



**Civil & Earthmoving
Contractors**

Supplementary Traffic Assessment

for the

Continued Operation and Extension

of

**Middle Creek Quarries,
via Oberon**



R.W. CORKERY & CO. PTY. LIMITED

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1 INTRODUCTION

For the purpose of assessing impact, the traffic impact assessment of the Environmental Impact Statement (EIS) (*Section 4.6.4* – pp. 4-57 to 4-63) assumed all traffic movements would occur within a 12 hour period equivalent to the restricted hours of operation nominated by *Condition 11*¹. As such the EIS already provides for an assessment of traffic impacts over a restricted period of operation.

It is also noted that both the NSW Roads and Maritime Services (RMS) and the local road authority (Oberon Council) reviewed the traffic impact assessment and considered it to adequately assess the potential impact of the development on roads and roads users.

The above notwithstanding, the following provides a review of the assessment included as part of *Section 4.6* of the EIS, along with discussion on additional traffic impact mitigation measures provided as well.

2 REVIEW OF TRAFFIC IMPACTS

As noted in *Section 4.6.2.3* of the EIS, the traffic monitoring locations on Abercrombie Road (refer to *Figure 4.10* of the EIS) identified a morning peak between 8:00am and 9:00am (55 to 56 vehicle movements) and an afternoon peak between 3:00pm and 4:00pm (67 to 73 vehicle movements). There is no evidence available to suggest that road network functionality / level of service is adversely affected during these periods. As the traffic stations on Abercrombie Road are located either side of the intersection with Sewells Creek Road (refer to *Figure 4.10* of the EIS), a similar distribution of traffic throughout the day on Sewells Creek Road is indicated.

The EIS considered peak hourly traffic levels at 14 vehicle movements per hour and compared these to hourly traffic counts which had previously been undertaken on Abercrombie Road. In assessing the impact of the Quarry traffic, consideration was given to the periods when the maximum number of vehicles would enter and exit the Quarry Site which, as for other quarry operations, would occur on commencement and cessation of operations each day. This coincides with initial despatch of product (loaded the previous afternoon), return of trucks for afternoon loading (in preparation for the next morning's despatch) and employee traffic movements. Based on this assessment of the highest traffic generating periods, the EIS considered the background traffic numbers and forecast traffic movements during these periods (7:00am to 8:00am and 6:00pm to 7:00pm) for the purpose of assessing impact.

When comparing the combined background / Quarry traffic between the hours of 7:00am to 8:00am and 6:00pm to 7:00pm with traffic levels during the peak background periods of 8:00am to 9:00am and 3:00pm to 4:00pm, the original traffic assessment of the EIS identified that there would be little difference. Noting this assessment already considered restricted hours of operation, the conclusion made remains valid. That is, as the maximum number of vehicle movements per hour are likely to remain equivalent to those already experienced during the heavier traffic periods on local roads, there is no reason to believe the safety or level of service of Sewells Creek Road / Abercrombie Road and associated intersections will be reduced.

The above notwithstanding, the Applicant acknowledges the concerns of some members of the local community and gives consideration to enhanced or additional controls or mitigation measures.

¹ The EIS considered a 12 hour day of 6:30am to 6:30pm as opposed to the slightly reduced 11 hour day recommended by the EPA (7:00am to 6:00pm).

3 CONSIDERATION OF ADDITIONAL MITIGATION MEASURES

3.1 Additional Upgrades to the Quarry Entrance and Sewells Creek Road

Concerns regarding the location and visibility of the existing Quarry Entrance have been raised.

While noting that the required sight distance in both directions is available, it is acknowledged that the alignment of Sewells Creek Road is compromised by the cadastral boundaries of surrounding properties. This in turn reduces the curve radii on approach and provides some limitation on sight distance.

To address this, the Proponent proposes to set the Quarry Entrance back further onto the Middle Creek property, enabling Sewells Creek Road to be realigned northward and increasing the curve radius. **Figure 1** illustrates the proposed intersection and road realignment. This realignment would require some resumption of Lot 2 DP 1112479 which is accepted by the Proponent (and land owner).

In realigning Sewells Creek Road in this way, sight distance would be further extended. As an additional benefit, the realignment would allow for an acceleration lane to be included into the intersection. Each of these measures would improve intersection performance and safety on Sewells Creek Road.

The Proponent has also committed to landscaping the intersection and property boundary to further limit any impact on local visual amenity. The approach to landscape design and implementation is discussed in the *Rehabilitation and Landscape Management Plan*, however, in summary would involve the following.

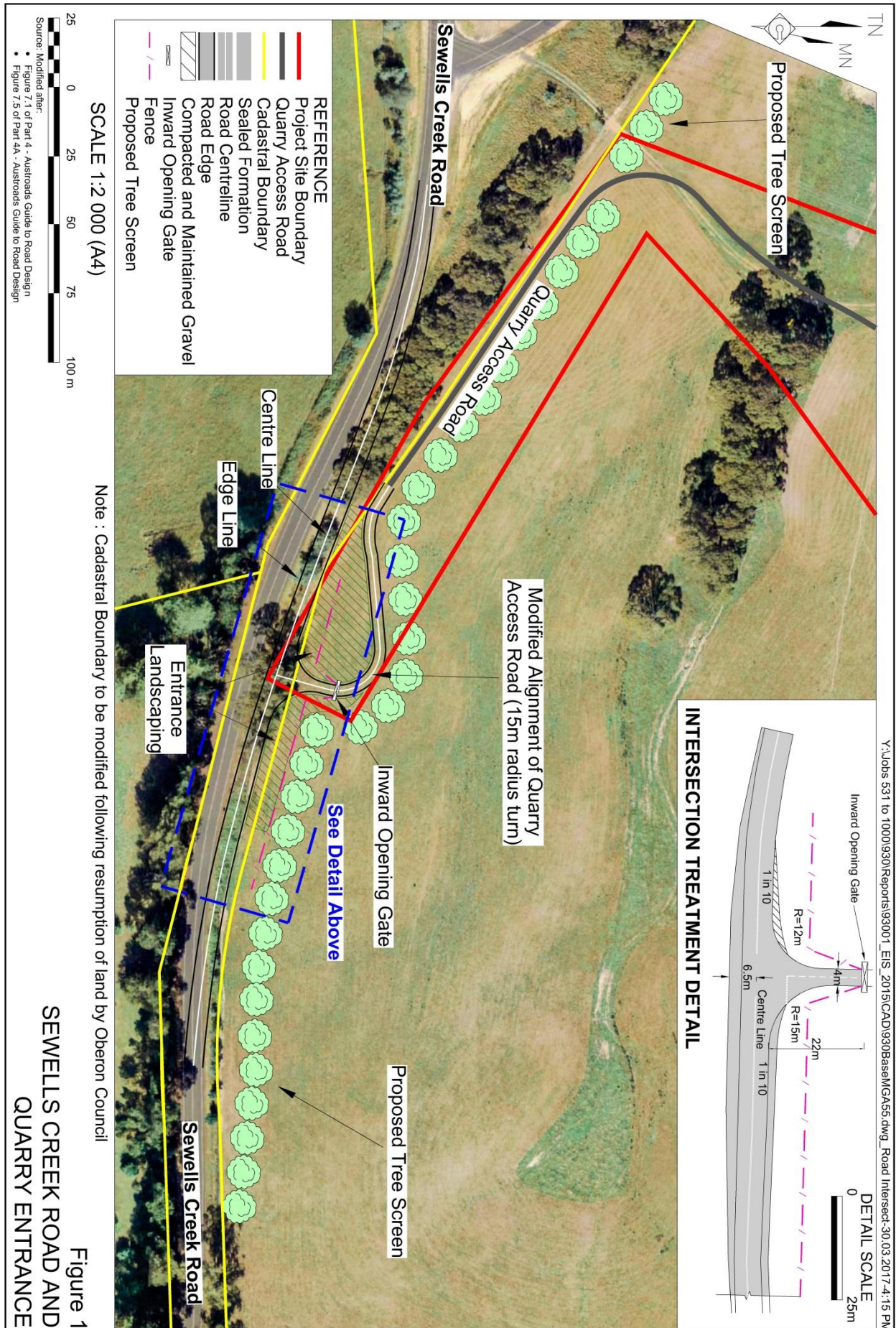
1. A conceptual landscape design would be obtained from an architectural or similar company.
2. This design would be distributed to key local stakeholders including the Oberon Council, operator of Mayfield Garden and land owners on Sewells Creek Road and Mayfield Road (south of Mayfield Garden).
3. Any reasonable and feasible modifications would be accommodated in an updated design.
4. Approval for final design would be obtained from the Oberon Council.

3.2 Alternative Access from the Middle Creek Property

The existing Quarry Entrance on Sewells Creek Road has already been approved for the movement of trucks between the Quarry and public road network (DA 10.2010.66.1). The location of the intersection provides suitable sight distance in both directions and has been assessed as appropriate (for the current development application DA 10.2016.38.1) both by the NSW Roads and Maritime Services (RMS) and the local road authority (Oberon Council) (subject to upgrading in accordance with the Austroads *Guide to Road Design* series). Additional modification and upgrade to the intersection and Sewells Creek Road to that required by the RMS and Oberon Council has now been proposed to further improve the functionality and performance of this intersection and Sewells Creek Road (refer to Section 3.1).

It has been suggested that rather than use the existing intersection from the existing Quarry with Sewells Creek Road, a new access road be constructed across the "Middle Creek" property to intersect with Sewells Creek Road or Abercrombie Road closer to Oberon.

This alternative would remove the intersection away from the Sewells Creek Road – Mayfield Road intersection which may reduce slightly interaction between Quarry traffic and traffic travelling to and from Mayfield Garden.



However, this alternative would require the movement of trucks in much closer proximity to residential receivers to the east of the Quarry. This would in turn increase the level of noise received at these locations, increase dust emissions received during construction of the road and potentially impact on the visual and rural amenity of these receivers for the life of the Quarry. It is also noted that this modified access road and intersection would not remove truck traffic from the travel route between Oberon and Mayfield Garden.

On balance, therefore, the minor benefits which might be gained by a small reduction in the total interaction between Quarry and other traffic are likely to be outweighed by the additional negative impacts on other land owners and residents located to the east of the Quarry Site. It is also noted that any negative impacts on local users of Sewells Creek Road are further addressed by the proposed additional intersection and road upgrades proposed by the Proponent (see Section 3.1).

3.3 Restricted Transport Hours of Operation

The possibility of transport hours being further restricted during periods when local roads are used by a school bus has been raised by some local community members.

While the concerns of the community members is acknowledged, the use of UHF radio communication provides a more than adequate safeguard given there are no drop-off points on Sewells Creek Road between Mayfield Road and Abercrombie Road. The UHF communication system is already used by forestry vehicles when using roads where school bus services operate. The use of the radio would provide warning to truck drivers of the movement of the school bus.

The above notwithstanding, the Proponent has committed to implementing a Driver Code of Conduct which will require acknowledgement and consideration of school bus services. Penalties for not adhering to the code of conduct, which include termination of employment, would be enforced.

In addition, while no restriction of traffic movements during school bus hours will be implemented, scheduling of deliveries will aim to reduce the number of vehicles between the hours of 8:00am and 9:00am and 3:00pm and 4:00pm.

3.4 ROAD CONDITION MANAGEMENT

The potential for increased heavy vehicle movements to accelerate pavement deterioration on local roads has been acknowledged. The proposed levy on extracted material movement of *Condition 18* is accepted (for movement of material extracted under the new development consent). This levy will provide for ongoing road maintenance to account for any accelerated deterioration².

² It is noted that the levy and associated maintenance does not account for any significant increase in traffic travelling to and from Mayfield Garden. The operator of Mayfield Garden quotes an objective to increase visitation to this site to 100 000 visitors per year within 3 years.