - AU)

From: Kate Leonard <Kate.LEONARD@transport.nsw.gov.au>
Sent: Friday, 27 August 2021 10:31 AM
To: Martin, Jason (Mangoola - AU)
Cc: Lane, Nathan (Mangoola - AU)
Subject: TfNSW Response - RE: Mangoola Coal Mine - Draft Traffic Management Plan (SSD8642 Cond. B104)

External sender

Hi Jason,

Transport for NSW (TfNSW) have reviewed the draft Traffic Management Plan (TMP) provided on 21/07/2021 and have no amendments to the document.

Regards,
Kate

Kate Leonard
Development Services Case Officer
Community and Place | Region North
Regional & Outer Metropolitan Division
Transport for NSW

Work Days: Monday to Thursday

T 02 4908 7688
E development.hunter@transport.nsw.gov.au
A 6 Stewart Avenue, Newcastle NSW 2300
[Chat with me in Teams](#)



Transport
for NSW

I acknowledge the traditional owners and custodians of the land in which I work and pay my respects to Elders past, present and future.

Consultation with Muswellbrook Shire Council

MANGOOKLA OPEN CUT

GLENCORE

21 July 2021

Ms Sharon Pope
Executive Manager Environmental and Planning Services
Muswellbrook Shire Council

Via Email: Sharon.Pope@muswellbrook.nsw.gov.au
Cc: council@muswellbrook.nsw.gov.au

Dear Ms Pope,

Re: Mangoola Coal Operations Pty Limited (SSD 8642) – Draft Traffic Management Plan (TMP) – Draft for Consultation

On 26 April 2021 the Independent Planning Commission (IPC) approved the Mangoola Coal Continued Operations (MCCO) Project under Part 4 of the *Environmental Planning and Assessment Act 1979* and issued Development Consent for State Significant Development (SSD) 8642. Condition B104 of SSD 8642 states:

B104. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;

(b) be prepared in consultation with TfNSW and Council;

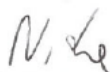
In this regard, attached to this correspondence is a copy of the draft *Traffic Management Plan* (TMP). The draft TMP has been prepared by Mr Mark Lucas, Senior Transport Planner at GHD, who's appointment has been endorsed by the Planning Secretary of Department of Planning, Industry and Environment on 20 May 2021.

It is kindly requested that MSC please review and provide any feedback on the draft TMP by 11 August 2021.

Please feel free to contact myself at any stage if you would like any further information in relation to the content of this correspondence or the draft TMP.

We look forward to your response.

Regards,



Nathan Lane
Environment and Community Manager
Mangoola Coal – A Glencore managed company
Tel: +61 2 6549 5503
Mob: +61 400 794 425
E: nathan.lane@glencore.com.au

Attached: Draft Mangoola Traffic Management Plan

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Mangoola Coal Operations Pty Ltd ABN 54 127 535 755

Appendix C - Other SSD 8642 Conditions

Condition	Condition Details	TMP Section
Evidence of Consultation		
A22.	Where conditions of this consent require consultation with an identified party, the Applicant must:	
A22 (a)	consult with the relevant party prior to submitting the subject document; and	Section 2 and Appendix A
A22 (b)	provide details of the consultation undertaken to the Department, including:	
A22 (b) (i)	the outcome of that consultation, matters resolved and unresolved; and	Section 2 and Appendix B
A22 (b) (ii)	details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Section 2 and Appendix B
Application of Existing Management Plans		
A23.	Prior to the approval of management plans under this consent, the Applicant must continue to implement any equivalent or similar management plan/s required under PA 06_0014, to the satisfaction of the Planning Secretary.	Noted
Road Maintenance		
B94	The Applicant must:	
B94 (a)	prepare a pre-dilapidation survey of the road transport route prior to the commencement of any construction or decommissioning works;	Section 11
B94 (b)	prepare a post-dilapidation survey of the road transport route within 1 month of the completion of construction or decommissioning works, or other timeframe agreed by the applicable roads authority; and	Section 11
B94 (c)	rehabilitate and/or make good any construction and decommissioning related damage identified in the post-dilapidation survey prepared under condition B93(b) within 2 months of completing the post-dilapidation survey, or other timeframe agreed by the applicable roads authority.	Section 11
B95	If the construction and/or decommissioning of the development is to be staged, the obligations in this condition apply to each stage.	N/A
B96	If there is a dispute about the scope of any remedial works or the implementation of the works, then either party may refer the matter to the Planning Secretary for resolution.	Section 11
Thomas Mitchell Drive		
B97	After the commencement of construction (as notified under condition A13(b)), the Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive, and the upgrade of the Thomas Mitchell Drive/Denman Road intersection, proportionate to its impact (based on	Section 3.1

Number: MANOC-1276546935-5

Status: [Document Status (Office)]

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: [Document Version (Office)]

Review: [Planned Review Date]

Page 59 of 65

Condition	Condition Details	TMP Section
	usage) on that infrastructure, in accordance with the Thomas Mitchell Drive Contributions Study, unless otherwise agreed with the Planning Secretary. For Thomas Mitchell Drive, the contributions must:	
B97(a)	(a) be paid to Council by the end of the financial year in which construction commences for the upgrade works; and	<i>Section 3.1</i>
B97(b)	<p>(b) be paid to Council in accordance with the maintenance schedule established in accordance with the Thomas Mitchell Drive Contributions Study during the life of the development (commencing from the year construction commences as notified under condition A13(b)), unless otherwise agreed with Council.</p> <p>For the Thomas Mitchell Drive/Denman Road intersection, the contributions must be paid to the relevant road authority undertaking the works (or if another mining company is undertaking the works, to that mining company) within three months of the completion of the intersection upgrade works to the satisfaction of TfNSW and Council, unless otherwise agreed with the Planning Secretary.</p> <p>Notes:</p> <ul style="list-style-type: none"> <i>If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.</i> <i>In making a determination about the applicable contribution/s under condition B96, the Planning Secretary shall take into account the contributions already paid and currently required to be paid towards the upgrade and maintenance of the local road network and any associated Voluntary Planning Agreement with Council.</i> 	<i>Section 3.1</i>
Restriction on Transport Routes		
B98	The Applicant must ensure that:	
B98 (a)	all over-dimensional vehicle access to and from the site is via Wybong Road east of the mine access road; and	<i>Section 4.1, Section 4.2, Section 6.2 and 7.1</i>
B98 (b)	all heavy vehicle access to and from the site is via Wybong Road east of the mine access road.	<i>Section 4.1, Section 4.2, Section 6.2 and 7.1</i>
B99	Project-related heavy vehicle traffic must not use Wybong Road west of the mine access road (to the intersection with the Golden Highway) to access the site, except during construction and decommissioning, or in any emergency to avoid the loss of lives, property and/or prevent environmental harm.	<i>Section 4.1 and Section 4.2</i>
B100	Project-related heavy vehicle traffic must not use Wybong Road west of the mine access road (to the intersection with the Golden Highway) to access the site, except during construction and decommissioning, or in any emergency to avoid the loss of lives, property and/or prevent environmental harm.	<i>Section 4.1 and Section 4.2</i>
B101	Condition B99 does not apply to any employees that reside on Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road, or the infrequent	<i>Section 4.2</i>

Number: MANOC-1276546935-5

Status: [Document Status (Office)]

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: [Document Version (Office)]

Review: [Planned Review Date]

Page 60 of 65

Condition	Condition Details	TMP Section
	use of the roads for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.	
Wybong Post Office Road		
B102	Prior to undertaking mining operation within 200 m of Wybong Post Office Road, unless otherwise agreed to by the Planning Secretary. The Applicant must close the affected section of Wybong Post Office Road and either:	
B102 (a)	realign the affected section of Wybong Post Office Road as described in the EIS and shown conceptually in Appendix 2, to the satisfaction of the applicable roads authority; or	Section 3.1.6
B102 (b)	provide a financial contribution to Council equivalent to the cost of the works identified in subparagraph (a) that is to be directed towards the implementation of Council's preferred approach to addressing road network issues associated with the closure of the affected section of Wybong Post Office Road.	Section 1.1 and Section 3.1.6
B103	If there is any dispute between the Applicant and Council in implementing the requirements for Condition B102, then either party may refer the matter to the Planning Secretary for resolution.	Noted
Traffic Management Plan		
B104	Addressed in this report	Section 1.1, Section 1.2 and Section 1.3
B105	If the construction and/or decommissioning of the development is to be staged, the obligations in condition B103 apply to each stage of construction and/or decommissioning	Noted
B106	The Applicant must not commence mining operations north of Wybong Road until the Traffic Management Plan is approved by the Planning Secretary	Noted
B107	The Applicant must implement the Traffic Management Plan as approved by the Planning	Noted
Management Plan Requirements		
D5 (a)	summary of relevant background or baseline data;	Section 1 and Section 16
D5 (b)	details of:	
D5 (b) (i)	the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 1
D5 (b) (ii)	any relevant limits or performance measures and criteria; and	NA
D5 (b) (iii)	the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 16

Number: MANOC-1276546935-5

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Review: [Planned Review Date]

Page 61 of 65

Condition	Condition Details	TMP Section
D5 (c)	any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	<i>Section 5.2, Section 10 and Section 11</i>
D5 (d)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	<i>Section 2.1.2, Section 3.1, Section 8.1, Section 13</i>
D5 (e)	a program to monitor and report on the:	
D5 (e) (i)	impacts and environmental performance of the development; and	<i>Section 6.1 and Section 7.1</i>
D5 (e) (ii)	effectiveness of the management measures set out pursuant to condition D4(c);	<i>Section 16</i>
D5 (f)	a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	<i>Section 11</i>
D5 (g)	a program to investigate and implement ways to improve the environmental performance of the development over time;	<i>Section 6.1 and Section 7.1</i>
D5 (h)	a protocol for managing and reporting any:	
D5 (h) (i)	incident, non-compliance or exceedance of any impact assessment criterion or performance criterion);	<i>Section 8</i>
D5 (h) (ii)	complaint; or	<i>Section 8</i>
D5 (h) (iii)	failure to comply with other statutory requirements;	<i>Section 8</i>
D5 (i)	public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	<i>Section 13</i>
D5 (j)	a protocol for periodic review of the plan.	<i>Section 16</i>
Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.		
D6.	The Applicant must ensure that management plans prepared for the development are consistent with the conditions of this consent and any EPL issued for the site.	Noted
Revision of Strategies, Plans and Programs		
D7.	Within three months of: (a) the submission of an incident report under condition D9; (b) the submission of an Annual Review under condition D11; (c) the submission of an Independent Environmental Audit under condition D12; (d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or (e) notification of a change in development phase under condition A13;	Noted

Number: MANOC-1276546935-5

Status: [Document Status (Office)]

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: [Document Version (Office)]

Review: [Planned Review Date]

Page 62 of 65

Condition	Condition Details	TMP Section
	the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.	
D8.	If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	Noted
Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.		
Reporting and Auditing		
Incident Notification		
D9.	The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Noted
Non-Compliance Notification		
D10.	<p>Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does 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.</p> <p>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</p>	Noted
Annual Review		
D11.	<p>By the end of March each year after the commencement of development, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the previous calendar, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:</p> <p>(i) relevant statutory requirements, limits or performance measures/criteria;</p> <p>(ii) requirements of any plan or program required under this consent;</p> <p>(iii) monitoring results of previous years; and</p>	<p>Noted</p> <p>(Note: not all the conditions under D11 are relevant to the TMP and traffic matters).</p>

Number: MANOC-1276546935-5

Status: [Document Status (Office)]

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: [Document Version (Office)]

Review: [Planned Review Date]

Page 63 of 65

Condition	Condition Details	TMP Section
	<p>(iv) relevant predictions in the document/s listed in condition A2(c);</p> <p>(c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;</p> <p>(d) evaluate and report on:</p> <p>(i) the effectiveness of the noise and air quality management systems; and</p> <p>(ii) compliance with the performance measures, criteria and operating conditions of this consent;</p> <p>(iii) the status of translocated plants and vegetation quadrat data from orchid monitoring sites;</p> <p>(e) identify any trends in the monitoring data over the life of the development;</p> <p>(f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(g) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.</p>	
D12	Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.	Noted
Access to Information		
D17.	<p>Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must:</p> <p>(a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:</p> <p>(i) the documents referred to in condition A2(c) of this consent;</p> <p>(ii) all current statutory approvals for the development;</p> <p>(iii) all approved strategies, plans and programs required under the conditions of this consent;</p> <p>(iv) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;</p> <p>(v) minutes of CCC meetings;</p> <p>(vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;</p> <p>(vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</p> <p>(viii) a summary of the current phase and progress of the development;</p> <p>(ix) contact details to enquire about the development or to make a complaint;</p> <p>(x) a complaints register, updated monthly;</p> <p>(xi) the Annual Reviews of the development;</p>	<p>Noted</p> <p>(Note: not all the conditions under D17 are relevant to the TMP and traffic matters).</p>

Number: MANOC-1276546935-5

Status: [Document
Status (Office)]

Effective: [Effective Date]

Owner: [Owner (Office)]

Version: [Document
Version (Office)]Review: [Planned
Review Date]

Page 64 of 65

Condition	Condition Details	TMP Section
	(xii) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; (xiii) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.	