



Planning &
Environment

**MODIFICATION REQUEST:
NorthConnex — Hornsby Quarry Road
Construction Spoil Management Facility**

**Modification to permit the use of compression
braking on Bridge Road
SSI 7066 (MOD 1)**



Secretary's Environmental Assessment Report
Section 115ZI of the
Environmental Planning and Assessment Act 1979

June 2017

Cover Photo — Aerial view of quarry with Old Mans Valley and Hornsby in the background
(Source: Hornsby Shire Council)

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Published June 2017
Department of Planning and Environment
www.planning.nsw.gov.au

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1. BACKGROUND

The Roads and Maritime Services (RMS – the Proponent) has submitted a request to modify the Hornsby Quarry Road Construction Spoil Management Facility State significant infrastructure approval (SSI 7066). The project was approved on 18 January 2016 by the then Minister for Planning under Section 115ZB of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

As part of the NorthConnex project the Hornsby Quarry was identified as the preferred option to deliver up to 1.5 million cubic metres (m³) of excavated spoil. The spoil will be trucked to the quarry which is accessed via Bridge Road, a steep road with grades of up to 20% which has been upgraded to accommodate the delivery vehicles.

To minimise noise, the approved project (condition B17) does not allow the trucks to use compression braking.

During the development of the EIS for the project, RMS consulted with trucking companies which initially advised that compression braking would not be necessary. However, the haulage companies and drivers have since raised safety concerns about the restriction on compression braking due to the steep grade of Bridge Road and potential for brake failure.

2. PROPOSED MODIFICATION

RMS is seeking to modify condition B17 to permit compression braking on Bridge Road. The use of compression braking would commence at the top of Bridge Road adjacent to Roper Lane (see Figure 1)

3. STATUTORY CONTEXT

3.1 Modification of the Minister's Approval

In accordance with Section 115ZI of the EP&A Act, a Proponent may request the Minister to modify the Minister's approval for State significant infrastructure. The Minister's approval for a modification is not required if the infrastructure as modified will be consistent with the existing approval.

The proposed use of compression braking on Bridge Road is not consistent with the existing approval. Consequently, modification of the Minister's approval under Section 115ZI of the EP&A Act is required.

3.2 Delegated Authority

Under the Instrument of Delegation dated 16 February 2015, the functions and powers of the Minister for Planning to determine a modification of the Minister's approval may be delegated to the Director, Transport Assessments, whereby:

- the relevant local council has not made an objection;
- a political disclosure statement has not been made; and
- there are no public submissions in the nature of objections.

A political disclosure statement has not been made, the relevant local council has not objected and no public submissions in the nature of objections were received. Accordingly, the Director, Transport Assessments, is delegated the authority to determine the modification request.

4. CONSULTATION AND SUBMISSIONS

4.1 Public Notification

Under Section 115ZL(1)(g) of the EP&A Act, the Secretary is required to make requests for modification of approvals given by the Minister publicly available. Accordingly, the Department provided a copy of the modification request on its website.

No submissions were received from the public.

4.2 Consultation with Government Authorities

The Department liaised with Hornsby Shire Council (Council) and the Environment Protection Authority. Both parties advised they did not object to the modification request.

On 8 June 2017, RMS contractors conducted a test to compare the noise levels of compression braking and traditional braking and gear use. The test was attended by officers from the Department, Council, the project's independent Environmental Representative, RMS and the haulage companies.

5. ASSESSMENT

The prohibition of compression braking was conditioned specifically to reduce noise generated by haul vehicles. To determine if there were any noise differences between the use of compression braking and the use of wheel brakes and low gear, the RMS conducted a controlled trial and compared the measured noise levels.

The trial used attended and unattended noise monitoring at representative locations around the site (see Figure 1). The noise measurements obtained from the attended monitoring adjacent to the haul road below Turn 3 provided the most accurate representation due to the proximity of the noise source to the monitoring point. Table 1 below provides monitoring results at this location.

Table 1: Results of noise monitoring trial

	Truck Pass 1	Truck Pass 2	Truck Pass 3	Truck Pass 4
Braking method	Compression Braking	Compression Braking	Non-compression braking	Compression Braking
Noise level				
L_{Aeq} [dB]	70.2	68.0	69.4	70.0
L_{AFMax} [dB]	81.4	79.1	85.5	81.2



Figure 1: Bridge Road Access and Location of noise monitoring

Departments Consideration

The results of the controlled test (Table 1) demonstrate that there is minimal difference in noise levels from the different braking methods.

The noise from compression braking is attenuated by the muffler systems installed on the trucks. The RMS requires the trucks entering the site to be regularly inspected to ensure the muffling systems are operating effectively.

The noise from compression braking in this situation is also low as the trucks use the braking method to restrict an increase in speed, as opposed to slowing down from higher speeds which produces the louder noise generally associated with compression braking.

On this basis the Department is satisfied that the use of compression braking by trucks descending into the site would not cause substantial noise impacts over and above that of the approved project. This would also help minimise the potential safety risks of an incident caused by brake failure when using wheel brakes only

The Department has therefore recommended that condition B17 be modified to keep its original intent of restricting compression braking which may cause noise impacts in other locations, but allow it to be used on Bridge Road to prevent the trucks from gaining speed.

6. RECOMMENDATION

It is recommended that the Director, Transport Assessments, as delegate of the Secretary:

- note the information provided; and
- approve the modification request by signing the attached modifying instrument.

Daniel Gorgioski
Planner, Transport Assessments

Approved by:



Glenn Snow
Director
Transport Assessments

APPENDIX A MODIFICATION REQUEST

See the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8553

APPENDIX B RECOMMENDED MODIFYING INSTRUMENT

See the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8553