

Our Ref: 222/451 (1296929)

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Scott Henderson

5 April 2017

Mr Howard Reed
Director Resource Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Howard

Re: SUBMISSION ON THE BRANDY HILL QUARRY EXTENSION PROJECT (SSD 5899)

Council is writing with regard to the Brandy Hill Quarry Extension Project (SSD 5899) at 979 Clarence Town Road, Seaham currently on public exhibition with the Department of Planning. This letter makes reference to the Traffic Impact Assessment report (June 2016) by IntersectTraffic, and the Noise and Vibration Impact Assessment report (August 2016) by Vipac Engineers and Scientists.

REPORT CONSIDERATIONS

Heavy vehicle trip generation

Council understands the proposed project will set a maximum limit of extraction to 1.5 million tonnes per annum (mtpa). That 822 estimated daily heavy vehicle trips (or 411 deliveries – Sec. 10 TIA) would be generated based on the quarry operating at full capacity.

This is over double the existing annual output of 620,000 tonnes generating traffic at the adopted values of: peak daily traffic at 380 vehicle trips per day (vtpd) and peak hourly traffic at 84 vtpd; where the majority of heavy vehicle traffic generated by the site is rigid truck and trailer combinations.

Vehicle trips based on quarry resource deliveries:

Resource extraction case	Resource extraction (tonnes pa)	Daily quarry product deliveries	Daily heavy vehicle trips (delivery component)	Total daily vehicle trips (incl. staff)	Total vehicle pk hr trips
Existing	620,000	170	340	380	84
Proposed	1,500,000	411	822	904	150
Increase	880,000	241	482	524	66

Source: Sec. 4 & 10, Traffic Impact Assessment

It is acknowledged that these quantities represent the quarry operating at capacity; and also that the Traffic Impact Assessment (TIA) report states that "currently there is no demand for the additional material".

Trip distribution

The TIA report states that, "The main haulage route used for transporting the extracted material from the site will not change with all quarry traffic (heavy vehicle) heading south along Brandy Hill Drive to Seaham Road and onto the Pacific Highway at Raymond Terrace." However, "A very small number of trips head west towards Maitland or east towards Clarence Town and Dungog. The westerly route towards Maitland is restricted due to difficulties crossing the Paterson River at Hinton and Woodville."

Council requests that the Department of Planning require the following information from the applicant:

- Identify the heavy haulage routes for these heavy vehicle trips that are proposed through Maitland LGA; and
- What is the estimated number of heavy vehicle trips expected to travel on any identified haulage routes through Maitland (i.e. through the Maitland local government area)?

POTENTIAL IMPACTS

Traffic impact

The impact of heavy vehicle traffic on the Maitland road network includes the following considerations:

- ✚ time of heavy vehicle travel through Maitland residential areas;
- ✚ the cumulative effects of road pavement damage and heavy vehicle traffic noise;
- ✚ the 'traffic bottlenecks' on the major arterial road network during peak traffic periods, and;
- ✚ the bridge constraints (load limit, single lane) on the road network,

Road pavement damage

Should any of the local roads in the Maitland local government area be identified as a heavy haulage route associated with the Brandy Hill Quarry operation, Council requests the determining authority require:

- The quarry operator to provide road contribution to Council equal in amount as defined in Council's Section 94 Plan – Extractive Industries.

A rigid truck and trailer combination can create a traffic impact on the road pavement up to six (6) equivalent standard axles (6 ESAs) where a standard axle load is equal to eight (8) tonne. A road pavements design life is a function of standard axle repetitions, and it is expected that should heavy vehicle trips travel through the Maitland local government area on local roads there would be some impact to these road pavements. In this regard, Council would seek a road contribution from the quarry operator equal to the formula prescribed in Council Section 94 Plan – Extractive Industries through conditions set on any determination notice issued by the determining authority.

Heavy vehicle traffic noise

The Noise and Vibration Impact Assessment report states that, "Vipac has been advised by Hanson Group that majority of the Brandy Hill Quarry truck movements associated with the existing quarry operations and proposed future expanded quarry operations will utilise Bandy Hill Drive and therefore only this road is considered for potential road noise impacts associated with the quarry". In terms of Brandy Hill Drive, Vipac recommends a limit to the number of heavy vehicles generated by Brandy Hill Quarry to be within traffic noise level government policy guideline limits.

However, should there be a demand for quarry material to be transported through towards Maitland, Council is concerned that traffic noise may have a significant impact due to the cumulative effect of "very small number of trips head west towards Maitland" combined with Martins Creek Quarry heavy vehicle traffic. Should there be heavy vehicle trips identified, Council requests the Department of Planning consider:

- Extending a traffic noise monitoring program to heavy haulage routes through the Maitland local government area through a Noise Compliance Management Strategy as was recommended by Vipac.

Noise monitoring should occur for day, evening and night periods noting that the Noise and Vibration Impact Assessment report states that, "It is Vipacs understanding that the existing quarry is permitted to operate on a 24-hour basis, but that this does not occur at present." Residential areas that may be affected, dependant of heavy haulage routes, may be Largs, Bolwarra Heights/ Bolwarra, and Lorn.

Any exceedance of traffic noise levels above government guidelines through a noise monitoring program at residential area near main roads in the Maitland LGA should require the quarry operator to then cap the number of heavy vehicle trips in a similar manner as has been recommended by Vipac for Brandy Hill Drive. Planning development/ operational triggers that require heavy vehicle traffic limits to be set should be specified in the Traffic Management Plan for the quarry, and copies distributed to local councils affected by such traffic.

Cumulative traffic on road network

Additional heavy vehicle trips generated by Brandy Hill Quarry on the road network in the Maitland local government area may impact on road service levels. The cumulative effects of heavy vehicle traffic generated by Martins Creek Quarry and Brandy Hill Quarry may deteriorate service levels in morning and afternoon peak traffic periods.

Areas to monitor for any cumulative effects of heavy vehicle traffic from the Brandy Hill Quarry with the heavy vehicle traffic from Martins Creek Quarry on the haulage routes identified for this quarry area are:

- Melbourne Street East Maitland traffic especially the interaction with New England Highway and the Lawes Street intersections; Melbourne Street is a state road;
- Belmore Road Maitland traffic especially on approach to Belmore Road/ High Street intersection; Belmore Road is a regional road;
- Paterson Road Bolwarra Height at the Tocal Road intersection; Tocal Road is a regional road;

Should there be heavy vehicle trips from Brandy Creek Quarry that travel these public roads then Council should have a say through the Transport Management Plan developed by the quarry operator.

Health and Wellbeing

In general, there should be consideration to the health and wellbeing of residents that reside along haulage routes associated with the quarry. As mentioned, these haulage routes need to be identified, and monitored through a Transport Management Plan to ensure that Council and residents have a say in relation to the impacts especially during peak periods of operation of the quarry or when there may be excessive combined effects of Martin's Creek Quarry and Brandy Hill Quarry operating at levels that may result in noise levels exceeded in government policy.

The increased operational hours (24/7) could see additional heavy vehicle movements at early morning or late evening hours, and noise levels in this regard needs to be monitored.

- Transport Management Plan should link to a Noise Compliance Management Strategy that considers noise monitoring, and consultation with Council on outcomes.

MITIGATING IMPACTS

Council requests consideration of the following measures to mitigate the impacts of heavy vehicle road transport through the Maitland LGA:

1. The quarry operator prepare a Transport Management Plan (TMP) to minimise the traffic impact on residents located along designated access routes to the quarry.

Reason: A statement of the conditions of travel to heavy vehicle operators travelling to/from the quarry.

2. Maitland City Council seeks a road maintenance contribution associated with the heavy vehicle traffic generated by the quarry where heavy haulage routes are identified on local roads in the Maitland local government area.

Reason: Council's apply a road maintenance contribution to quarry operators that generate heavy vehicle traffic on Council's local road network.

3. Self-imposed limit heavy vehicle travel speed during early hours through built areas of Largs, Bolwarra Heights/ Bolwarra, and Lorn.

Reasons: (a) Heavy vehicle traffic associated with the quarry travelling at early hours through built up areas such as Bolwarra/ Bolwarra Heights where dwelling setbacks from the main road are 15m to 20m. (b) Empty trucks travelling to the quarry are more likely to cause higher traffic noise at higher speeds, (c) Heavy vehicle especially laden vehicles may cause excessive vibration on nearby dwellings.

4. Travel conditions such as limiting travel speed by agreement where issues are raised through government agencies associated with school traffic, and child cares centres and aged care centres and the like along the identified access routes.

Reason: To ensure road safety around school, and ensure that environmental amenity is maintained.

5. Limit heavy vehicle volumes to specific periods of the day to minimise impact on residents and road traffic service levels where required by road authorities.

Reason: Peak heavy vehicle traffic generation associated with the quarry may occur for extended periods during major projects may cause noise above statutory thresholds (e.g. Bolwarra/ Bolwarra Heights) and may impact on the service levels of part of the road network (Melbourne Street East Maitland signals at Pitnacree Road and at New England Highway).

6. Heavy vehicle operators that provide services to the quarry maintain their vehicle fleet on a regular basis, and the use of compression braking controlled, where appropriate, through a Transport Management Plan.

Reason: To reduce engine and exhaust noise.

7. Encourage the quarry to use Performance Based Standards (PBS) heavy vehicles with routes for these vehicles approved through the National Heavy Vehicle Regulator (NHVR).

Reason: To minimise non-compliance of heavy vehicle operators with road and travel conditions.

8. Heavy vehicles are permitted to operate at PBS Level 1 General Mass Limits (GML) up to but not exceeding 50.5 tonnes Gross Combination Mass along Belmore Road Lorn, Paterson Road Largs, Hinton Road subject to posted local restrictions.

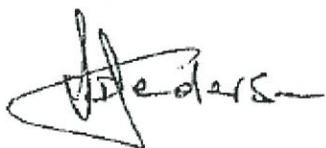
Reason: General access on all roads includes Roads & Maritime Services controlled bridges subject to load limits that form part of the local road network in the Maitland local government area. A 50.5 tonne load limit applies to Belmore Bridge over the Hunter River, and Dunmore Bridge and Hinton Bridge over the Paterson River.

9. The quarry operator / heavy vehicle operators are to comply with the requirements of Roads and Maritime Services.

Reason: State roads are under the care and control of Roads & Maritime Services, and Roads & Maritime Services are asset owners of state bridges in the Maitland local government area.

Should you wish to discuss these matters further please call me 02 4934 9814.

Yours faithfully



Scott Henderson
Coordinator Infrastructure Planning Engineering