

**E1.3 Community Agreement Report:
Gatleys Northern Portal Shotcreting
– EPL 21766**
Revision A - Coffs Harbour Bypass

FERROVIAL GAMUDA JOINT VENTURE

VERSION CONTROL

Revision	Date	Description
A	22/04/2024	Submission to EPA
B	23/04/2024	Redacted version for website with receiver addresses removed.
C		
D		
E		

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1 PURPOSE

This report details the consultation undertaken by Ferrovial Gamuda Joint Venture (FGJV) to obtain community agreement for out of hours (OOH) shotcreting between 6:00PM to 10:00PM Monday to Fridays at the Gatleys Road Tunnel northern portal. The agreement period is up to the end of May 2024.

This report has been prepared in accordance with EPL Condition E1.3 as detailed in Table 1 below.

TABLE 1: EPL REQUIREMENTS

Ref	Condition Requirement	Where Addressed
E1.3	The licensee must report to the EPA the community consultation and agreement process that was undertaken with the Community Affected Catchments. This report to the EPA must be:	This Report
	a) prepared in writing;	
	b) detail the steps taken to fulfil the requirements of condition E1.2;	Section 4
	c) demonstrate that the Noise Sensitive Receivers understood the nature of the works and any predicted impacts, including that consideration was made of additional requirements relevant to the needs of culturally and linguistically diverse Noise Sensitive Receivers;	Section 4
	d) provide the script used during the community consultation with Noise Sensitive Receivers;	Section 4 Attachment A
	e) report community response and consent rates (including where no contact could be made) against the total community affected catchments, and must be broken down into response and consent rates based on sub-catchments that are delineated by affectation levels;	Section 5
	f) include a noise validation monitoring plan as required by E2.1; and	Section 6 Attachment D
	g) be submitted to the EPA at least 15 business days prior to any works that are the subject of the agreement being undertaken unless prior arrangements have been made with the EPA.	Noted.
A copy of the report must be:	Noted. Following EPA agreement, a copy of this report will be uploaded to the Project website.	
a) kept by the licensee for the duration of this licence including on the premises, and made available to an EPA authorised officer on request; and b) be made available on the licensee's project website or another website approved in writing by the EPA for the duration of the OOHs permitted under condition E1.1. (Personal details of Noise Sensitive Receivers must be omitted).		

2 PROPOSED OOHW

In accordance with EPL Condition E1, FGJV has sought community agreement from noise sensitive receivers to undertake OOH at the Gatleys Road Tunnel northern portal (herein referred to Gatleys-N) between 6:00PM to 10:00PM Monday to Friday.

Construction activities associated with the proposed portal works include:

- Concrete deliveries with Concrete Agitator Trucks
- Spraying of shotcrete with a Mobile Concrete Boom Sprayer, Concrete Agitator Truck
- Washdown after shotcreting with a water pump

2.1 JUSTIFICATION

In accordance with the approved Contractor's Specification – Tunnel Sequential Excavation (TU-59), tunnel excavation and primary lining application is to be continuous at all times to ensure safety of the works. Interruptions to tunnel excavations are not allowed to occur until all support elements of the structure have been completed, including shotcrete application to the excavation face where required. Unplanned excavation stoppages can lead to issues with both work safety and design flaws if the structure is not adequately supported.

Extension of shotcrete work into the evening period will allow more time for excavation works during standard construction hours. It will also provide more time to ensure the necessary structural stability of the tunnel portal is achieved in order to comply with work safety and design requirements.

3 NOISE SENSITIVE RECEIVERS

A detailed noise impact assessment of shotcreting activities was undertaken using the Project's Noise Model Noisecheck to identify noise sensitive receivers predicted to experience noise levels above the evening OOH noise management level (NML) and agreement would need to be sought from.

Predicted noise impacts are summarised in Table 2 and a more detailed breakdown at each receiver address is provided in Table 4. A copy of the Noise Assessment Report is included in Attachment A.

TABLE 2: PREDICTED NOISE IMPACT SUMMARY

Noise Category	dBA above NML	Affected receivers	Mitigation
Noticeable	<5	2	-
Clearly Audible	5 to 15	3	N, R1, DR
Moderately Intrusive	15 to 25	0	V, N, R1, DR
Highly Intrusive	>25	0	V, IB, N, R1, DR, PC, SN

4 CONSULTATION SUMMARY

All five noise sensitive receivers were emailed a copy of the letter detailing the Project's request for community agreement (refer to Attachment B). This written agreement also formed the script used during the consultation and included the following details:

- Description of the different construction activities proposed consistent with Section 2 above;
- Proposal for OOH shotcreting between 6:00PM and 10:00PM Monday to Friday;
- Map showing the location of the proposed work;
- Summary of the noise levels predicted consistent with Section 3 above;
- List of plant and equipment to be used for the work;
- Mitigation measures to minimise impacts;
- Receiver's ability to withdraw agreement at any stage during the work;
- Ongoing consultation process to ensure continuation of agreement throughout the program of work; and
- Other out of hours work in the area;
- Project contact details.

Follow up phone calls, emails, door knocks, and letterbox drops were also made in second and third attempts to contact residents.

5 COMMUNITY RESPONSE & CONSENT RATES

Contact was made and consultation undertaken with 80 percent of the five noise sensitive receivers. As detailed in Table 3, agreement to undertake proposed OOH shotcreting was 60 percent, which constitutes a substantial majority.

Of the remaining two receivers, one did not agree and the other did not respond despite three attempts to make contact.

A more detailed breakdown of the consultation undertaken with each receiver and their response is provided in Table 4.

TABLE 3: COMMUNITY AGREEMENT SUMMARY

Total Affected Receivers	Agreement Received		Agreement Not Received		No Response Received	
	No.	%	No.	%	No.	%
5	3	60	1	20	1	20

6 NOISE VALIDATION MONITORING PLAN

Noise validation monitoring has already been completed by FGJV for Shotcreting at Gatelys North Portal. Noise data obtained on the 6/03/2024 shows the activity is 5dBA lower than the model prediction (refer to Attachment C).

Based on this data, the JV are confident in the validity of the model used to predict worst-case impacts from the works. In accordance with the Project's approved Construction Noise and Vibration Monitoring Program (Appendix 7 of the Construction Noise and Vibration Management Plan), the JV do not need to undertake additional validation monitoring. If consultation with the community suggests a need for validation monitoring, this will be reassessed.

TABLE 4: NOISE SENSITIVE RECEIVER CONSULTATION AND CONSENT

No.	NCA	NML	Predicted Impacts			Consultation Summary		
			Prediction (dBA)	Exceedance	Noise Category	Contact Made?	Consultation Undertaken	Agreement Obtained?
1	19	35	45	10	Clearly audible	Yes	Email	No
2	18	36	46	10	Clearly audible	Yes	Email and phone call.	Yes
3	18	36	40	4	Noticeable	Yes	Emails, letterbox drop, phone calls and doorknock.	Yes
4	18	36	39	3	Noticeable	No	Emails, letterbox drop, phone call and left message with property owners' family member.	No response
5	19	35	44	9	Clearly audible	Yes	Email	Yes

ATTACHMENT A – NOISE ASSESSMENT REPORTS

Noise Assessment Report - Gatelys N - Shotcrete, Evening

Date: 07/03/24

Created by: Tyler Gilheany

1. Introduction

This report presents a noise assessment of gatelys n - shotcrete construction activity which is proposed to occur during the evening period (RMS CNVG OOHW1). This report presents the proposed activities, noise prediction results, an assessment against RMS CNVG requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the total LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment



Table 1. Summary of modelled plant and equipment

Name	List of equipment	Duration	Sound power level	Annoyance penalty	Mitigation	Mitigation reduction	Notes
📍 Shotcrete	Concrete boomer, Concrete agitator truck	100%	112 dBA	0, 0 dBA	Portable barrier eg Echobarrier	5 dBA	5dBA reduction added to reflect monitoring data obtained from shotcreting on 6/3/24
📍 Static noise	🔊 Moving noise (continuous)	🔊 Moving noise (staged)					

4. Results

OOHW1 ▼ ⓘ

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable	Clearly audible	Moderately intrusive	Highly intrusive
	-	N, R1, DR	V, N, R1, DR	V, N, R1, DR
Residential	4	3	0	0

ATTACHMENT B – COMMUNITY AGREEMENT LETTER

Resident
58 Gatelys Road
Coffs Harbour, NSW, 2450

Re: Agreement for work outside of approved construction hours on the Coffs Harbour bypass

10/04/2024

The Australian and NSW governments are funding the \$2.2 billion, 14-kilometre Coffs Harbour bypass project. The bypass will boost the regional economy and improve connectivity, road transport efficiency and safety for local and interstate motorists.

As part of major construction, the Coffs Harbour bypass team is seeking your agreement to carry out tunnel shotcreting work outside of our approved construction hours at the Gatelys Road Tunnel northern portal, between West Korora Road and Gatelys Road, Coffs Harbour until May 2024.

Shotcreting is a critical tunnelling activity as it provides ground support after the tunnel face has been blasted. This tunnel ground support work will include:

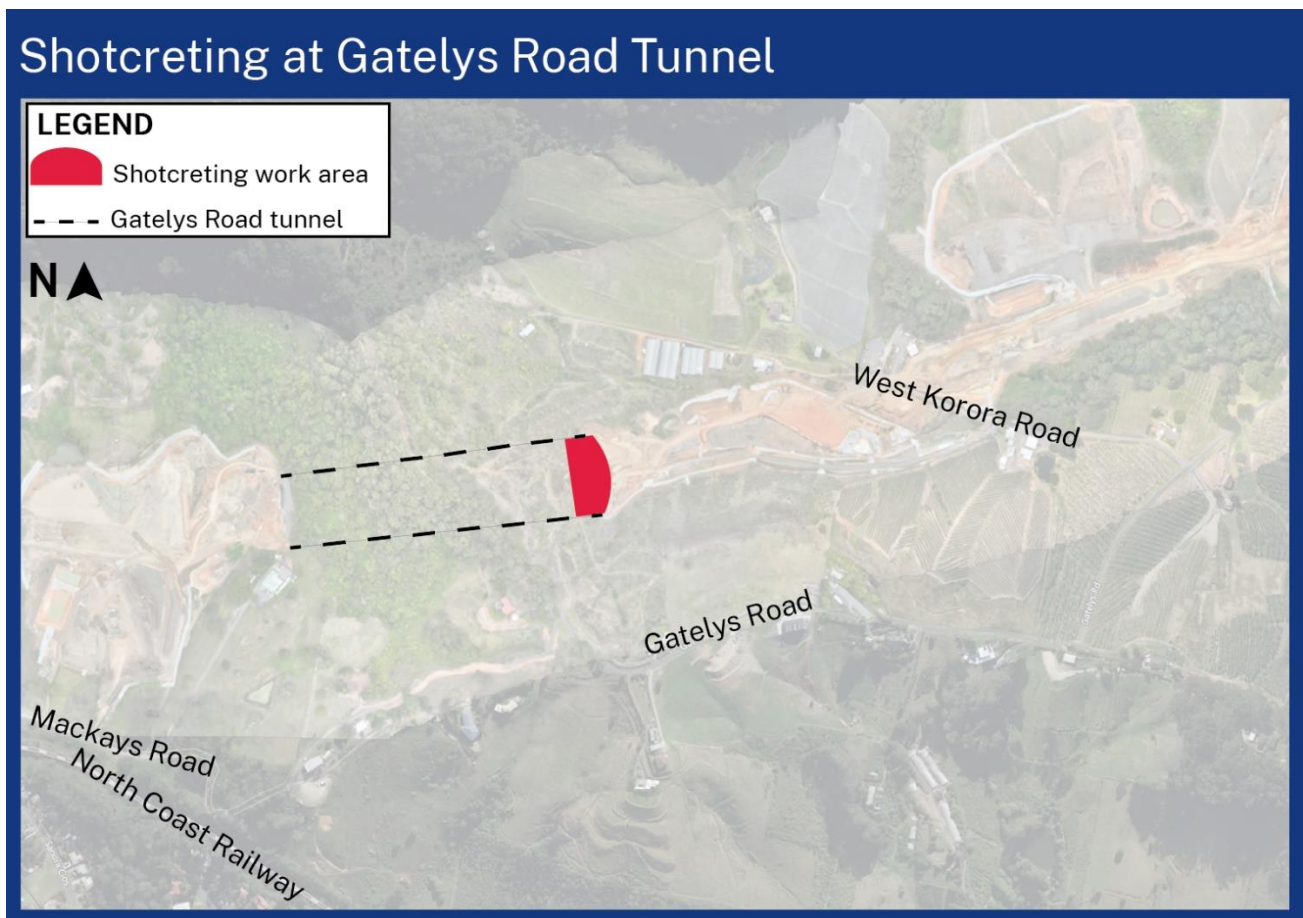
- Spraying shotcrete
- Concrete deliveries via approved haulage routes

Our approved construction hours are from Monday to Friday from 7am to 6pm, and Saturday from 8am to 1pm.

Our proposal for these activities is to work outside of approved construction hours on Monday to Friday from 6pm to 10pm.

This agreement will be valid until acoustic barriers and control doors are installed at the tunnel portal in May 2024. Under the project's Minister's Conditions of Approval, tunnel construction work can be carried out 24 hours a day, seven days a week once acoustic barriers are in place.

Location of work



Noise levels

The noise you are likely to hear during these activities includes engines from a mobile concrete sprayer, concrete trucks with agitators, and water pumps for washing down plant after spraying. The predicted noise levels are expected to be quiet in nature at your property. A comparison of noise levels is provided below.

Comparison of noise levels



The project's Minister's Conditions of Approval (MCoA) sets strict requirements for work outside of standard construction hours and noise, vibration and dust management. To ensure compliance and mitigate impacts of this out of hours work, we:

- Consult and seek agreement with directly impacted residents ahead of the work starting
- Monitor noise levels, dust and vibration
- Use water carts, and soil binders to reduce dust where possible, focusing on high traffic areas within the project boundary
- Turn off plant and machinery when not in use
- Use non-tonal reversing beepers and instruct workers to keep noise to a minimum
- Position plant and equipment as far from nearby neighbours as possible.

Further agreements may be required for future work in the area, separate agreement will be sought if required.

Other out of hours work in this area

We are also undertaking other activities outside of approved construction hours in this area including

- Truck deliveries to work sites near Mackays and West Korora roads
- Refuelling and plant and machinery maintenance
- Water cart and excavator operations on internal haulage routes at work sites near Mackays and West Korora roads
- Earthwork along the alignment – this may include extended hours on Saturdays
- Maintenance of environmental controls including sediment basins

This program of work is a proposal we are seeking your agreement for. You are under no obligation to sign this agreement. By signing this document, you confirm that you agree to this work being done outside of approved construction hours between 6pm to 10pm Monday to Friday for tunnel shotcreting work until May 2024. At any point you can withdraw this agreement by contacting the project team. The project team will consult with residents to confirm the continuation of this agreement throughout the program of work. Conditions of the agreement are on the next page.

Contact

If you have an enquiry or complaint, please contact the project team on 1800 550 621 or community@chbteam.com.au

Translating and interpreting service



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 550 621

Conditions of agreement

Name: _____

As the occupier of 58 Gatelys Road, I agree to the Coffs Harbour bypass project's request to work outside of approved construction hours as outlined in this agreement. This agreement covers the period from March 2024 to May 2024.

I agree/do not agree to a copy of this document being provided to the NSW Environmental Protection Agency. I understand that I can withdraw this agreement at any time.

The project team will consult with residents to confirm the continuation of this agreement, if required, during this program of work. The project team should contact me via phone/email /SMS (circle preferred contact method), if you need to consult with me about an extension.

Signature _____ **Date:** _____

ATTACHMENT C – NOISE MONITORING FIELD SHEET

NOISE MONITORING FIELD SHEET

Date:	6/3/24	Conducted by:	T Ailheany
Purpose: (OOHW Permit No. if applicable)	Verification monitoring		
Monitoring Location: (Attach map or mark up as required)	Approx 30m from portal		
	NCA:	19	NML: 35
Monitoring Set Up (take photo if possible)	<input type="checkbox"/> Field Field (>3.5m away from wall) <input checked="" type="checkbox"/> 1m from Façade (*deduct 2.5dB from all measurements)		
Weather:	Sunny, minimal wind		
Activities / Works: (Note distance from the noise source)	Shotcrete on Gatelys NB portal		
	Modelled Noise Prediction: 50 @ Nearest Receiver		
Instrumentation (model and S/N):	SWAN 971 SN: 113343		
Field Calibration Measurement:	Before:	113.98	After: 114

Monitoring Event Notes:

Time Started:	17:49	Duration:	15
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Please include duration category (i.e. constant, intermittent, one-off) and actual duration (i.e. 5 mins)

69 - 70: spraying shotcrete

66 - idle

67: spraying shotcrete

68 - 69: " "

67 - 69: shotcrete spraying

68 - 70: spraying shotcrete

69 - spraying shotcrete

44

71-72: Shotcrete spray

74-75: ~~aggr~~ ~~coning~~ shotcrete spraying

70 - aggr passing

65 - Shotcrete rig idle

74-75: Shotcrete spray

Total Sound Levels (nearest whole dB)

L _{Aeq} *	69	L _A F ₉₀ *	86
L _A F _{max} *	78	L _A F ₁₀ *	71

Summary

Dominant Noise Source:	Shotcrete rig		
Estimated Construction Contribution (dBA):	69		
Monitoring Conclusion:	Based on actual noise levels, predict 45 dBA @ closest resident (approx. 200m)		
Additional mitigation / management required?	N/A ↳ below prediction.		