



Ref: L14817/BH/15-041

13 April 2017

Quarry Solutions Pty Ltd  
c/- Groundwork Plus  
6 Mayneview Street  
MILTON QLD 4064

**Attention: Mr Jim Lawler**

Dear Jim

**Re: Addendum to Noise Compliance Review December 2016 –  
Coraki Quarry, Coraki**

MWA Environmental conducted a noise compliance review for the Coraki Quarry in December 2016, as detailed in the report *December 2016 Noise Compliance Review – Coraki Quarry – Coraki* (MWA Environmental, 16 December 2016).

The NSW Department of Planning and Environment subsequently issued a request for additional information by correspondence dated 18 January 2017, including a request (Item 2) that:

2. The Quarry undertake further noise compliance monitoring by no later than close of business **28 April 2017** at monitoring location R1, R2, R3 and within 30 metres of R4 for a further two fifteen minute periods when conditions are not affected by extraneous noise sources such as those identified in the NCR (insects and birds) and wind speeds are less than 3.0m/s. Following this monitoring, the Secretary further requests that a brief report summarising this monitoring is provided via email to [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au) for review by no later than close of business **31 May 2017**.

Further noise monitoring was undertaken by MWA Environmental between 7:30am and 1:30pm on 29 March 2017. The monitoring locations, methods and equipment were consistent with those detailed in the *Noise Compliance Review* report.

Weather conditions during the 29 March 2017 monitoring were fine with early fog but no rainfall and wind speeds of less than 3 metres per second, predominantly from westerly directions.

There was no notable insect noise influence during the noise monitoring period however, for certain locations/measurements, extraneous noise influences included:

- Bird calls – able to be relatively well filtered out through post-processing using audio recordings for most measurements
- Distant frog noise from water covered floodplain – evident as background noise during several measurements – unable to be filtered out
- Public road traffic noise - well filtered out through on-site data exclusion

Coraki Quarry operations during the noise monitoring period were as follows:

- Crushing and screening
- Loading dump trucks by excavator and haulage from pit to plant
- Stockpile management
- Loading and dispatch of product (road) trucks – consistent and frequent trucks throughout the monitoring period
- No rock drill or rock pick operating

Noise monitoring was undertaken over minimum 15 minute periods at free-field locations within 30 metres of the following residential dwellings nearest to the Coraki Quarry (refer **Figure 1**):

- R1
- R2
- R3
- R4

Attended noise monitoring was undertaken using a Bruel & Kjaer Type 2250 frequency analysing sound level meter with current NATA calibration. The sound level meter was calibrated to a reference signal of 94 dB at 1kHz prior to the monitoring and displayed no variance post-monitoring.

Condition 4 of the Development Consent Schedule 3 prescribes a 35 dB(A)  $L_{Aeq,15min}$  noise limit for privately owned residences unless formal written agreements are in place with landowners.

As allowed for by Development Consent Schedule 3 Condition 4 and EPL Condition L4.2, formal written agreements are in place with the following landowners to the effect that the land owners do not hold objections to the operation of the Coraki Quarry exceeding the noise emission criterion by up to 5 dB(A):

- R1: 200 Lagoon Road, Coraki
- R2: 95 Spring Hill Road, Coraki
- R3: 75 Spring Hill Road, Coraki
- R6: 1905 Casino-Coraki Road, Coraki
- R7: 140 Newmans Road, Coraki

A summary of the relevant 29 March 2017 compliance noise monitoring for the purposes of response to the NSW Department of Planning and Environment request (18 January 2017) is provided in **Attachment 1**.

The Coraki Quarry was assessed to be compliant with the Development Consent and Environment Protection Licence No. 3397 noise limits during the 29 March 2017 noise monitoring period at R1, R2, R3 and R4.

Whilst some measurements were affected to an extent by extraneous noise from birds in particular which were not able to be completely filtered out, the further monitoring undertaken does provide a conclusive basis for assessment of compliance at each of the four relevant residences on 29 March 2017.

I trust that the further noise monitoring undertaken on 29 March 2017 adequately addresses the information requested in Item 2 of the NSW Department of Planning and Environment correspondence dated 18 January 2017.

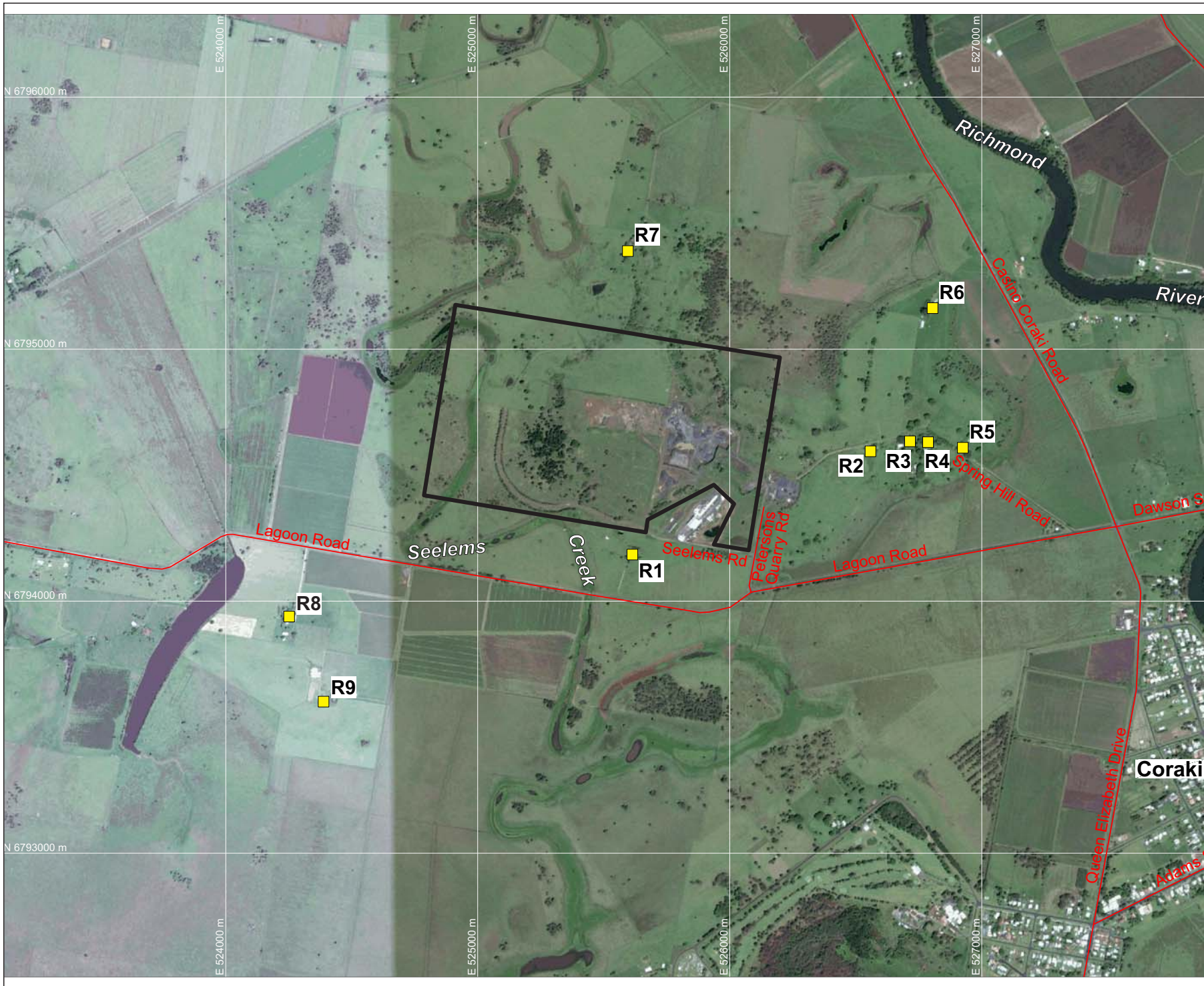
If you require any clarification or additional information please contact the undersigned.

Yours sincerely



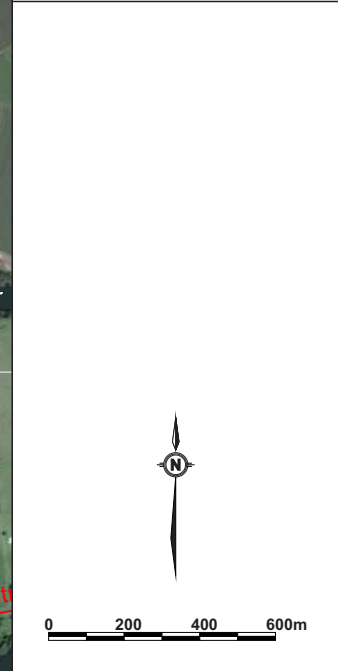
Ben Hyde  
Environmental Engineer

## FIGURES



**LEGEND**  
 — SITE BOUNDARY  
 ■ R9 SURROUNDING RESIDENCES (R1-R9)

**DRAWING REFERENCE**  
 GROUNDWATER PLUS SITE LOCATION PLAN  
 1837.DRG.002, 13/04/15.



CLIENT  
**QUARRY SOLUTIONS PTY LTD**

PROJECT  
**CORAKI  
 NOISE COMPLIANCE  
 ASSESSMENT  
 CORAKI QUARRY**  
 Petersons Quarry Rd Coraki NSW

TITLE  
**AERIAL PHOTOGRAPH  
 SHOWING SURROUNDING  
 RESIDENCES**

JOB	CORAKI	<b>FIGURE 1</b>
JOB NO.	15-041	
DATE	16/12/16	DRAWING NUMBER
SCALE	1:20,000 (A4)	<b>15-041-1</b>
REV.		

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# **ATTACHMENT 1**

*Summary of Compliance Noise Monitoring*

MONITORING LOCATION	TIME	WIND	OVERALL MEASURED Leq INCLUDING EXTRANEOUS UNABLE TO BE FILTERED-dB(A)	ASSESSED QUARRY COMPONENT NOISE Leq - dB(A)	ASSESSMENT BASIS	NOISE LIMIT LAeq dB(A)	COMPLIANCE STATUS	MONITORING NOTES
R1	850	0.9m/s WSW	35.1	<35	Quarry generally inaudible, <1min of observed audible tip and truck noise, still significant bird noise influence despite filtering	40	Compliant	Quarry generally inaudible, around 31-32dBA when fewer birds, processing plant possible just audible and occasional tip at tiphead. Some birds (filtered to extent feasible).
	1130	0.9m/s NNW => 1.8m/s NW => 1.3m/s WSW	35.5	<35.5	Measured with some extraneous	40	Compliant	Processing plant audible and occasional truck and tiphead audible. Processing plant <35dBA. Minimal bird noise (filtered to extent possible).
R2	925	Calm	40.9	38.0	Calculation based upon observed audible times and levels for trucks, excavator and tip head. Reasonable based upon overall measurement and bird noise influence.	40	Compliant	Quarry audible - processing plant, tiphead and trucks. Bird noise (filtered to extent feasible but still significant influence).
	1205	1.3m/s NW => 2.2m/s NE => 0.9m/s ENE	38.4	<38.4	Measured with some extraneous	40	Compliant	Processing plant audible at 35-36dBA and occasional truck, excavator sorting and tiphead noise. Distant birds only.
R3	945	0.9m/s WNW	40.5	38.5	Calculation based upon observed audible times and levels for trucks, processing plant and tip head. Reasonable based upon overall measurement and bird noise influence.	40	Compliant	Quarry audible - processing plant, tiphead and occasional trucks. Processing plant <37dBA when less extraneous noise. Bird noise (filtered to extent feasible but still significant influence), frog noise and Lagoon Rd traffic noise.
	1225	2.2m/s WSW	37.7	<37.7	Measured with some extraneous	40	Compliant	Processing plant audible at <35dBA without birds etc., occasional excavator sorting and tiphead noise. Lagoon Rd truck noise. Some bird noise (filtered to extent possible)
R4	730	0.9m/s WNW	37.2	Inaudible	Inaudible	35	Compliant	Quarry inaudible. Some bird noise (filtered to extent possible), frog noise from floodplain to SW, trucks and traffic on Lagoon Rd and Casino-Coraki Rd.
	1010	0.9m/s W	37.5	Generally Inaudible, <35	Quarry generally inaudible, <10sec of observed audible tip noise, still significant bird and road traffic noise	35	Compliant	Quarry inaudible aside from occasional tiphead noise. Bird noise (filtered to extent possible), plane noise excluded. Measurement ceased when power tools commenced at R3.
	1245	2.7m/s NW => 2.2m/s NNW	33.9	<33.9	Measured with some extraneous	35	Compliant	Quarry generally inaudible aside from occasional truck engine just audible (low 30s dBA). Lagoon Rd and Casino-Coraki Rd traffic, some birds.