

Eastern Tunnelling Package Out-of-Hours Work Protocol

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1 Introduction

1.1 Target audience

This Protocol applies to permanent, temporary, and casual staff; staff seconded from another organisation; and contingent workers including labour hire, professional services contractors, consultants, delivery partners, contractors and sub-contractors.

1.2 Purpose and Applicability

This protocol was developed to comply with condition D24 of [SSI-19238057](#), reproduced below:

Out-of-Hours Work Protocol – Work not subject to an EPL

D24 An **Out-of-Hours Work Protocol** must be prepared before the approval of out-of-hours-work under **Condition D23(c)(ii)**. The Protocol must identify a process for the consideration, management and approval of work which are outside the hours defined in **Conditions D21** and **D22**. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours work. The Protocol must be prepared in consultation with the **ER** and the **AA**. The Protocol must provide:

- (a) identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where:
 - (i) the **ER** and **AA** review all proposed out-of-hours activities and confirm their risk levels;
 - (ii) low risk activities can be approved by the **ER** in consultation with the **AA**; and
 - (iii) high risk activities that are approved by the Planning Secretary;
- (b) a process for the consideration of out-of-hours work against the relevant NML and vibration criteria;
- (c) a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of **Condition D36**. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events;
- (d) procedures to facilitate the coordination of out-of-hours work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and
- (e) notification arrangements for affected receivers for all approved out-of-hours works and notification to the Planning Secretary of approved low risk out-of-hours works.

This condition does not apply if the requirements of **Condition D23(b)** are met.

*Note: Out-of-hours work is any work that occurs outside the construction hours identified in **Conditions D21** and **D22**.*

This Protocol describes the process for considering, managing, and approving work on the Sydney Metro West Eastern Tunnelling Package that is undertaken outside the standard hours of work specified in conditions D21 and D22 of planning approval [SSI-19238057](#) (also called SMW Stage 2 or ETP).

This protocol does not apply to:

- Safety and Emergencies described under Condition D23(a).
- Low Impact Works that comply with Condition D23(b).
- Scheduled Activities which are subject to a current Environmental Protection Licence (EPL) per condition D23(c)(i).
- Negotiated Agreements described under Condition D23(c)(iii).
- Prescribed Activities listed under Condition D23(d).

Other Stages of Sydney Metro West have Out-of-Hours Protocols that are relevant to those stages under different planning approvals.

This OOHW Protocol should be used in conjunction with:

- The Sydney Metro Construction Noise and Vibration Standard
- The Contractor's Construction Environmental Management Plan
- The Contractor's Noise and Vibration Management Plan
- A relevant Detailed Noise and Vibration Impact Statement

1.3 Definitions

The definitions in the Ministers Conditions of Approval for [SSI-19238057](#) apply and should be read in conjunction with this Protocol.

All other terminology in this Protocol taken to mean the generally accepted or dictionary definition. Other terms and jargon are defined within the [SM-17-00000203 Sydney Metro Glossary](#).

Table 1: Terms/acronyms and definitions

Acronym term/ term	Definition
AA	(Independent) Acoustics Advisor
AAA	Alternate Acoustics Advisor
CEMF	Construction Environmental Management Framework (Sydney Metro West)
CNVS	Construction Noise and Vibration Standard (Sydney Metro West)
CoA or MCoA	Minister's Conditions of Approval
Directly affected sensitive receivers	Noise sensitive receivers predicted to be impacted by noise levels exceeding NMLs
DNVIS	Detailed Noise and Vibration Impact Statement
EPA	The NSW Environment Protection Authority
EPL	Environmental Protection Licence
ER	(Independent) Environmental Representative
ETP	Eastern Tunnelling Package of the Sydney Metro West project
ICNG	Interim Construction Noise Guideline (DECC, NSW, 2009)
Land Use Survey	Identification of the use of surrounding premises to identify sensitive receiver types and locations.
NML	Noise Management Level
NSR	Noise and Vibration Sensitive Receivers
OCCS	Overarching Community Communication Strategy
OOH (OOHW)	Out-of-Hours (Work)
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Scheduled Activity	Activities listed in Schedule 1 of the Protection of the Environment Operations Act 1997

2 OOHW approval under this Protocol

The Sydney Metro Out-of-Hours Work Permit application form (SM-22-00003835) shall be used to apply for all OOHW. OOHW applications under this Protocol will be processed through five phases:

- **Scoping Phase** where details of the OOHW are initially proposed and a justification for the works being conducted outside standard hours.
- **Criteria Phase** where the criteria for impacts the nearby receivers are selected and formalised.
- **Assessment Phase** where an assessment of the works against the relevant criteria (noise and non-noise) is conducted and mitigations are introduced to reduce the impacts on receivers as much as practicable. The risk level of the OOHW is confirmed at the end of this phase. All documentation relating to an application would be collated into one Permit form with Appendices and signed by the Applicant, their Place Manager and their Environment Manager
- **Review Phase** where the OOHW application is reviewed by the AA and ER depending on the risk level
- **Approvals Phase** where the OOHW are approved by either the ER or DPE. Low risk OOHW would be approved by the ER in consultation with the AA (who would provide an endorsement). High Risk OOHW would be approved by DPE (endorsed by the AA and reviewed by the ER).

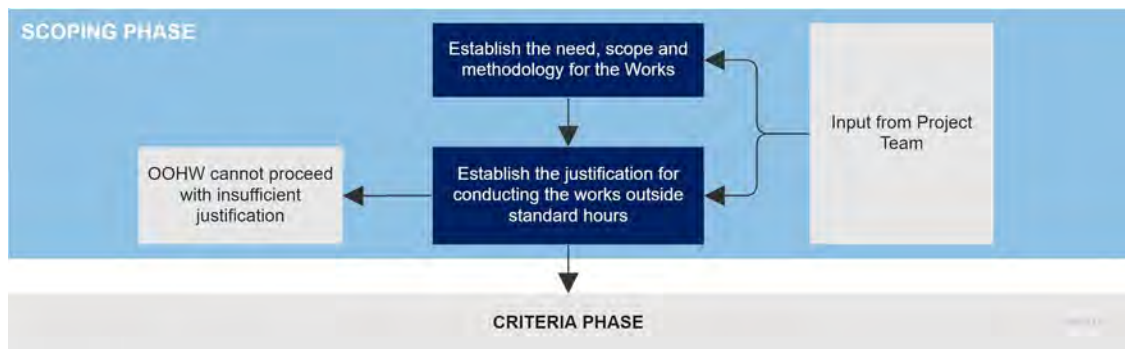
The OOHW Permit application form is to be used to ensure the applicant will:

- Provide a strong justification for the works to be undertaken outside of approved hours
- Document an assessment of the noise impacts at nearest receivers with a clear statement of impact (commentary around times and durations of impact, noise character and other relevant information, rather than just a table of dB numbers)
- Demonstrate that mitigations and consultation will be implemented
- Provide an initial classification of the OOHW risk level
- Involve their Environment Manager and Community Manager
- Provide the form to the AA and ER for review, endorsement or approval where required
- Document DPE's approval prior to commencement of the OOHW.

Once prepared, the OOHW Permit application form and appendices, are submitted to the Sydney Metro's Environment Manager, Place Manager and the AA and ER for review. Any of the reviewers may provide comments on the application, which need to be adequately addressed by the Applicant in a resubmitted document to the satisfaction of the reviewers. The review timeframe is 7 days for the Sydney Metro and ER and the AA to provide comments. Once approved, a community notification timeframe of 14 days also applies.

A flowchart describing the overall process is shown on the next page with targeted discussion on the following pages.

2.1 Scoping Phase



In the scoping phase, the applicant shall document the need, scope and methodology for the proposed works on the OOHW Permit form to provide background information. Establishing the proposed methodology and items of construction equipment is important as it will form the basis of impacts and then also mitigations.

Through the Applicant's Place Manager, early consideration of the feedback from potentially affected receivers shall be incorporated within this phase. Such feedback would help develop alternative options for methodology and scheduling which should be explored and introduced here also.

2.1.1 Justification of the OOHW

OOHW are defined as any works that are undertaken outside of the hours defined in Infrastructure Approval [SSI-19238057](#) Conditions D21 being:

- 7:00am to 6:00pm Mondays to Fridays, inclusive
- 8:00am to 6:00pm Saturdays
- at no time on Sundays or public holidays.

The justification for conducting the proposed works outside standard hours needs to be provided on the OOHW Permit form and will ultimately be considered by the Acoustics Advisor and the Environmental Representative. Given the cost and disruption associated with OOHW, these would normally be conducted only when daytime works are not approved or if more disruption would occur than from daytime works. Unfortunately, construction program alone is not a suitable justification, OOHW should only be conducted only when necessary or unavoidable.

Work associated with the Project will be undertaken in accordance with the assessment and management approach outlined in the Construction Noise and Vibration Standard (CNVS). The CNVS requires that work proposed outside of standard work hours must be appropriately justified.

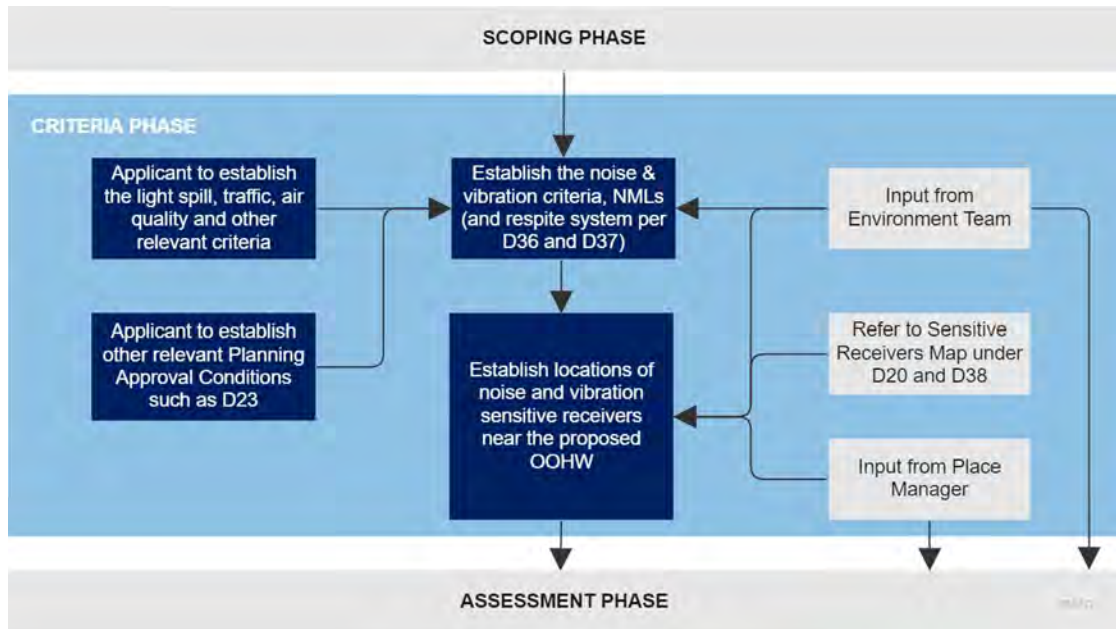
Further justification is required for consideration by Sydney Metro, the AA and, ER, including but not limited to:

- instances where works must occur on/adjacent to live traffic, such that a Road Occupancy Licence must be obtained, of which is only provided during periods of reduced traffic/ pedestrian activity
- to limit the impact to commercial or other sensitive receivers which may operate during specific periods of time (i.e. medical centres, childcare centres etc.)
- to undertake works on utilities such as gas, or water, of which can only be permitted by utility providers during OOHW periods as working on major

utilities during the day when they are most in use could pose a risk to the general public.

The Project Team are best placed to document this phase on the OOHW Permit form.

2.2 Criteria Phase



Here, the criteria for assessing the OOHW impacts to receivers and also for applying mitigations should be formalised and agreed. Criteria for other environmental impacts such as light spill, dust, traffic, crowds etc should also be identified here.

Some relevant guidelines for establishing project-specific noise and vibration criteria to guide the application of mitigation measures include the following:

- Airborne and ground-borne noise - the Interim Construction Noise Guideline (DECC, 2009). The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) penalty to the predicted level before comparing to the construction Noise Management Level (NML)
- Vibration (human comfort) - Assessing vibration: a technical guideline (DEC, 2006)
- Building damage - BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"
- Heritage items - German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage) (applicable when a heritage-listed structure is identified in poor condition)
- Sleep disturbance - NSW Noise Policy for Industry, Environment Protection Authority 2017
- Environmental Criteria for Road Traffic Noise Road Noise Policy (DECCW, 2011).

Additionally, sensitive land uses/ users under Condition D20 and D38 need to be identified and feedback from Noise Sensitive Receivers (NSRs) also incorporated within the OOHW Permit. Here, specialist input from the Applicant's Place Manager/ Community and Environment teams would help the applicant develop a better understanding of nearby receivers that may or may not be listed under the D20/ D38 mechanisms.

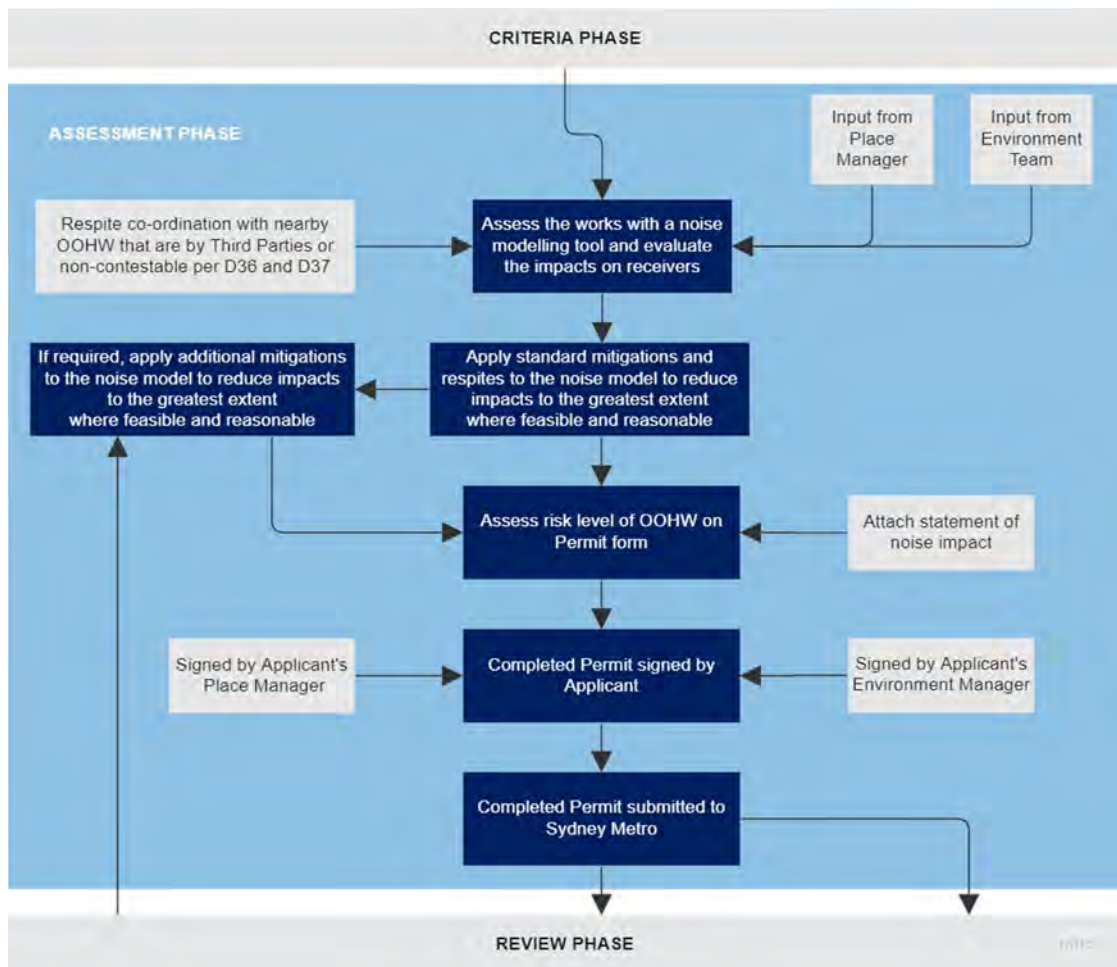
Following identification of NSRs which may be affected by the proposed activity, the above guidelines will be utilised to identify noise and vibration criteria based upon the NSR types, distance from the works, and the location and timing of the proposed activity.

Refer to D36 and D37 for particulars on respite systems to be considered.

Refer to the CNVMP and the CNVS for criteria for building damage as an assessment of the building structure may be required to confirm if it is either:

- (a) Reinforced or framed, or
- (b) Unreinforced or light framed structure
- (c) A heritage structure which is structurally sound or not.

2.3 Assessment Phase



The assessment phase is the key component of the OOHW Protocol and is where the information collected in the scoping and criteria phase are modelled in noise modelling tool. The impact can only be assessed in conjunction with clear information about the sequence of work (and noise) during a shift (or over the duration of works).

The predicted impacts are displayed and can be compared against the noise-relevant criteria and also feedback from affected receivers. Mitigations can be introduced to minimise these impacts and the estimated reduction in noise impact can also be modelled.

Importantly, an understanding of the environmental constraints of the proposed OOHW, supported by a noise modelling tool can enable a determination of the risk level of the

OOHW. The OOHW approval pathway can then be determined per section 2.3.3 of this Protocol.

2.3.1 Consideration of OOHW against NML and Vibration criteria

Noise Management Levels (NMLs) are specific noise criteria that are unique to each Noise Catchment Area (NCA) within the project and are derived from the Rating Background Level (RBL) for each NCA.

An RBL is usually determined through actual noise measurements for different 'daytime', 'evening' and 'night' periods. The applicant's noise consultant will establish the RBLs for different noise catchments and then will add the relevant noise increment to these RBL's to derive each NML.

NML's will be documented in the applicant's DNVIS and then become the baseline against which all future noise assessments are compared. The range between the NML and 75dB(A) is designated as 'noise affected' under the ICNG and the range above 75dB(A) is known as 'highly noise affected', also under the ICNG.

The goal of implementing standard and additional mitigations is to attenuate the noise experienced by receivers to as close to (or below) the NML as possible.

Consideration of vibration criteria follows a similar pathway. The DNVIS will show the vibration contours at each construction site modelled for different phases of work. The contours should show different levels for:

- human discomfort
- impact on heritage structures
- cosmetic damage

An alternative to vibration contours could be the use of established minimum working distances supported by calculations or validation monitoring of plant that is normally used during OOHW.

Once modelled, mitigations, plant selection or scheduling can be applied to ensure the impact of vibration is managed to below the relevant levels shown in the DNVIS or the statement of impact.

2.3.2 Selection and implementation of mitigation measures

The following sections deal with the selection and implementation of mitigation measures that serve to attenuate the noise emanating from proposed OOHW.

2.3.2.1 Standard mitigations

Standard Mitigation Measures from Section 4 in the CNVS are shown in Table 2 below and can be used to reduce the noise impact to nearby receivers in the first instance:

Table 2: Standard mitigation measures (Table 11 of the Sydney Metro CNVS)

Action Required	Applies to	Details
Management Measures		
Implementation of any project specific mitigation measures required	Airborne noise Ground-borne noise and vibration	Any <i>project specific</i> mitigation measures identified in the environmental assessment documentation (e.g. EA, REF, submissions or representations report) or approval or licence conditions must be implemented.
Implement community consultation measures	Airborne noise Ground-borne noise and vibration	Tools for consulting with the community are outlined in the OCCS and include • newsletters • notification Letters • website • project information and construction response telephone line
Surveillance	Airborne noise Ground-borne noise and vibration	Authorised Construction Representatives must observe work behaviours to manage monitor situations such as: • approved equipment/ plant in use • number of equipment/ plant in use • time of works in accordance with approval • operating equipment dominating noise levels, and any potential requirements for maintenance/ repairs • unnecessary noise being generated from work behaviours.
Register of Noise Sensitive Receivers	Airborne noise Ground-borne noise and vibration	A register of all noise and vibration sensitive receivers (NSRs) would be kept in the applicant's Noise and Vibration Management Plan (such as the sensitive land use survey required by Condition D20 and D38). The register would include the following details for each NSR where known: • address of receiver • category of receiver (e.g. residential, commercial etc.) • contact name and phone number.
Site inductions	Airborne noise Ground-borne noise and vibration	All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include: • all relevant project specific and standard noise and vibration mitigation measures • relevant licence and approval conditions • permissible hours of work • any limitations on high noise generating activities • location of nearest sensitive receivers • construction employee parking areas • designated loading/unloading areas and procedures • site opening/closing times (including deliveries) • environmental incident procedures.

Action Required	Applies to	Details
Behavioural practices	Airborne noise	- no swearing or unnecessary shouting or loud stereos/radios on site - no dropping of materials from height; throwing of metal items; and slamming of doors, tailgates and other equipment - elimination of unnecessary noise generation - avoid impulsive noise such as metal and metal contact - turning off idling equipment when not in use - no excessive revving of plant and vehicle engines - controlled release of compressed air - no excessive signalling with horns.
Source Controls		
Construction hours and scheduling	Airborne noise Ground-borne noise and vibration	Program to avoid noisy activities after midnight as far as practicable (such as hammering, sawing etc).
Equipment selection and operation	Airborne noise Ground-borne noise and vibration	- Equipment to be maintained and mobilisation/ pre-start checks confirming proper and efficient operation. - Use quieter and less vibration emitting construction methods where feasible and reasonable such as smaller, lower powered, newer, or better maintained. - Examining alternative technologies and methods to complete activities more quietly, including recommend measures to avoid sleep disturbance. - Equipment operator to be appropriately qualified and competent.
Plan worksites and activities to minimise noise and vibration	Airborne noise Ground-borne vibration	Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site.
Non-tonal reversing alarms**	Airborne noise	Non-tonal reversing beepers** (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant for any out-of-hours work.
Minimise disturbance arising from delivery of goods to construction sites	Airborne noise	- Loading and unloading of materials/deliveries is to occur as far as possible from NSRs - Select site access points and roads as far as possible away from NSRs - Dedicated loading/unloading areas to be shielded if close to NSRs - Delivery vehicles to be fitted with straps rather than chains for unloading, wherever feasible and reasonable
Path Controls		
Shield stationary noise sources such as pumps, compressors, fans etc	Airborne noise	Enclosures or shields on or around stationary noise sources.
Shield sensitive receivers from noisy activities	Airborne noise	Use structures and/ or screens to shield NSRs.

**or movement alarms.

2.3.2.2 Additional mitigation measures

In addition to the above standard mitigation measures, Additional Mitigation Measures described in the CNVS are required to be implemented based on the predicted noise levels above NMLs, or maximum predicted levels, as reasonable and feasible. Such Additional Mitigation Measures and matrices for noise, ground-borne noise and vibration exceedances are shown in the CNVS (reflected in Tables 3, 4, 5 and 6 below for the OOHW periods).

There may be personal circumstances among the NSRs where the conventional approach to Additional Mitigation Measures is not best suited. The Applicant's or Sydney Metro's Place Managers have the authority to amend/ over-ride the below approach with the aim of achieving a better outcome for unique NSR's.

Table 3: Additional mitigation measures (Table 15 of the Sydney Metro CNVS)

Measure	Description	Abbreviation
Alternative accommodation	Alternative accommodation options may be provided for residents living in close proximity to construction works that are likely to incur unreasonably high impacts over an extended period of time. Alternative accommodation will be determined on a case-by-case basis.	AA
Monitoring	Where it has been identified that specific construction activities are likely to exceed the relevant noise or vibration goals, noise or vibration monitoring may be conducted at the affected receiver(s) or a nominated representative location (typically the nearest receiver where more than one receiver have been identified). Monitoring can be in the form of either unattended logging or operator attended surveys. The purpose of monitoring is to inform the relevant personnel when the noise or vibration goal has been exceeded so that additional management measures may be implemented.	M
Individual briefings	Individual briefings are used to inform stakeholders about the impacts of high noise activities and mitigation measures that will be implemented. Communications representatives from the contractor would visit identified stakeholders at least 48 hours ahead of potentially disturbing construction activities. Individual briefings provide affected stakeholders with personalised contact and tailored advice, with the opportunity to comment on the project.	IB
Letter box drops	For each Sydney Metro project, a newsletter is produced and distributed to the local community via letterbox drop and the project mailing list. These newsletters provide an overview of current and upcoming works across the project and other topics of interest. The objective is to engage and inform and provide project-specific messages. Advanced warning of potential disruptions (e.g. traffic changes or noisy works) can assist in reducing the impact on the community. Content and newsletter length is determined on a project-by-project basis. Most projects distribute notifications on a monthly basis. Each newsletter is graphically designed within a branded template.	LB
Project specific respite offer	The purpose of a project specific respite offer is to provide residents subjected to lengthy periods of noise or vibration respite from an ongoing impact.	RO
Phone calls and emails	Phone calls and/or emails detailing relevant information would be made to identified/affected stakeholders within 7 days of proposed work. Phone calls and/or emails provide affected stakeholders with personalised contact and tailored advice, with the opportunity to provide comments on the proposed work and specific needs etc.	PC
Specific notifications	Specific notifications would be letterbox dropped or hand distributed to identified stakeholders no later than 7 days ahead of construction activities that are likely to exceed the noise objectives. This form of communication is used to support periodic notifications, or to advertise unscheduled works.	SN

Table 4: Additional mitigation measures – Airborne construction noise (CNVS Table 16)

Time Period		Mitigation Measures			
		Predicted L_{Aeq} (15minute) noise level Above NML			
		0 to 10 dB	>10 to 20 dB	20 to 30 dB	> 30 dB
Standard	Mon-Fri (7.00 am - 6.00 pm)	-	LB	LB, M, SN	LB, M, SN
	Sat (8.00 am - 1.00 pm)				
	Sun/Pub Hol (Nil)				
OOHW (Evening)	Mon-Fri (6.00 pm - 10.00 pm)	LB	LB, M	LB, M, SN, RO	LB, M, SN, IB, PC, RO
	Sat (1.00 pm - 10.00 pm)				
	Sun/Pub Hol (8.00 am - 6.00 pm)				
OOHW (Night)	Mon-Fri (10.00 pm - 7.00 am)	LB	LB, M, SN, RO	LB, M, SN, IB, PC, RO, AA	LB, M, SN, IB, PC, RO, AA
	Sat (10.00 pm - 8.00 am)				
	Sun/Pub Hol (6.00 pm - 7.00 am)				

Table 5: Additional mitigation measures – Groundborne const. Noise (CNVS table 17)

Time Period		Mitigation Measures		
		Predicted L_{Aeq} (15minute) noise level Above NML		
		0 to 10 dB	10 to 20 dB	> 20 dB
Standard	Mon-Fri (7.00 am - 6.00 pm)	No NML for Groundborne noise during standard hours, refer to table 18 of the CNVS (table 6 of this OOHV Protocol)		
	Sat (8.00 am - 1.00 pm)			
	Sun/Pub Hol (Nil)			
OOHW (Evening)	Mon-Fri (6.00 pm - 10.00 pm)	LB	LB, M, SN	LB, M, SN, IB, PC, RO
	Sat (1.00 pm - 10.00 pm)			
	Sun/Pub Hol (8.00 am - 6.00 pm)			
OOHW (Night)	Mon-Fri (10.00 pm - 7.00 am)	LB, M, SN	LB, M, SN, IB, PC, RO, AA	LB, M, SN, IB, PC, RO, AA
	Sat (10.00 pm - 8.00 am)			
	Sun/Pub Hol (6.00 pm - 7.00 am)			

Table 6: Additional Mitigation Measures – Groundborne Vibration (CNVS table 18)

Time Period		Mitigation Measures
		Predicted Vibration Levels Exceed Max. Levels
Standard	Mon-Fri (7.00 am - 6.00 pm)	LB, M, RO
	Sat (8.00 am - 1.00 pm)	
	Sun/Pub Hol (Nil)	
OOHW (Evening)	Mon-Fri (6.00 pm - 10.00 pm)	LB, M, IB, PC, RO, SN
	Sat (1.00 pm - 10.00 pm)	
	Sun/Pub Hol (8.00 am - 6.00 pm)	
OOHW (Night)	Mon-Fri (10.00 pm - 7.00 am)	LB, M, IB, PC, RO, SN, AA
	Sat (10.00 pm - 8.00 am)	
	Sun/Pub Hol (6.00 pm - 7.00 am)	

Human comfort and cosmetic damage levels are sourced from the vibration assessment from section 3.2.1 above.

2.3.3 Identification of low and high risk activities

The applicant will initially categorise the proposed OOHW as either low or high risk. The AA and ER will review all proposed out of hours activities and confirm or amend these risk levels.

The application will then be subject to the relevant approval pathway:

- Low risk activities are approved by the ER in consultation with the AA
- High risk activities are approved by the Planning Secretary.

High risk and Low risk OOHW are differentiated using the below table:

Table 7: Classification of low and high risk OOHW

Classification	Criteria
Low Risk OOHW	Works that do not trigger the 'high risk' criteria for residential receivers. Works that are not considered high risk following consultation with the AA, the ER and the Place Manager.
High Risk OOHW residential receiver criteria	OOHW will be categorised as 'high risk' if the following criteria are satisfied: 1. The affected noise sensitive receivers are 'High Impact' (particularly sensitive**): e.g. Residential home for the elderly/ high density unit blocks/ persistent complainants/ residents deemed to have "construction noise fatigue"; and 2. The predicted noise level of the OOHW exceeds the sleep disturbance criteria (i.e. Rating Background Level + 15 dB(A) or more); and 3. The type of and intensity of noise emitted from the OOHW is categorised as High Noise Impact as defined in the Interim Construction Noise Guideline, or 4. OOHW that will result in noise from the project exceeding the NML during the evening and/ or night period for any sensitive receiver for more than: a) 2 consecutive nights or b) 3 nights in any week or c) 10 nights in any month or d) 50 nights in any 6 month period, or 5. The OOHW will result in out of hours noise at a sensitive receiver, between the hours of 12:00am and 7:00am, exceeding the NML by 30 dB(A) for airborne noise or 20 dB(A) for ground borne noise or vibration exceeding the human response criteria., or 6. Any other works that are considered high risk by the AA, the ER or the Place Manager.
High Risk OOHW non residential receiver criteria	OOHW may be considered as 'high risk' by the AA, the ER or the Place Manager if undertaken during trading hours and in close proximity to their place of business (for example, during Saturday evening trading hours). Since each non-residential receiver has different business needs, it is imperative that the Place Manager provide advice for inclusion in each OOHW application for the AA and ER to better understand how the proposed OOHW would impact any businesses and confirm the risk levels of the proposed activity.

** context added that is not present in the CNVS.

As part of their review, using the applicant's assigned risk level as a starting point the AA and ER will consider other relevant factors to confirm or adjust the nominated risk level from either 'high risk' to 'low risk' or vice-versa. These relevant factors include:

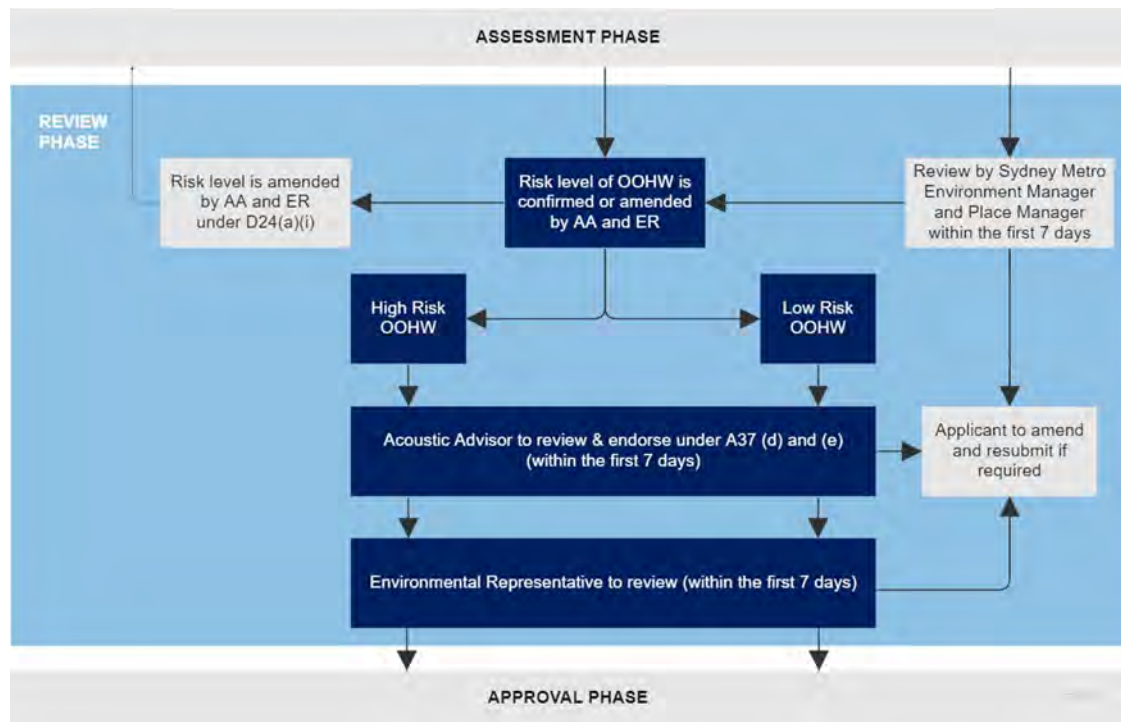
- those listed in Table 8 of this document
- Third Party approvals and permits
- any other factors the AA and ER consider relevant.

Table 8: Risk level considerations

Aspect	Guidance
Predicted Noise Exceedance	The degree of predicted noise level exceedance above the RBL or NML as appropriate
Duration and timing	Length of time the peak predicted noise levels are anticipated, and timing during the shift peak predicted noise levels are likely to occur.
Certainty	Whether RBLs, NMLs or predicted noise impacts are not well understood
Past Experience	Nature of works are new, in a new location or have not been undertaken by the contractor on the project already
Frequency	The number of consecutive evenings/ nights of work, the number of non-consecutive evenings/ nights in a week, the overall number of evenings/ nights
Negotiated Agreement with Sensitive Receivers	Whether negotiated agreements have been obtained in accordance with CoA D23(c)(iii) Substantial majority should be more than 65% of respondents.
Potential Sleep Disturbance	Whether the activity is likely to exceed the Project's sleep disturbance criteria
Number of awakening events	How often (the potential number) and when in the shift are awakening events likely to occur, and how do the noise levels of the awakening events compare to ambient noise levels
Non-Residential Receivers	Whether the impacted non-residential receivers operate within the same time period as scheduled OOHW.
Special Events	The timing and location of special events in the area of the proposed OOHW may be schedules at the same time or immediately before or after the special event (e.g. festivals, public gatherings etc.)
Consultation fatigue	Where a noise sensitive receiver is being notified continuously for upcoming OOHW. The notifications and OOHW lookaheads should regulate the flow of information so that it remains consistent, and predictable.
Construction fatigue	Where a common NSR is subjected to very long periods (more than 3 months) of day work and OOHW from overlapping or concurrent projects.

Following their consideration, the AA and ER will confirm the final classification level on the OOHW Permit application form (including any risk identification commentary) the approval pathway will follow that outlined in table 9.

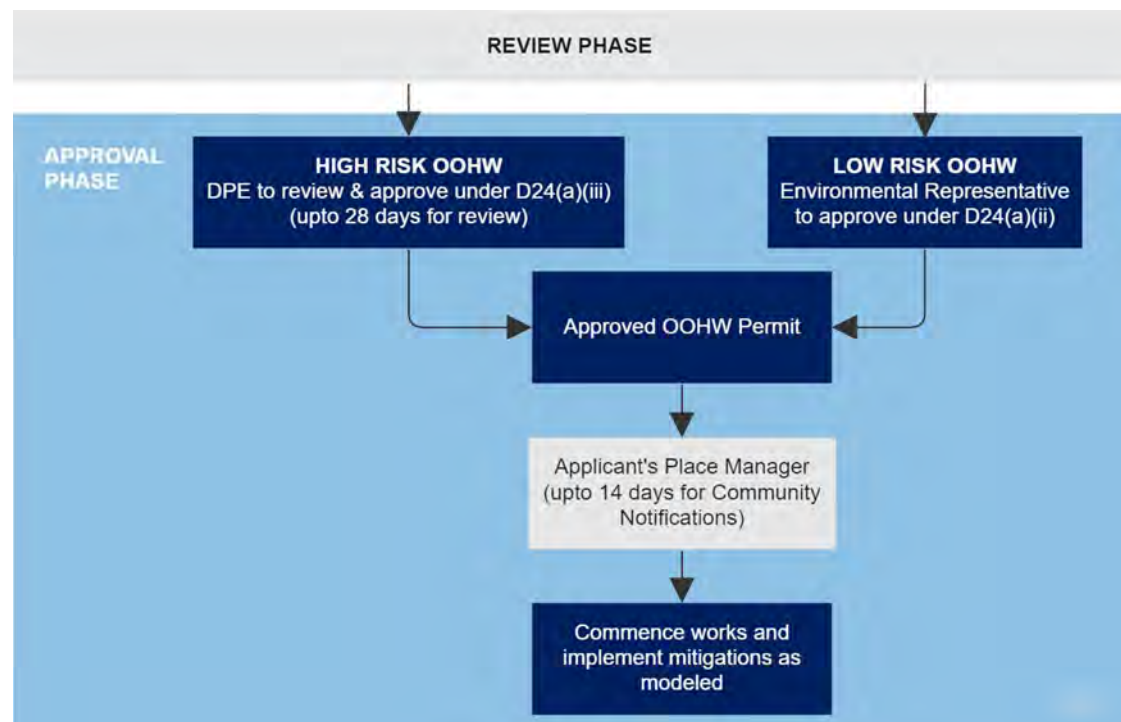
2.4 Review Phase



When the OOHW Permit form is submitted to Sydney Metro, the target review period is seven days for review by the Sydney Metro Environment Manager, Place Manager, Acoustic Advisor and Environmental Representative. Please note that these reviews may occur in parallel.

Comments from this review phase will be provided to the applicant for amendment of the permit. Close-out of comments should be actioned within 24 hours to enable the permit to progress to approvals quickly.

2.5 Approval Phase



Low Risk OOHW can be approved by the ER under D24(a)(ii). High Risk OOHW must be submitted to DPE for a standard 28-day review and approval period. This is summarised again in table 9 below:

Table 9: Role according to OOHW Classification

Classification	AA	ER	DPE
Low risk OOHW	Review & endorse under A37(d) and (e)	Review & approve under D24(a)(ii)	N/A
High risk OOHW	Review & endorse under A37(d) and (e)	Review	Review & approve under D24(a)(iii)

For High Risk OOHW, it would be beneficial to hold a targeted meeting with DPE before the application is submitted to explain the works and justifications in a presentation. Mitigations and alternatives can be discussed, and it would also be a valuable forum for DPE to ask any questions about the High Risk OOHW whilst the AA and the ER are present. DPE may confer with the AA and the ER in these applications also.

Once approved, the Permit is sent to the applicant's Place Manager for the development and distribution of notifications to the affected community. There is a 7-day period for notification which must be observed, after which the OOHW can commence.

Following the community notification letterbox drop, the OOHW Permit application form will be returned to the team performing the work and the OOHW register updated.

2.6 Procedures to facilitate the coordination of OOHW

Coordination of OOHW with adjacent projects occurs per section 9 of the Overarching Community Co-ordination Strategy and also per the following guidelines:

- contractor's environment team prepares an OOHW lookahead program and distributes this program to relevant stakeholders regularly per D37(a)
- adjacent projects would examine each other's OOHW lookahead programs to identify overlapping works
- where possible and without causing an adverse cumulative impact, OOHW are to be conducted on the same nights as neighbouring projects in order to preserve respite days/ nights
- neighbouring projects should communicate to resolve situations where simultaneous OOHW would yield a cumulative impact to common receivers
- projects should share noise data, list of OOHW plant and noise models to enable the common receivers to be identified and mitigated
- appropriate mitigations for the common receivers must be discussed and applied. Projects should collaborate and negotiate fairly to ensure the best outcome for the community is achieved.
- the project who is closer to this receiver is responsible for implementing the mitigations that this receiver would require.

2.7 Notification arrangements for affected receivers

Consultation with affected receivers would be conducted by the Applicant's Place Manager/ Community Team under the guidance in sections 4 and 5 of the Sydney Metro Overarching Community Communication Strategy. The Applicant's Local Community Communications Sub-Plan and Small Business Owners Engagement Plan(s) may offer relevant additional guidance.

The aim of consultation with receivers predicted to be affected by OOHW is to discover opportunities for outcomes that would minimise or eliminate impacts to these receivers. Consultation would aim to:

- Comprehensively inform the noise affected receivers about the proposed OOHW, and
- Capture the affected receiver's feedback in project systems such as Consultation Manager so that the project has a record of the issues that are important to each affected receiver, and
- Incorporate the affected receiver's feedback in the Scoping Phase (under input from Project Team) and in the Criteria Phase (under input from Place Manager), and
- Implement the affected receiver's feedback in the Criteria and Assessment Phases (under input from Place Manager), and
- Discuss various standard and additional mitigations that the noise affected receiver would prefer.

2.7.1 Newsletters

Communities are more likely to understand the impacts from noise and vibration if they are provided with honest detailed information and commitments on mitigation measures to be implemented that are adhered to by the project prior to the works commencing. Therefore newsletters are to be produced and distributed as follows:

- undertaken by letterbox drop or email
- made available on the Sydney Metro website
- broadly describe the locations, type of work, and provide a progressive schedule for periods no less than three (3) months for OOHW
- detail the expected noise impacts, characteristics and levels, of the works
- detail mitigation and management measures and proposed respite periods
- clearly state how additional information can be obtained through details on how to contact Sydney Metro included the number of the 24-hour telephone complaints line, site contact (where available) and the Project website address.

2.7.2 Notifications

Specific community notifications are used as an additional mitigation measure for receivers of noise and vibration impacts from OOHW events. OOHW notifications will be issued to potentially affected sensitive receivers at least seven days prior to the OOHW commencing. Such notifications will:

- be undertaken by letterbox drop or email, and be made available on the Sydney Metro website
- clearly outline the reason that the work is required to be undertaken outside standard construction hours specified

- include a diagram that clearly identifies the location of the proposed works in relation to nearby cross streets and local landmarks
- include details of relevant time restrictions that apply to the proposed works
- clearly outline the location, nature, type of work, scope and days and dates and hours of the proposed works
- detail the expected noise impacts, characteristics and levels, of the works
- detail mitigation and management measures and proposed respite periods
- clearly state how additional information can be obtained, how to contact Sydney Metro for consulting on respite periods and how to access mitigation offers
- include the number of the 24-hour telephone complaints line, site contact (where available) and the Project website address.

The applicant, through Sydney Metro will also provide a notification to DPE of approved low risk out-of-hours works.

3 Compliance matrix

This Protocol has been developed to comply with [CSSI-19238057](#) CoAs and Revised Environmental Mitigation Measures (REMMs). Table 10 indicates where these requirements have been addressed.

Table 10: Out-of-Hours Work CSSI CoAs and REMMs

Reference	Requirement	Addressed in
CoA D24	An Out-of-Hours Work Protocol must be prepared before the approval of out-of-hours-work under Condition D23(c)(ii). The Protocol must identify a process for the consideration, management and approval of work which are outside the hours defined in Conditions D21 and D22. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours work. The Protocol must be prepared in consultation with the ER and the AA. The Protocol must provide:	This Protocol
(a)	identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where: (i) the ER and AA review all proposed out-of-hours activities and confirm their risk levels; (ii) low risk activities can be approved by the ER in consultation with the AA; and (iii) high risk activities that are approved by the Planning Secretary;	Section 2.3.3
(b)	a process for the consideration of out-of-hours work against the relevant NML and vibration criteria;	Section 2.3.1
(c)	a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of Condition D36. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events;	Section 2.3.2
(d)	procedures to facilitate the coordination of out-of-hours work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and	Section 2.6
(e)	notification arrangements for affected receivers for all approved out-of-hours works and notification to the Planning Secretary of approved low risk out-of-hours works. This condition does not apply if the requirements of Condition D23(b) are met. Note: Out-of-hours work is any work that occurs outside the construction hours identified in Condition D21 and D22.	Section 2.7
D26	All reasonable and feasible mitigation measures must be applied when the following residential ground-borne noise levels are exceeded: (a) evening (6:00 pm to 10:00 pm) — internal LAeq(15 minute): 40 dB(A); and (b) night (10:00 pm to 7:00 am) — internal LAeq(15 minute): 35 dB(A). The mitigation measures must be outlined in the Noise and Vibration CEMP Sub-plan, including in any Out-of-Hours Work Protocol, required by Condition D24.	Section 2.3.2.1 and 2.3.2.2
REMM NV04	The use of noise intensive equipment at construction sites with 'moderate' and 'high' out-of-hours noise management level exceedances would be scheduled for standard construction hours, where feasible and reasonable. Where this is not feasible and reasonable, the works would be undertaken as early as possible in each work shift.	Section 2.1.1 2.3.3.1, 2.3.3.

4 Protocol review and approval

In accordance with condition D24, the Out-of-Hours Work (OOHW) Protocol must be prepared in consultation with the Acoustic Advisor (AA) and Environmental Representative (ER). Following this, the OOHW Protocol must then be approved by the Planning Secretary before the commencement of the OOHW.

A Consultation Register showing dates of consultation with the AA and the ER will be included within Appendix A.

Appendix A: Register of Consultation

Version	Date Issued to AA and ER	Date comments received
1	07 December 2022	16 December 2022
2	18 January 2023	23 January 2023
3	06 February 2023	08 February 2023
4	22 February 2023	28 February 2023
5	Submitted to DPE for approval	Submitted to DPE for approval