

HANLON INDUSTRIES

NOISE MANAGEMENT PLAN

Sydney Park road – Erskineville

Issue	Description	Author	Date
1	Sydney Park Noise Management Plan	Dean Johns	8/4/2024

Table of Contents

1	Description of Works	3
1.1	Location of Works	5
1.2	Working Activities	6
1.3	Working Hours	7
2	Contractor Details	8
3	Equipment	8
4	Noise Predictions	9
4.1	RMS Noise Estimator Scenario	10
4.2	Noise prediction Conclusion	12
5	Noise Monitoring	13
6	Noise and Vibration Control Measures.....	13
6.1	General Control Measures	13
6.2	Day Works	14
6.3	Work Sequencing	14
6.4	Noise Barricading	16
7	Complaint Response	18
7.1	Procedure and recording of complaints	18
7.2	Community notification.....	19
7.3	Community Notification Letter	Error! Bookmark not defined.
7.4	Resident Specific Notification Letter	19
8	Conclusion	20
9	References.....	21
10	Appendix.....	22
10.1	Community Notification Letter	22
10.2	Community Notification Letter – Specific	23
10.3	Community Notification Leaflet Distribution Area – 150m	24
10.4	Resident Specific Notification Distribution Area – 50m.....	24
10.5	RMS Noise Estimator Calculator Example	26

1 Description of Works

Hanlon Industries are working on behalf of JCDecaux to carry out installation of digital advertising sign.

The scope of works involves undertaking initial geo-technical drill assessment, carrying out pile drilling/installation/pour, pile cap excavation/formwork/pour, electrical trenching works and then installation of signage column and screen. These works are carried out over approximately a 4-5 week period. Each stage involves different works.

Stage 1. (1 day works)

Geo tech drill from Sydney park road using 2.5 tonne restricted access drill from footpath
This would require temporary closure of one lane to unload and load machine and partial footpath closure during drilling .

Stage 2. (3-13 tonne excavator) from Sydney park rd

Installation of work platform and fenced off work zone – 3 nights – 3 – 13 tonne excavator used to drill and install steel members to support drill rig platform .

Stage 3. Tesco 8.5 tonne restricted access rig from Sydney park rd

Drill pile with 8.5 tonne tesco 750 mm dia– Rail track and Sydney park road

Number of nights required to complete – 3 Days - 3 nights

Night time hours - Rail track closures and Sydney park footpath and one lane closure

Spoil removal to skip bin placed in bus lane using small excavator

1 lane closure

Stage 4. Reo cage installation- (Day works)

Reo cages to be tied onsite installed from Sydney park using excavator or mini crane (foot path closure and one lane

Stage 5. Concrete pile pour – 1 night shift

Sydney park – footpath and 1 lane closure – Concrete pump and 2 x agitators

Stage 6. Form pile cap – 7 day shifts

Excavate and contour embankment (3-13 tonne excavator)

Footpath closure and one lane for delivery of materials.

Stage 7. Pour pile cap – 1 night shift

Sydney park – footpath and 1 lane closure – Concrete pump and 2 x agitators

Stage 8. Strip formwork – 2 day shifts

Footpath closure and one lane for material removal.

Stage 9 . Installation and commissioning of sign 2 night shift

Footpath and Partial road closure and then full closure for short period of time

Machinery - semi trailer a60 tonne crane and Ewp

1.1 Location of Works

The work location is shown in the area as detailed in Figure 1. The work site is located in the rail corridor and access to site will be via the Sydney park pedestrian footpath adjacent to the location.

Road. 13 new bus shelters are to be installed on smaller roads located throughout lane Cove area.



Figure 1: Sydney park road Erskineville Site Location

1.2 Working Activities

The scope of works involves various activities. Below are the four stages of work required in order to remove and install a new bus shelter. Each stage includes the works associated with noise generation.

1.2.1 Geo-technical drill investigation

- Clear vegetation to allow access off Sydney park road
- Set up lane closure and footpath traffic control
- Delivery of 2.5 tonne tight access rig
- Drill hole
- Pick up machinery

1.2.2 Excavator works

- Install drill platform, perimeter fence and noise barriers
- Mechanical excavation to drill install drill platform.
- Loading of waste materials into skip and removal of skips.

1.2.3 Pile drilling

- Tesco 8.5 tonne drill rig.
- Delivery/Pick truck onsite
- Excavator to transfer spoil
- Skip bin for spoil pick up and drop off.

1.2.4 Reinforcement cage installation

- Reo cages to be tied onsite installed from Sydney park using excavator or mini crane

1.2.5 Concrete pile pour

- Concrete pump and 2 x agitators
- One lane road closure
- The use of hand tools

1.2.6 Form pile cap

- Excavate and contour embankment (3-13 tonne excavator)
- Footpath closure and one lane for delivery of materials.
- The use of Hand tools

1.2.7 Pour Pile Cap

- Concrete pump and 2 x agitators
- One lane road closure
- The use of hand tools

1.2.8 Strip formwork

- The use of hand tools
- Partial road closure to remove materials with trucks

1.2.9 Electrical installation works

- Potential road closure if required
- Trenching
- Temp footpath closure

1.2.10 Column and screen installation works

- Temporary Road closure
- Temp footpath closure
- Crane
- EWP
- 2x Truck movements into road closure.

1.3 Working Hours

Hours of work under terms set out by the RMS, Road Occupancy Licences (ROL). Working hours are site dependent and can typically be day or night works.

Typical work hours are the following:

- Dayworks 10am-2pm (Monday-Friday – If ROL approved)
- Night 8pm-5am (Monday-Friday) If ROL approved
- Rail Possession weekend (Application for continuous works) Sat 02:00 hrs continous to Monday 04:00 hrs. If ROL approved

2 Contractor Details

The below table gives the contact details of the contractor and relevant contacts.

Table 1- Contact Details

Name	Position	Contact Number/s	Email
Sujith Reddy	Project Engineer	0450 131 992	Sujith.b@hanlonindustries.com.au
Omar Saboune	Site Supervisor	0416 781 646	omar@hanlonindustries.com.au

3 Equipment

The equipment onsite will vary depending on the activity being carried out. Below gives a list of equipment that will be onsite for each bus shelter works activity.

- Existing Bus Shelter Removal
 - Battery power tools such as drills & grinders.
 - Crane Truck
 - Canter Gear Truck
- Civil excavation works
 - Small Rigid Truck
 - Small Excavator
 - Concrete Saw Cutter
 - Soil compactor/Wacker
- New Concrete Works.
 - Battery power tools such as electric saws and drills.
 - Concrete truck
 - Concrete pulse vibrator
- Installation of New Bus Shelter
 - Battery power tools such as drills & grinders.
 - Crane Truck
 - Canter Gear Truck

4 Noise Predictions

The rating background level (RBL) is used when determining the management level. The RBL is the overall single-figure background noise level measured in each relevant assessment period. The *RMS Construction & Maintenance Noise Estimator Tool* has been used to estimate the RBL noise level at different site locations in the Lane Cove area. Table 2 gives details of the estimated RBL's.

Table 2- RBL Estimations from RMS noise estimator examples.

Site Locations	RBL night (10pm-7am)	RBL Day (7am-6pm)
Sydney park rd	35	45

The interim construction guideline, as seen in Table 3 below states that if works are carried out outside the recommended standard working hours a management level of RBL+5db is acceptable.

Time of day	Management level L _{Aeq} (15 min) *	How to apply
Recommended standard hours: Monday to Friday 7 am to 6 pm Saturday 8 am to 1 pm No work on Sundays or public holidays	Noise affected RBL + 10 dB	The noise affected level represents the point above which there may be some community reaction to noise. - Where the predicted or measured L_{Aeq} (15 min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level. - The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
	Highly noise affected 75 dB(A)	The highly noise affected level represents the point above which there may be strong community reaction to noise. - Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: - times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences) - if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours	Noise affected RBL + 5 dB	- A strong justification would typically be required for works outside the recommended standard hours. - The proponent should apply all feasible and reasonable work practices to meet the noise affected level. - Where all feasible and reasonable practices have been applied and noise is more than 5 dB(A) above the noise affected level, the proponent should negotiate with the community. - For guidance on negotiating agreements see section 7.2.2.

Table 3- Table taken from Interim Construction Noise Guideline

Table 4- Estimated Noise Management Level + 5db for sites areas

Main site Locations	Management Level for Night works (RBL + 5db)
Sydney park rd	40

4.1 RMS Noise Estimator Scenario

The RMS noise estimator excel has been used to predict the noise level present during different work activities onsite. The following assumptions have been made for the Noise estimation.

- No Shielding Correction factor used on all tasks except piling rig bored operation.
- Direct line of site to receptor has been assumed for worst case.
- Distance to nearest receptor has been set at 30m for worst case on one scenario.

4.1.1 Pile drilling

Scenario/Plant used Separately	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Auger/Drill Rig	105	Yes	0	40	64.80

Total SPL LAeq(15minute) (dBA)	64.80
---------------------------------------	--------------

4.1.2 Excavator works

Scenario/Plant used Separately	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Excavator	105	Yes	0	30	67.34

Total SPL LAeq(15minute) (dBA)	67.34
---------------------------------------	--------------

4.1.3 Concrete pump and concrete agitator

Scenario/Plant used	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Concrete pump and concrete agitator	112	Yes	0	50	69.82

Total SPL LAeq(15minute) (dBA)	69.82
---------------------------------------	--------------

4.1.4 Mobile crane (all terrain)

Scenario	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Mobile crane	110	Yes	0	40	64.80

Total SPL LAeq(15minute) (dBA)	64.80
---------------------------------------	--------------

4.1.5 Piling rig (bored)

Scenario	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Piling rig (bored)	112	Yes	5	40	66.79

Total SPL LAeq(15minute) (dBA)	66.79
---------------------------------------	--------------

4.1.6 Impact wrench

Scenario	SWL LAeq (dB(A))	Is there line of sight to receiver?	Shielding correction (dB(A))	Distance used in calculation (m)	Predicted Noise level SPL (dB(A))
Impact wrench	111	Yes	0	50	68.8

Total SPL LAeq(15minute) (dBA)	68.8
---------------------------------------	-------------

4.2 Noise prediction Conclusion

As detailed in Section 4.1 RMS Noise Estimator Scenario for the installation works our maximum predicted noise level is during the concrete pump and agitator works where it is predicted that the noise level will be in the vicinity of 69db which is above the 35db – 45db requirements for night-time works in the Erskineville site location.

Noise reduction measures such as noise boarding are estimated to reduce noise levels from 5-15db during night works, however this still will not reduce the noise levels to the appropriate level required to meet the guidelines set out in the interim construction guideline, as seen in Table 3 above.

Table 5- Estimated Noise Level including noise reduction correction based on highest noise output

Scenario	Total SPL LAeq(15minute) (dBA)	-15db for noise reduction due to fencing
Highest noise output	69	54

	Sound Power Level (dBA)	Distance (m)	Sound Pressure Level (dBA)	Air Attenuation (dBA) Day and Evening	Air Attenuation (dBA) Night	Additional Attenuation (hoarding etc) (dBA) ¹	Predicted Noise level (SPL dBA LAeq) Day and Evening	Predicted Noise level (SPL dBA LAeq) Night
May to Sep	112	50	70.03	0.20	0.21	0	69.83	69.82

	Standard Hours	OOHW P1 Day	OOHW P1 Evening	OOHW P2 Night
Rating Background Level (RBL)	45	45	40	35
RBL Exceedance	25	25	30	35
Noise Management Level (NML)	55	50	45	40

The required mitigation measures for your activity are:

	Exceedance of RBL (dBA)											
	Standard Hours				OOHW Period 1 - Day				OOHW Period 1 - Evening			
	0-20	20-30	>30	>75dBA*	5-10	10-20	20-30	>30	0-10	10-20	20-30	>30
Standard Mitigation Measures (TINSW CNVS Appendix C)		Yes					Yes					Yes
Additional Mitigation Measures (TINSW CNVS Appendix D)												
Periodic notification		Yes					Yes				Yes	
Verification monitoring		Yes					Yes				Yes	
Specific Notification											Yes	
Respite Offer											Yes	
Respite Period											Yes	
Duration Reduction											Yes	
Alternative Accommodation											Yes	

* Any work above 75dBA regardless of RBL exceedance

Assessment Summary

Site Locality: Erskineville
Construction Scenario: Installation of digital sign
User Name and Company: hanlon
Number of Sources and SWL: 2 Sources with overall SWL of 112 dBA
Receiver Distance: 50 m
Barrier/enclosure attenuation: 0 dBA
Assessment Date: 9.4.24

Predicted Noise Level: 70 dBA 70 dBA

Period	RBL	NML	+ RBL
Standard Hours	45	55	25
OOHW Period 1 - Day	45	50	25
OOHW Period 1 - Evening	40	45	30
OOHW Period 2 - Night	35	40	35

Therefore, community engagement will be required to inform residents of the works and highlight the potential for noise disruption throughout the works period.

5 Noise Monitoring

Noise Monitoring shall be carried out intermittently during the nightworks to get some accurate baseline data for analyses. The below points detail how noise shall be measured during the first set of works.

- Data logging sound level meter will be set up at the boundary of the most noise affected residence.
- Location of the sound meter to be recorded via photographic evidence and distances from identifiable landmarks written down.
- Sound meter to be set up on tripod 1.5m from ground level and facing the direction of the worksite
- Data logging to include date, time and to operate for the duration of the night's work.
- Check on an hourly basis that the equipment is still operational and recording as programmed.
- Meter to be returned to the office for results analyses.

Depending on the results received during live tests regular noise monitoring during night works may be incorporated into the works to ensure noise volumes are recorded during work activities for further analyses and allow for additional control measures if required.

6 Noise and Vibration Control Measures

6.1 General Control Measures

Site specific training prior to commencement of site works will ensure contractor & sub-contractor employees are advised of the following:

- Sensitive nature of the residents in the local area
- Always attempt to reduce noise, resulting from construction works. Employees are to be mindful of making unnecessary noise and to speak with a low voice when possible.
- Ensure generators and night light equipment is set up in areas to least impact residents.
- Do not drop equipment or materials. Place equipment on the ground to avoid any unnecessary noise generation.

- Instruct operators to switch off plant and equipment when not in use (e.g. idling cherry pickers, trucks etc)
- Use of non-tonal (quacker) reversing and operational warning devices on trucks/plant equipment.
- Implement measures to control noise including plywood/ noise screening where practical at source of noise. This is to be identified prior to works and the relevant staff trained to carry out noise measurement.

6.2 Day Works

Due to ROL time restrictions for works onsite some works are required to be carried out during the night. Where possible day work will be carried out to ensure minimal noise generation.

- If possible and ROL's permit majority of the high noise output works shall be carried out during the day.
- Where ROL's allow excavations works these will be carried out during the day to avoid noisy works at night if possible.
- Where ROL's only allow night works noise barriers will be used for works. All other noise output works will be carried out during the day hours to ensure minimal noise at night occurs when possible.

6.3 Work Sequencing

All working times will be based on available ROL times. Day works will be carried out where possible to reduce night noise and disruption. The sites has been reviewed for resident density (e.g. outside apartment blocks.). The site does have an apartment block that is approx. 40mtrs away from the site and where possible works will be carried out during the day and night, depending on ROL restrictions.

Where possible night works are planned to span no more than two consecutive nights as recommended by the NSW Interim Construction Noise Guideline and the RMS Construction Noise and Vibration Guideline August 2016. This will offer a duration reduction that will provide respite periods to the residents in the apartment.

6.3.1 Daytime - ROL's (If approved)

- All works will be completed during the day

6.3.2 Where ROL's are 4-hour day works only & Night Works. (if approved)

- Excavations and noisy works will be carried out during the day.
- Removals, Concrete Works & Installations will be at night. Measures, such as noise boarding will be implemented to reduce night-time noise as required.

6.3.3 Night Works Only.

- All measures to reduce excavations at night will be carried out. Such as drilling during the day (if ST allows) and completing noisy works prior to 11pm where feasible.
- Noise barriers will be implemented to reduce night-time noise as required.
- Potential to have council ranger to be present for all nightworks

6.4 Noise Barricading

Where night works are required noise barriers will be used to reduce noise generated by excavation works.

Noise barriers will be installed onsite and shall consist of temporary fencing and noise insulating material. An example of fencing materials and set up is shown in Figure 2 below.

Based on performance specifications it is estimated that the noise reduction fencing has the potential to reduce noise generation by 15db.

Table 6- Example of Noise insulating material

Size:	1335mm(W) x 2050mm(H)
Material:	High quality PVC combined with water resistant materials
Weight:	7kgs
Finish:	Secure hook eyelets with velcro strips



Figure 2: Example of Fencing Set up

6.4.1 Site Set up example

In order to contain the noise a perimeter will be required around the entire site to reduce noise traveling. Figure 3 below shows an example of the proposed set up of this site during night works.

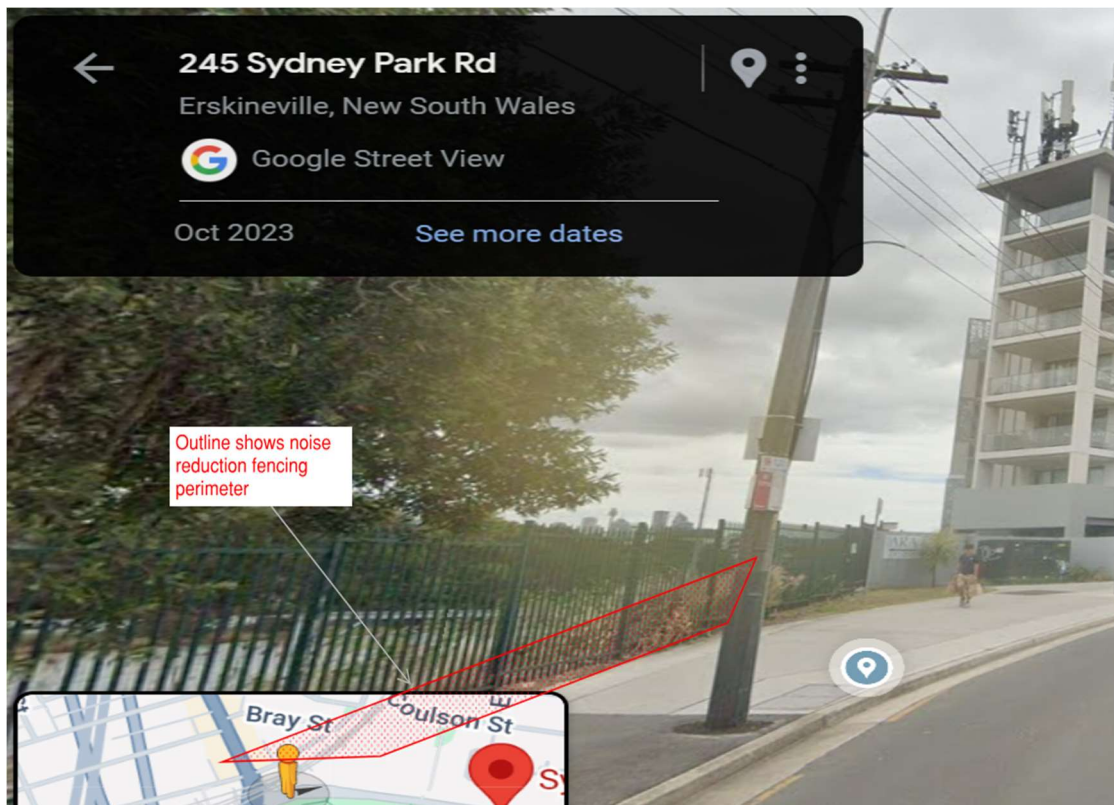


Figure 3: Example of Site Set up

7 Complaint Response

7.1 Procedure and recording of complaints

7.1.1 Onsite Complaints Register

An onsite complaints register is always to be kept onsite by workers. After each shift a worker shall report any complaints to the project manager who will input this into the master complaints register. An example of the register can be seen in Table 1.

Date	Site Location	Activity	Complaint Description.	Onsite Action Taken

Table 1: Complaint Register Example

7.1.2 Reporting Complaints

All complaints will be reported directly to JCDecaux. All complaints will be dealt with accordingly and contact will be made back as soon as is reasonably practical.

Each complaint will be investigated with the project team. Records of all actions taken to resolve the complaint will be kept in the complaints register.

Responses to complaints will be made via email or telephone.

JCDecaux

If you have any questions regarding the works or complaints, please email brett.hutton@jcdecaux.com.au or call during business hours TBA

7.2 Community notification

In order to ensure the community and residents within the Erskineville area are aware of the upcoming works.

Community Letter notifications are to be dropped to residents effected by the Lane Cove Bus shelter upgrade works. Letter box drops are to be carried out minimum 1 week in advance of any works commencing onsite and shall cover the following, whichever is greater.

- 150m either side of the bus stop location, on both side of the street.
- Minimum 150m radius from the bus shelter location

An example of a letter notification can be seen in Section 10 Appendix

7.3 Resident Specific Notification Letter

If any reason a bus shelter works is to impede or effect a resident a specific house visit or letter box drop is carried out. This is for any instances such as trenching across driveways, new concrete works effecting a resident driveway area or works that are likely to directly affect the resident.

- 50m either side of the bus stop location, on both side of the street.
- Minimum 50m radius from the bus shelter location

An example of a letter notification can be seen in the Section 10 Appendix

8 Conclusion

To conclude from the above, and as outlined in Table 5 in Section 4 Noise Predictions, noise generation for installations and bulk earthworks is estimated to be 69db. These values include the estimated noise reduction gained by installing noise barriers and are still above the 35db – 45db requirements for night-time works at the Erskineville site.

Therefore, the below points are a summary of the actions taken to reduce night time noise where possible.

1. Community engagement, council media posts along with letter drop notifications are to be carried out for all work sites as recommended by the *Interim Construction Noise Guideline*.
2. Day works are being carried out where ROL's allow.
3. Work scheduling, available ROL times and programming has been reviewed to maximise daytime works and reduce the time period of night-time works.
4. Where night works are required works will not last more than two consecutive nights as recommended by the *RMS Construction Noise and Vibration Guideline*.
5. Night works required at the site will have temporary noise barricading installed throughout the works to reduce night-time noise.

9 References

1. *Interim Construction Noise Guideline - State of NSW and Department of Environment and Climate Change NSW*
2. *Construction Noise and Vibration Guideline August 2016 Version 1.0 - Transport NSW Roads & Maritime Services*
3. *RMS Construction & Maintenance Noise Estimator Tool*
 - Available at <https://www.rms.nsw.gov.au/about/environment/reducing-noise/index.html>

10 Appendix

10.1 Community Notification Letter

Important - Notice of works.

Dear Local Resident,

I am writing to inform you, on behalf of the local; council, JCDecaux will be installing a digital advertising sign within your area on Sydney park rd.

Works will start week commencing _____

Please be aware this will be a work zone and the bus shelter will be temporarily moved to x location to allow uninterrupted service and we will have traffic controllers available to assist with both road and pedestrian.

Typical work hours are the following:

- Dayworks 10am-2pm (Monday-Friday)
- Night 8pm-5am (Monday-Friday)
- Rail Possession weekend (Application for continuous works) Sat 02:00 hrs

How this may affect you

Noise

- These works may create additional noise on weeknights
- Heavy plant will be in operation around the work site

Traffic

- There will be traffic controllers assisting residents and the public

Please note that the bus stop may move 30 mtrs from current location and we will have traffic controllers onsite to assist the general public.

If you have any questions please contact Brett.Hutton@JCDecaux.com.au or call during business hours on _____

Regards,

Brett Hutton
Senior Project Manager
JCDecaux

10.2 Community Notification Letter – Specific

Important - Notice of works JCDecaux

Dear Local Resident

Sorry we missed you. I am following up on a previous notification sent out by JCDecaux on behalf of the local council in regards to the installation on a new digital advertising screen being installed outside your residence this week and that there may be some disruptions during the works.

For your information the the scope involves:

- Worksite set up hoarding and sound protection
- Drill rig set up and drilling
- Traffic controllers for both road and pedestrian
- Excavator works
- Concrete pump works
- Electrical trenching works
- Truck movements
- Crane install works

Typical work hours are the following:

- Dayworks 10am-2pm (Monday-Friday)
- Night 8pm-5am (Monday-Friday)
- Rail Possession weekend (Application for continuous works) Sat 02:00 hrs

How this may affect you

Noise

- These works may create additional noise on weeknights
- Heavy plant will be in operation around the work site

Traffic

- There will be traffic controllers assisting residents and the public

How we are trying to help

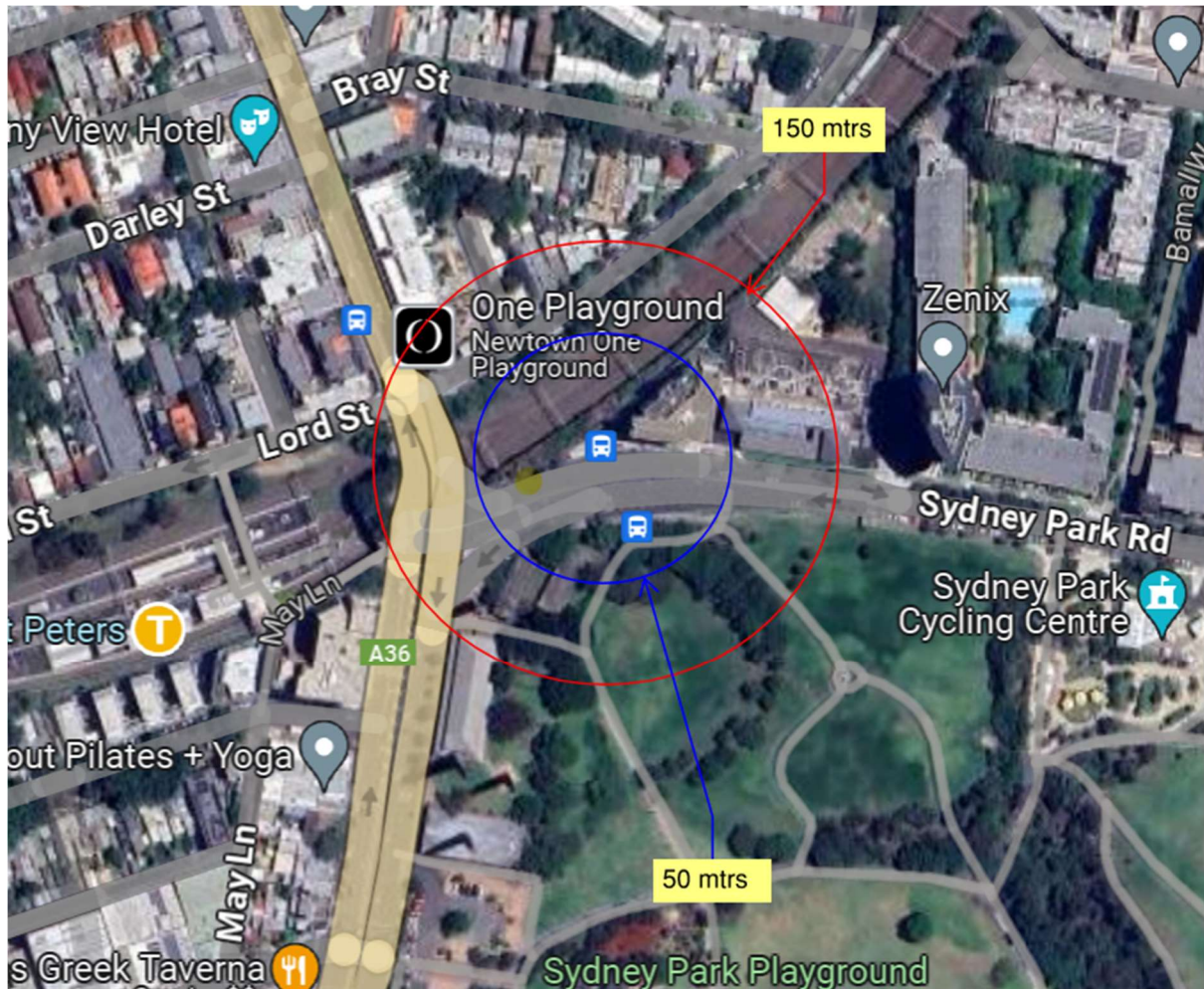
- We are aware night works are disruptive, however working hours are site dependant and can be day or night works as specified by RMS, Road occupancy licenses(ROL).
- We will try and limit the noise by drilling during the day where possible.
- Traffic controllers will be onsite during the works to assist pedestrians and residents.

If you have any questions please contact Brett.Hutton@JCDecaux.com.au or call during business hours on _____

Regards,

Brett Hutton
Senior Project Manager
JCDecaux

10.3 Community Notification Leaflet Distribution Area – 150m & 50 m



10.4 Resident Specific Notification Distribution Area – 50m



Sydney park road Erskineville Digital Advertising Screen

Noise Management Plan

RMS Noise Estimator Calculator Example



The required mitigation measures for your activity are:

	Exceedance of RBL (dBA)															
	Standard Hours				OOHW Period 1 - Day				OOHW Period 1 - Evening				OOHW Period 2 - Night			
	0-20	20-30	>30	>75dBA*	5-10	10-20	20-30	>30	0-10	10-20	20-30	>30	0-10	10-20	20-30	>30
Standard Mitigation Measures (TfNSW CNVS Appendix C)		Yes					Yes					Yes				Yes
Additional Mitigation Measures (TfNSW CNVS Appendix D)																
Periodic notification		Yes					Yes					Yes				Yes
Verification monitoring		Yes					Yes					Yes				Yes
Specific Notification												Yes				Yes
Respite Offer												Yes				
Respite Period												Yes				Yes
Duration Reduction												Yes				Yes
Alternative Accommodation																

* Any work above 75dBA regardless of RBL exceedance

Assessment Summary

Site Locality	Erskineville
Construction Scenario	Installation of digital sign
User Name and Company	hanlon
Number of Sources and SWL	2 Sources with overall SWL of 112 dBA
Receiver Distance	50 m
Barrier/enclosure attenuation	0 dBA
Assessment Date	9.4.24

Predicted Noise Level 70 dBA 70 dBA

Period	RBL	NML	+ RBL
Standard Hours	45	55	25
OOHW Period 1 - Day	45	50	25
OOHW Period 1 - Evening	40	45	30
OOHW Period 2 - Night	35	40	35

This page is left blank