



# TRAFFIC MANAGEMENT PLAN

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# Traffic Management Plan

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# 1 INTRODUCTION

## 1.1 Background

Maxwell Ventures (Management) Pty Ltd (Maxwell), a wholly owned subsidiary of Malabar Resources Limited (Malabar) owns and operates the Maxwell Underground Project (the site). The site is located in the Upper Hunter Valley of New South Wales (NSW), east-southeast of Denman and south-southwest of Muswellbrook. The site is approved to extract a maximum of 8 million tonnes of run-of-mine coal per year over a period of 26 years. The site boundary is shown in **Figure 1**.

The site consists of the following areas:

- Underground area comprising the proposed area of underground mining operations and the mine entry area (MEA) to support underground mining and coal handling activities and provide for personnel and materials access;
- Maxwell Infrastructure (formerly Drayton mine) comprising previous open cut mining areas, existing coal handling and preparation plant, train load-out facilities and rail loop, Antiene rail spur and other infrastructure and services; and
- Transport and services corridor between the underground area and Maxwell Infrastructure comprising the proposed site access road, covered overland conveyor, power supply and other ancillary infrastructure and services.

The area within and surrounding the site, which has previously been known as Mt Arthur South, Saddlers Creek and Drayton South, has long been identified as having a significant in-situ coal resource. Prospecting for coal commenced in the late 1940s, with exploration intensifying during the 1960s and 1970s. Open cut coal extraction and mining activities commenced at Maxwell Infrastructure in 1983 and ceased in October 2016. The previous open cut mining area is currently in the rehabilitation phase of the mine operations.

The development consent for State Significant Development 9526 (SSD 9526) was granted on 22 December 2020 under clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* and section 4.5(a) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The development consent was modified on 19 November 2021 (Maxwell MOD1) to allow for the repositioning of infrastructure primarily at the MEA and realignment of a section of the site access road. The development consent was further modified (Maxwell MOD2) on 19 October 2022 to allow for the following:

- Re-orientation of the longwall panels in the Woodlands Hill, Arrowfield and Bowfield Seams resulting in a minor increase in the approved underground mining extent.
- Reduction in the width of some of the longwall panels in the Woodlands Hill Seam.
- Repositioning of the upcast ventilation shaft site and associated infrastructure.
- Other minor works and ancillary infrastructure components (e.g. access road and ancillary water management infrastructure for the repositioned ventilation shaft site).

The site also incorporates the development formerly authorised under the Maxwell Infrastructure Project Approval (PA) 06\_0202. Development Consent DA 106-04-00 for the existing rail loop and Antiene Rail Spur was granted on 2 November 2000 under Section 76(A)9 and 80 of the EP&A Act. DA 106-04-00 was modified on 18 September 2023 (Antiene MOD1) to align with the approved operating life of the Maxwell Underground Project (i.e. until 2047). Product coal will only be transported from the site by rail in accordance with Schedule 2, Condition A10 of Development Consent SSD 9526 and Schedule 2, Part A, Condition A5 of DA 106-04-00.

## 1.2 Purpose and Scope

The purpose of this Traffic Management Plan (TMP) is to detail the statutory requirements and to outline the controls to be implemented to manage site-generated traffic on the identified transport routes. This TMP has been prepared in accordance with Schedule 2, Condition B91 of Development Consent SSD 9526. This TMP is one of a series of Environmental Management Plans that together form the Environmental Management System for the site.

In accordance with Schedule 2, Condition C8 of Development Consent SSD 9526, an Extraction Plan will be prepared for all second workings to the satisfaction of the Planning Secretary. The Extraction Plan will be prepared prior to second workings and will include a Built Features Management Plan prepared in accordance with Schedule 2, Condition C8 (g)(ii) of Development Consent SSD 9526. The Built Features Management Plan will describe management of the potential subsidence impacts of the proposed underground workings on built features, including public roads.

In accordance with Schedule 2, Condition B12 of Development Consent SSD 9526, a Noise and Blasting Management Plan (NBMP) will be prepared and approved prior to construction. In accordance with the NBMP, Maxwell will only undertake blasting during construction of the mine entry area and transport and services corridor and when removal of material with dozers and excavators is not practicable. No construction-related blasting is proposed within 500 metres (m) of a public road. At its nearest point, the mine entry area is located approximately 3 kilometres from Edderton Road. Ground vibration levels associated with construction blasting activities at the site are predicted to comply with the blasting criteria in Development Consent SSD 9526 for all public roads.

This TMP was approved by the Planning Secretary on 22 February 2022. On 6 April 2022 Maxwell gave written notice to the Department of Planning and Environment (DPE) of its intention to commence permitted construction, in accordance with Condition A13(b), Schedule 2 of Development Consent SSD 9526. In accordance with Schedule 2, Condition B92 of Development Consent SSD 9526, Maxwell did not commence construction until this TMP was approved by the Planning Secretary. In accordance with Schedule 2, Condition B93 of Development Consent SSD 9526, Maxwell is implementing this TMP.

### **1.3 Objectives**

The objectives of this TMP are to:

- Detail all relevant statutory requirements.
- Include details of transport routes and traffic types to be used for development-related traffic.
- Include a protocol for undertaking pre-dilapidation and post-dilapidation surveys.
- Include details of measures to be implemented to minimise traffic issues and disruptions to local road users.
- Implement a Drivers' Code of Conduct for all personnel associated with the site.
- Manage any complaints related to traffic in a timely and effective manner.

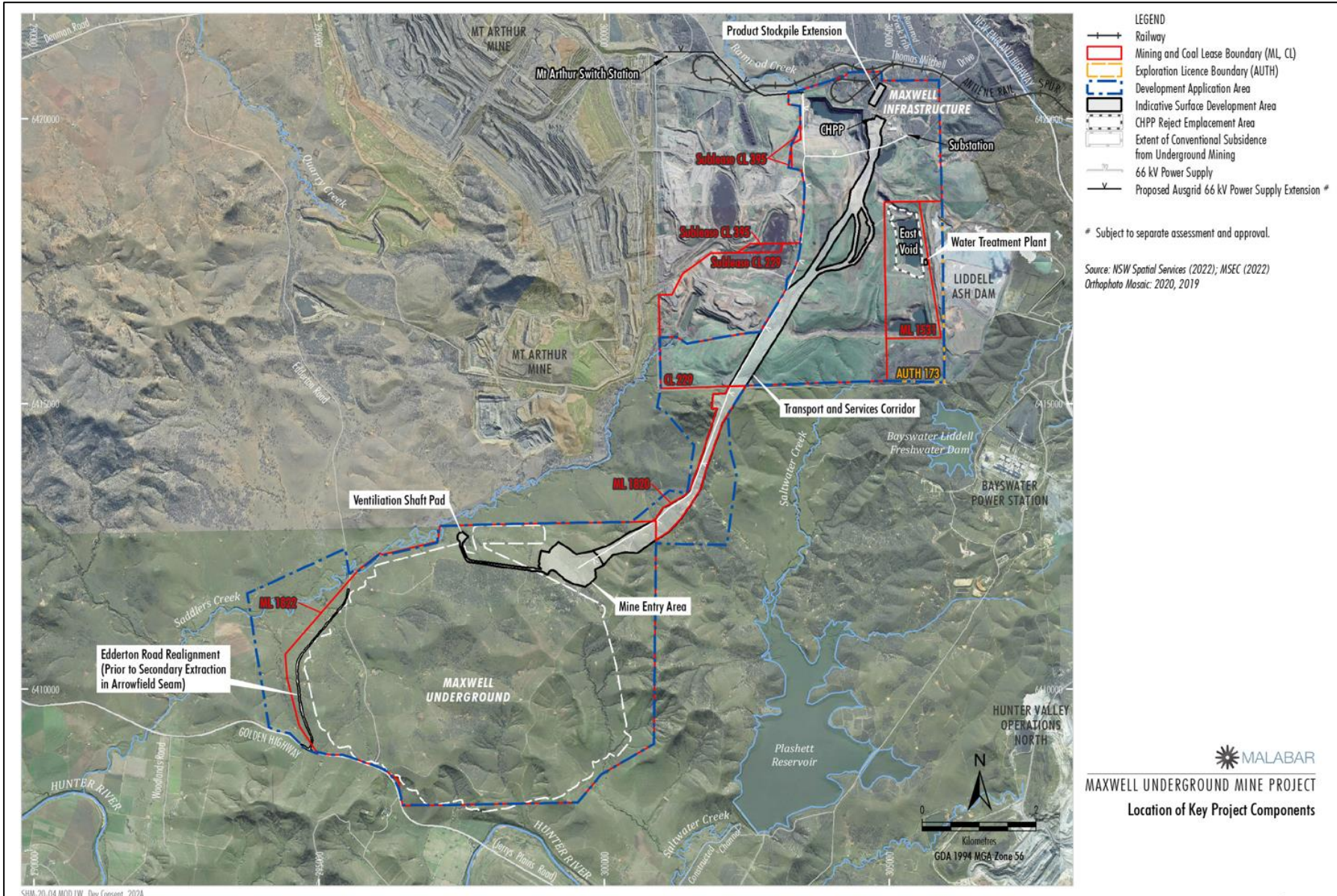


Figure 1. Location of Key Project Components

## 2 PLANNING

### 2.1 Regulatory Requirements

This TMP describes the management of traffic and roads to meet relevant statutory requirements within SSD 9526. The various conditions that relate to traffic management and where they are addressed in this document are detailed in **Appendix 1**.

### 2.2 Maxwell Project EIS and Supporting Document Commitments

A road transport assessment was undertaken for the Maxwell Underground Project Environmental Impact Statement (Project EIS) (published on 14 August 2019). Commitments in the Project EIS and supporting documents that relate to traffic management, and where they are addressed in this document are detailed in **Appendix 2**.

### 2.3 Preparation and Consultation

Schedule 2, Condition B91(a) of Development Consent SSD 9526, requires that this plan be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary. This TMP has been prepared by Penny Dalton, an Associate Director of The Transport Planning Partnership Pty Ltd (TTPP). Penny is a member of Engineers Australia, a Chartered Professional Engineer, registered on the National Engineering Register, and a Registered Professional Engineer of Queensland, with over 27 years of experience in consulting in the field of traffic and transport planning. A copy of the endorsement by the Planning Secretary is included in **Appendix 3**.

This TMP has been prepared in consultation with Muswellbrook Shire Council (MSC) and Transport for New South Wales (TfNSW). A draft of this TMP was provided for review to MSC and TfNSW, and feedback received from those stakeholders has been addressed when preparing the final version. Outcomes of the consultation with MSC and TfNSW are presented in **Appendix 4**.

### 2.4 Existing and Baseline Traffic Conditions

Appendix K of the Project EIS included a road transport assessment (TTPP, 2019a) and addendum (TTPP, 2019b). The road transport assessment included a road safety audit of existing conditions on Thomas Mitchell Drive (TTPP, 2018). In response to a supplementary submission from TfNSW, an updated assessment was undertaken of the forecast operating conditions at the intersection of Denman Road with Thomas Mitchell Drive (TTPP, 2020).

The following key roads are of relevance to the Project (refer to **Figure 2**):

- New England Highway (Highway 9, Route A15) – the main north-south link through the Hunter Region, connecting Muswellbrook and Newcastle as part of its route between Hexham and the Queensland border. A corridor for a future bypass of New England Highway around Muswellbrook preserves a route to the east of Muswellbrook from south of Muscle Creek Road to north of Sandy Creek Road.
- Golden Highway (Highway 27, Route B84) – a road link between the New England Highway and the Newell Highway west near Dubbo.
- Denman Road (Main Road 209) – forms the primary connection between Denman and Muswellbrook and provides an additional road link between the Golden Highway and New England Highway.
- Thomas Mitchell Drive (a local road) – provides a link between Denman Road and the New England Highway to the south of the Muswellbrook township. This road provides a bypass of Muswellbrook for some traffic and access to the Muswellbrook Industrial Area, Mt Arthur Coal and Maxwell Infrastructure.
- Edderton Road (a local road) – provides a road connection between the Golden Highway in the south and Denman Road in the north. Mt Arthur Coal has completed a realignment and upgrade of the northern portion of Edderton Road to allow for future mining operations.

Access to the site is via an existing sealed site access road from Thomas Mitchell Drive. The primary access routes to the site are via the New England Highway (from the north and south) and Thomas Mitchell Drive. Employees, visitors and deliveries from Denman, Sandy Hollow, Merriwa and further west will access site via Denman Road and Thomas Mitchell Drive.

Available traffic flow data from TfNSW and surrounding mines was reviewed and additional traffic surveys were undertaken in June 2018. Relevant traffic counter locations are shown on **Figure 2** and the existing daily traffic volumes are summarised in **Table 1**.

The road transport assessment (TTPP, 2019a) presents forecasts of the traffic conditions expected with the cumulative impacts of other developments and background growth unrelated to the site, forming the baseline conditions against which the impacts of the site activity are assessed. The forecasts include the times of the peak of the initial construction stage (representative of peak construction activity, with a peak workforce of 250 people), during the peak operational stage in the short term (Year 6), and during the peak operational stage in the longer term (Year 13) and are summarised in **Table 1**.

The existing and forecast baseline peak hour midblock Levels of Service at key road locations surrounding the Project are summarised in **Table 1**. Level of Service is defined as a qualitative measure describing the operational conditions within a traffic stream as perceived by drivers and/or passengers. Level of Service A provides the best traffic conditions, with no restrictions on desired travel speed or overtaking. Levels of Service B to Levels of Service D describe progressively worse traffic conditions, with Level of Service E for traffic conditions that are at or close to capacity, with virtually no freedom to select desired speeds or manoeuvre in the traffic stream. During peak hours on Thomas Mitchell Drive, vehicles will tend to travel in platoons, and the ability to overtake is limited.

To examine the existing performance of key intersections of relevance to the Project, vehicle turning movements were recorded between 5.00 am and 8.00 am, and between 4.00 pm and 7.00 pm at the intersections of:

- Thomas Mitchell Drive and the site access road;
- The New England Highway and Thomas Mitchell Drive;
- Denman Road and Thomas Mitchell Drive; and
- Denman Road and Edderton Road (former alignment).

The locations of the 2018 intersection surveys are shown on **Figure 2**.

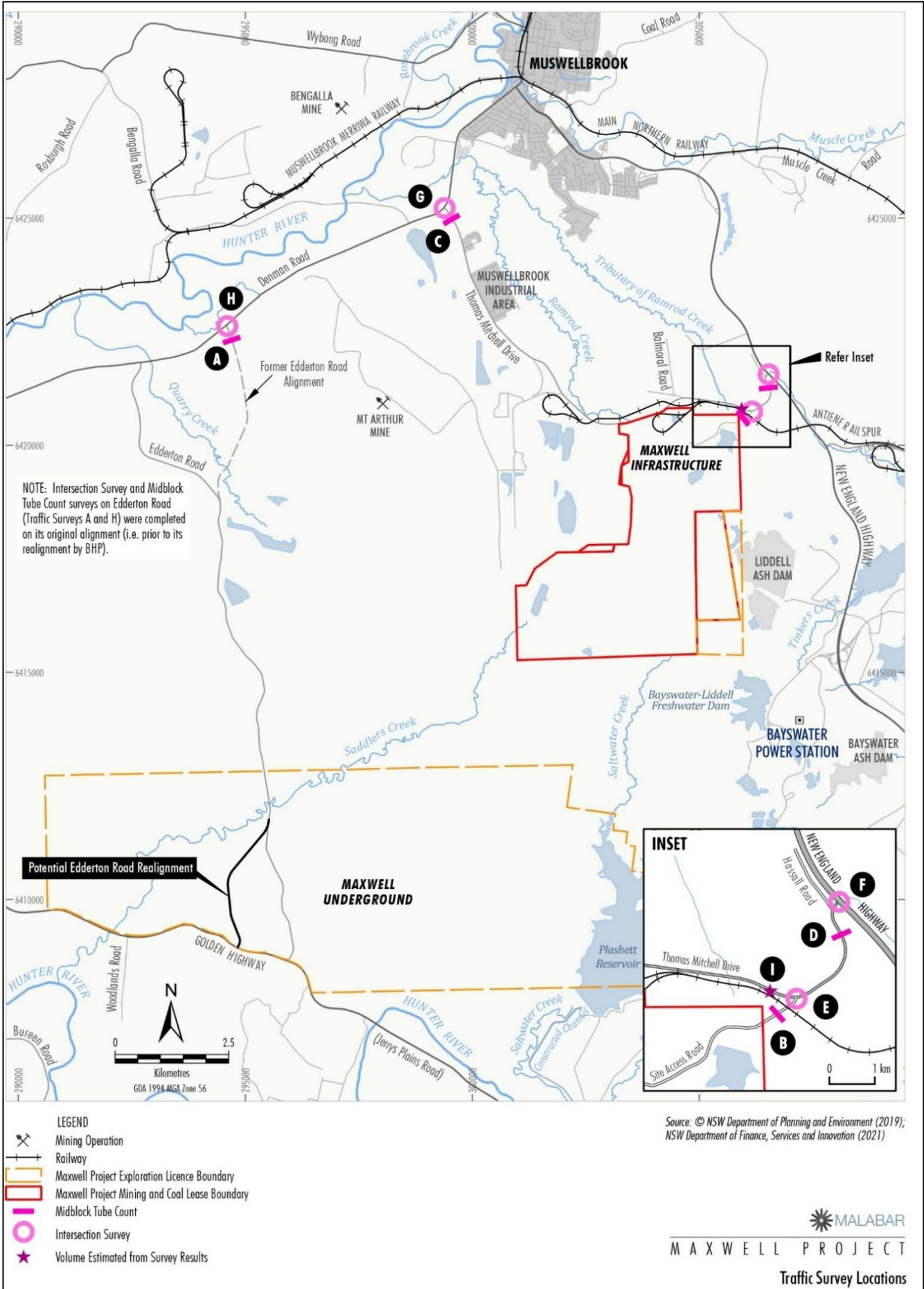


Figure 2. Traffic Survey Locations

**Table 1. Average Weekday Traffic Volumes and Midblock Performance**

Site <sup>1</sup>	Road and Location	Average Weekday (vehicles per day)	Weekday Peak Hour Midblock Level of Service			
			Inbound to Maxwell Infrastructure		Outbound from Maxwell Infrastructure	
			AM Peak	PM Peak	AM Peak	PM Peak
<b>Existing 2018</b>						
A	Edderton Road south of Denman Road	823	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	98	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	6,082	C	A	A	C
D	Thomas Mitchell Drive west of New England Highway	3,347	D	A	A	B
<b>Baseline 2020</b>						
A	Edderton Road south of Denman Road	838	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	238	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	6,264	C	A	A	B
D	Thomas Mitchell Drive west of New England Highway	3,580	D	B	B	C
<b>Baseline 2026</b>						
A	Edderton Road south of Denman Road	884	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	20	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	6,582	C	A	A	B
D	Thomas Mitchell Drive west of New England Highway	3,587	D	B	B	C
<b>Baseline 2033</b>						
A	Edderton Road south of Denman Road	878	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	20	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	5,088	B	A	A	B
D	Thomas Mitchell Drive west of New England Highway	2,607	C	B	B	C

**Notes:**

<sup>1</sup> Refer to Figure 2.

The 2018 data peak hour times are specified in Table 2.9 of the Maxwell UG Project Road Transport Assessment.

The Baseline figures for 2020, 2026 and 2033 are all AM Peak = 6:00 am to 7:00 am and PM Peak = 5:00 pm to 6:00 pm, being the anticipated peak hours for the Maxwell traffic.

The operation of the surveyed intersections as surveyed, and under the baseline future conditions, was assessed using SIDRA INTERSECTION 8 (SIDRA), which is an analysis program that determines the characteristics of intersection operating conditions, including the degree of saturation, average delays and Levels of Service. The SIDRA results indicate that the majority of the intersections currently, and will continue to, operate at satisfactory Levels of Service during peak periods (i.e. with spare capacity and acceptable delays), with the exception of the intersection of Thomas Mitchell Drive and Denman Road. During the evening peak hour, vehicles at this intersection currently experience delays, with limited spare capacity available to exit Thomas Mitchell Drive via a right turn. This intersection is expected to be upgraded in accordance with Condition 47(c) of the Project Approval (09\_0062) for the Mt Arthur Coal mine.

Supplementary modelling of the baseline operation of the intersection of Thomas Mitchell Drive with Denman Road prepared using revised and less conservative assumptions (as requested by DPE) demonstrates that the intersection would operate at a good Level of Service under baseline conditions (letter from Malabar to DPIE, 30 April 2020).

## 2.5 Predicted Impacts

The road transport assessment (TTPP, 2019a) presents forecasts of the traffic expected to be generated by the site during the peak of the initial construction stage, during the peak operational stage in the short term (Year 6), and during the peak operational stage in the longer term (Year 13). These forecasts are summarised in the following sections.

### 2.5.1 Vehicular Access and Transport Routes

Site-generated vehicles will enter and exit the site via the existing Site Access Road from Thomas Mitchell Drive.

In accordance with Schedule 2, Condition B87 of Development Consent SSD 9526, Edderton Road and Golden Highway will not be used to access the site except where required to ensure the safety of the mine, its workers or the general public, for land management purposes, environmental monitoring, works associated with the realignment of Edderton Road or where approved in writing by the Planning Secretary. This access would be via either the main entrance to the property "Plashett" on the corner of Edderton Road and Golden Highway, the double gates located just south of Saddlers Creek along Edderton Road or the driveway in to the Bowfield property.

Agricultural and other land management activities will continue on Malabar-owned property throughout the life of the Project. Land management activities include weed spraying, feral animal management and/or revegetation works. Access for any other operational purposes will be undertaken in consultation with MSC.

Potential approach and departure routes for light and heavy vehicles (with a Gross Vehicle Mass greater than 4.5 tonnes but excluding oversize or overmass (OSOM) vehicles) will be as shown in **Table 2**. The light vehicle access routes in **Table 2** comprise the approach routes expected to be used by the workforce vehicles travelling to the site access road. These generally assume that drivers will use the shortest route available, noting that some alternative routes exist and may be used by some drivers.

**Table 2. Transport Routes**

Trip Origin or Destination	Access Route
<b>Light Vehicles</b>	
Singleton, Lower Hunter and Newcastle	New England Highway South – Thomas Mitchell Drive
Muswellbrook	New England Highway North – Thomas Mitchell Drive
Scone, Aberdeen and North <sup>1</sup>	New England Highway North – Thomas Mitchell Drive
Sandy Hollow, Merriwa and	Golden Highway West – Denman Road South – Thomas Mitchell Drive

Trip Origin or Destination	Access Route
<b>Light Vehicles</b>	
West	
Denman	Denman Road South – Thomas Mitchell Drive
Jerrys Plains	Jerrys Plains Road – Lemington Road – New England Highway – Thomas Mitchell Drive
<b>Heavy Vehicles (GVM &gt; 4.5 tonnes, excluding OSOM)</b>	
Singleton, Lower Hunter and Newcastle	New England Highway South – Thomas Mitchell Drive
Muswellbrook and North <sup>1</sup>	New England Highway North – Thomas Mitchell Drive OR Denman Road North – Thomas Mitchell Drive
Denman/Western Coalfield	Denman Road South – Thomas Mitchell Drive

Notes:

<sup>1</sup> Once constructed, vehicles to/from the north of Muswellbrook will use the Muswellbrook Bypass.

### 2.5.2 Initial Construction Activity

Key site-generated traffic during the initial construction stage will consist of:

- employees and visitors (typically light vehicles);
- deliveries of construction materials and mobile fleet (typically heavy vehicles and some oversize vehicles); and
- deliveries of consumables and removal of waste (typically heavy vehicles).

Initial construction activity is expected to generate an average of 90 personnel, and a maximum of 250 personnel. Construction work will typically occur between 6:00 am and 6:00 pm, however some night works will take place for drift and shaft development. At peak construction, it is estimated that night work will employ approximately 40 personnel, and the remaining 210 personnel will work during the day. The start and finish times of the workers will vary depending on their activity, and it is noted that construction activity would take place some distance from the site access off Thomas Mitchell Drive, requiring additional internal travel time for workers before and after their shift.

The construction workforce are assumed to travel to and from the site by private vehicles, with only limited carpooling due to the short-term nature of the construction activity. Conservatively assuming that each worker travels independently by private vehicle, the peak construction workforce will generate 500 vehicle trips per day. During peak construction activity, the site will require an average of 35 heavy vehicle deliveries per day and 15 light vehicle deliveries/visitors per day. At the time of peak construction activity, it is estimated that the site will require up to 90 heavy vehicle deliveries per day and 25 light vehicle deliveries/visitors per day. This will result in an average of 70 heavy vehicle and 30 light vehicle trips per day over the initial construction phase, and up to 180 heavy vehicle and 50 light vehicle trips per day during the initial construction phase.

Deliveries and visitors to the site during the initial construction phase will typically be spread throughout the day, with limited activity at night, consistent with the construction shift and staffing arrangements. On this basis, the delivery and visitor activity at the time of peak construction activity will be expected to generate six light and 12 heavy vehicle trips per hour during the Project peak hours. Heavy vehicles will be road registered small and large rigid trucks, semitrailers and B-doubles. Any OSOM vehicles will be identified and managed on a case-by-case basis (refer to **Section 3.6** of this TMP).

Forecast peak hourly vehicle movements generated by the site are presented in **Figure 3** and **Figure 4**. The Project morning peak hour is anticipated to occur between 6:00 am and 7:00 am. The Project evening peak hour is anticipated to occur between 5:00 pm and 6:00 pm. Initial construction activities are expected to commence during the second half of 2021 and will be undertaken in accordance with the provisional project schedule contained in **Section 3.3** of the Project EIS.

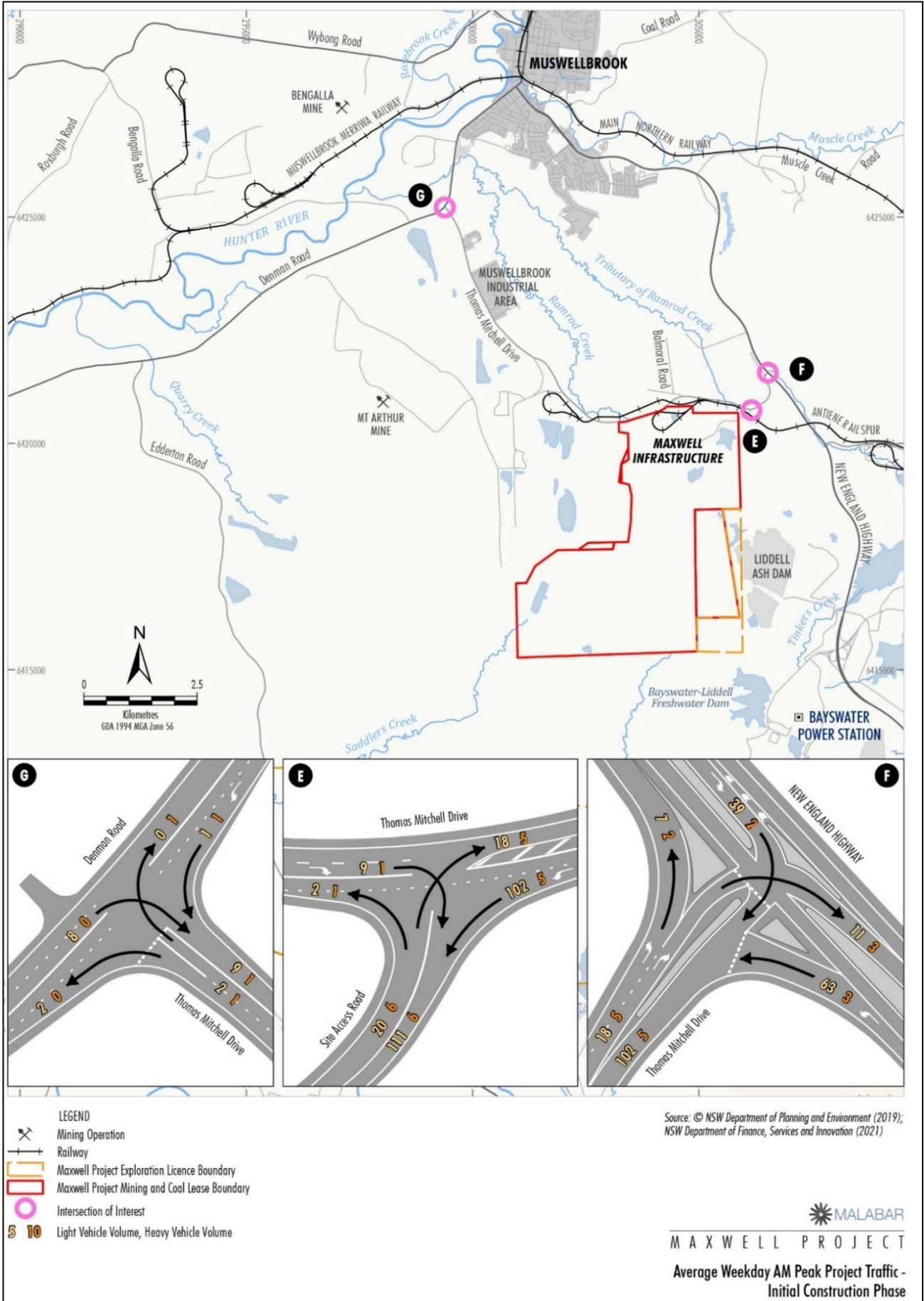


Figure 3. Average Weekday AM Peak Project Traffic – Initial Construction Phase

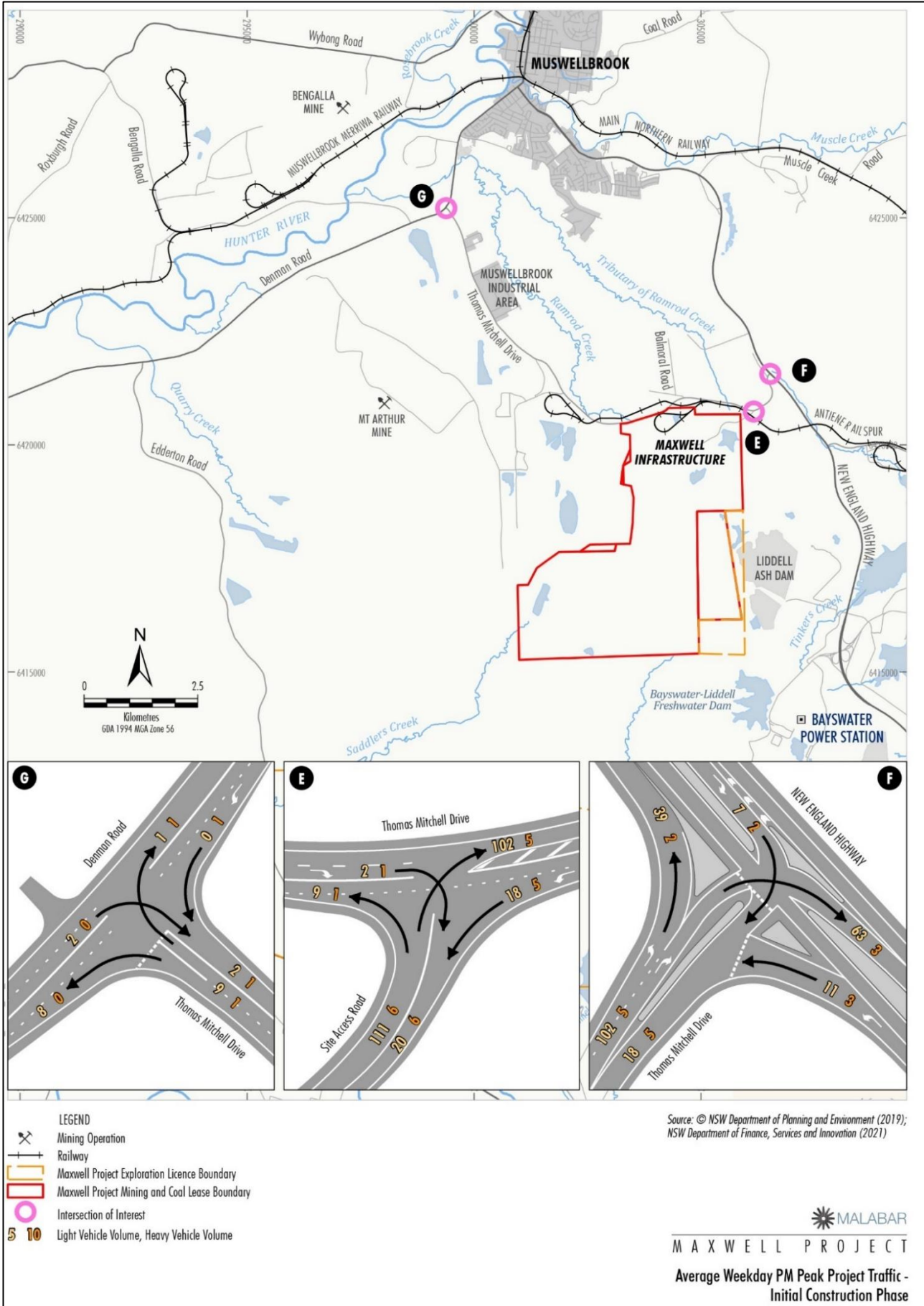


Figure 4. Average Weekday PM Peak Project Traffic – Initial Construction Phase

### 2.5.3 Operational Activity

Key site-generated traffic during the operational stage will consist of:

- employees and visitors (typically light vehicles);
- deliveries of equipment and consumables and removal of waste (typically heavy vehicles, with occasional oversize vehicles).

The total daily vehicle trips forecast for the site's operational activity during its short term and long term peaks are:

- 414 light (354 employee and 60 non-employee) vehicle trips per day and 80 heavy vehicle trips per day in the short-term peak (Year 6, peak workforce present); and
- 382 light (322 employee and 60 non-employee) vehicle trips per day and 60 heavy vehicle trips per day in the long-term peak (Year 13, peak workforce for years 7 to 26 present).

Forecast peak hourly site-generated vehicle movements are presented in **Figure 5** and **Figure 6** for the short-term peak, and **Figure 7** and **Figure 8** for the longer-term peak. The Project morning peak hour is anticipated to occur between 6:00 am and 7:00 am. The Project evening peak hour is anticipated to occur between 5:00 pm and 6:00 pm.

Heavy vehicles during the operational stage will be road registered small and large rigid trucks, semitrailers and B-doubles. Any OSOM vehicles will be identified and managed on a case-by-case basis (refer to **Section 3.6** of this TMP).

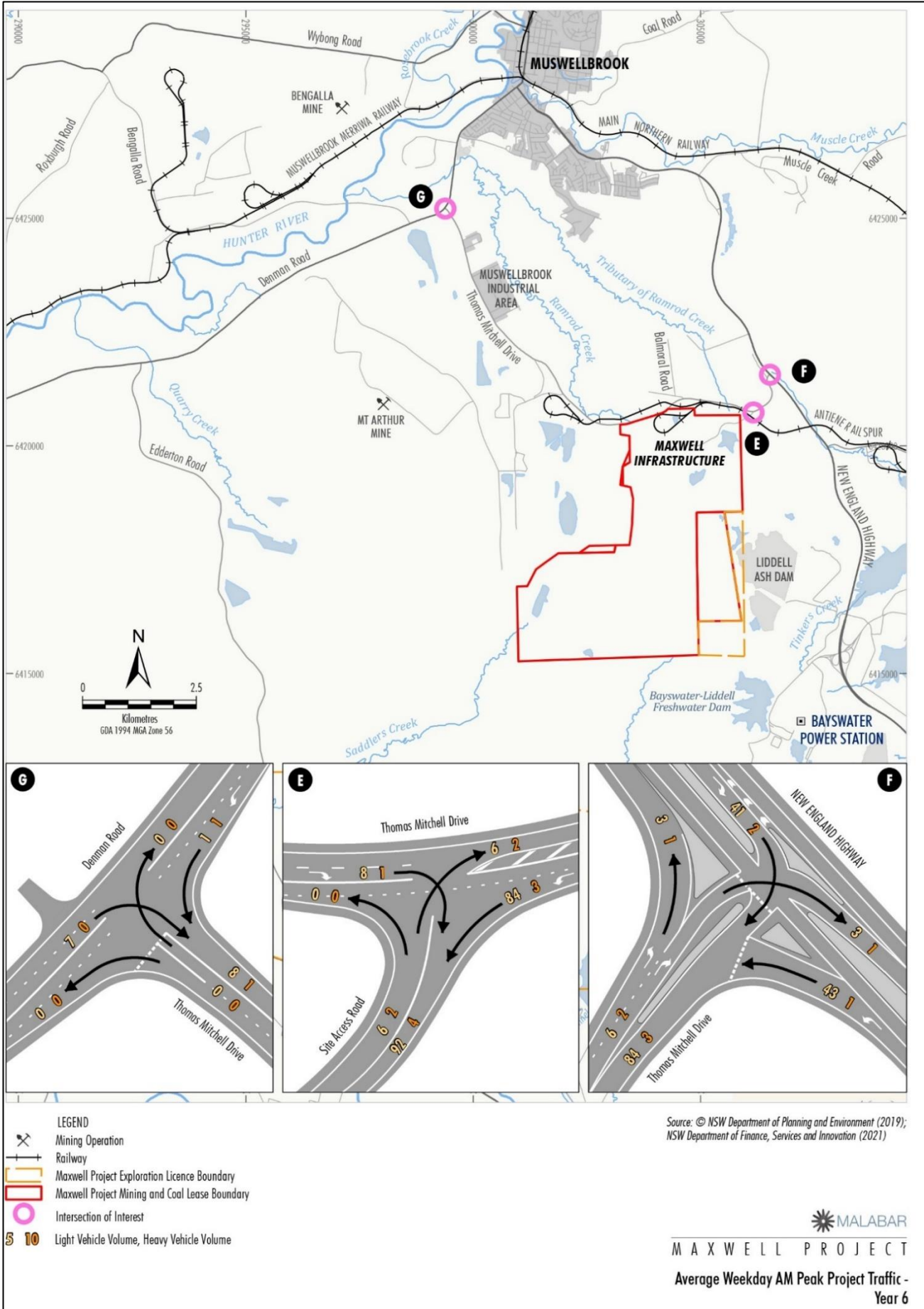


Figure 5. Average Weekday AM Peak Project Traffic – Year 6

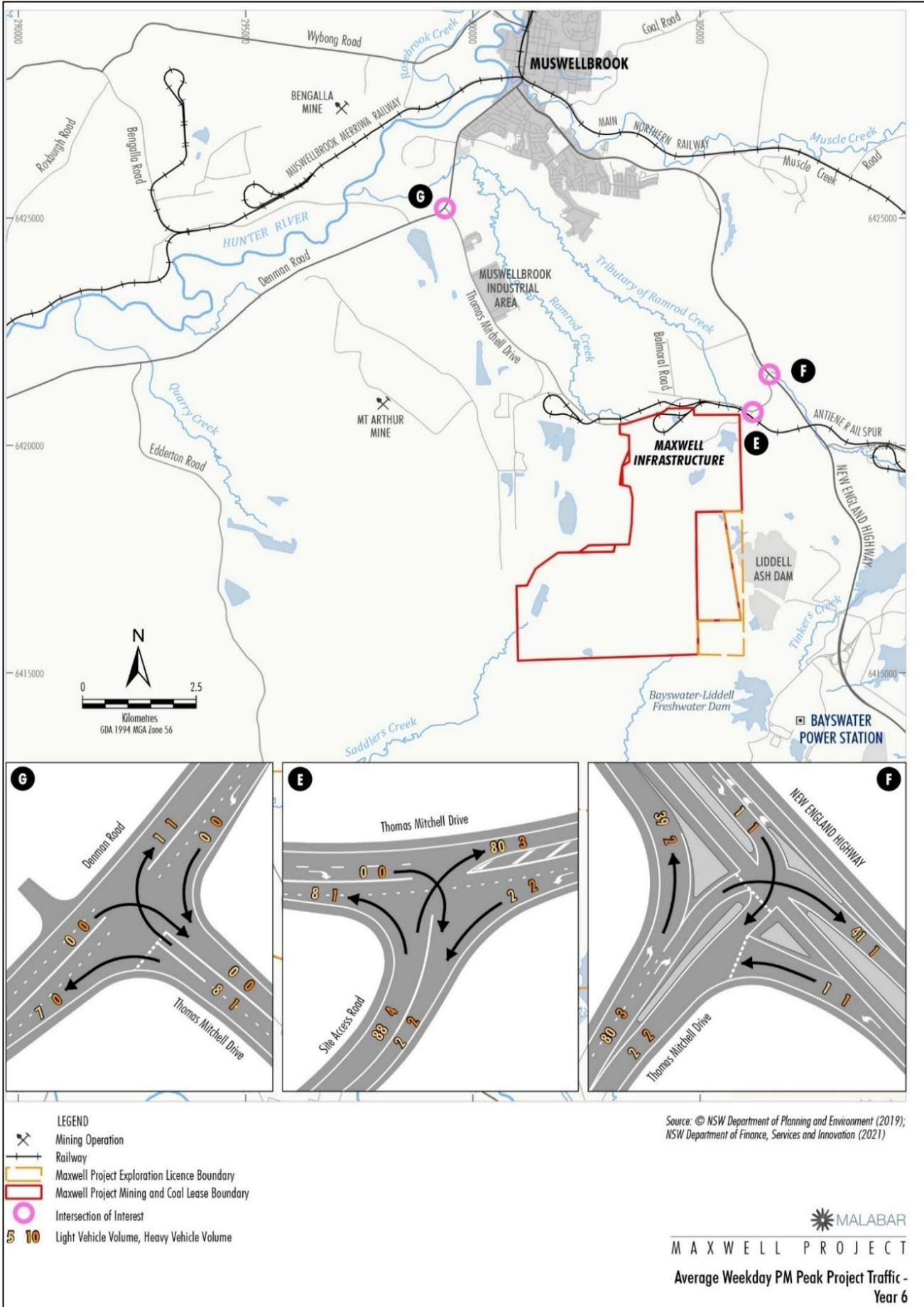


Figure 6. Average Weekday PM Peak Project Traffic – Year 6

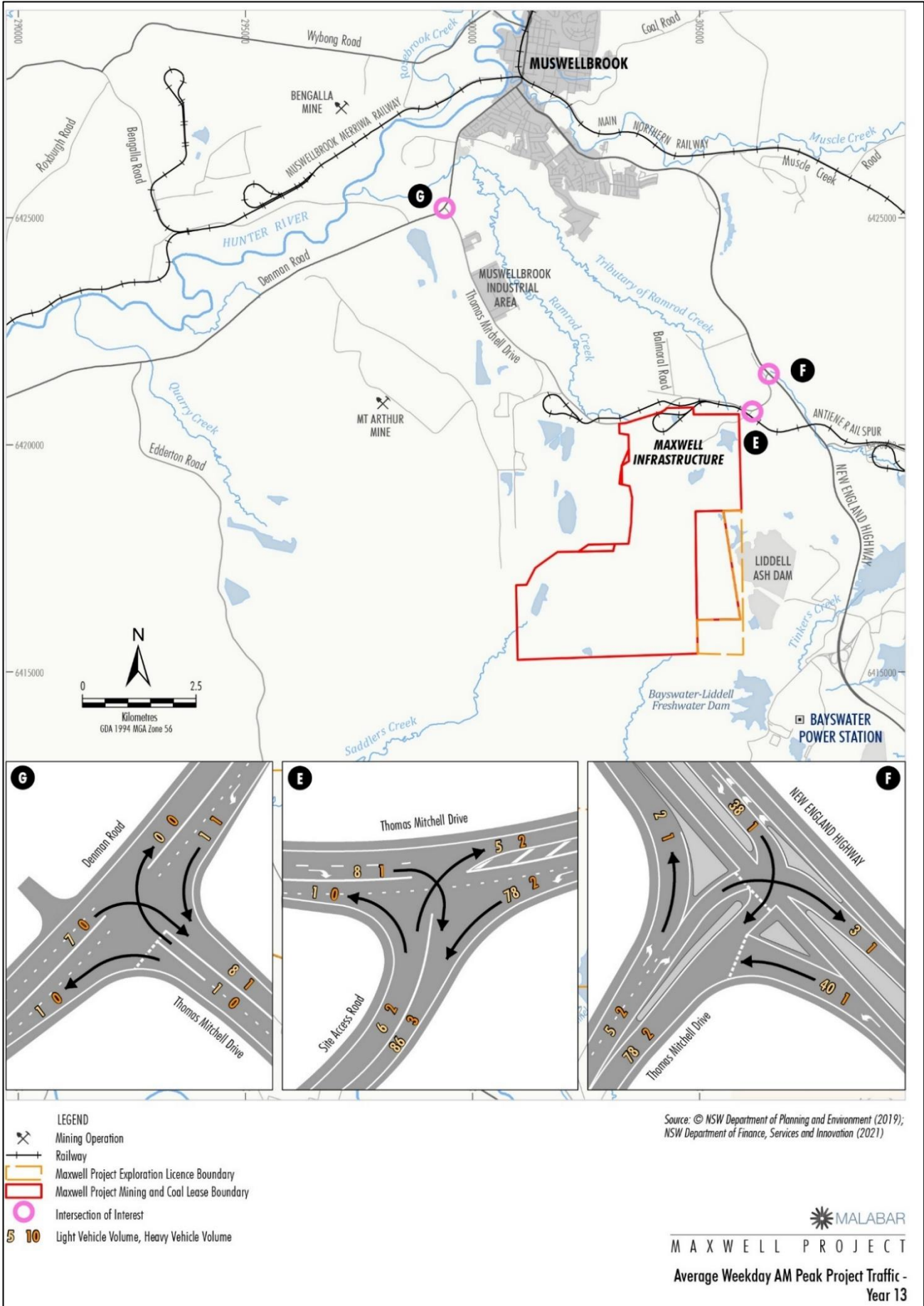


Figure 7. Average Weekday PM Peak Project Traffic – Year 13

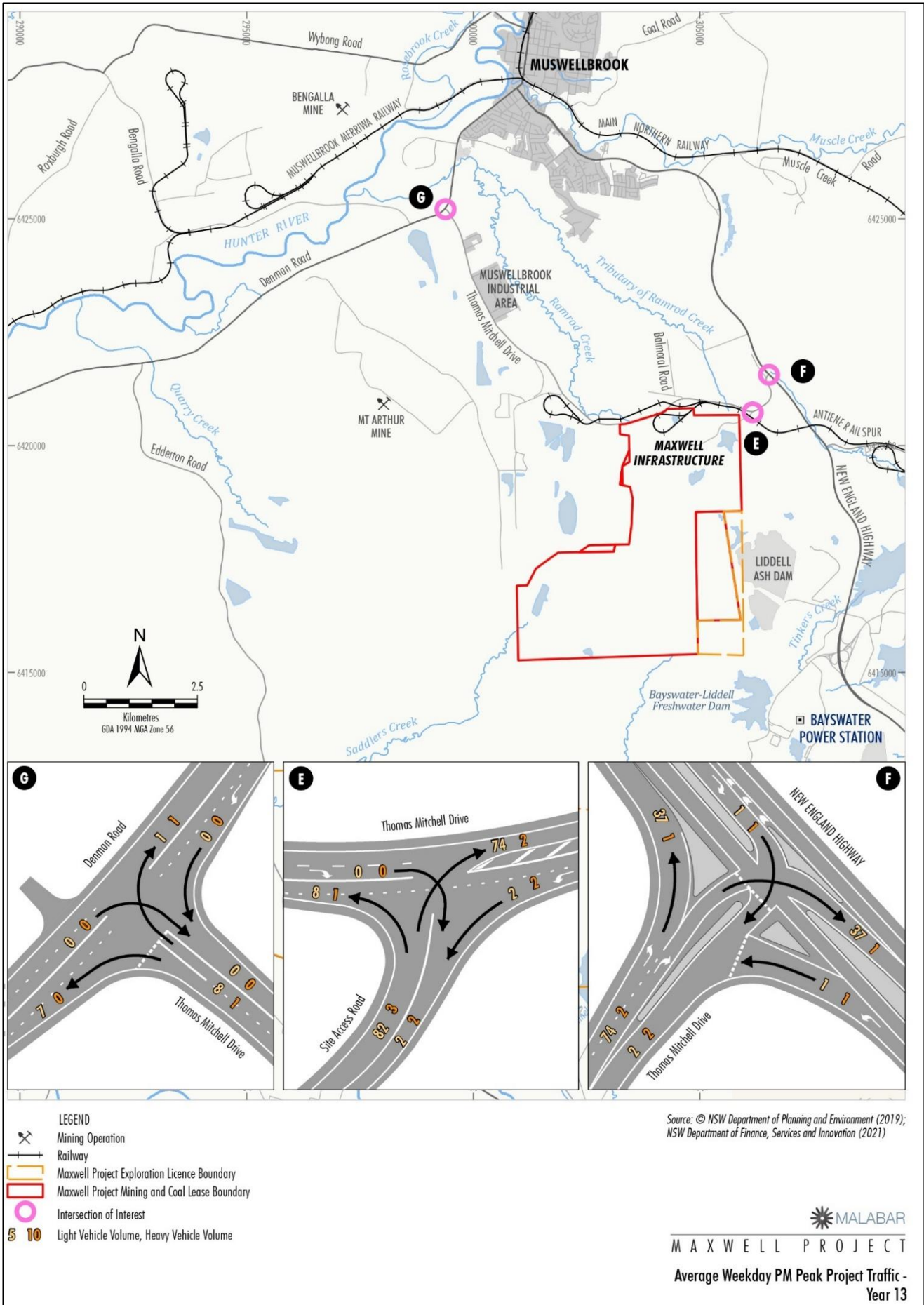


Figure 8. Average Weekday PM Peak Project Traffic – Year 13

## 2.5.4 Predicted Traffic Conditions

The road transport assessment (TTPP, 2019a) presents forecasts of the traffic conditions expected with the cumulative impacts of the site activity with the baseline traffic at the times of the peak of the initial construction stage, during the peak operational stage in the short term (Year 6), and during the peak operational stage in the longer term (Year 13). Forecast traffic conditions, with the predicted peak hour midblock Levels of Service at key road locations surrounding the site, are summarised in **Table 3**.

**Table 3. Predicted Average Weekday Traffic Volumes and Midblock Performance**

Site <sup>1</sup>	Road and Location	Average Weekday (vehicles per day)	Weekday Peak Hour Midblock Level of Service			
			Inbound to Maxwell Infrastructure		Outbound from Maxwell Infrastructure	
			AM Peak	PM Peak	AM Peak	PM Peak
<b>Initial Construction Phase 2020</b>						
A	Edderton Road south of Denman Road	838	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	870	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	6,320	C	A	A	B
D	Thomas Mitchell Drive west of New England Highway	4,158	D	B	B	C
<b>Project Year 6 2026</b>						
A	Edderton Road south of Denman Road	884	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	500	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	6,634	C	A	A	C
D	Thomas Mitchell Drive west of New England Highway	3,627	D	B	B	C
<b>Project Year 13 2033</b>						
A	Edderton Road south of Denman Road	878	A	A	A	A
B	Site access road south of Thomas Mitchell Drive	448	A	A	A	A
C	Thomas Mitchell Drive east of Denman Road	5,134	B	A	A	B
D	Thomas Mitchell Drive west of New England Highway	2,989	C	B	B	C

Notes:

<sup>1</sup> Refer to Figure 2.

Peak hours for 2020, 2026 and 2033 are all AM Peak = 6:00 am to 7:00 am and PM Peak = 5:00 pm to 6:00 pm, being the anticipated peak hours for the Maxwell traffic.

Analysis of the operation of the surveyed intersections with the cumulative traffic generated by the site activity and the baseline traffic indicates that the majority of the intersections will continue to operate at satisfactory Levels of Service during peak periods (i.e. with spare capacity and acceptable delays), with the exception of the intersection of Thomas Mitchell Drive and Denman Road under its existing layout.

Without an upgrade, vehicles at this intersection would continue to experience delays due to the limited spare capacity available to exit Thomas Mitchell Drive via a right turn. This intersection is expected to be upgraded in accordance with Condition 47(c) of the Project Approval (09\_0062) for the Mt Arthur Mine.

Supplementary modelling of the baseline operation of the intersection of Thomas Mitchell Drive with Denman Road prepared using revised and less conservative assumptions (as requested by DPE) demonstrates that the intersection would operate at a good level of service under the future conditions with the site-generated traffic (letter from Malabar to DPIE, 30 April 2020).

## 3 IMPLEMENTATION

The mitigation and management measures outlined in this section will be implemented by Maxwell to minimise traffic safety issues and disruption to local road users during the construction and operational phase of the site.

### 3.1 Drivers Code of Conduct

A Drivers Code of Conduct has been prepared to manage specific behavioural requirements applicable to inducted personnel (i.e. contractors and employees inducted to work on the mine site) driving vehicles to site. The Drivers Code of Conduct provides details on posted speed limits, designated transport routes and safe driving practices.

A copy of the Drivers Code of Conduct is provided in **Appendix 5**.

### 3.2 Road Signage and Speed Limits

Maxwell will install wayfinding signage at appropriate locations to reinforce the access routes (**Table 2**) and will liaise with TfNSW and MSC to develop a final design for a signage scheme. The road signage scheme will consider the locations of any similar signage for nearby developments such as Mt Arthur Coal, and will aim for an overall integration of signage.

Speed limit signs will be installed at appropriate locations on internal roads and on the section of privately owned site access road from Thomas Mitchell Drive. The speed limit on the site access road from Thomas Mitchell Drive is 60 km per hour. Once sealed, the access road along the Transport and Services corridor will have a speed limit of no more than 80 km per hour during construction and operational stages. Other internal roads will have a speed limit of no more than 60 km per hour.

It is noted that the first section of the site access road (approximately 350 m in length) is a public road. Maxwell will engage with, and seek relevant approval/s from, TfNSW regarding speed limits on this section of road. Maxwell will engage with, and seek relevant approval/s from MSC regarding road signage on this section of road.

### 3.3 Temporary Traffic Controls

No temporary traffic controls or traffic detours are anticipated to be required on public roads as part of the site's initial construction period. The development, design and implementation of any traffic control plans associated with the temporary traffic controls, detours or signage would be prepared in accordance with the current edition of TfNSW's *Traffic Control at Work Sites Technical Manual*.

Maxwell will seek approval under Section 138 of the *Roads Act 1993* from MSC for any temporary traffic controls, signage or works within the Council Public Road corridor.

### 3.4 Shift Time Coordination

The road transport assessment undertaken for the Project EIS, identified that the Project would have minor impacts on the midblock levels of service experienced by drivers on Thomas Mitchell Drive in the short to medium term. In the long-term, the Project traffic would not impact levels of service on Thomas Mitchell Drive compared with those conditions expected without the Project.

To mitigate potential queuing impacts on Thomas Mitchell Drive, in particular at the intersection with the New England Highway during shift change, Maxwell will contact other mining operations via email prior to the commencement of construction, first workings and second workings to request a copy of their shift times. If provided, Maxwell will assess the times and stagger shift changes with other mining operations in the locality, where practicable, to minimise impacts during morning and afternoon peak traffic periods.

Should Maxwell elect to change the nominated shift times for more than 50 per cent of the daily attendant workforce, this will be done with consideration of the shift times at Mt Arthur Coal to minimise the potential cumulative impacts of shift changes of both mines on Thomas Mitchell Drive. This will also take into consideration the time taken for employees to drive along the Site Access Road between the Mine Entry Area and Thomas Mitchell Drive.

In addition, Maxwell will support measures to encourage car-pooling by workers as a means of reducing private vehicle trip generation. Specific measures will be developed in consultation with the workforce and may include the provision of an internal communication platform to facilitate contact between potential drivers and passengers.

### 3.5 Car Parking

On-site parking will be provided at the existing Maxwell Infrastructure carpark (which provides parking for around 300 vehicles in delineated car parks). There are also sealed and unsealed areas available that could more than double the parking capacity at Maxwell Infrastructure. A new carpark will be established at the Mine Entry Area, at the southern end of the proposed internal access road. Total parking capacity will be at least 500 vehicles with the potential to increase if required.

### 3.6 Oversize and Overmass Vehicles

The proposed movement for any oversize vehicles will be negotiated with TfNSW and relevant local councils on a case-by-case basis. All oversize loads would be transported with the relevant permits and load declarations obtained in accordance with *Additional Access Conditions Oversize and overmass heavy vehicles and loads* (TfNSW, 2020), and any other licences and escorts as required by regulatory authorities.

To the extent possible, the movement of OSOM vehicles will be avoided during peak periods on Thomas Mitchell Drive, with staging locations to be identified and utilised on a case-by-case basis. To the extent possible, the movement of OSOM vehicles will be avoided during school bus operating hours.

High vehicles exceeding the 5.2 m clearance at the railway overbridge across Sydney Street (New England Highway) in Muswellbrook will use the signposted high vehicle detour route via Bell Street, Victoria Street and Market Street.

### 3.7 Dangerous Goods Transport

Dangerous goods required for the site will be transported in accordance with the relevant legislation, including *Dangerous Goods (Road and Rail Transport) Act 2008*, *Dangerous Goods (Road and Rail Transport) Regulation 2014* and *Dangerous Goods (Road and Rail Transport) Amendment (Model Law) Regulation 2020*, reflecting the new edition of the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (National Transport Commission, 2020) for implementation in New South Wales.

The transportation, handling and storage of all dangerous goods at the site will be conducted in accordance with the requirements of the relevant Australian Standards, driver and vehicle licencing requirements, and the current version of the Australian Dangerous Goods Code.

### 3.8 Interaction with School Buses

Maxwell will consult with bus operators providing regular school bus services in the region, in January of each year to confirm details of school bus routes and operating times for the upcoming school year. School bus times have not been provided in this plan as they may change from year to year. To the extent possible, the movement of heavy vehicles and OSOM vehicles will be avoided during the school bus operating hours on routes used by school buses. Safe driving practices around schools and school buses are included in the Drivers Code of Conduct.

### 3.9 Road Maintenance

Maxwell will maintain the Site Access Road in a manner that provides for safe and efficient access for all road users. Inspections of the access road will be undertaken regularly and safety issues arising from inspections will be addressed in a timely manner. It is noted that the first section of the site access road (approximately 350 m in length) is a Council public road and as such MSC is the relevant road authority. Maxwell will engage and seek relevant approval/s from MSC regarding road maintenance.

In the event of emergency repairs or maintenance being required on the Site Access Road during construction and/or decommissioning, these will be undertaken as soon as practical, and Maxwell will review and revise or place a hold on the construction or decommissioning schedule as required to enable the emergency works to be prioritised while minimising potential safety issues for mine personnel.

The site's contribution to traffic on Thomas Mitchell Drive is expected to vary along the route, and also vary with time, noting the predicted impacts (**Section 2.5**) relate to peak conditions. The site's contribution to traffic volumes on other local roads would be minimal. In accordance with Schedule 2, Condition B88 of Development Consent SSD 9526 after the commencement of construction (as notified under condition A13(b)), Maxwell shall contribute to the upgrade and maintenance of Thomas Mitchell Drive, and the upgrade of the intersection of Thomas Mitchell Drive and Denman Road, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Thomas Mitchell Drive Contributions Study, unless otherwise agreed with the Planning Secretary.

For Thomas Mitchell Drive, Maxwell will pay the contributions to MSC by the end of the financial year in which construction commences for the upgrade works; and be paid to MSC 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 MSC.

For the Thomas Mitchell Drive/Denman Road intersection, Maxwell will pay the contributions 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 MSC, unless otherwise agreed with the Planning Secretary.

### 3.10 Edderton Road Realignment

Prior to commencing second workings in the Arrowfield or Bowfield seams, Maxwell will complete the realignment of Edderton Road and associated upgrading of Saddlers Creek Crossing to the satisfaction of the Planning Secretary in accordance with Schedule 2, Condition B89 and B90 of Development Consent SSD 9526.

The realigned portion of Edderton Road would have a two-way sealed carriageway 7.0 m wide, with 1.0 m sealed shoulder and 1.0 m unsealed shoulder on each side. This is consistent with Austroads (2016) requirements for rural roads carrying an Annual Average Daily Traffic volume (AADT) of between 1,000

and 3,000 vehicles per day. Historic traffic volumes on Edderton Road indicate that Edderton Road has carried over 1,000 vehicles per weekday, thus adoption of the road width consistent with this higher design AADT is considered appropriate.

The new intersection of the realignment of Edderton Road with Golden Highway would include a channelised right turn lane and an auxiliary left turn lane in Golden Highway for vehicles turning into Edderton Road. The existing intersection of Edderton Road and Golden Highway will be decommissioned.

The historic traffic volume on Golden Highway at Ogilvie's Pass west of Edderton Road indicates that traffic volumes peak on Golden Highway in the middle of the day, rather than at traditional morning or evening periods. At the time of that survey (November 2014), Golden Highway carried 87 vehicles per hour during the site morning peak hour, 137 vehicles per hour during the site afternoon peak hour, and 173 vehicles per hour during the midday peak hour.

The historic traffic volume on Edderton Road north of Golden Highway suggests that the volume at the southern end of Edderton Road is less than that at its northern end.

Considering these background volumes, the proposed Channelised Right Turn and Auxiliary Left Turn treatments on Golden Highway at the new intersection with Edderton Road are expected to meet or exceed the warrants set out by Austroads (2017a) and are considered satisfactory. Sight distance at the new intersection is currently estimated at approximately 200 m between vehicles on Golden Highway and a vehicle on the Edderton Road realignment. The sight distance to and from the west is limited by trees along the northern side of Golden Highway, and sight distance to and from the east is limited by the raised verge on the northern side of Golden Highway. The new intersection will be designed to meet the sight distance requirements of Austroads (2017b), noting that this may require trimming of trees and/or localised lowering of the verge.

The realignment works will include all road furniture and safety requirements required to meet relevant road standards, to the satisfaction of the relevant roads authorities. If there is a dispute between the relevant parties, then any party may refer the matter to the Planning Secretary for resolution. As road works are required on the Golden Highway, TfNSW will require the Applicant to enter into a Works Authorisation Deed (WAD) with TfNSW. TfNSW may exercise its separate powers and functions of the road authority, to undertake road works in accordance with Sections 64, 71, 72 and 73 of the *Roads Act 1993*.

As part of the Edderton Road realignment, Maxwell will design and construct the new Saddlers Creek crossing to a two-lane rural road standard, capable of providing flood-free access during a 1 in 100-year Annual Exceedance Probability flood event.

### **3.11 Notifying the Community**

The objective of stakeholder engagement is to provide transparent, consistent and inclusive stakeholder engagement and access to current and sufficient information about the Maxwell UG Project, its activities, workforce and schedule to support impact management and monitoring. Stakeholder engagement activities include, but are not limited to:

- distributing construction notices to landholders within 2.5 km of project;
- liaison as agreed with landowners;
- conducting community information sessions commencing prior to construction and continuing during at least the first three years of operation to provide updates and address potential issues or concerns; and
- offering to meet regularly with representatives of the Coolmore Stud, Godolphin Woodlands Stud and Hollydene Estate Wines.

General project updates including development-related traffic impacts will be included in the Maxwell external newsletter which will be distributed generally every six months for at least the first three years of operation. Maxwell will also provide MSC with key project updates during construction.

In addition to this, Maxwell will establish and operate a Community Consultative Committee (CCC) in accordance with Schedule 2, Part A, Condition A20 of Development Consent SSD 9526, consistent with the *Community Consultative Committee Guideline: State Significant Projects (NSW Government, 2019)* or its latest equivalent version. Maxwell will provide the CCC with regular information on the progress of coal transport operations, road transport operations and environmental monitoring results. Engagement with the CCC will also allow Maxwell to seek community views and respond to road transport matters raised by the community.

Prior to the commencement of the Edderton Road realignment and associated upgrading of Saddlers Creek Crossing, Maxwell will notify the community via the CCC and by publishing a notice in the local newspapers. A community information session will also be held to provide additional information to stakeholders, and individual landholder meetings (in person or over the phone) will also be offered to those directly impacted (i.e. residents living on Edderton Road).

## **4 MEASUREMENT AND EVALUATION**

### **4.1 Traffic Monitoring**

Monitoring of light and heavy vehicle movements to and from the site and on Thomas Mitchell Drive to the east and west of the Site Access Road will be undertaken during the peak of the initial construction stage, during the peak operational stage in the short term (Project Year 6), and during the peak operational stage in the longer term (Project Year 13). Monitoring data will be maintained by Maxwell and reported directly to MSC.

### **4.2 Road Dilapidation Survey**

In accordance with Schedule 2, Condition B84 of Development Consent SSD 9526, Maxwell will undertake pre and post dilapidation surveys of the transport route. Prior to the upgrading of the intersection of Thomas Mitchell Drive and Denman Road, the transport route is limited to Thomas Mitchell Drive between the site access (which includes the first 350 m of the site access road) and the New England Highway (including the highway intersection). Following the upgrading of the intersection of Thomas Mitchell Drive and Denman Road, the transport route includes Thomas Mitchell Drive and its intersections with Denman Road and New England Highway.

The pre dilapidation survey will be undertaken prior to the commencement of any construction or decommissioning works, or other timeframe agreed by the applicable roads authority. The post dilapidation survey will be undertaken within one month of the completion of construction or decommissioning works, or other timeframe agreed by the applicable roads authority.

The aim of the dilapidation surveys is to establish the increase in traffic load and the change in pavement condition due to construction traffic. The dilapidation surveys will involve:

- undertaking a visual condition assessment and a falling weight deflectometer test of the transport route prior to the commencement of any site construction works;
- undertaking a traffic count to establish baseline and construction traffic; and
- undertaking a visual condition assessment and a falling weight deflectometer test of the transport route within one month of the completion of construction works.

A visual condition assessment will be undertaken by an experienced pavement engineer using a surface assessment vehicle such as an Automated Road Analyser, Intelligent Safe Surface Assessment Vehicle or similar. The visual condition assessment will involve the following:

- Recording a video of the relevant road section using a GPS camera to document the condition of the existing pavement.

- The footage will be used to record the location, type and extent of pavement defects and other environmental factors (e.g. drainage) that may be impacting the existing pavement.

A falling weight deflectometer test will also be undertaken specifically loading 40kN and 70kN to the existing pavement at 20m intervals, staggered between lanes. Subsurface investigations may be required depending on the existing data available from MSC on the transport route. This will be discussed further with MSC at the time of the survey.

The assessment of the existing pavement will be conducted in accordance with the following design standards and guidelines:

- Austroad Guide to Pavement Technology (AGPT) – Part 2: Pavement Structural Design (2019)
- Austroad Guide to Pavement Technology (AGPT) – Part 5 Pavement Evaluation and Treatment Design (2019)
- Applicable AUSPEC and TfNSW specifications
- Other applicable design standards

The results of the visual condition assessment and falling weight deflectometer test will be provided in a pavement assessment report and summarised in a table format to include the following factors (where available):

- Roughness
- Rutting
- Structural Cracking
- Environmental Cracking
- Pot holes
- Pot Patch
- Heavy Patching
- Ravelling
- California Bearing Ratio
- Deflection
- Curvature
- AC overlay
- Granular Overlay
- Structural Deficiency
- Pavement Condition Index
- Surface Curvature Index

The level of pavement damage that may be attributed to site-generated construction traffic based on the change in traffic loads and the change in pavement condition will be determined based on the results of the pavement condition assessment and traffic count data. In accordance with Schedule 2, Condition B84(c) of Development Consent SSD 9526, Maxwell shall rehabilitate and/or make good any development-related damage identified in the post-dilapidation survey within two months of completing the post-construction dilapidation survey, or other timing as may be agreed by the applicable roads authority, to the satisfaction of the applicable roads authority.

In accordance with Schedule 2, Condition B86 of Development Consent SSD 9526, 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.

### 4.3 Evaluation

The results of the traffic monitoring program (**Section 4.1**) will be evaluated against the relevant assumptions and predictions in the assessment, *Maxwell Project Road Transport Assessment* (TTPP, 2019a). Where any significant discrepancies in the traffic volumes or characteristics are identified, the potential cause and impacts of the discrepancies will be investigated and the TMP will be amended as required.

#### 4.4 Incident and Non-Compliance Notification

An incident is defined in SSD 9526 and DA 106-04-00 as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be a non-compliance or cause a non-compliance.

In accordance with Schedule 2, Part E, Condition E9 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C5 of DA 106-04-00, Maxwell shall immediately notify DPE and any other relevant agencies, immediately after it becomes aware of an incident relating to the road transport environment. The notification shall be in writing via 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. Maxwell will also advise MSC if an incident occurs on Council's Public Road.

In accordance with Schedule 2, Part E, Condition E10 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C6 of DA 106-04-00, Maxwell shall notify DPE within seven days of becoming aware of a non-compliance. The notification shall be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of Development Consent SSD 9526 that the Project 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. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

#### 4.5 Adaptive Management and Contingency Plan

In accordance with Schedule 2, Part E, Condition E4 of SSD 9526 and Schedule 2, Part C, Condition C2 of DA 106-04-00, where any exceedance of performance measures has occurred, Maxwell shall, at the earliest opportunity:

- Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- Consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPE describing those options and any preferred remediation measures or other course of action; and
- Implement reasonable remediation measures as directed by the Planning Secretary.

In accordance with Schedule 2, Part E, Condition E5 (f) of SSD 9526, the following contingency plan is used 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:

- Review the unpredicted impact with consideration of any relevant activities and monitoring data.
- Identify the most likely source of the unpredicted impact.
- Review the existing process and current traffic management controls.
- Implement appropriate mitigation measures.

#### 4.6 Complaints Handling

The site maintains a 24-hour community hotline (1800 653 960) for any issues or enquiries. In addition to the community hotline, the site can also be contacted by emailing [info@malabarresources.com.au](mailto:info@malabarresources.com.au).

If a complaint or enquiry is received regarding driver behaviour and/or road transport, it is investigated as soon as reasonably practicable and managed in accordance with Maxwell's *Community Complaints and Enquiries Procedure*. Details such as complainant name, contact details, nature of concern, date, time and method of receipt are recorded. While details of the enquiry vary depending on the nature and source of the enquiry, the following actions may result:

- Confirmation of whether the complainant would like the matter raised as a complaint or an enquiry.
- Identify further details which may assist in determining the cause of the complaint.
- Carry out an inspection of the site or assessment (if required).

- Identify if there is an exceedance or non-compliance with any consent or licence condition.
- Identify, where necessary and practical, methods to manage the source of the complaint and minimise the chance of a recurrence or the potential to generate further complaints.

All enquiries and/or complaints are recorded in an enquiries database. A summary of complaints is presented to the CCC, included in the Annual Review and EPL Annual Return, and made available on Malabar's website.

## 5 AUDIT, REVIEW AND IMPROVEMENT

### 5.1 Review Schedule

The suitability of this TMP will be reviewed in accordance with Schedule 2, Part E, Condition E7 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C3 of DA 106-04-00, that is within three months of:

- the submission of an incident notification under condition E9/C5;
- the submission of an Annual Review under condition E11;
- the submission of an Independent Environmental Audit under condition E13/C7;
- the approval of any modification of the conditions of Development Consent SSD 9526 or DA 106-04-00; or
- notification of a change in development phase under condition A13.

In accordance with Schedule 2, Part E, Condition E8 of SSD 9526 and Schedule 2, Part C, Condition C4 of DA 106-04-00, this plan will be revised, if necessary, to improve the environmental performance of the site, or cater for a modification or comply with a direction. The revised plan will be submitted to DPE for approval within six weeks of the review.

### 5.2 Reporting

In accordance with Schedule 2, Part E, Condition E11 of Development Consent SSD 9526, by the end of March in each year after the commencement of the development, or other timeframe agreed by the Planning Secretary, an Annual Review report will be submitted to DPE. The Annual Review will include, but not be limited to, the following:

- A description of the development that was carried out in the previous calendar year and the development proposed to be carried out over the current calendar year.
- A comprehensive review of any traffic monitoring and evaluation undertaken over the past year.
- A comprehensive review of any road transport complaints records over the past year, including a description of the manner in which complaints were addressed.
- A description of non-compliances which occurred in the previous calendar year and actions that were (or are being) taken to rectify the non-compliance and avoid reoccurrence.
- Identify any trends in any traffic monitoring data over the life of the development.
- Identify any discrepancies between the predicted and actual impacts of the Project on the road transport environment, and analyse the potential cause of any significant discrepancies.
- Where applicable, measures that will be implemented over the next reporting year to improve the environmental performance of the development with respect to the road transport environment.

In accordance with Schedule 2, Part E, Condition E12 of Development Consent SSD 9526, copies of the Annual Review shall be submitted to MSC and made available to the CCC and any interested person upon request.

In accordance with Schedule 2, Part E, Condition E17(a) of Development Consent SSD 9526, the Annual review will be publicly available on the site's website at <https://malabarresources.com.au/corporate-governance/>.

### 5.3 Auditing

In accordance with Schedule 2, Part E, Condition E13 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C7 of DA 106-04-00, within one year of commencement of development SSD 9526 and within one year of approval of Antiene MOD1, and every three years after, unless the Planning Secretary directs otherwise, Maxwell will commission and pay the full cost of an Independent Environmental Audit of the development. The audit shall:

- (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary;
- (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary;
- (c) be carried out in consultation with the relevant agencies and the CCC;
- (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
- (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
- (f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
- (g) be conducted and reported to the satisfaction of the Planning Secretary.

In accordance with Schedule 2, Part E, Condition E14 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C8 of DA 106-04-00, within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary. Maxwell shall submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations shall be implemented to the satisfaction of the Planning Secretary.

### 5.4 Access to Information

In accordance with Schedule 2, Part E, Condition E17 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C11 of DA 106-04-00, before the commencement of construction and within 3 months of the approval of Antiene MOD1 until the completion of all rehabilitation required under SSD 9526 and DA 106-04-00, Maxwell will make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of SSD 9526 and DA 106-04-00) that are relevant to this plan publicly available on Malabar's website (<https://malabarresources.com.au/corporate-governance/>):

- this TMP;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- minutes of CCC meetings;
- 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;
- 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;
- a summary of the current phase and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- the Annual Reviews of the development; and

- 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.

This information shall be kept up to date, to the satisfaction of the Planning Secretary.

## 5.5 Records Management

All traffic and transport monitoring data will be maintained in accordance with the Environmental Management Strategy and retained by Malabar for a period of at least five years.

## 5.6 Continuous Improvement

Maxwell will investigate and implement ways to continuously improve the environmental performance of the site over time. This will be achieved by keeping abreast of best practice in the industry for road transport, addressing and reporting on outcomes of any monitoring and surveys undertaken, and/or complaints received in relation to road transport, in Annual Reviews.

## 5.7 Document Review History

A summary of the document history is outlined in **Table 4**.

**Table 4. Document revision status**

Issue	Issue Date	Review Team	Details of Change / Communication
1	June 2021	Penny Dalton Robyn Skinner Donna McLaughlin	Document prepared following approval of SSD Consent 9526 for the Maxwell UG Project.
1.1	July 2021	Robyn Skinner Donna McLaughlin	Document updated following review by DPIE.
2	February 2022	Alex Newton Donna McLaughlin	Document updated following approval of Maxwell MOD1.
3	August 2022	Robyn Skinner	Document updated following AEMR submission (to meet Condition E7(b)) and Independent Environmental Audit submission (to meet Condition E7(c)) and notification of construction commencement ((to meet Condition E7(e)).
4	November 2022	Robyn Skinner Donna McLaughlin	Document updated following approval of Maxwell MOD2.
5	November 2023	Donna McLaughlin Alex Newton	Document updated following approval of Modification 1 of development consent DA 106-04-00 for the Drayton Rail Loop and Antiene Rail Spur.

# 6 INFORMATION, TRAINING AND INSTRUCTION

## 6.1 Competent Persons

Suitably qualified, competent and experienced persons shall be involved in the design, planning and implementation of this plan and related procedures.

## 6.2 Training

Traffic impact mitigation training is provided to all employees and contractors through the Site Familiarisation process. From time to time, workforce communication and toolbox talks allow for discussion of the objectives and requirements of this and any other relevant Management Plans.

Fully inducted employees will also be made aware of the Drivers' Code of Conduct.

## 7 RESPONSIBILITIES

Responsibilities associated with this management plan are outlined **Table 5**.

**Table 5. Responsibilities**

Position	Responsibilities
<b>General Manager</b>	<ul style="list-style-type: none"> <li>• Provide sufficient resources for the effective implementation of this TMP.</li> <li>• Enforce compliance with the Drivers' Code of Conduct.</li> </ul>
<b>HSEC Manager</b>	<ul style="list-style-type: none"> <li>• Authorise this TMP and any future amendments.</li> <li>• Facilitate all training relevant to this TMP as necessary and maintain records.</li> <li>• Facilitate that all traffic monitoring is undertaken in accordance with this TMP.</li> <li>• Audit implementation of all mitigation measures in the TMP.</li> <li>• Maintain traffic awareness amongst employees and contractors via inductions and tool box talks.</li> <li>• Respond to community complaints.</li> <li>• Liaise with regulatory authorities regarding traffic management.</li> <li>• Review and amend this TMP.</li> <li>• Facilitate training of all employees and contractors to provide awareness of their obligations under this TMP.</li> </ul>
<b>Contractors</b>	<ul style="list-style-type: none"> <li>• Develop and implement procedures for their employees and subcontractors under their responsibility to facilitate compliance with this TMP.</li> <li>• Train all employees and subcontractors under their control of their obligations under this TMP.</li> <li>• Provide Malabar with details of anticipated vehicle traffic movements for each activity they are involved in.</li> <li>• Provide relevant data to assist Malabar with reporting requirements.</li> </ul>
<b>All Personnel</b>	<ul style="list-style-type: none"> <li>• Drive safely at all times in accordance with the Drivers' Code of Conduct.</li> <li>• Ensure they are fit to drive in accordance with the requirements of the TMP and relevant regulations.</li> <li>• Inform the Supervisor of any traffic related issues as they arise.</li> <li>• Provide relevant data to assist Malabar with any reporting requirements in accordance with this TMP.</li> <li>• Use higher occupancy vehicles to the greatest extent practical.</li> </ul>

## 8 DOCUMENT INFORMATION

### 8.1 References

Austrroads (2017a), *Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings*.

Austrroads (2017b), *Guide to Road Design Part 4A: Unsignalised and Signalised Intersections*.

Austrroads (2019a), *Guide to Pavement Technology Part 2: Pavement Structural Design*.

Austrroads (2019b), *Guide to Pavement Technology Part 5: Pavement Evaluation and Treatment Design*.

National Transport Commission (2020), *Australian Code for the Transport of Dangerous Goods by Road and Rail*.

NSW Government (2019), *Community Consultative Committee Guideline: State Significant Projects*.

Transport for NSW (2019), *Traffic Control at Work Sites Technical Manual*.

Transport for NSW (2020), *Additional Access Conditions Oversize and overmass heavy vehicles and loads*.

TTPP (2018), *Maxwell Project Road Safety Audit of Existing Conditions*.

TTPP (2019a), *Maxwell Project Road Transport Assessment*.

TTPP (2019b), *Maxwell Project – Addendum to Road Transport Assessment*.

TTPP (2020), *Maxwell Project Thomas Mitchell Drive and Denman Road* (letter to Malabar Coal Limited).

## 8.2 Definitions and Abbreviations

Term	Definition
Antiene MOD1	Drayton Rail Loop and Antiene Rail Spur (DA 106-04-00) Modification 1
CCC	Community Consultative Committee
DPE	NSW Department of Planning and Environment
DPIE	NSW Department of Planning, Industry and Environment (now NSW Department of Planning and Environment)
EIS	Environmental Impact Statement
EP&A	Environmental Planning and Assessment
GVM	Gross Vehicle Mass
HSEC	Health, Safety, Environment and Community
Malabar	Malabar Resources Limited
Maxwell	Maxwell Ventures (Management) Pty Ltd
Maxwell MOD1	Maxwell Underground Project (SSD 9526) Modification 1
Maxwell MOD2	Maxwell Underground Project (SSD 9526) Modification 2
MEA	Mine Entry Area
MSC	Muswellbrook Shire Council
NSW	New South Wales
OSOM	Oversize or overmass
TfNSW	Transport for New South Wales
TMP	Traffic Management Plan

Term	Definition
TTPP	The Transport Planning Partnership
SIDRA	SIDRA INTERSECTION 8
SSD	State Significant Development

## APPENDIX 1 – REGULATORY REQUIREMENTS

### State Significant Development Consent 9526

Condition	Detail	Relevant TMP Section
<b>A10</b>	Product coal may only be transported from the site by rail. <i>Note: the loading and transportation of coal via the rail loop and Antiene Rail spur is subject to a separate development consent (DA 106-04-00).</i>	<b>1.1</b>
<b>B84</b>	The Applicant must: <ul style="list-style-type: none"> <li>(a) prepare a pre-dilapidation survey of the transport route prior to the commencement of any construction or decommissioning works, or other timeframe agreed by the applicable roads authority;</li> <li>(b) prepare a post-dilapidation survey of the transport route within 1 month of the completion of construction or decommissioning works, or other timeframe agreed by the applicable roads authority; and</li> <li>(c) rehabilitate and/or make good any development-related damage identified in the post-dilapidation survey prepared under paragraph (b) within 2 months of completing the post-dilapidation survey, or other timing as may be agreed by the applicable roads authority,</li> </ul> to the satisfaction of the applicable roads authority.  <i>Notes:</i> <ul style="list-style-type: none"> <li>• Prior to the upgrading of the intersection of Thomas Mitchell Drive and Denman Road, in this condition, the 'transport route' refers to Thomas Mitchell Drive between the site access and the New England Highway (including the highway intersection)</li> <li>• Following the upgrading of the intersection of Thomas Mitchell Drive and Denman Road, in this condition, the 'transport route' refers to Thomas Mitchell Drive and its intersections with Denman Road and the New England Highway</li> </ul>	<b>4.2</b>  <b>4.2</b>  <b>4.2</b>
<b>B85</b>	If the construction and/or decommissioning of the development is to be staged, the obligations in condition B84 apply to each stage.	<b>Noted. Staging not planned</b>
<b>B87</b>	No direct access to or from the development is permitted via Edderton Road or the Golden Highway, except where required to ensure the safety of the mine, its workers or the general public, for land management purposes, environmental monitoring, works associated with the realignment of Edderton Road or where approved in writing by the Planning Secretary.	<b>2.5.1</b>
<b>B88</b>	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 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: <ul style="list-style-type: none"> <li>(a) be paid to Council by the end of the financial year in which construction commences for the upgrade works; and</li> <li>(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)),</li> </ul> unless otherwise agreed with Council.	<b>3.9</b>  <b>3.9</b>

Condition	Detail	Relevant TMP Section
	<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><i>Note:</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.</p>	3.9
B89	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) construct Edderton Road realignment to the following standard: <ul style="list-style-type: none"> <li>i. 7m wide sealed carriageway;</li> <li>ii. 1m wide sealed shoulders on each side; and</li> <li>iii. 1m wide unsealed shoulders on each side;</li> </ul> </li> <li>(b) Decommission the existing intersection of Edderton Road and Golden Highway</li> <li>(c) Construct the new intersection of Edderton Road and the Golden Highway and Channelised Right-Turb (CHR) and Auxiliary Left Turn (AUL) treatments;</li> <li>(d) Ensure that sight distances at the intersection of Edderton Road and the Golden Highway comply with the requirements of relevant Austroads guidelines; and</li> <li>(e) Design and construct the new Saddlers Creek crossing to a two-lane rural road standard, capable of providing flood-free access during a 1 in 100-year AEP flood event.</li> </ul> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>• The realignment works identified above include all road furniture and safety requirements required to meet relevant road standards, to the satisfaction of the relevant roads authorities.</li> <li>• 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.</li> <li>• As road works are required on the Golden Highway, TfNSW will require the Applicant to enter into a Works Authorisation Deed (WAD) with TfNSW. TfNSW may exercise its separate powers and functions of the road authority, to undertake road works in accordance with Sections 64, 71, 72 and 73 of the Roads Act.</li> </ul>	3.10 3.10 3.10 3.10 3.10
B90	<p>Unless otherwise agreed by the Planning Secretary, the Applicant must not commence second workings in the Arrowfield or Bowfield Seams until the realignment of Edderton Road and the associated upgrading of the Saddlers Creek Crossing is completed to the satisfaction of the Planning Secretary.</p>	3.10
B91	<p>The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;</li> <li>(b) be prepared in consultation with TfNSW and Council;</li> <li>(c) include details of all transport routes and traffic types to be used for development-related traffic;</li> </ul>	2.3 2.3, Appendix 4 2.5

Condition	Detail	Relevant TMP Section
	<p>(d) 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;</p> <p>(e) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during the construction and operational phases of the development, including:</p> <ul style="list-style-type: none"> <li>(i) staggering shift changes with other mining operations in the locality, where practicable, to minimise impacts during AM and PM peak traffic periods;</li> <li>(ii) notifying the local community about development-related traffic impacts;</li> <li>(iii) temporary traffic controls, including detours and signage (where required);</li> <li>(iv) responding to any emergency repair requirements or maintenance during construction and/or decommissioning;</li> <li>(v) a traffic management system for managing any over-dimensional vehicles; and</li> <li>(vi) minimising potential for conflict with school buses;</li> </ul> <p>(f) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:</p> <ul style="list-style-type: none"> <li>(i) adhere to posted speed limits or other required travelling speeds;</li> <li>(ii) adhere to the designated transport routes;</li> <li>(iii) implement safe driving practices; and</li> <li>(iv) avoid the intersection of Thomas Mitchell Drive and Denman Road (particularly during AM and PM peak traffic periods), where practicable, until the planned intersection upgrade is completed.</li> </ul>	<p>4.2</p> <p>3</p> <p>3.4</p> <p>3.11</p> <p>3.3</p> <p>3.9</p> <p>3.6</p> <p>3.8</p> <p>3.1, Appendix 5</p>
<b>B92</b>	The Applicant must not commence construction until the Traffic Management Plan is approved by the Planning Secretary	1.2
<b>B93</b>	The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.	1.2
<b>E5</b>	<p>Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:</p> <p>(a) a summary of relevant background or baseline data;</p> <p>(b) details of:</p> <ul style="list-style-type: none"> <li>(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>(ii) any relevant limits or performance measures and criteria; and</li> <li>(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;</li> </ul> <p>(c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);</p> <p>(d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</p> <p>(e) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>(i) impacts and environmental performance of the development; and</li> <li>(ii) effectiveness of the management measures set out pursuant to condition E5(c);</li> </ul>	<p>2.4</p> <p>2.1, Appendix 1</p> <p>2.5</p> <p>4.1, 4.2, 4.3</p> <p>2.2, Appendix 2</p> <p>3</p> <p>4.1, 4.2, 4.3, 4.6, 5.2</p>

Condition	Detail	Relevant TMP Section
<b>E5 cont'd</b>	<p>(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;</p> <p>(g) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(h) a protocol for managing and reporting any:</p> <p>(i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion);</p> <p>(ii) complaint; or</p> <p>(iii) failure to comply with other statutory requirements;</p> <p>(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and</p> <p>(j) a protocol for periodic review of the plan.</p> <p><b>Note:</b> <i>The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p><b>4.5</b></p> <p><b>5.6</b></p> <p><b>4.4</b></p> <p><b>4.6</b></p> <p><b>4.4</b></p> <p><b>5.4</b></p> <p><b>5.1</b></p>
<b>E7</b>	<p>Within three months of:</p> <p>(a) the submission of an incident report under condition E9;</p> <p>(b) the submission of an Annual Review under condition E11;</p> <p>(c) the submission of an Independent Environmental Audit under condition E13;</p> <p>(d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or</p> <p>(e) notification of a change in development phase under condition A13;</p> <p>The suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.</p>	<b>5.1</b>
<b>E8</b>	<p>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.</p> <p><i>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.</i></p>	<b>5.1</b>
<b>E9</b>	<p>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 to <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a> and identify the development (including the development application number and name) and set out the location and nature of the incident.</p>	<b>4.4</b>
<b>E10</b>	<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 to <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a> 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><i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i></p>	<b>4.4</b>

## Development Consent DA 106-04-00

Clause	Requirement	Section of Plan
A5	Product coal must only be transported by rail.	1.1
C2	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent.</p> <p>Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ul style="list-style-type: none"> <li>(a) Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</li> <li>(b) Consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li> <li>(c) Implement reasonable remediation measures as directed by the Planning Secretary.</li> </ul>	4.5
C3	<p>Within three months of:</p> <ul style="list-style-type: none"> <li>(a) the submission of an incident report under condition C5 or C6;</li> <li>(b) the submission of an Independent Environmental Audit under condition C7;</li> <li>(c) the approval of any modification of the conditions of this consent (unless the conditions require otherwise);</li> </ul> <p>the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.</p>	5.1
C4	<p>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.</p> <p><b>Note:</b> <i>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.</i></p>	5.1
C5	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 via 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	4.4
C6	<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 via 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><b>Note:</b> <i>A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i></p>	4.4
C7	Within one year of approval of Mod 1, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay	5.3

Clause	Requirement	Section of Plan
	<p>the full cost of an Independent Environmental Audit of the development. The audit must:</p> <ul style="list-style-type: none"> <li>(a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary;</li> <li>(b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary;</li> <li>(c) be carried out in consultation with the relevant agencies;</li> <li>(d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);</li> <li>(e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;</li> <li>(f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and</li> </ul> <p>be conducted and reported to the satisfaction of the Planning Secretary.</p>	
<b>C8</b>	<p>Within three months of commencing an Independent Environmental Audit the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.</p>	<b>5.3</b>
<b>C11</b>	<p>Within 3 months of the approval of Mod 1, until the completion of all rehabilitation required under this consent, the Applicant must: (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> <ul style="list-style-type: none"> <li>(i) the documents listed in condition A2(c) of this consent;</li> <li>(ii) all current statutory approvals for the development;</li> <li>(iii) all approved strategies, plans and programs required under the conditions of this consent;</li> <li>(iv) a summary of the current phase and progress of the development;</li> <li>(v) contact details to enquire about the development or to make a complaint;</li> <li>(vi) a complaints register, updated monthly following the receipt of any complaints;</li> <li>(vii) 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;</li> <li>(viii) any other matter required by the Planning Secretary; and</li> </ul> <p>(b) keep such information up to date, to the satisfaction of the Planning Secretary</p>	<b>5.4</b>

## APPENDIX 2 – MAXWELL PROJECT EIS AND SUPPORTING DOCUMENT COMMITMENTS

Source	Detail	Relevant TMP Section
<b>EIS Section 6.14.4</b>	Malabar would continue to consult with Muswellbrook Shire Council and the DPIE to develop a plan to contribute to the maintenance of local roads under the control of the Muswellbrook Shire Council.	<b>3.9</b>
<b>EIS Section 6.14.4</b>	The proposed movement for any oversize vehicles would be negotiated with RMS and relevant local councils on a case-by-case basis. All oversize loads would be transported with the relevant permits and load declarations obtained in accordance with <i>Additional Access Conditions for Oversize and Overmass Heavy Vehicles and Loads</i> (RMS, 2019), and any other licences and escorts as required by regulatory authorities.	<b>3.6</b>
<b>EIS Section 6.14.4</b>	Dangerous goods required for the Project would be transported in accordance with relevant legislation and the <i>Australian Code for the Transport of Dangerous Goods by Road and Road</i> . The transportation, handling and storage of all dangerous goods at the Project would be conducted in accordance with the requirements of the relevant Australian Standards, driver and vehicle licencing requirements, and the current version of the ADG Code.	<b>3.7</b>
<b>EIS Section Table 6-13</b>	Imposing a maximum 60 km per hour speed limit on internal roads and maximum 80 km per hour speed limit on the sealed site access road during construction and operational stages.	<b>3.2</b>
<b>Maxwell Project Road Transport Assessment Section 5.7</b>	Malabar should consult with Muswellbrook Shire Council and the NSW Department of Planning and Environment to develop a plan to contribute to the maintenance of local roads under the control of Muswellbrook Shire Council. The Project's contribution to traffic on Thomas Mitchell Drive is expected to vary along the route and also vary with time.	<b>3.9</b>
<b>Maxwell Project Submissions Report, Section 6.1.5</b>	<p>On-site parking would be provided at the existing Maxwell Infrastructure carpark (which provides parking for around 300 vehicles in delineated car parks) (Figure 7). There are also sealed and unsealed areas available that could more than double the capacity at the Maxwell Infrastructure location.</p> <p>A new carpark (providing for at least 200 vehicles) would be established at the MEA, at the southern end of the proposed internal access road (refer Figure 3-5 of the EIS).</p> <p>Hence, total parking capacity would be at least 500 vehicles with the potential to increase to more than 800.</p>	<b>3.5</b>



Planning,  
Industry &  
Environment

Donna McLaughlin  
HSE and Community Manager  
Maxwell Ventures (Management) Pty Ltd  
Thomas Mitchell Drive  
Muswellbrook, NSW, 2333

29/01/2021

Dear Ms McLaughlin

**Maxwell Underground (SSD-9526)  
Traffic Management Plan Endorsement**

I refer to your request (SSD-9526-PA-5) for the Planning Secretary's approval of suitably qualified persons to prepare the Traffic Management Plan for the Maxwell Underground (SSD-9526).

The Department has reviewed the nomination and information you have provided and is satisfied the expert is suitably qualified and experienced. Consequently, I can advise that the Planning Secretary approves the appointment of Penny Dalton to prepare the Traffic Management Plan.

If you wish to discuss the matter further, please contact Charissa Pillay on 9995 5944.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sprott'.

Matthew Sprott  
Director  
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary

## APPENDIX 4 – CONSULTATION WITH MUSWELLBROOK SHIRE COUNCIL AND TRANSPORT FOR NSW

Raised By	Consultation Feedback	Outcome
Transport for NSW (TfNSW)	<p>TfNSW has reviewed the Traffic Management Plan (TMP) prepared by Malabar Resources Ltd dated 19 February 2021, for the Maxwell Underground Coal Mine.</p> <p>Please be advised that TfNSW has identified that the recommendation of staggering staff change over times as detailed in condition B91(e)(i) does not appear to have been adopted, and potential queuing on Thomas Mitchell Drive at the intersection with the New England Highway during shift change over appears likely. TfNSW recommends that the TMP be revised to mitigate potential queuing impacts on Thomas Mitchell Drive.</p>	<p>Section 3.4 has been amended to clearly include the staggering of shift changes with other mining operations in the locality, where practicable.</p> <p>Section 3.4 has been amended to include further discussion on the proposed measures to mitigate potential queuing on Thomas Mitchell Drive which includes staggering shift times and carpooling</p>
Muswellbrook Shire Council (MSC)	<p>Please provide or advise when the following plans will be available (specifically relevant to the management of Edderton Road);</p> <ul style="list-style-type: none"> <li>(i) Built Features Management Plan;</li> <li>(ii) Blasting Management Plan.</li> </ul>	<p>Maxwell notes that the Built Features Management Plan is required prior to second workings and the Noise and Blasting Management Plan is required prior to construction. No construction-related blasting is proposed within 500 metres (m) of a public road. Section 1.2 has been updated to provide further context on the Built Features Management Plan and the Noise and Blasting Management Plan.</p>
	<p>The Thomas Mitchell Drive Contributions Study (TMDCS) as amended August 2018 does not include the Maxwell Underground Project levels of contribution -has Malabar Resources requested/been advised when this will be undertaken by Department of Planning, Industry &amp; Environment;</p>	<p>Maxwell understands that the current Thomas Mitchell Drive Contributions Study (dated August 2018) at the time of writing this plan does not include the Maxwell UG Project however DPIE have advised that the study is being updated. No change to the TMP required.</p>
	<p>The status of the first 350m of the Site Access Road from the intersection of Thomas Mitchell Drive needs to be clarified as this section appears to be Public Road- this will have implications as to how this road can be dealt with if it is still classified as “Public Road”;</p>	<p>Maxwell confirms the first section of the access road is a public road. Section 3.9 discusses engagement with the appropriate road owner regarding maintenance.</p>
	<p><b>1.2 Purpose and Scope-</b></p> <ul style="list-style-type: none"> <li>(i) Should include that this plan is to comply with the requirements of Condition B91 of the Development Consent;</li> <li>(ii) Please provide details of consultation undertaken with TfNSW and kindly provide Council with their comments.</li> </ul>	<p>Condition 91 has now been included in Section 1.2.</p> <p>All evidence of consultation is provided in Appendix 4 of the TMP.</p>

Raised By	Consultation Feedback	Outcome
	<p><b>2.4 Existing and Baseline Traffic Conditions-</b></p> <p>(i) Specify what the am and pm peak hour times are in terms of what time of the day they are;</p> <p>(ii) Provide a schedule of timeframes/dates for construction activities and the type and number of heavy vehicles including OSOM accessing the site during these times and to specify what equipment and deliveries are being brought in.</p>	<p>Peak times have been added to the notes section below Table 1. Further detail has been provided on the timeframe and type/number of heavy vehicle in Section 2.5.2. Section 3.7 addresses oversized and overmass vehicles noting, <i>'The proposed movement for any oversized vehicles will be negotiated with TfNSW and relevant local councils on a case-by-case basis. All oversized loads would be transported with the relevant permits and load declarations obtained in accordance with Additional Access Conditions Oversize and overmass heavy vehicles and loads (TfNSW, 2020), and any other licences and escorts as required by regulatory authorities.'</i></p>
	<p><b>2.5.1 Vehicle Access Routes-</b></p> <p>(i) Kindly define "Land Management" purposes with regards to accessing the site from Edderton Road;</p> <p>(ii) Advise locations of access points;</p> <p>(iii) Figures 3-8 in this section- please specify what time of day the am and pm peak times are.</p>	<p>A definition for 'land management' has been added to Section 2.5.1.</p> <p>Access points are discussed in Section 2.5.1 noting that site-generated vehicles will enter and exit the site via the existing Site Access Road. Additional information has been provided regarding access points on Edderton Road.</p> <p>Morning and evening peak hours has been added to sections 2.5.2 and 2.5.3.</p>
	<p><b>2.5.4 Predicted Traffic Conditions-</b></p> <p>to be discussed at a face to face meeting- seeking clarification on predicted traffic conditions.</p>	<p>Discussed during meeting held on 15 June 2021.</p>
	<p><b>3.1-Drivers' Code of Conduct-</b></p> <p>(i) Specify who "inducted Personnel" are;</p> <p>(ii) This section identifies that the Thomas Mitchell Drive/Denman Road intersection is to be avoided however in the Appendix 5 Drivers Code of Conduct the above intersection is the designated route for both heavy and light vehicles (other than OSOM) when approaching from the west. This is contradictory. Further the Transport Route referred to in B84 of the Development Consent specifies "Prior to the upgrading of the intersection of</p>	<p>Section 3.1 has been amended to specify 'inducted personnel'.</p> <p>Section 1.2.3 of the Drivers Code of Conduct has been updated to state the following, <i>'For transparency and consistency with the Road Transport Assessment</i></p>

Raised By	Consultation Feedback	Outcome
	<p>Thomas Mitchell Drive and Denman Road, in this condition, the “transport route” refers to Thomas Mitchell Drive between the site access and the New England Highway (including the highway intersection)”. This “transport route” should be the route specified in the Drivers Code of Conduct specifically for heavy vehicles and construction traffic accessing the site;</p> <p>(iii) Please advise details of all transport routes to be used and traffic types for development related traffic.</p>	<p><i>undertaken as part of the Maxwell UG Project Environmental Impact Statement, all possible transport routes have been identified below. However, in accordance with Schedule 2, Condition B91(f)(iv) of Development Consent for SSD 9526, Maxwell notes that until the planned upgrade of the intersection of Denman Road with Thomas Mitchell Drive is completed, drivers travelling to and from the site (particularly during morning and afternoon peak periods) should, where practical, avoid use of that intersection.’.</i></p> <p>All transport routes and traffic types (i.e. light vehicles and heavy vehicles) are provided in section 1.2.3 of the Drivers Code of Conduct.</p>
	<p><b>3.3 Temporary Traffic Controls-</b></p> <p>Any temporary traffic controls, signage or works within any of the Council Public Road corridors must have prior permission from Council and approval under s.138 of the Roads Act 1993.</p>	<p>Section 3.3 has been amended to note that Maxwell will seek approval under Section 138 of the <i>Roads Act 1993</i> from Muswellbrook Shire Council for any temporary traffic controls, signage or works within the Council Public Road corridor.</p>
	<p><b>3.7 Oversize and Overmass Vehicles-</b></p> <p>No movement of OSOM or heavy vehicle construction traffic related to the site is to occur during the operation of any school bus along Thomas Mitchell Drive. The proponent is to liaise with the relevant bus operators to determine the times the buses will travel on Thomas Mitchell Drive. These times and restrictions need to be specified in the TMP.</p>	<p>School bus times have not been provided in this plan as they may change from year to year. However, Maxwell has already committed to consult with the bus operators providing regular school bus services in the region, in January of each year to confirm details of school bus routes and operating times for the upcoming school year. No change to the TMP required.</p>
	<p><b>3.10 Road Maintenance-</b></p> <p>The status of the first 350m of the site access road is yet to be determined. This will affect the manner in which this section of road is to be maintained.</p>	<p>Maxwell confirms the first section of the access road (350 m) is a public road and therefore this section of road has been included in the pre and post dilapidation surveys. Section 3.9 has been amended to note that MSC is the relevant road authority.</p>

	<p><b>4.2 Dilapidation Survey-</b></p> <p>Liaison to occur with MSC staff as to what is to be included in the dilapidation survey prior to commencement. The survey will require approval under s.138 Roads Act 1993 approval through MSC. The following matters (at a minimum) need to be addressed on the pre dilapidation survey:</p> <p>1. Visual Condition Assessment (Automated Road Analyser- ARAN). The visual pavement assessment is to be undertaken by an experienced pavement engineer who will:</p> <ol style="list-style-type: none"> <li>I. Record video of the relevant road section using a GPS camera to document the condition of the existing pavement;</li> <li>II. Use the footage to record the location, type and extent of pavement defects and other environmental factors (e.g. drainage) that may be impacting the existing pavement.</li> </ol> <p>The results of the visual assessment will be provided in a section of the pavement assessment report and summarised in table format and to include the following factors:</p> <ul style="list-style-type: none"> <li>• Roughness</li> <li>• Rutting</li> <li>• Structural Cracking</li> <li>• Environmental Cracking</li> <li>• Pot holes</li> <li>• Pot Patch</li> <li>• Heavy Patching</li> <li>• Ravelling</li> <li>• California Bearing Ratio (CBR)</li> <li>• Deflection</li> <li>• Curvature</li> <li>• AC overlay (mm)</li> <li>• Granular Overlay (mm)</li> <li>• Structural Deficiency (mm)</li> <li>• Pavement Condition Index (PCI)</li> <li>• Surface Curvature Index (SCI)</li> </ul> <p>The assessment of the existing pavement is to be conducted in accordance with the following design standards and guidelines:</p> <ul style="list-style-type: none"> <li>• Austroad Guide to Pavement Technology (AGPT)- Part 2: Pavement Structural Design (2017)</li> <li>• Austroad Guide to Pavement Technology (AGPT) -Part 5 Pavement Evaluation and Treatment Design (2011)</li> <li>• Applicable AUSPEC and TfNSW specifications</li> <li>• Other applicable design standards.</li> </ul> <p>2. Falling Weight Deflectometer (FWD) – Specifically loading 40kN and 70kN need to be applied to the existing pavement at 20m intervals in alternating wheel paths.</p> <p>Subsurface investigations -sufficient number of 300mm (at a minimum) diameter pavement holes would be required to sufficiently assess the pavement and underlying subgrade. Dynamic cone penetrometer (DCP) testing to</p>	<p>A visual condition assessment was already proposed as part of the dilapidation survey. No change to the TMP required.</p> <p>Maxwell have amended Section 4.2 to include the falling weight deflectometer test.</p> <p>Maxwell have amended Section 4.2 to include the design standards and guidelines provided by MSC.</p> <p>Maxwell have amended Section 4.2 to include a provision for subsurface investigations (subject to the provision of existing data available from MSC).</p> <p>Maxwell have not included the provision of a Road Maintenance Management Plan. Maxwell notes in Section 4.2 that the level of pavement damage that may be attributed to site-generated construction traffic based on the change in traffic loads and the change in pavement condition will be determined based on the results of the pavement condition assessment and traffic count data.</p>
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Raised By	Consultation Feedback	Outcome
	<p>be performed at each test pit location to assess in-situ density or consistency of subsurface material. The test locations are to be recorded by a GPS unit with typical accuracy of +/- 10m in MGA format, together with description of locations relative to the pavement.</p> <p>Samples of pavement and subgrade are to be tested at a NATA registered laboratory for the following geotechnical testing:</p> <ul style="list-style-type: none"> <li>• Subgrade <ul style="list-style-type: none"> <li>(i) 3 No. Standard compaction and CBR</li> </ul> </li> <li>• 3 No. moisture content pavement <ul style="list-style-type: none"> <li>(i) 6 No. Modified compaction and CBR</li> <li>(ii) 6 No. PSD</li> <li>(iii) 6 No. moisture content</li> <li>(iv) 6 No. Atterberg Limits</li> </ul> </li> </ul> <p>The above 2 methods are standard investigations to determine the current surface and pavement condition prior to use of the road by construction traffic.</p> <p>Road Maintenance Management Plan is to be prepared for Thomas Mitchell Drive between the New England Highway and the Site Access Road to address development related damage to the road during the construction period.</p>	
	<p><b>4.4 Incident and Non-Compliance Notification-</b></p> <p>If an incident occurs on Council's Public Road the MSC is to be advised also.</p> <p>The Traffic Management Plan does not address Edderton Road with regards to B91(e) of the Development Consent specifically for subsections: (ii), (iii), (iv) &amp; (vi) during the operational phase of the mine.</p>	<p>Section 4.4 has been amended to note that Maxwell will also advise MSC if an incident occurs on Council's Public Road.</p> <p>Notification of the works on Edderton Road has been added to Section 3.11.</p> <p>Any temporary traffic controls will be undertaken in accordance with Section 3.3. No change to the TMP required.</p> <p>There is no direct access to the site from Edderton Road and as such no repairs or maintenance are expected during construction and/or decommissioning. Maxwell have noted in Section 4.4 that Maxwell will advise Muswellbrook Shire Council if an incident occurs on Council's Public Road. No change to the TMP required.</p> <p>Minimising potential conflict with school buses is already addressed in Section 3.8. No change to the TMP required.</p>

Raised By	Consultation Feedback	Outcome
	<p><b>Appendix 1</b> Condition B88 of the Development Consent does not appear in the regulatory requirements relating to the contributions by Maxwell Underground to the Thomas Mitchell Drive/Denman Road intersection upgrade.</p>	<p>Condition 88 has been added to Appendix 1 of the plan.</p>
	<p><b>Appendix 2</b> EIS Section Tale 6-13 The status of the first 350m of the Site Access Roads needs to be ascertained. If this section is Public Road then the delegation for posting speed limits lies with Transport for NSW.</p>	<p>Maxwell confirms the first section of the access road is a public road. Section 3.2 has been amended to confirm TfNSW is responsible for setting speed limits on the first section (350m) of the site access road that is a public road.</p>

## Drivers Code of Conduct



### 1.1 Purpose

This Drivers Code of Conduct has been prepared to comply with Schedule 2, Condition B91(f) of Development Consent for State Significant Development (SSD) 9526.

The purpose of the Drivers Code of Conduct is to ensure drivers:

- Adhere to posted speed limits or other required travelling speeds;
- Adhere to the designated transport routes;
- Implement safe driving practices; and

This Drivers Code of Conduct applies to all Maxwell Ventures (Management) Pty Ltd (Maxwell) personnel and any person conducting business for the Maxwell Project, whether a direct employee of Maxwell or employed by another organisation providing a service or product to Maxwell.

It applies 24 hours per day, seven days per week.

### 1.2 Your Requirements

You are expected to comply with all the relevant legal requirements and accepted community standards while conducting your business. Whether you are an employee of Maxwell or operate any service to Maxwell, your behaviour on the road reflects upon the community reputation of Maxwell and your full compliance with this Drivers Code of Conduct is required.

#### 1.2.1 General Requirements

All drivers must:

- Hold a current and valid drivers' licence for the class of vehicle that you operate.
- Know and comply with all road rules pertaining to your vehicle.

#### 1.2.2 Safe Driving Practices

All drivers must:

- Display courtesy and restraint towards other road users.
- Observe road signs and adjust driving to the existing conditions.
- Observe any special limits or conditions that apply for road works.
- Travel at no more than the posted speed limit.
- Drive cautiously past schools, school buses, parks, shopping centres or other high activity areas.
- Drive in a manner that will help avoid an accident, despite inappropriate or incorrect actions of other road users or poor driving conditions.
- Avoid the need for heavy braking by being aware of conditions ahead and leaving an appropriate gap between our vehicle and other road users.
- Only overtake when safe to do so.
- Be alert to hazards on or near the road and adjust driving as necessary.
- Never drive when fatigued or under the influence of drugs or alcohol.

In addition to the above, all drivers of heavy vehicles must:

- Ensure loads are secured, restrained or covered (if relevant) and meet the current loading requirements and performance standards.
- Brake with care, remembering that heavy vehicles will react differently according to loading and road conditions.
- Minimise or avoid use of engine brakes near residences and built up areas.
- Descend hills at no more than the signposted truck speed limit, or in the lowest gear to suit the conditions.
- Be aware that a heavy vehicle may become a hazard if it is parked close to or broken down on the roadway. Use portable warning signs alongside the vehicle and at least 50m in front of and behind the vehicle if the vehicle must be stopped on or within one metre of the travel lanes.

### 1.2.3 Designated Transport Routes

All drivers of light and heavy vehicles, with the exception of oversize or overmass vehicles (OSOM) which will be assessed on a case-by-case basis subject to relevant permits and load declarations, must comply with the following transport routes when driving to and from the Maxwell UG Project site.

For transparency and consistency with the Road Transport Assessment undertaken as part of the Maxwell UG Project Environmental Impact Statement, all possible transport routes have been identified below.

**Table 1. Transport Routes**

Trip Origin or Destination	Access Route
<b>Light Vehicles</b>	
Singleton, Lower Hunter and Newcastle	New England Highway South – Thomas Mitchell Drive
Muswellbrook	New England Highway North – Thomas Mitchell Drive
Scone, Aberdeen and North <sup>1</sup>	New England Highway North – Thomas Mitchell Drive
Sandy Hollow, Merriwa and West	Golden Highway West – Denman Road South – Thomas Mitchell Drive
Denman	Denman Road South – Thomas Mitchell Drive
Jerrys Plains	Jerrys Plains Road – Lemington Road – New England Highway – Thomas Mitchell Drive
<b>Heavy Vehicles (GVM &gt; 4.5 tonnes, excluding OSOM)</b>	
Singleton, Lower Hunter and Newcastle	New England Highway South – Thomas Mitchell Drive
Muswellbrook and North <sup>1</sup>	New England Highway North – Thomas Mitchell Drive OR Denman Road North – Thomas Mitchell Drive
Denman/Western Coalfield	Denman Road South – Thomas Mitchell Drive

Notes:

<sup>1</sup> Once constructed, vehicles to/from the north of Muswellbrook will use the Muswellbrook Bypass.

### 1.3 Failure to Comply

Failure by any Maxwell employee to comply with this Drivers Code of Conduct will lead to site disciplinary action in accordance with the Maxwell Disciplinary Procedure. If the offending party represents another company, then the action may be referred to the employer for disciplinary action and or may result in the suspension or cancellation of a service contract or arrangement between Maxwell and the company.

Department of Planning and Environment



Our ref: SSD-9526-PA-90

Donna McLaughlin  
HSEC Manager  
Maxwell Ventures (Management) Pty Ltd  
Thomas Mitchell Drive  
Muswellbrook, NSW 2333

25 January 2023

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**Maxwell Underground: Traffic Management Plan**

Dear Mrs. McLaughlin

Thank you for submitting the Traffic Management Plan in accordance with Condition B91, Schedule 2 of the consent for the Maxwell Underground (SSD-9526-PA-90). I also acknowledge your response to the Department's review comments and request for additional information.

I note the Traffic Management Plan contains the information required by the conditions of approval.

Accordingly, as nominee of the Planning Secretary, I approve the Traffic Management Plan (Rev.4 , January 2023).

You are reminded that if there are any inconsistencies between the Plan and the conditions of approval, the conditions prevail.

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Charissa Pillay on 02 99955944.

Yours sincerely

A handwritten signature in black ink, appearing to be "S O'Donoghue".

Stephen O'Donoghue  
Director  
Resource Assessments  
As nominee of the Planning Secretary