

## ASSESSMENT REPORT

### GUNLAKE QUARRY

#### Section 75W Modification - Truck Movements (MP 07-0074 MOD 3)

## 1 BACKGROUND

Gunlake Quarries Pty Ltd (Gunlake) owns the Gunlake Quarry, located approximately 8 km northwest of Marulan, 30 km east of Goulburn and 160 km south west of Sydney (see Figure 1).

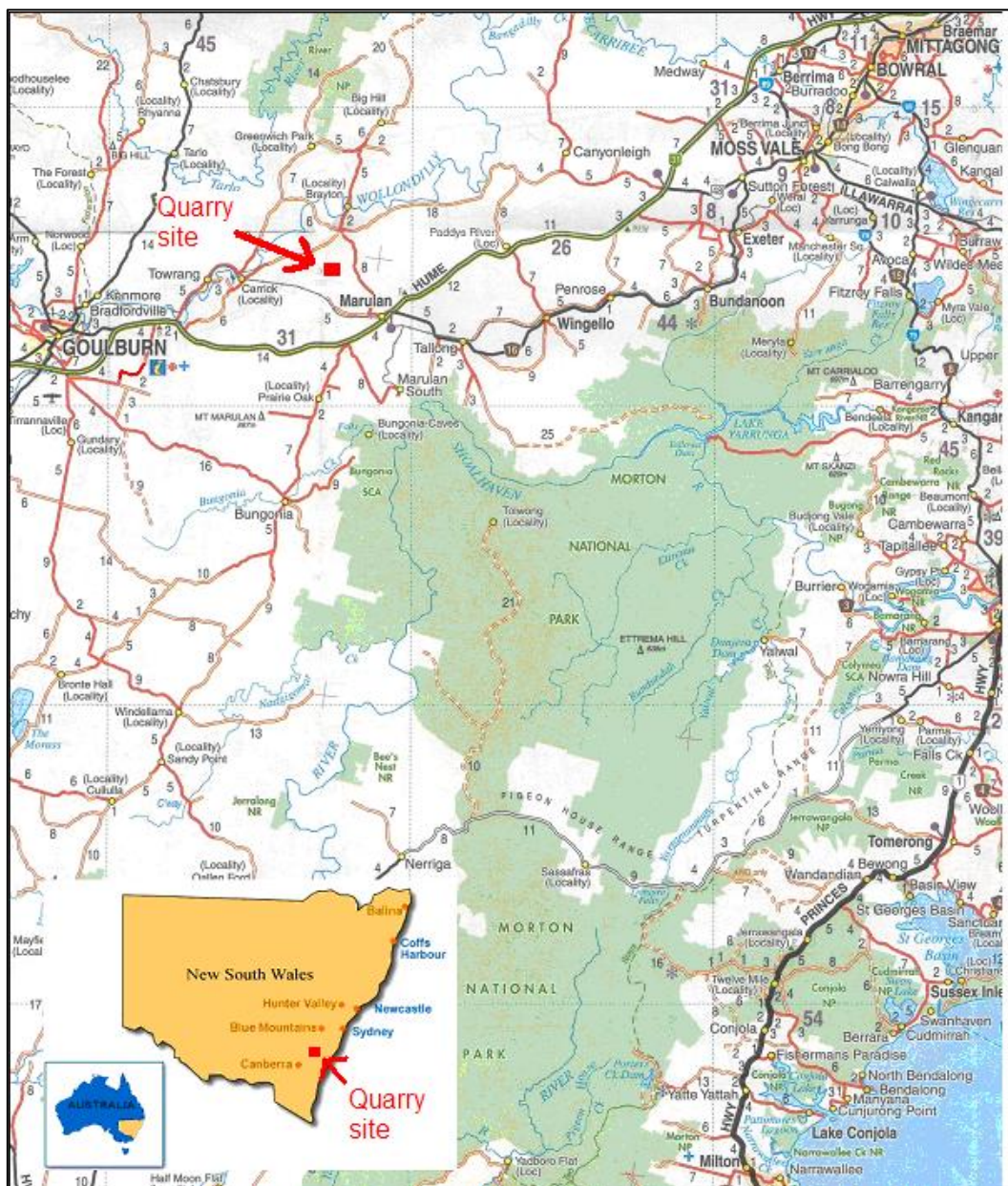


Figure 1: Location Map

On 24 September 2008, the then Minister for Planning approved the construction and operation of the quarry (project application 07\_0074) under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The quarry commenced operations in 2010.

The project approval has been modified once (in March 2013) and permits the extraction, processing and transport of up to 500,000 tonnes of hard rock per year until 2038, and transportation of finished product from the quarry in two stages:

- Stage 1      Transportation through Marulan limited to a monthly average of 25 truck movements per day, with a maximum of 38 movements per day; and
- Stage 2      Transportation limited to 100 truck movements per day via the bypass road (see below), including up to 25 truck movements per day through Marulan.

The approved project included the upgrade of local roads and the construction of a purpose-built public road between Brayton Road and the Hume Highway for vehicles transporting product to the northern market to bypass Marulan (the 'bypass road'). Gunlake's project approval allowed it to proceed to Stage 2 of product transport following construction of the bypass road, which was completed in May 2013. Although constructed by Gunlake, the bypass road is now dedicated as a public road.

#### *Approved Transport Routes*

Loaded vehicles destined for markets south of the quarry travel along Brayton Road and access the southbound lanes of the Hume Highway through the interchange at Marulan. Loaded vehicles travelling to markets north of the quarry travel along the bypass road to access the Hume Highway north bound lanes. Trucks returning empty from the north proceed to the South Marulan Interchange (constructed for the Lynwood Quarry) and use the overpass to access the north bound lanes of the Hume Highway. They then proceed north and make a left hand turn into Red Hills Road and travel along the bypass road and Brayton Road to access the quarry.

Currently, on an average weekday, the quarry generates 100 two way heavy vehicle truck trips per day (as averaged over one month) based on 50 inbound trips and 50 outbound trips. The majority of truck movements to and from the quarry are via the bypass road, of which the key intersections are Brayton Road and the bypass road and Red Hills Road and the Hume Highway (see Figure 2).

Gunlake has indicated it is currently operating at a level in which the maximum number of truck movements required to meet market demands (including demand for larger amounts of material required to be delivered over shorter periods of time on some days) is above the maximum limit of 100 truck movements per day prescribed in the project approval. This has recently resulted in Gunlake exceeding the approved number of truck movements per day on some occasions, for which the Department has issued a penalty infringement notice to the company.

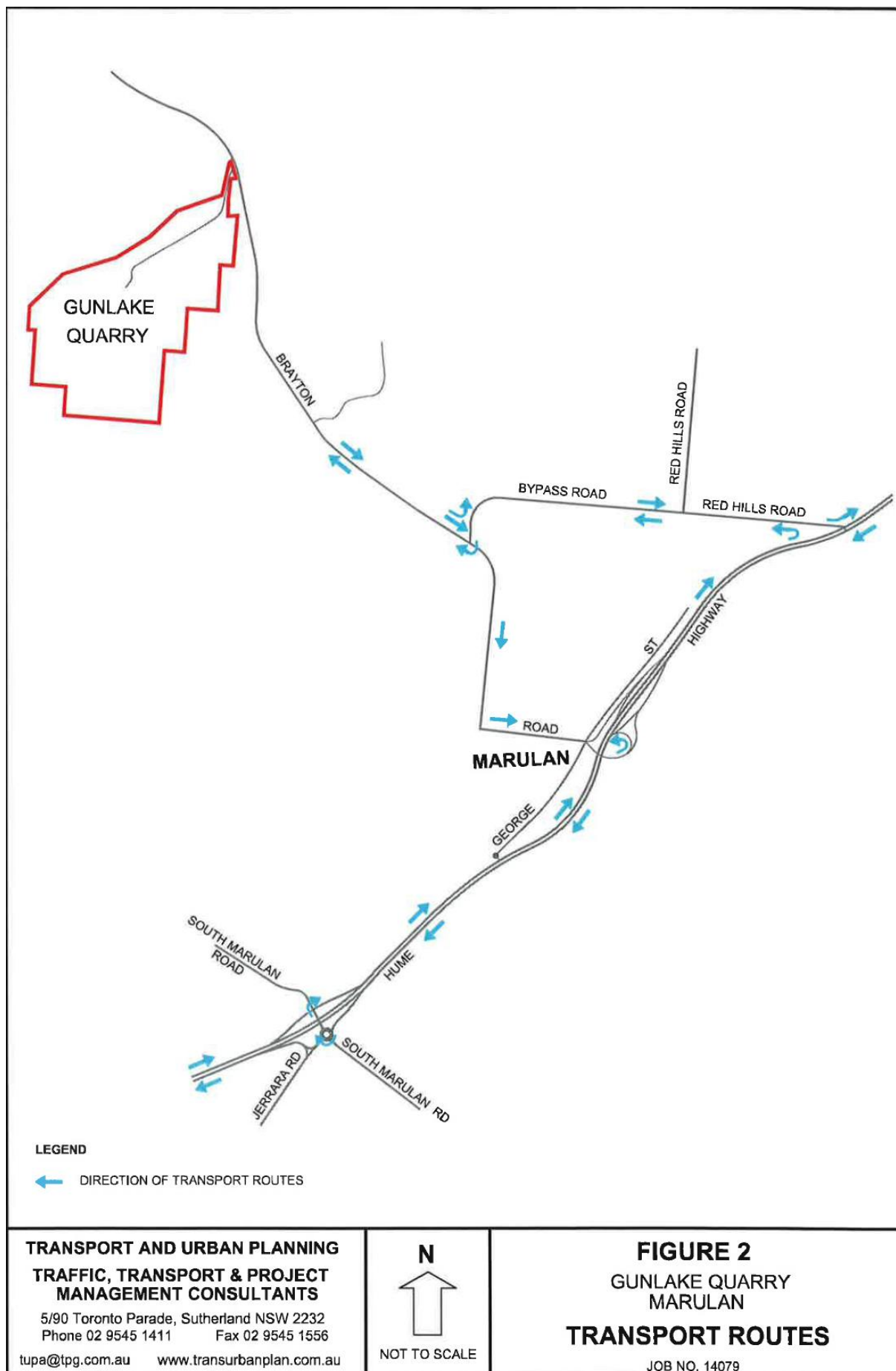
The Department received Gunlake's separate modification application for an expansion of the quarry (Modification 2) prior to this modification application. Modification 2 includes an increase in production and a further increase in truck movements along the approved transport routes. However no additional truck movements above those proposed for this modification are proposed to use the Brayton Road via Marulan transport route. Traffic data collected as part of the transport assessment for Modification 2 has been referenced by the Department in this assessment where relevant.

## **2 PROPOSED MODIFICATION**

Gunlake is seeking to modify its project approval under Section 75W of the EP&A Act to enable an increase in the maximum number of truck movements per day from 100 truck movements per day to a maximum of 150 truck movements per day, including 25 truck movements per day (averaged over one month) and a maximum of 38 truck movements per day on Brayton Road between the bypass road and the intersection of Brayton Road/George Street/Interchange Underpass (the latter being commensurate with the approved Stage 1 transport operations).

The proposed modification would not change the approved production limits, road transport routes or transport operating hours.

Further details of the proposed modification are included in Gunlake's supporting Environmental Assessment (EA) (see Appendix C).



**Figure 2: Approved Transport Routes**

### 3 STATUTORY CONTEXT

#### **Section 75W**

Although Part 3A of the EP&A Act was repealed on 11 October 2011, the approved operations of the Gunlake Quarry remain a “transitional Part 3A project” under Schedule 6A of the EP&A Act. The proposed modification is therefore being considered under the former Section 75W of the EP&A Act, in accordance with the relevant savings provisions.

As the modification does not entail any changes to other aspects of the approved operations beyond road transport, the Department believes it should be characterised as a modification to the original approval rather than a new project in its own right. Consequently, the Department is satisfied that the proposed modification is within the scope of Section 75W of the EP&A Act.

#### **Approval Authority**

The Minister for Planning is the approval authority for the proposed modification. However, under the Minister’s delegation dated 14 September 2011, the Secretary can determine the application as:

- Goulburn Mulwaree Council did not object to the proposed modification;
- there were less than 10 public submissions in the nature of objections; and
- Gunlake has not made any reportable political donations.

#### **Environmental Planning Instruments**

The Department has considered the relevant environmental planning instruments in its assessment and is satisfied that these instruments either do not apply to the modification or do not substantially govern the carrying out of the modification.

### 4 CONSULTATION

After accepting Gunlake’s application and associated EA for the proposed modification, the Department made the documents publically available on the Department’s website ([www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)) from 5 September 2014. The Department also consulted with NSW Roads and Maritime Services (RMS) and Goulburn Mulwaree Council (Council) regarding the proposal.

In response, the Department received comments from the RMS and Council as well as one letter from a local landowner/resident along the transport route.

The **RMS** raised concerns about the impact of the increased (peak) truck movements on the intersections of the Hume Highway/Red Hills Road and the bypass road/Brayton Road. The RMS recommended additional information be provided in the traffic assessment, including further detail of existing movements and likely additional movements to and from the quarry onto the Hume Highway. The RMS also recommended an assessment of the suitability of the existing junctions against Austroads standards and the requirement for any upgrades (including the need for an acceleration lane for traffic entering the Hume Highway at the junction of Red Hills Road).

**Council** raised no objections to the proposed modification and recommended that Gunlake undertake further consultation with local school and other bus operators to identify any potential safety concerns.

Council also recommended that Gunlake should enter into negotiations and agreement with Council for the supply of \$100,000 worth of gravel for the upgrade of the section of Brayton Road adjacent to Marulan. Gunlake has indicated it subsequently reached a separate agreement with the General Manager of Council for the supply of gravel for the upgrade of Brayton Road.

In response to Council’s recommendation, Gunlake consulted with the current local bus operators (PBC Goulburn Buses). PBC Goulburn Buses’ advised Gunlake that none of their drivers had reported any safety issues associated with quarry trucks using Brayton Road. Gunlake previously consulted with the local school bus operator during the original development proposal and no safety concerns were raised at this time.

The Department has also been made aware by Council of general community concerns regarding the current state of Brayton Road adjacent to Marulan, cumulative impacts from quarry trucks and future plans for its upgrade.

The key issues raised in the local resident's letter to the Department generally related to the capacity of Brayton Road, road safety concerns and cumulative traffic impacts. The letter also raised concerns about Gunlake's compliance with the conditions of its approval relevant to transport operations, including use of unapproved transport routes and operations outside of approved transport hours.

## **5 ASSESSMENT**

In assessing the merits of the proposed modification, the Department has considered the:

- EA (see Appendix C);
- comments received from Council, RMS and the general public and Gunlake's response to these comments;
- current project approval;
- relevant content of previous EAs, current environmental management plans and available traffic survey data;
- provisions of relevant environmental planning instruments, policies and guidelines; and
- relevant provisions of the EP&A Act, including the objects of the Act.

The Department considers the key assessment issues relating to the proposed modification are potential traffic and associated traffic noise impacts. Below is a summary of the assessment findings.

### **5.1 Traffic**

The key traffic related issues relevant to the proposed modification are:

- the capacity of the road network to cater for the change in peak truck movements; and
- road maintenance contributions to Council.

These issues are addressed below.

#### *Road Capacity*

The EA includes a traffic assessment prepared by Transport and Urban Planning Pty Ltd. The traffic assessment predominantly refers to the original Traffic Assessment report prepared by Christopher Hallam and Associates Pty Ltd in 2008.

The traffic assessment concluded the impacts of a maximum of 150 truck movements would be relatively minor and that the road network could easily accommodate the higher number of product truck movements generated by the quarry, on some days, without any significant impact on any part of the road network.

This conclusion is supported by more recent traffic survey data collected for Gunlake's separate modification application (Transport and Urban Planning Pty Ltd dated June 2014), which indicates current traffic volumes on the approved transport routes (including existing quarry traffic) are generally low to very low.

Given there currently exists considerable spare capacity on the road network to absorb any future growth in background traffic for the foreseeable future, the Department is satisfied the proposed increase in maximum truck movements is unlikely to have a significant impact on the capacity of the road network.

#### *Intersection Performance*

The traffic assessment concluded the proposed increase in peak truck movements would not affect intersection capacity or safety and would not result in a significant change to the levels of service and/or vehicle delays at any of the intersections along the approved transport routes.

This conclusion is supported by more recent traffic survey data for the key intersections (Transport and Urban Planning Pty Ltd dated June 2014), which indicates:

- traffic volumes and vehicle delays are relatively low; and
- all intersections are currently operating at a very good level of service (Level of Service A operation) during a busy hour during the day.

In regards to the RMS' comments (specifically, the suitability of the existing left turn deceleration lane for vehicles entering Red Hills Road and the need for an acceleration lane for traffic entering the Hume Highway from Red Hills Road), the Department notes the following:

- The original Traffic Assessment (Christopher Hallam and Associates Pty Ltd, 2008) identified there would be above average days (i.e. truck numbers) but concluded that an acceleration lane for



trucks leaving Red Hills Road and making a left hand turn onto the Hume Highway was not required.

- Recent traffic survey data (Transport and Urban Planning Pty Ltd dated June 2014) indicates the volume of left turning vehicles to and from Red Hills Road onto the Hume Highway is very light. The proposed modification is therefore unlikely to significantly impact on the intersection performance of Red Hills Road and the Hume Highway to the extent that an acceleration lane would now be required.
- The existing left turn deceleration lane for vehicles entering Red Hills Road was designed and constructed by Gunlake to the satisfaction of the then NSW Roads and Traffic Authority (now RMS). As described above, given the proposed modification is unlikely to significantly affect road network capacity and/or intersection performance, the Department is satisfied the design of this lane would continue to suitably accommodate left turn traffic volumes.

Notwithstanding, the Department supports the RMS' recommendations for a more detailed assessment to be undertaken as part of Gunlake's separate modification application.

Overall, the Department is satisfied the proposed modification is unlikely to significantly affect levels of service or vehicle delays at any of the key intersections along the approved transport routes.

#### *Road Safety*

As noted in Section 4, no safety concerns have been raised by local bus operators regarding Gunlake's existing quarry truck movements in the area. Given the proposed increase in peak traffic movements on any given day would be relatively minor and that the majority of Gunlake's quarry trucks would continue to travel via the designated bypass road (i.e. avoiding Marulan), the Department is satisfied the modification is unlikely to result in any significant safety concerns.

The Department also notes Gunlake is required to implement a Traffic Management Plan, which includes measures to minimise potential safety aspects associated with operational traffic from the quarry.

#### *Road Maintenance and Upgrade Contributions*

Gunlake currently pays road maintenance contributions to Council for every tonne of product transported from the quarry in accordance with its project approval and Council's *Section 94 Contributions Plan 2009*.

As noted in Section 4, the Department has been made aware by Council of general community concerns regarding the current state of Brayton Road adjacent to Marulan, cumulative impacts from quarry trucks and future plans for its upgrade. Whilst not directly related to this modification application, the Department notes Gunlake has reached a separate agreement with Council to supply an agreed value of gravel for the required upgrades to Brayton Road.

The Department also notes no additional trucks (i.e. above those proposed for this modification) are proposed to use the Brayton Road via Marulan transport route as part of Gunlake's separate modification application.

Based on the traffic assessment findings described above (i.e. no significant impacts), the Department is satisfied that Gunlake's existing road maintenance and upgrade contributions to Council are commensurate with the impacts of the development on the local road network and no additional contributions are required as a result of the proposed modification.

## **5.2 Road Traffic Noise**

Increased peak truck movements to and from the quarry have the potential to generate increased levels of road traffic noise at sensitive receivers adjacent to the road transport routes.

The EA included an assessment of potential road traffic noise impacts by SLR Consulting Pty Ltd (SLR Consulting) against the applicable daytime and night-time criteria in the *NSW Road Noise Policy*. The traffic noise assessment predominantly refers to the original Transportation Noise Assessment report prepared by Heggies Pty Ltd in 2008.

The assessment identified that the only residences potentially affected by traffic noise from increased truck movements would be those adjacent to Brayton Road between the quarry entrance and the bypass road, as well as one other residence adjacent to Red Hills Road/bypass road.

Based on the original traffic noise assessment predictions (including the maximum average hourly truck movements allowable to remain compliant with the traffic noise criteria), the assessment concluded that

the variation in quarry truck movements resulting from the proposed modification would continue to comply with the traffic noise criteria in the *NSW Road Noise Policy* for the affected road sections.

The Department also notes the proposed modification would not change the approved transport operating hours for the Brayton Road to Marulan transport route, which were established to minimise amenity impacts on residents in Marulan.

Overall, given the proposed modification would not significantly vary the number of average hourly truck movements on any given day, the Department is satisfied the proposed modification would not result in significant road traffic noise impacts.

### **Other Issues**

Other issues associated with the proposed modification have been considered by the Department. As no other components of the quarry operations are proposed to be modified, the Department is satisfied that all other issues are likely to have negligible environmental impacts over and above those already assessed and approved for the quarry, and can be managed in accordance with the existing conditions of approval.

## **6 RECOMMENDED CONDITIONS**

The Department has prepared a notice of modification (see Appendix A) to manage the proposed modification and a proposed consolidated project approval (see Appendix B).

Gunlake has reviewed and accepted the recommended conditions of approval.

## **7 CONCLUSION**

Gunlake proposes to increase the maximum number of truck movements per day permissible along its approved road transport routes during Stage 2 of transport operations. Specifically, the proposed modification would result in an increase in the maximum number of truck movements from 100 truck movements a day to 150 truck movements per day, including a maximum of 38 truck movements per day on Brayton Road between the bypass road and the intersection of Brayton Road/George Street/Interchange Underpass.

The change in truck movements is primarily required to provide Gunlake with greater flexibility to respond to fluctuating market demands on some days.

Recent traffic survey data indicates the current road capacity and intersection performance on the approved road transport routes are at acceptable levels, with considerable capacity for future growth in background traffic volumes.

No other aspects of the approved quarry operations including production volumes, road transport routes or transport operating hours would change as a result of the modification. Specifically, the modification would not change the approved transport operating hours for the Brayton Road to Marulan transport route (i.e. no night-time transport), which were established to minimise amenity impacts on the local community. The majority of traffic generated by the quarry's operations would continue to travel via the approved Red Hills Road/bypass road and not via Marulan.

The Department is satisfied Gunlake's existing contributions to Council are commensurate with the impacts of the development on the local road network and that no additional contributions would be required for the modification. Nonetheless, the Department acknowledges Gunlake's separate agreement with Council to supply materials for the required upgrade of the section of Brayton Road adjacent to Marulan.

The Department has assessed the modification application in accordance with the relevant requirements of the EP&A Act, including the objects of the Act and the principles of ecologically sustainable development.

Overall the Department is satisfied the proposed modification would not result in any significant deterioration in the capacity, performance or safety of the road network for other road users. Accordingly, the Department has concluded the proposed modification is in the public interest and should be approved.

## 8 RECOMMENDATION

It is RECOMMENDED that the Secretary, as delegate for the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the proposed modification is within the scope of Section 75W of the EP&A Act;
- **approves** the application to modify the project approval, subject to conditions, under Section 75W of the EP&A Act; and
- **signs** the attached notice of modification (see **Appendix A**).

*DKitto 17/10/14*

David Kitto  
Acting Executive Director  
Resource Assessments

*CM McNally*

Caroline McNally  
Secretary

*21.10.14*



## **APPENDIX A: NOTICE OF MODIFICATION**

## **APPENDIX B: CONSOLIDATED PROJECT APPROVAL**

## **APPENDIX C: ENVIRONMENTAL ASSESSMENT**

Refer to Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=6677](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6677)