

# 1. Bradley Street & The Northern Road 56 Hour Road Work Community Agreement

## 1.1 Proposal

As part of the Northern Road Upgrade Project, CPB Contractors (CPB) proposes to undertake full depth pavement reconstruction works at the Bradley Street intersection with The Northern Road. CPB has made offers of alternate accommodation to specific residences based on impacts determined by predictive noise modelling. This is detailed in Appendix B of this document. This work requires gaining consensus from potentially affected noise sensitive receivers to undertake works over three consecutive days, evenings and nights from Friday evening to Monday morning. CPB targets for the work to occur on the 11<sup>th</sup> December 2020. The principal area where the construction activity will occur is indicated in red on the map below. A breakdown of the proposed activities is presented in the timetable provided in Section 2 of this document.



## 1.2 Justification

Switching existing traffic onto the new road at Bradley Street and its intersection with The Northern Road, is a major milestone for the project. This work once complete will shift the existing traffic onto the newly constructed permanent infrastructure.

In order to effect these traffic switches, works are required that cannot be undertaken during the day because of the volume of traffic using Bradley Street and The Northern Road.

The reconstruction of the pavement on Bradley Street and its intersection with the Northern Road requires a full depth pavement reconstruction, and this cannot be undertaken physically in single shifts. Instead, these works will require full closure of traffic lanes on both Bradley Street and similarly on the Northern Road. The work will require asphalt milling, pavement reconstruction and a new asphalt overlay with new line-marking, and this is required on traffic lanes that are busy during the daytime.

The Traffic Management Centre (TMC) will not provide a Road Occupancy Licence (ROL) for weekdays for all these various works due to the importance of Bradley Street and The Northern Road to Western Sydney traffic.

The proposal is designed to minimise overall impacts at residences and reduce impacts to traffic and business by completing these works sooner.

CPB has approached potentially affected local receivers to inform them of the proposed scope of work and gained their agreeance to carry out the works. The CPB Community Team approached 3 residential households and details are provided in Appendix B.

## 2. Activities

### 2.1 Scheduled duration of the works and activities list.

These works are planned over one single weekend period to provide adequate respite for sensitive receivers. Furthermore, noise sensitive receivers would not be impacted by planned project out-of-hours activities preceding the 56 hour works from Monday to Thursday during the week in the lead up to the works.

	Monday 7 <sup>th</sup> Dec	Tuesday 8 <sup>th</sup> Dec	Wednesday 9 <sup>th</sup> Dec	Thursday 10 <sup>th</sup> Dec	Friday 11 <sup>th</sup> Dec	Saturday 12 <sup>th</sup> Dec	Sunday 13 <sup>th</sup> Dec
Week 1	Respite	Respite	Respite	Respite	<b>High Noise – Full depth pavement</b>	<b>High Noise– Full depth pavement</b>	<b>General Construction Noise – Full depth pavement</b>

Table 1. General works schedule and provision of respite periods

Appendix D – Works Schedule, shows the dates and time periods for specific planned activities.

Following the 56 hour shutdown weekend, a respite period of two nights on the Monday and Tuesday will be adhered to in accordance with EPL condition L4.3iii(3).

Should circumstances such as if weather impacts construction planning, or, if unforeseen critical enabling works are required, then additional out-of-hours works may need to be undertaken. This proviso has been delivered to potentially noise affected sensitive receivers as part of Appendix C Script for the Community Agreement.

CPB will inform the EPA of external utility or service providers known to be operating in the area over the weekend period of works such that they may cause impacts to sensitive receivers already identified as part of this community agreement.

Activities will consist of the following:

- a) General earthworks including the following:
- b) Running bogie trucks into Bradley Street
- c) Remove existing pavement using milling equipment.
- d) Excavate and remove the existing pavement material.
- e) Place new pavement material and undertake ripping and compaction works.
- f) Construction of stormwater drainage
- g) Asphalt paving work
- h) Line marking and traffic signage installation

Equipment would consist of:

- a) Lighting plant
- b) Light vehicles
- c) Road profiler
- d) Bogie trucks
- e) Excavators
- f) Grader
- g) Roller
- h) Flatbed truck
- i) Tractor and bobcat broom
- j) Paver
- k) Semitrailer tip trucks

There is the possibility of further refinement of the construction programme as further detailed planning takes place.

The predicted noise impacts associated with these activities are conservatively assessed and presented in Appendix A.

## 3. Impacts and Mitigation

### 3.1 Construction noise and vibration impact statement (CNVIS)

Detailed noise modelling has been undertaken using the RMS Noise Calculator tool for all the nights in this program. Appendix A shows a map of the proposed high impact noise nightworks. A vibration assessment is shown in Appendix A.

### 3.2 Mitigation and Management Measures

The following mitigation measures will be implemented:

- Potentially affected receivers will be notified of works in accordance with the requirements of the EPL, and community consultation program.
- Noise-emitting plant to be directed away from sensitive receivers where possible.
- Shielding by acoustic noise blankets will be considered on a case-by-case basis and utilised whenever reasonable and feasible to do so.
- Providing pre-start tool-boxing to field crews about eliminating unnecessary noise at night
- Siting stationary plant such as lighting towers behind noise screens or other structures
- Switching off all plant and equipment not to be used for 15 minutes or more
- Non-tonal reverse alarms on plant.

With COVID-19 orders, community impacts of extending construction hours and how these might be mitigated have been considered for this package of works, and include:

1. Offers of alternative accommodation have been provided to residential receivers consistent with the Project OOHW protocol. A summary is provided in Appendix B.
2. Special consideration arrangement in cases where alternative accommodation is not a preferred option. At present, this includes offering sound machines that assist by facilitating sleep.

3. Provision of respite periods to mitigate the impacts of construction noise. These have been shown above in Section 2 Table 1.
4. CPB contractors will keep the local community apprised of the works proposed to be undertaken.
5. Communications with potentially noise impacted residents have been undertaken to explain the benefits of the extended hours for this package of works including how CPB will minimise impacts of the works. Refer to Appendix C.

## 4. Community Consultation

### 4.1 The Agreement

The CPB Community Relations team have approached sensitive receivers via phone to ensure that residents had the opportunity to be informed about expected impacts based on noise modelling and provide feedback on this proposed work. Residents were consulted via phone with results of each consultation detailed in Appendix B.

Offers of alternative accommodation were provided in consultation with COVID best practice to those noise sensitive receivers. This measure was undertaken even though impacts from the construction noise were not predicted to exceed 25 dBA above the Project Noise Management Level consistent with the project OOHW protocol.

The wider community will be advised of the road work through the RMS communication protocols, which include an email blast of the notification to the wider community, uploading the notification to the RMS project webpage and advertising through print. RMS will support this by use of their social media communication.

Road users will be advised of the works through traffic management communications, which will include mobile VMS displays, information on 'livetraffic.com', the weekly traffic email blast and the project website.

### 4.2 The results

The detailed results of the consultation is provided in Appendix B and summarised below.

The total number of residents approached = 3

Number agreed = 3

Number disagree = 0

Non contactable residents despite 3 attempts i.e. phone call, door knock, letterbox drop  
"sorry we missed you" card = 0

Number of dwellings eliminated either because no one appears to be living there, no access, or being a commercial property = 0

Percentage agreement is  $3/3 = 100\%$

## 5. Inspections, monitoring and compliance reporting

### 5.1 Monitoring

Environmental field inspections including noise and vibration monitoring would be conducted under the package of works and in accordance with EPL condition E1.6 and work practices modified in accordance with condition E1.7.

As indicated in Appendix E - Noise Monitoring Plan, monitoring will be undertaken during high noise activities on the Friday, Saturday & Sunday.

The objective of noise monitoring is to target the highest impact works, determine the nature of any noise impacts, to check against predictions in noise modelling, and to refine construction methods or techniques to minimise noise.

Noise monitoring will be undertaken at representative locations in proximity to sensitive receiver properties. Specific locations of monitoring will be shown in a follow-up validation report of the out of hours works and will be submitted in accordance with EPL condition E1.9.

Noise monitoring will predominantly target those properties where impacts are predicted to exceed 20 decibels above the Noise Management Level (NML). However, monitoring would also be conducted at opportunistic locations where noise impacts are predicted to be lower.

Noise monitoring will be undertaken over 15-minute periods to confirm the 15min Laeq(dB) predictions identified in the table above.

Works within the safe working distance for cosmetic damage will be monitored to confirm safe vibration levels for sensitive receivers.

Where complaints are received, additional noise monitoring may be undertaken at sensitive receiver locations to determine the nature of the noise impacts, and to check against predictions in the model.

### 5.2 Complaint Reporting

The project will complete and submit to the EPA details of complaints received and actions taken for resolution consistent with M4.5 of the EPL.

## 6. Project EPL Requirements

According to the project Environment Protection License works outside of the standard construction hours are permitted if an agreement is reached between the licensee and a substantial majority of potentially noise sensitive receivers, (EPL 21189 condition L4.12).

The EPL also requires any agreement reached between the licensee and potentially affected noise sensitive receivers must be:

Submitted to the EPA for approval prior to any works that are the subject of the agreement being undertaken; and

Prepared in writing and a copy of the agreement(s) kept on the premises by the licensee for the duration of this licence; and

- (a) Kept on the licensee's project website or the RMS project website for the duration of the agreement (personal details of residents must be omitted); and.
- (b) Prepared and implemented in accordance with Condition E1.

## 7. The Planning Requirements

The Ministers Planning Approval Condition E25 (administered by DPE) states that:

- The Proponent must identify and consult with receivers identified as being subject to levels that exceed the Highly Noise Affected criteria with the objective of determining appropriate hours of respite unless an agreement is reached with those receivers.

## 8. Appendix

### Appendix A

Noise modelling and vibration Assessment

### Appendix B

Results of Community Agreement

### Appendix C

Script for Community Agreement

### Appendix D

Works Schedule

### Appendix E

Noise Monitoring Plan

## Attachment A – Noise & Vibration Assessment (OOHW time period 2)

### Bradley Street and the Intersection with The Northern Road

**Table 1. Noise Assessment.**

**Plant & equipment assessed:** Road asphalt profiler.

Modelled plant	Asphalt profiler
Modelled Sound Power Level LAeq dB(A)	117

Impact classification guide

Category – Impact Level	1	2	3	4	5
Exceedance of background level in dB for OOHW	0-5	6-10	11-20	21-30	>30

Address	Land use type	Approx. distance from works (m)	Predictive Noise Modelling						Vibration Assessment In accordance with Project NVMP Annexure B Construction Noise and Vibration Monitoring Program Table 3-7	
			Noise Catchment Area (NCA)	Rating Background Level (RBL)	Noise Management Level (NML)	Predicted Laeq, 15 minute noise level, dB	Exceedance of NML, dB	Impact Classification (Refer to Impact classification guide below)	Within Safe Working Distance for Cosmetic Damage?	Within Safe Working Distance for Human Response
2-32 Bradley Street	Residential	200	1	44	49	58	9	2	No	No
1-13 Bradley Street	Residential	84	1	44	49	68	19	3	No	Yes*
15-29 Bradley Street	Residential	251	1	44	49	56	7	2	No	No

\*The human response for a 13-18 tonne vibratory roller >300kN is 100m (Source. CNVMP pp. 76)

**Appendix B. Results of Community Agreement – Bradley Street intersection full depth pavement works on The Northern Road project**

No.	Address	Agreement	Notes	Offer Accepted
1	2-32 Bradley Street	Yes	Phone call to stakeholder 26/10/2020 to discuss impacts of works. Stakeholder agreeable for the works to proceed.  Community Relations Manager advised for stakeholder to contact CPB if she changes her mind.	Declined the offer of alternative accommodation
2	1-13 Bradley Street	Yes	Phone call to stakeholder 26/10/2020 to discuss impacts of works. Stakeholder agreeable for the works to proceed.  Community Relations Manager advised for stakeholder to contact CPB if she changes her mind.	Declined the offer of alternative accommodation
3	15-29 Bradley Street	Yes	Phone call to stakeholder 24/10/2020 to discuss impacts of works. Stakeholder agreeable for the works to proceed.  Community Relations Manager advised for stakeholder to contact CPB if she changes her mind.	Declined the offer of alternative accommodation

# COMMUNITY AGREEMENT SCRIPT



## BRADLEY STREET INTERSECTION WITH THE NORTHERN ROAD 56 HOUR ROAD WORK COMMUNITY AGREEMENT

Dear valued stakeholder,

I am calling to let you know we would like to conduct 3 consecutive days, evenings and nights of high noise construction work on the Bradley Street and The Northern Road Street intersection from Friday the 11<sup>th</sup> December to Monday morning 14<sup>th</sup> December 2020 in your area, weather permitting.

High noise emitting plant is likely to generate some impulsive, intermittent or tonal frequencies that are known to cause sleep disturbance for some people. The high noise activities undertaken for these works include the use of a vibratory roller for compaction of road base and asphalt. High noise may also be generated during initial asphalt removal and during asphalt paving of the new road surface.

The work taking place includes:

- General earthworks including the following:
- Trucks movements
- Remove existing pavement using milling equipment.
- Excavate and remove the existing pavement material.
- Place new pavement material, asphaltting and vibratory compaction works.
- Line marking and signage placement

We will further consult with you should additional impactful out-of-hours activities be required that are outside the scope of this community agreement. CPB will coordinate the timing of out-of-hours works between its works and the works undertaken by third parties licensed by the EPA, to achieve respite periods in locations where residents are likely to be impacted by the same concurrent construction works. In this regard, CPB will schedule these out-of-hours activities such that all potential impacts can be minimised as much as possible.

CPB will consult with you regarding any unexpected changes to the works schedule, such as from forecast rain.

We do not intend to work evenings or nights in the lead up to the week works. However, should circumstances such as if weather impacts construction planning, or, if unforeseen critical enabling works be required, then you will be informed of any additional out-of-hours works may need to be undertaken.

We would like to offer alternative accommodation for certain residents identified as being eligible as per CPB's predictive noise modelling and in accordance with our Construction Noise and Vibration Management Plan. You will be made aware that you are eligible for this during our consultation with you. Offers of alternative accommodation will also be considered on a case-by-case basis.

Reasonable and feasible measures to mitigate noise will be considered on a case-by-case basis and include examples such as acoustic noise shielding, non-tonal reverse alarms, switching off noise emitting plant that is not in use, and directing plant away from properties.

These night works have the benefit of the following:

- Finishing the project more quickly
- Reducing the duration of impact to traffic
- Improving safety for motorists by completing the work more quickly



Are you agreeable for this work to go ahead?

If you change your mind before the work begins or during the work, you realise that you would like to accept the offer of alternative accommodation or a sleep machine please call me on 1800 703 457 press 1 and 5 and we can discuss what arrangements can be made for you”

Kind regards

**The Community Team - CPB The Northern Road Upgrade**

22-40 Gates Road, Luddenham, NSW 2745, Australia

**M** 1800 703 457

**E** [thenorthernroad@cpbcon.com.au](mailto:thenorthernroad@cpbcon.com.au)



**Appendix D. Works Schedule – 56 Hour Bradley Street and The Northern Road intersection works**

	Monday 7 <sup>th</sup> December	Tuesday 8 <sup>th</sup> December	Wednesday 9 <sup>th</sup> December	Thursday 10 <sup>th</sup> December	Friday 11 <sup>th</sup> December	Saturday 12 <sup>th</sup> December	Sunday 13 <sup>th</sup> December	
Week 1	Respite	Respite	Respite	Respite	<b>High Noise</b> – Full depth pavement  <u>Evening:</u> Traffic control setup  <u>Night</u> Profile asphalt (most of the night) Remove barriers Excavation of unsuitable material Removal of unsuitable material	<b>High Noise</b> – Full depth pavement  <u>Day</u> Removal of unsuitable material Place geofabric/geogrid Import suitable fill material Trim road surface  <u>Evening</u> Import suitable fill material Compaction testing Place SMZ material Trim road surface  <u>Night</u> Trim road surface Place SMZ material Compaction testing Interface drainage	<b>High Noise</b> – Full depth pavement  <u>Day</u> Interface drainage Seal road surface Asphaltting - layer 1 & 2 Asphalt cool down  <u>Evening</u> Asphaltting - layer 3 & 4  <u>Night</u> Asphaltting - layer 3 & 4 Asphalt cool down Replace barriers Line marking	
Week 2	Monday 14 <sup>th</sup> December	Tuesday 15 <sup>th</sup> December						
	Respite	Respite						

**Attachment D – Noise Monitoring Plan & Locations Map**

**Monitoring dates:** Monitoring would be performed on the 11<sup>th</sup>, 12<sup>th</sup> December 2020 at each of the locations below and as per EPL 21189 condition E1.6b.

**Time period:** Evening and night time periods.

Impact classification guide

Category – Impact Level	1	2	3	4	5
Modelled exceedance of RBL in dB for OOHW	0-5	6-10	11-20	21-30	>30

Monitoring Point no. Refer to maps below this table	Address	Coordinates	Approx. distance from works (m)	Noise Catchment Area (NCA)	Rating Background Level (RBL)	Noise Management Level (NML)	Predicted Laeq, 15 minute noise level, dB	Exceedance of NML, dB	Impact Classification (Refer to Impact classification guide above)
Point 1	1-13 Bradley Street	-33.80476, 150.69541	47	1	44	49	68	19	3
Point 2	2-32 Bradley Street	-33.80527, 150.69374	160	1	44	49	58	9	2

