



Temporary Noise Barrier Strategy – Local Roads; Campbell Street and Campbell Road

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Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Document Approval

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Signature:						

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Details of Revision Amendments

Document Control

The Project Director is responsible for ensuring that this Strategy is reviewed and approved. The Engineering and Design Director is responsible for updating this Strategy to reflect changes to the Project, legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the Project Director before being distributed or implemented.

Revision Details

Revision	Details
0	For internal review.
1	Incorporates comments from RMS and SMC, for DP&E review and approval.
2	Incorporates comments from DP&E.
3	Incorporates comments from DP&E.
4	Incorporates comments from DP&E and captures additional barrier proposed for the access road at Camdenville Basin minor ancillary facility.
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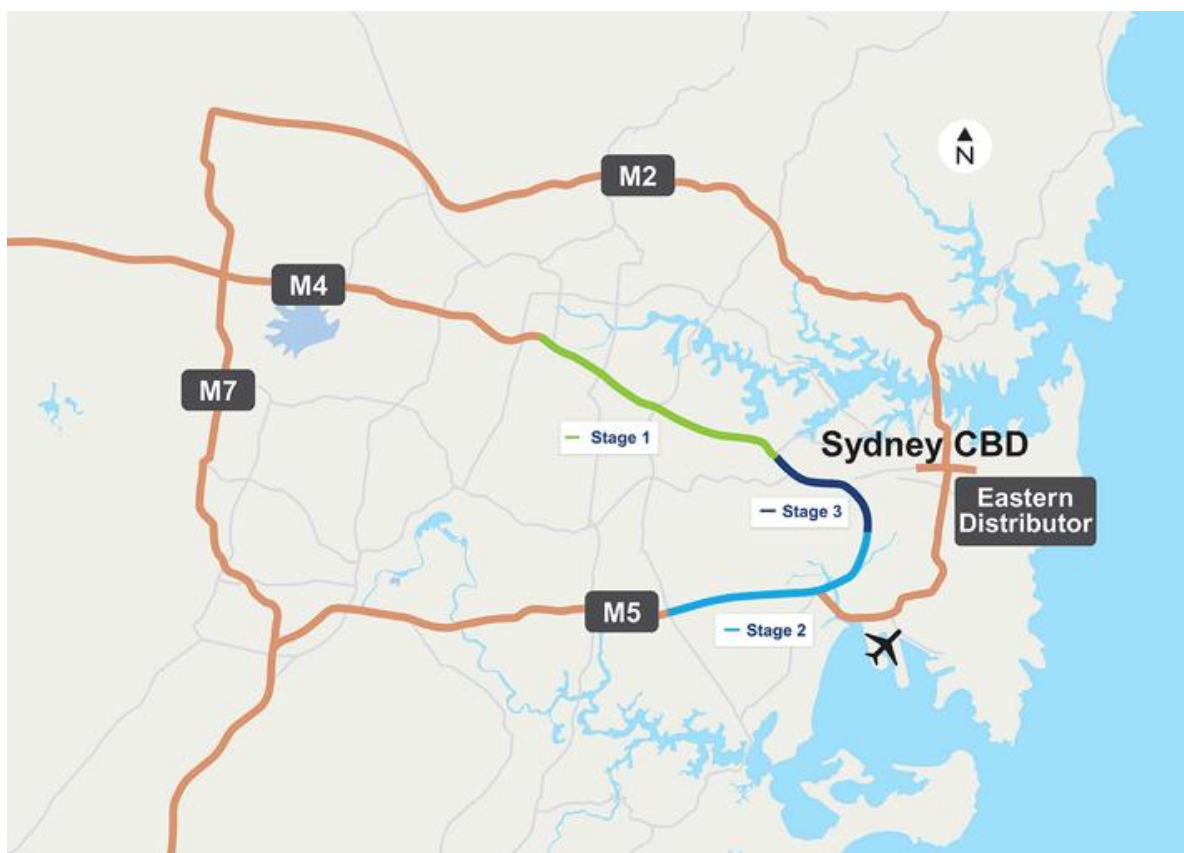
1. Introduction

1.1. Project Description

WestConnex is one of the NSW Government's key infrastructure projects which aims to ease congestion, create jobs and connect communities. It is the largest integrated transport and urban revitalisation project in Australia.

The 33 kilometer project was a key recommendation of the State Infrastructure Strategy released in October 2012. It brings together a number of important road projects which together form a vital link in Sydney's Orbital Network. They include a widening of the M4 east of Parramatta, a duplication of the M5 East and new sections of motorway to provide a connection between the two key corridors.

Figure 1 - WestConnex Project Map



WestConnex will support Sydney's long term growth and boost the city's economic productivity. It will:

- Provide quicker, more reliable trips between Western Sydney and the Port Botany/Sydney Airport precinct to support Sydney's urban freight task
- Help distribute traffic across the wider road network, removing bottlenecks and relieving congestion for local trips
- Provide better connections along the M4 and M5 corridors to cater for the forecast growth in employment and population along these routes
- Allow urban revitalisation and increase opportunities for active and public transport along and across Parramatta Road.

The WestConnex project includes a number of stages:

- Stage 1a – M4 Widening
- Stage 1b – M4 East

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- Stage 2 – New M5
- Stage 3 – M4-M5 Link

In November 2015, the Sydney Motorway Corporation (SMC) awarded the CPB Contractors Dragados Samsung Joint Venture (CDS JV) the contract for the design and construction of Stage 2 – New M5. The New M5 will run from the existing M5 East corridor at Beverly Hills via a tunnel to St Peters, providing improved access to the airport, south Sydney and Port Botany precincts.

Key features of the New M5 include:

- New twin tunnels which are higher, wider and flatter. These will more than double capacity along the M5 East corridor and provide motorway access to north of Sydney Airport
- A new interchange at an industrial site at St Peters, which reduces the impact on nearby residential areas
- Connections from the interchange to key roads in the area, including Campbell Road/Street, Euston Road and across the canal to Bourke Road
- Widening of Campbell Road/Street and Euston Road through existing road widening reservations
- Western tunnel entry and exit points at Kingsgrove.

Stage 2 of WestConnex is being accelerated following an historic funding agreement signed by the Australian and New South Wales Governments in May 2014.

This has allowed work to start on the M5 - King Georges Road Interchange upgrade.

The duplication of the M5 East corridor will improve travel times and reliability for the 100,000 motorists which use this key route every day.

It will allow for improved movement of freight to and from the Port Botany area and provide an express route between Western Sydney and Sydney Airport once WestConnex is completed.

1.2. Purpose of this Plan

The CDS JV has prepared this Temporary Noise Barrier Strategy – Campbell Local Roads (TNBS-CLR) in accordance with Condition of Approval (CoA) D20.

The TNBS takes into account works associated with the construction of the upgraded Campbell Street and Campbell Road, and the out of hours use of the minor ancillary facility being established at Camdenville Basin. It identifies temporary noise barrier location, outlines consultation processes, and includes acoustic report detailing the barrier specifications and predicted noise attenuation benefits.

1.3. Scope of this Document and Compliance with D20

This document provides the structure and details of the TNBS required for the project as prescribed in CoA D20. This strategy focuses on the Campbell Street and Campbell Road works for the Local Roads network around the St Peters Interchange site, and the out of hours use of the minor ancillary facility being established at Camdenville Basin. Figure 2 shows the area of works for which this TNBS-CLR applies.

Noise modelling undertaken to develop this TNBS-CLR, as presented in the supporting acoustic report in Attachment A, also includes predicted noise from construction works within the SPI compound, widening of Euston Rd and other Local Roads works within St Peters, Alexandria and Mascot. Whilst incorporated in the acoustic report, other Local Roads works such as Euston Road

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widening, bridges over Alexandra Canal and Mascot roads alignment and tie-ins will be covered by a separate TNBS.

The TNBS for St Peters Interchange (M5N-ES-PLN-SPI-0003) considers noise impacts and temporary noise barrier strategy for construction compounds C8 (Canal Road), C9 (Campbell Road, C10 (Landfill Closure) and C11 (Burrows Rd) and are not included in this TNBS-CLR.

This TNBS-CLR will form part of the project wide TNBS as detailed in the New M5 Staging Report. This report is submitted to address the Campbell Road works under Stage 2(d) which includes surface construction activities on the local road network around the St Peters Interchange (SPI) as detailed in Section 1.3 of the New M5 Staging Report Rev 03.

Table 1.1 shows where compliance with CoA D20 is addressed within this document.

Figure 2 – Area of works covered by this TNBS-CLR



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Table 1: Compliance with D20

D20 Requirements	Compliance
The Proponent must develop and implement a Temporary Noise Barrier Strategy which includes:	
a) identification and confirmation of all temporary noise barriers including -	Section 2.1 – 2.6
(i) the provision of a temporary noise barrier on the northern side of the Kingsgrove North construction compound to provide noise mitigation to highly affected residents at a level greater than that identified in the documents referred to in condition A2(b),	Section 1.3 - See Temporary Noise Barrier Strategy – Kingsgrove M5N-CN-PLN-WSW-001, CoA D20 (a) (i) is not addressed within this TNBS-CLR
(ii) consideration of the installation of temporary noise barriers on the southern and northern side of the M5 East Motorway during the relocation of the existing permanent noise barriers (or detail on why these noise barriers are not considered feasible and reasonable),	Section 1.3 - See Temporary Noise Barrier Strategy – Kingsgrove M5N-CN-PLN-WSW-001, CoA D20 (a) (ii) is not addressed within this TNBS-CLR
(iii) consideration of the installation of temporary noise barriers along Campbell Road, Campbell Street and Euston Road (or detail on why these noise barriers are not considered feasible and reasonable),	Section 1.3 – This TNBS-CLR covers the noise barriers for the management and mitigation of construction noise along Campbell Road and Campbell Street and the supporting minor ancillary facility at Camdenville Basin. Euston Road works is captured in a separate report, refer M5N-ES-PLN-LRW-0009..
(iv) temporary noise barriers around construction compounds;	Section 1.3 - See Temporary Noise Barrier Strategy – St Peters Interchange M5N-CN-PLN-SPI-003, CoA D20 (a) (iv) is not addressed within this TNBS-CLR. Compound C12 is captured in a separate report, refer M5N-ES-PLN-LRW-0009.
b) the consultation and decision-making process for all temporary noise barriers; and	Section 3.1 – 3.5

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D20 Requirements	Compliance
c) an acoustic report detailing the final barrier heights, material analysis and predicted benefits.	Attachment A
The temporary barrier options must be developed in consultation with the landowners adjacent to the barrier locations prior to the adoption of a final design.	Section 3.1 – 3.5
The Temporary Noise Barrier Strategy must be approved by the Secretary prior to site establishment works or construction works at the Kingsgrove North construction compound, the permanent noise barriers on the northern and southern side of the M5 East Motorway are removed, and/or road widening works are undertaken along Campbell Road, Campbell Street or Euston Road.	<p>This TNBS-CLR covers road widening works are undertaken along Campbell Road and Campbell Street, and out of hours works at the minor ancillary facility being established at Camdenville Basin. Condition D20 requires approval by the Secretary.</p> <p>Euston Road works will be captured in a separate TNBS.</p>

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2. Temporary Noise Barrier Strategy

2.1. Temporary Barrier Overview

The overall approach of the TNBS is to ensure that temporary noise barrier solutions are developed and implemented in accordance with CoA whilst specifically consulting with landowners adjacent to the barrier locations.

2.2. Identify Sensitive Receivers

A key component of the TNBS is to identify sensitive receivers based on the proposed construction footprint. Residential areas surrounding the Project have been divided into Noise Catchment Areas (NCAs) based on each area's similar acoustic environment. The NCAs have been based on those established and developed within the EIS and Construction Noise and Vibration Management Plan (CNVMP) respectively. Figure 3 presents the sensitive receiver catchments for the Local Roads.

Sensitive receivers have been reviewed considering CoA D20 and specifically identified for consultation, especially landowners, tenants and residents adjacent to proposed temporary noise barriers.

Figure 3 - Sensitive Receiver Catchments



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2.3. Noise Objectives

Construction noise management levels have been developed using NSW Interim Construction Noise Guideline (ICNG), in accordance with CoA D16(a). Objectives have been set in the form of Construction Noise Management Levels.

Residential receivers are considered noise affected where construction noise levels are greater than the Noise Management Levels (NMLs). NMLs are detailed in Attachment A, Appendix B. Noise affected levels represent the point above which there may be some community reaction to noise, where this scenario is anticipated predicted and/or measured construction noise levels exceed NMLs, all feasible and reasonable work practices will be applied to meet NMLs.

During standard construction hours the highly affected noise objectives are as follows:

- Residential receivers: 75 dB(A) LAeq(15min) external noise level
- Classrooms at schools and other educational institutions, hospital wards, operating theatres and places of worship: 45 dB(A) LAeq(15min) internal noise level.
- Active recreation areas: 65 dB(A) LAeq(15min) external noise level
- Passive recreation areas: 60 dB(A) LAeq(15min) external noise level
- Community centres: depends on use – refer to Australian Standard (AS) 2107: *Acoustics - Recommended design sound levels and reverberation times for building interiors*.

Reference Attachment A - Sections 3.1 for further details.

2.4. Construction Noise Assessment

Modeling and assessment of airborne noise impacts from activities associated with the construction works have been determined by modeling the noise sources, receiver locations, topographical features, and possible noise mitigation measures using a Cadna-A computer noise model specifically developed for this project. The model calculates the contribution of each noise source at identified sensitive receivers and allows for the prediction of the total noise from a site for various stages of construction.

2.4.1. Campbell Street and Road construction

The model is used to determine the impact of construction noise from local roads construction stages, identified as V01 through to V11 below in Table 2. Timing of stages is indicative and used as a guide for modeling purposes. Local Roads construction activities are planned to be undertaken during standard day time construction hours. Where out of hours works (OOHW) are required to be carried out during construction, these works will be covered by the CNVMP and the OOHW protocol. The temporary noise barriers will provide additional attenuation.

Some OOHW along the Campbell Road and Campbell Street corridor are required during investigation and site establishment works, which precede construction works. Temporary noise barriers can only be constructed following site establishment and property demolition. Further detail on the timing of the installation of temporary noise barriers is presented in Section 2.6.

A key component of early site mobilisation works is to enable the erection of temporary noise barriers. Table 2 below shows the construction stage assumptions used for modeling. Further details can be found in Attachment A, Section 4.

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Table 2 - Noise modelling assumptions – Local Roads¹

Construction Phase	Zone where work is carried out for each variant										
	2016		2017			2017					2018
	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
UTILITIES	C, E, F, I	C, E, I	C	C							
SITE ESTABLISHMENT		E									
PRELIMINARY WORKS	C	A, C, E	A, C, D	D	D, E	E		A, C			
ENABLING WORKS - AUSGRID				F	F						
SERVICES RELOCATION	C, E, F	A, C, E, F, H	A, C, E, F, H	A, C, E, F, H	C, E, H	E, H	F	A, C, F	A, F		
CIVIL WORKS	H	H	H	H	H	H	H				
EARTHWORKS	B, G, J	C, E, G, J	A, C, E, G	A, C, E, F, G	C, E, F, G	E	C, E, G, H, J	C, E, F	A, F, H		
PAVEMENTS - FULL DEPTH			G, J	G	C, E, G	A, C, E, F, G	C, F, E, G	E, G	E	A, C, E, F	A, F
PAVEMENTS - MILL & Re-SHEET								B, J			B, J
FINISHING WORKS			B, G, J	G	G	A, G	C, E, F, G	B, E, G, J	E	C, E	A, B, F, G, J
TRAFFIC SWITCH							F				
PROPERTY WORKS						A, C	C, E, F, G	E	C, E	A, C, F	A, F, G
DEMOBILISATION										H	
ALBERT ST WORKS						C	C				
UNWIN BRIDGE & MAY STREET	H	H	H					H	H		H
BEDWIN INTERSECTION	H	H	H	H	H			H	H		
PEIERS & ABUTMENTS	D	D									
GIRDER INSTALLATION			D	D	D	D					
BRIDGE DECK & PARAPETS						D	D				
APPROACHES & AC							D				

Note 1: Zones where work is carried out for each construction stage (variant) are as follows:

- Zone A Campbell Street, between Princes Highway and Unwins Bridge Road
- Zone B Princes Highway-Campbell Street tie-in
- Zone C Campbell Street/ Road, between Princes Highway and Alexandria Canal
- Zone D Alexandria Canal bridgeworks
- Zone E Bourke Street between Alexandria Canal and Church Avenue
- Zone F Euston Road, between Campbell Road and Sydney Park Road
- Zone G Sydney Park Road-Huntley Street-Euston Road tie-in
- Zone H Bedwin Road-May Street-Unwins Bridge Road-Campbell Street tie-in (the access road for the minor ancillary facility at Camdenville Basin is part of this zone).
- Zone I Gardeners Road tie-in
- Zone J Campbell Road-Euston Road tie-in.

Refer Attachment A - Construction Noise and Vibration: Temporary Noise Barrier Acoustic Report (Local Roads) Section 2 for further detail.

Impacts to sensitive receivers have been determined and will be reviewed during design development and construction. Noise mitigation measures in the form of temporary noise barriers, and relocatable noise screens (discussed further in Section 2.5 below), have been developed to address predicted noise levels for standard hours. Noise levels are detailed in Attachment A, Section 4.4.

To mitigate the noise generated by high impact activities in accordance with CoA D16, high impact activities will be subject to respite periods and maximum durations.

Mitigation measures will be refined as design and construction methods are finalised.

2.4.2. Camdenville Basin minor ancillary facility


CDS JV will be using existing vacant land at Camdenville Basin as a minor ancillary facility for the Campbell Street works. The facility will house site sheds, light vehicle parking and limited material storage in support of works being undertaken on the western end of the Campbell Street corridor. An application to establish the facility was provided to the DP&E's Environmental Representative for consideration under Condition of Approval D64. The facility was approved by the Environmental Representative on 14 March 2017.

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Noise modelling supporting the application demonstrated that the proposed use of the compound complies with the Relevant Noise Management Levels at the nearest receiver during both day and night time periods, subject to 3m high noise hoarding being installed along the access road (to attenuate noise from vehicle movements outside of standard construction hours). Table 3 summarises the results from noise modelling for the operation of the minor ancillary facility. Detailed results are presented in Attachment G, Appendix D. CDS JV notes that this temporary noise barrier (LRNB07) is to attenuate noise from the operation of the Camdenville Basin minor ancillary facility, rather than mitigate noise impacts from the construction along the Campbell Street corridor.

Table 3: Summary of level of compliance with Noise Management Levels from operation of minor ancillary facility at Camdenville Basin

NCA	Level of compliance with NML		
	Day	Evening	Night
NCA02	◆	◆	◆
NCA03	◆	◆	◆
NCA06A	◆	◆	◆
NCA06B	◆	◆	◆

Notes:  Complies with Noise Management Level.

2.5. Noise Barrier Design

The strategy focuses on modeling proposed construction methodologies, predicting the noise impacts of such methodologies, identifying sensitive receivers, consultation with sensitive receivers to help develop and finalise temporary noise barrier options based on the Construction Noise Assessment described above.

Barrier options have been developed considering a variety of acoustic ratings and noise wall performance levels and options have been subsequently matched to required weighted noise reduction (Rw) ratings determined from the modeling process. Noise barrier design specifications have been classified using the below performance criteria;

- Low – Rw 10 to 15
- Medium – Rw 15 to 20
- Medium to High – Rw 20 to 25
- High – Rw 25 to 30
- Very High – Rw > 30

Noise barriers are derived from Attachment A. Barriers are specified by location and required Rw rating as determined by noise modeling. A variety of barrier options were considered to ensure actual barrier acoustic ratings are greater than specified Rw ratings. Temporary noise barriers in the local roads setting have been optimised in consideration of the need to maintain pedestrian and vehicular access for side streets. The access requirements mean that noise barriers of any grading will not be capable in reducing noise to below NMLs. It is expected that the barriers may provide 5 dB(A) noise reduction where they break line of sight with receivers. A barrier that provides 5 dB noise reduction should be constructed out of a material that provides at least 10 dB more transmission loss through the barrier to ensure that the noise passing through the barrier does not add to the noise going over the top (or around) the barrier. In all instances traditional plywood hoardings, or combinations of plywood hoarding and clear acrylic paneling, meet required Rw ratings. Modelling was conducted using these ratings. The noise barrier specifications are specified in Table 4. The indicative design of

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the temporary noise barriers are presented in Attachment B. The location of the noise barriers are presented in Figure 4 and Table 5.

Table 4 - Noise Barrier Specifications¹

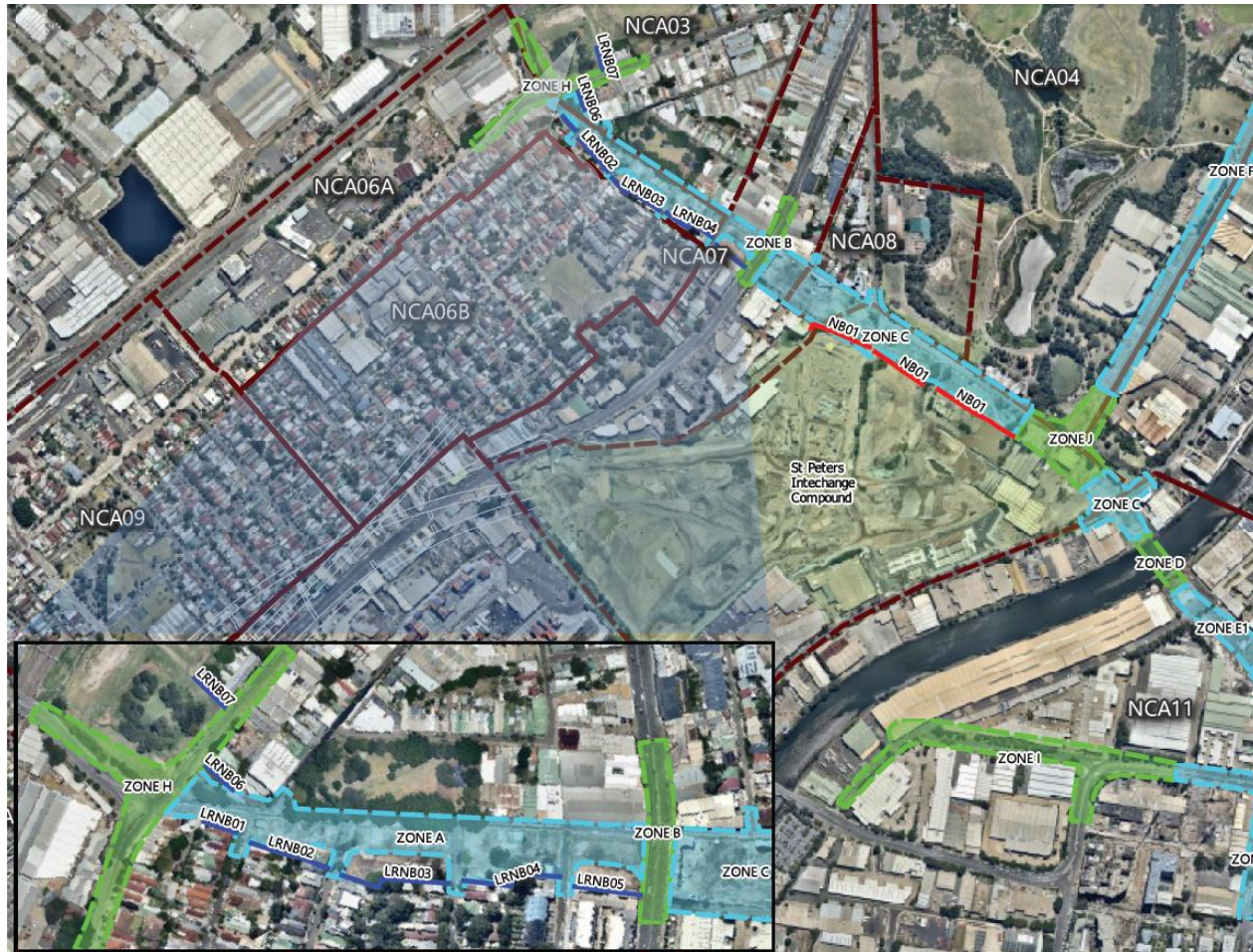
Noise Barrier	Location ²	Barrier Height	Required Rw	Proposed Construction	Acoustic Rating Rw
LRNB01	Campbell Street - southern side of road between Southern Cross Hotel and Brown Street	3m	Rw 15-20	17mm plywood; OR	Rw 24
LRNB02	Campbell Street – southern side of road between Brown Street and Florence Street	3m	Rw 15-20	Perspex 8mm; OR LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 29
LRNB03	Campbell Street – southern side of road between Florence Street and St Peters Street	3m	Rw 15-20	PALGLAS 15mm; OR	Rw 31
LRNB04	Campbell Street – southern side of road between St Peters Street and Church Street	3m	Rw 15-20	Fortress fencing A- Type RRP Soundproof Fence; OR	Rw 32
LRNB05	Campbell Street – southern side of road between Church Street and Princes Highway	3m	Rw 15-20	FlexShield, EchoBarrier OR	Rw 18
LRNB06	Campbell Street – northern side of road between May Street and Hutchison Street	3m	Rw 15-20	AcoustiFlex fixed to temporary fencing or scaffold	Rw 20
LRNB07	Camdenville Basin minor ancillary facility access road	3m	Rw 15-20		

Notes 1: The above design the designs are final following landholder consultation. Noise barriers will be constructed to 3m height to ensure the optimal noise attenuation is achieved. LRNB01-06 will comprise approximately 600mm of clear acrylic will sit on top of 2.4m plywood hoarding so as to reduce the potential for shading and provide privacy for residents. 'Windspray' and 'Pale Eucalypt' colours will be incorporated onto the plywood in accordance with landholder requests. LRNB07 will consist of black Soundproof Fence fixed to scaffold.

2: Noise barriers will be installed so as to maintain access to driveways and properties.

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Figure 4 - Noise Barrier Locations¹



Note 1: NB01 – NB03 are addressed in Temporary Noise Barrier Strategy – St Peters Interchange M5N-CN-PLN-SPI-003

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Table 5 - Noise Barrier Distance to Nearest Resident

Noise Barrier	Location ^{Note 1}	Barrier Height	Distance to Nearest Resident
LRNB01	Campbell Street - southern side of road between Southern Cross Hotel and Brown Street	3m	<5m
LRNB02	Campbell Street - southern side of road between Brown Street and Florence Street	3m	<5m
LRNB03	Campbell Street - southern side of road between Florence Street and St Peters Street	3m	<5m
LRNB04	Campbell Street - southern side of road between St Peters Street and Church Street	3m	<5m
LRNB05	Campbell Street - southern side of road between Church Street and Princes Highway	3m	18m
LRNB06	Campbell Street - northern side of road between May Street and Hutchison Street	3m	<5m
LRNB07	Camdenville Basin minor ancillary facility access road	3m	<10m

Note 1: Noise barriers will be installed so as to maintain access to driveways and properties.

2.5.1. Campbell Street and Campbell Road

The construction of Campbell Street and Campbell Road is staged so as to allow the existing roadway to remain open until the newly constructed road can be made open to traffic. During the first stage construction works will be undertaken to the south of the existing road and will extend to the road boundary. During subsequent stages, the existing road will be closed and works extend to the boundary of existing premises. Attachment C shows staging to demonstrate the switching of traffic, and does not show locations of noise attenuation measures.

On the northern boundaries of the works, construction of temporary noise barriers is not feasible as there is no room between the construction area and the trafficable road, nor is the room to north of the existing Campbell Road corridor as it would impact on third party land and significant trees in Simpson Park. Importantly, to maintain public access to footpaths, property entrances and driveways the works boundary on the northern side of Campbell Street and Campbell Road will be shifted regularly. This will enable the road and footpath to be upgraded while maintaining access to properties. Building long term temporary noise barriers on the northern side of Campbell Street and Campbell Road would not enable the works to be performed or access to properties to be maintained. CDS JV have investigated opportunities to install the temporary noise barriers further within the construction area. The temporary noise barriers are required to be fixed into ground using piling and / or strip footing and therefore are not possible as they would prevent construction of the road.

In these locations, and where sensitive receivers will be highly impacted by construction noise, relocatable noise screening approximately 1.8m high will be installed on the worksite perimeter (as it shifts) to provide screening to sensitive receivers. Based on noise predictions made in the Attachment A, it is anticipated that properties along the northern side of Campbell Street and Campbell Road in NCA03, NCA04 and NCA08 will require this form of attenuation. The relocatable noise screening will be installed at active worksites where they do not compromise the safety of the works site or adjacent public access. The typical form of these screens when attached to temporary fencing are presented in Figure 5. The indicative design when attached to concrete barriers is presented in Attachment D.

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Furthermore, residential properties between Euston Road and Princes Highway impacted by construction noise have been offered acoustic inspections as they are potentially eligible for ‘at property acoustic treatment’. 28 properties have been offered inspection. Should treatment be installed at these properties during the construction period, this will provide further noise attenuation in addition to the relocatable noise barriers.

Figure 5 – Example of relocatable noise screens



2.5.2. Camdenville Basin minor ancillary facility

Noise modelling for the operation of the ancillary facility shows that predicted noise impacts are below the relevant Noise Management Levels at the nearest receiver, subject to 3m high noise hoarding being installed along the access road (to attenuate noise from vehicle movements outside standard construction hours). For this to occur LRNB07 will be erected, comprising black Soundproof Fence fixed to scaffold.

2.6. Noise Barrier Installation

Noise barrier installation is summarized in Table 6.

Noise barriers LRNB01-06 will be installed after the following precedent activities; acquisition, site establishment including access and laydown areas, demolition of the properties along the southern side of Campbell Street and Road, clearing for access to the temporary noise barrier work areas and leveling of the areas where temporary noise walls will be built. This is expected to occur in early 2017. The temporary noise walls will require foundation piles on average 3m deep.

LRNB07 will be installed prior to out of hour use of the minor ancillary facility to be established at Camdenville Basin. This is expected to occur in quarter 2 of 2017.

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Table 6 - Noise Barrier Installation

Noise Barrier	Location	Commence Installation	Comments
LRNB01	Campbell Street - southern side of road between Southern Cross Hotel and Brown Street	Following preceding activities, defined in Section 2.6 above.	The barrier will be installed so as to maintain public access to Unwins Bridge Road and Brown Street.
LRNB02	Campbell Street – southern side of road between Brown Street and Florence Street		The barrier will be installed so as to maintain public access to Brown Street and Florence Street.
LRNB03	Campbell Street – southern side of road between Florence Street and St Peters Street		The barrier will be installed so as to maintain public access to Florence Street and St Peters Street.
LRNB04	Campbell Street – southern side of road between St Peters Street and Church Street		The barrier will be installed so as to maintain public access to St Peters Street and Church Street.
LRNB05	Campbell Street – southern side of road between Church Street and Princes Highway		The barrier will be installed so as to maintain public access to Church Street and Princes Highway.
LRNB06	Campbell Street – northern side of road between May Street and Hutchison Street		The barrier will be installed so as to maintain public access between May Street and Hutchison Street.
LRNB07	Camdenville Basin minor ancillary facility access road	Prior to out of hours use of minor ancillary facility	The barrier will be installed along 30m of existing access road connecting May Street to Camdenville Basin minor ancillary facility.

2.7. Other construction phase noise mitigation measures

The temporary noise barriers identified in this report are part of a suite of noise attenuation and mitigation measures for the Campbell Street and Campbell Road local road upgrade works. Other exceedances of the NML during standard construction hours will be mitigated and managed through the measures outlined in Sections 4.5.2 and 4.5.3 of Attachment A. Note that properties that experience high noise impacts will get respite from these activities as described in Section 4.5.2 of Attachment A.

As described in Section 2.5 above, 28 properties have been offered acoustic inspections as they are potentially eligible for 'at property acoustic treatment'. These properties are listed in Table E.1 of Attachment A. Table E.1 in Attachment A lists the properties identified as eligible for consideration of operational at-property treatment in the EIS and, of these properties, those that are also affected by construction noise from the Local Roads works. Where it is reasonable and feasible to do so, at-property treatments will be installed prior to construction commencement, or as soon as practicable during construction.

At property treatment is not a typical mitigation measure for construction noise carried out during standard construction hours. In accordance with Condition of Approval D19, operational noise mitigation measures (such as noise barriers and at-property architectural treatments) must be implemented in areas where receivers would be subject to construction noise impacts. This is outlined in Section 4.5.1 of Attachment A.

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Properties that have been identified as eligible for treatment as a result of construction noise are those that are affected by the OOHW associated with the longer-term tunnel support works. These properties are also identified in Table E.1.

Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

3. Stakeholder Consultation

3.1. Consultation

CPBDS-JV has adopted a well-coordinated, targeted and personalised approach to consult with highly affected properties and other key stakeholders regarding the temporary noise barriers following the principles and processes outlined in the Community Communication Strategy. Consultation has been carried out with landowners adjacent to LRNB01 – 07.

3.2. Affected stakeholders

During temporary noise barrier design development and optioning phases, properties adjacent to proposed noise barrier locations were identified via desktop analysis and verified by site assessments. Identified properties were consulted as above and where possible feedback was included in designs of the temporary noise barriers. Further information will be provided just prior to the commencement of temporary noise barrier construction.

3.2.1. Campbell Street and Campbell Road

Properties adjacent to proposed temporary noise barriers were consulted, a report detailing the consultation is attached as Attachment E.

Consultation was undertaken with twelve properties located directly adjacent to proposed temporary noise barriers on Campbell Street (LRNB01-06). Figure 6 show properties consulted.

On 28 October 2016 an interface meeting was held with Inner West Council (4 representatives), SMC (1 representative), Roads and Maritime Services (1 representative) and CDS JV (6 representatives). The information used for consultation on the temporary noise barriers (shown in Attachment F) was presented. The document outlines materials, heights, locations and proposed timing of installation. No comments were provided by Inner West Council on the matter.

On 24 of February 2017 an interface meeting was held with Inner West Council (2 representatives), SMC (1 representative), Roads and Maritime Services (1 representative), DP&E (3 representatives from Compliance Team) and CDS JV (4 representatives). Temporary noise barriers were discussed including program for installation, consultation with adjacent property owners, design, colour and layout. No comments were received from Inner West Council or any other stakeholders on the matter.

3.2.2. Camdenville Basin

On 24 March 2017 an interface meeting was held with Inner West Council (2 representatives), SMC (1 representative), Roads and Maritime Services (1 representative), DP&E (1 representative from Compliance Team) and CDS JV (4 representatives). The temporary noise barrier for Camdenville Basin was discussed including program for installation, consultation with adjacent property owners, design, colour and layout. No comments received from Inner West Council or any other stakeholders in attendance. On 4 April 2017 CDS JV consulted with the receiver adjacent to the proposed temporary noise barrier at Camdenville Basin (119 May Street, St Peters). The design, colour and layout (black soundproof fencing) was discussed with the stakeholder. They had no issues with the temporary noise barrier or site establishment works. The record of consultation is provided in Attachment H.

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road

Figure 6 - Properties Consulted



3.3. Communication and Consultation Activities

CPBDS-JV has consulted with residential properties adjacent and near to the proposed temporary noise barriers using specific temporary noise barrier related communications and engagement activities, including one-on-one briefings, council interface meetings and notifications.

One-on-one briefings

Briefings were conducted with property adjacent to the proposed barriers. The purpose of these briefings was to consult with impacted stakeholders prior to the adoption of a final design.

These briefings were undertaken by a door-knock and performed by the Community Relations Lead and Project Manager or Environment Manager for the area.

The following tools were used during these briefings to facilitate stakeholder's understanding of the proposed barriers options:

- Maps and plans to illustrate proposed barrier locations and project design
- Colour samples
- Local Roads fact sheet, community update and other relevant project communications

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road

Where a resident was not at home a calling card stating the intent of the consultation and CDS-JV contact details were left.

Council Interface Meeting

Regular interface meetings are being held with Inner West Council on a recurring basis. This forum has been organised to enable Council to be kept informed and engaged on a one-on-one basis covering a range of project matters, including proposed temporary noise barrier options. Temporary noise barrier options were presented at the council interface meetings specified under section 3.2.

Notification

Notification will be sent to directly adjacent commercial properties to inform them of works to install the temporary noise barriers. The notification will detail the location of the barrier works, timing and impacts. Ongoing notifications and project updates will be provided as works progress.

3.4. Decision Making Process

All stakeholders consulted for the temporary noise barriers were residential. Key issues are evident in the feedback received as detailed summarised below:

- The final operational design of Campbell Street and Campbell Road and construction related impacts of the local roads upgrades was of greater concern than the noise barriers.
- The potential for the barriers to block natural light reaching premises was the main issue identified for residents adjacent LRNB01-06 due to the screens sitting on the northern side of their properties. Requests were made to alter the design from a 3m high plywood wall. This was not identified as an issue for the property adjacent LRNB07.
- Continued free access to properties was identified as an issue. Residents were concerned about access to their properties as a result of the barriers being in place.
- Windspray was identified as the preferred colour by one resident, and Pale Eucalypt by two residents. Most showing no preference between the options available.

The above key trends have been considered for in the final design. Noise barriers will be constructed to 3m height to ensure the required noise attenuation is achieved. LRNB01 – 06 will be constructed with approximately 600mm of clear acrylic will sit on top of 2.4m plywood hoarding so as to reduce the potential for shading and provide privacy for residents. Windspray and Pale Eucalypt colours will be incorporated. LRNB07 will be constructed of black Soundproof Fence fixed to scaffold.

3.5. Monitoring and reporting

All stakeholder interactions regarding the implementation of the temporary noise barrier strategy with adjacent properties has been recorded in the project's community contact database and included in monthly and quarterly progress reports.

Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

4. Ongoing Monitoring

The strategy sets the overall approach to how construction and traffic noise will be mitigated during construction. The effectiveness of the strategy will rely on multiple iterations of implementation of the strategy principles as design and construction methodologies are refined and implemented. Ongoing noise monitoring will be performed in accordance with the Construction Noise and Vibration Management Plan.



Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

5. Conclusion

The CDS JV has prepared this TNBS-CLR in accordance with the Conditions of Approval (CoA), in particular condition D20.

The strategy sets the overall approach to how construction and traffic noise will be mitigated during construction. The strategy focuses on modeling impacts based on proposed construction methodologies, determining the noise impacts of such methodologies, identifying sensitive receivers, consultation with sensitive receivers to help develop and finalize temporary noise barrier options and ongoing monitoring of the overall effectiveness of the strategy. This strategy demonstrates that optimum barrier solutions have been developed utilizing sound analytical modeling which demonstrates the benefit of proposed solutions and at the same time is a desired solution for highly effected residents as the consultation process demonstrates.

A key component of the implementation of the overall strategy is found in Attachment A.



Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

Attachment A: Construction Noise and Vibration: Temporary Noise Barrier Acoustic Report (Local Roads)

WESTCONNEX NEW M5

Construction Noise and Vibration: Temporary Noise Barrier Acoustic Report (Local Roads)

7 April 2017

CPB Dragados Samsung Joint Venture

TH014-06 01F32 WXC_NM5 TNBAR_LR (r5)

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1 Introduction

1.1 Relevant requirements and purpose of this report

This Construction Noise and Vibration Temporary Noise Barrier Acoustic Report (TNBAR) has been prepared to address the Conditions of Approval for the WestConnex New M5 Project (New M5 or Project), more specifically Condition D20.

D20 The Proponent must develop and implement a Temporary Noise Barrier Strategy which includes:

(a) identification and confirmation of all temporary noise barriers including -

(i) the provision of a temporary noise barrier on the northern side of the Kingsgrove North construction compound to provide noise mitigation to highly affected residents at a level greater than that identified in the documents referred to in condition A2(b),

(ii) consideration of the installation of temporary noise barriers on the southern and northern side of the M5 East Motorway during the relocation of the existing permanent noise barriers (or detail on why these noise barriers are not considered feasible and reasonable),

(iii) consideration of the installation of temporary noise barriers along Campbell Road, Campbell Street and Euston Road (or detail on why these noise barriers are not considered feasible and reasonable),

(iv) temporary noise barriers around construction compounds;

(b) the consultation and decision-making process for all temporary noise barriers; and

(c) an acoustic report detailing the final barrier heights, material analysis and predicted benefits.

The temporary barrier options must be developed in consultation with the landowners adjacent to the barrier locations prior to the adoption of a final design.

The Temporary Noise Barrier Strategy must be approved by the Secretary prior to site establishment works or construction works at the Kingsgrove North construction compound, the permanent noise barriers on the northern and southern side of the M5 East Motorway are removed, and/or road widening works are undertaken along Campbell Road, Campbell Street or Euston Road. This identifies the temporary noise walls to be installed at the Kingsgrove Road site, at the Western end of the M5N.

This TNBAR forms part of the Temporary Noise Barrier Strategy and has been prepared to address the temporary noise barriers associated with the Local Roads upgrade worksites at the eastern end of the

Project. Separate acoustic reports have been prepared to address the temporary noise barriers at other compounds associated with the Project, including:

- Temporary Noise Barrier Acoustic Report - Kingsgrove compounds C1, C2 and C3
- Temporary Noise Barrier Acoustic Report - Bexley compounds C4, C5 and C6
- Temporary Noise Barrier Acoustic Report - Arncliffe compound C7
- Temporary Noise Barrier Acoustic Report - St Peters Interchange compounds C8, C9, C10 and C11.

This report will be submitted to the Department of Environment and Planning (DEP) as part of the Temporary Noise Barrier Strategy required by Condition D20.

1.2 Structure of this report

This report is structured as follows:

- **Section 2** Description of work area and noise sensitive receivers surrounding the site;
- **Section 3** Noise objectives; and
- **Section 4** Construction Noise Assessment.

1.3 Quality assurance

The work documented in this report was carried out in accordance with the Renzo Tonin & Associates Quality Assurance System, which is based on Australian Standard / NZS ISO 9001. Appendix A contains a glossary of acoustic terms used in this report.

2 Work area and sensitive receivers

2.1 Description of work area

This TNBAR provides information on the temporary noise barriers associated with the eastern end of the M5N Project, more specifically in relation to the road upgrade construction works located in the following zones:

- Zone A Campbell Street, between Princes Highway and Unwins Bridge Road
- Zone B Princes Highway-Campbell Street tie-in
- Zone C Campbell Street/ Road, between Princes Highway and Alexandria Canal, including compound C12
- Zone D Alexandria Canal bridgeworks
- Zone E Bourke Street between Alexandria Canal and Church Avenue
- Zone F Euston Road, between Campbell Road and Sydney Park Road
- Zone G Sydney Park Road-Huntley Street-Euston Road tie-in
- Zone H Bedwin Road-May Street-Unwins Bridge Road-Campbell Street tie-in
- Zone I Gardeners Road tie-in
- Zone J Campbell Road-Euston Road tie-in.

Figure B1 in Appendix B shows the construction work area addressed in this report.

2.2 Sensitive receivers

In order to assess and manage construction noise impact, the residential areas surrounding the Project have been divided into Noise Catchment Areas (NCAs) based on each area's similar acoustic environment prior to the commencement of construction works. The NCAs have been based on those established in the EIS, with some modifications to allow for site specific characteristics identified during the detailed assessment and delivery phase. The NCAs are identified in more detail in the Construction Noise and Vibration Management Plan (CNVMP) prepared for the Project.

An indicative list of the nearest and potentially worst affected noise and vibration sensitive receivers and their respective NCAs are summarised in Table 2.1 below.

Table 2.1 Nearest Noise and Vibration Sensitive Receivers

NCA	Receiver Type	Nearest construction work area	Distance from receiver to works
NCA01	Residential	Local road upgrade Zone G	<5m (adjacent)
NCA02	Residential	Local road upgrade Zone H	40m

NCA	Receiver Type	Nearest construction work area	Distance from receiver to works
NCA03	Residential	Local road upgrade Zone A and Zone H	<5m (adjacent)
NCA04	Residential	Local road upgrade Zone B, Zone C, Zone F and Zone G	<5m (adjacent) 200m
NCA05	Industrial	Local road upgrade Zone F	5-10m (alongside)
NCA06A	Residential	Local road upgrade Zone A and Zone H	<5m (adjacent)
NCA06B	Residential	Local road upgrade Zone A and Zone H	60m
NCA07	Industrial	Local road upgrade Zone A, Zone B and Zone C	15m
NCA08	Residential	Local road upgrade Zone C	<5m (adjacent)
NCA11	Industrial Residential	Local road upgrade Zone D, Zone E and Zone I	<10m (adjacent)

All relevant residential sensitive receivers near the worksites are identified on aerial photographs located in APPENDIX B.

3 Noise Objectives

3.1 Construction Noise Management Levels

Construction noise management levels have been determined using the NSW Interim Construction Noise Guideline (ICNG), in accordance with Condition D16(a).

Figure B1 and Table B1 in APPENDIX B identify the adopted construction noise management levels (NMLs) for the nearest noise sensitive receivers to the worksite. The NMLs for residential receivers are based on long-term noise monitoring conducted by AECOM on behalf of SMC to quantify ambient noise levels for the Environmental Impact Statement (EIS) as noted in the CNVMP. The NMLs are derived from the lowest measured RBLs within each NCA and are generally considered to be conservative.

The NMLs for 'other' sensitive receivers are from the ICNG, as reported in Section 3.1.1 of the CNVMP.

Residential receivers are considered 'noise affected' where construction noise levels are greater than the NMLs identified in APPENDIX B. The noise affected level represents the point above which there may be some community reaction to noise. Where predicted and/or measured construction noise levels exceed NMLs, all feasible and reasonable work practices will be applied to meet the NMLs.

During standard construction hours a highly affected noise objective of $L_{Aeq(15min)}$ 75 dB(A) applies at all receivers.

Any construction related activities that could exceed the NMLs shall be identified and managed in accordance with the CNVMP.

4 Construction Noise Assessment

4.1 Noise prediction methodology

Modelling and assessment of airborne noise impacts from activities associated with the construction works were determined by modelling the noise sources, receiver locations, topographical features, and possible noise mitigation measures using a Cadna-A computer noise model developed for this Project. The model calculates the contribution of each noise source at identified sensitive receiver locations and allows for the prediction of the total noise from a site for the various stages of the construction works.

The noise prediction models consider:

- Location of noise sources and sensitive receiver locations;
- Height of sources and receivers referenced to one metre digital ground contours for the site area and surrounding area;
- Sound Power Levels (L_w) of plant and equipment likely to be used during the various construction activities are included in Table C1 in Appendix C - Construction Timetable/ Activities/ Equipment. Table C1 also identifies the plant and equipment that will be operating during standard construction hours and outside of standard construction hours.
- Separation distances between sources and receivers;
- Ground type between sources and receivers; and
- Attenuation from barriers (natural and purpose built).

Key details regarding the construction site layout, the likely plant and equipment (including truck movements), and hours of operation were informed by the Design and Construction Teams. This information is presented in APPENDIX C and formed the basis for all modelling assumptions used in this assessment.

4.2 Preliminary detailed design outcomes

During the development of the site design, Renzo Tonin & Associates are playing a key role in assisting CDS JV to determine the physical noise mitigation measures required to reduce noise impact from the operation of the site. The following sections describe briefly the noise design methodology and outcomes, including height and location of noise walls required around the site. To ensure the timely and efficient provision of inputs to the design process, these mitigation measures were documented in the Noise Design Report.

A noise management schedule has been prepared for the site identifying the noise mitigation strategies that are to be incorporated into the site design to minimise noise impact where it may occur. The schedule is presented in Table C1 in APPENDIX C.

4.3 Noise barriers design

Table C3 in APPENDIX C sets out the noise barrier design schedule in relation to temporary noise barriers for the Local Roads construction phase of the Project. Figure B1 in APPENDIX B identifies noise wall/ hoarding locations around the site, including:

- 3m high barriers along southern side of Campbell Road (NB01 in Figure B1) on land acquired for the Project. The noise barriers are designed to provide noise mitigation from Compounds C9, C10 and C11, the SPI Civil works, and SPI tunnel support works;
- 3m high barriers along southern side of Campbell Street (LRNB01, 02, 03, 04 and 05 in Figure B1). Fixed, temporary noise barriers are feasible in this location as land has been acquired to enable the local road upgrade works. Barriers can be constructed on Project land where driveway access to properties is not required. The noise barriers are designed to provide noise mitigation from the local road works to sensitive receivers south of Campbell Street;
- 3m high barrier along a small section of the northern side of Campbell Street near May Street (LRNB06 in Figure B1). As above, fixed, temporary noise barriers are feasible in this location as land has been acquired to enable the local road upgrade works. The barrier can be constructed on Project land as driveway access to properties is not required. The noise barrier is designed to provide noise mitigation from the local road works to sensitive receivers on May Street north of Campbell Street;
- 3m high barrier along the eastern site boundary of the Camdenville Basin ancillary facility access driveway with 119 May Street, St Peters (LRNB07 in Figure B1). A barrier in this location is feasible as it can be constructed on Project land as driveway access to properties is not required. The noise barrier is designed to provide noise mitigation from vehicles entering and exiting Camdenville Basin ancillary facility; and
- relocatable noise screening on the worksite perimeter adjacent to sensitive receivers (not identified on Figure B1), including (but not limited to) the northern side of Campbell Street and Campbell Street, both sides of Euston Road, Gardeners Road and O'Riordan Street. Fixed, temporary noise barriers are not feasible in these areas as the works are within the existing road corridor. There is no opportunity to install permanent footings for the noise barriers. In addition, most of these boundaries require driveway access to private residences.

An analysis of the noise barrier requirements for Compound C12 in Zone C found there are no nearby noise-sensitive receivers to the compound. The nearest receivers within 200m of the compound are mostly industrial or warehousing facilities. The nearest residential receivers are in Campbell Road, approx. 220m from the compound. The C12 compound and surrounding receivers are identified on Figure B2 in APPENDIX B.

Noise modelling with and without noise barriers around Compound C12 found that noise barriers had no noticeable noise benefit and were therefore not a reasonable noise mitigation option at this location.

Fixed temporary noise barriers in the local roads setting have been optimised in consideration of the need to maintain pedestrian and vehicular access for side streets. The access requirements mean that a continuous noise barrier cannot be installed and noise barriers of any grading (i.e. height and/or material construction) will not be capable in reducing noise to below NMLs. It is expected that the barriers may provide 5 dB(A) noise reduction where they break line of sight with receivers. As the nearby receivers are primarily single-storey, a 3-m high wall will break the line of sight to the ground floor. An increase of height will not provide significant reduction in noise levels as the 3-m high barrier is already level with the eaves.

Relocatable temporary noise barriers are expected to provide up to 5-10 dB(A) noise reduction, depending on the extent to which they break line of site to receivers. As these barriers are often located very close to the noise sources, noise reduction is maximised at the works area boundary. In addition, the relocatable barriers have an absorptive side that faces towards the construction site. This provides some noise mitigation benefit, even where line of site to the receiver cannot be broken.

A barrier that provides 5 dB noise reduction should be constructed out of a material that provides at least 10 dB more transmission loss through the barrier to ensure that the noise passing through the barrier does not add to the noise diffracting over the top (or around) the barrier. The traditional plywood hoardings, or combinations of plywood hoarding and clear acrylic panelling (APPENDIX C Table C4) are over and above the minimum R_w ratings of 15-20 dB required to achieve the transmission loss requirement. Materials with higher R_w ratings will not further reduce the noise levels as the limiting factor is the noise diffracting over the top and around the sides of the noise barriers.

4.4 Predicted noise levels

The stages/operations considered in the noise model are summarised in the Table 4.1. The Zones (or areas of work) referred to in Table 4.1 are described in Section 2.1 and shown on Figure B1. For more detail on specific works being undertaken for each modelling scenario see the activity and timing Table C2 in APPENDIX C.

Table 4.1 shows that 11 'variants' or modelling scenarios have been modelled to predict the likely cumulative noise impact from the local road works over the duration of the works, from 2016 to 2018. Noise modelling assumed that the temporary noise barriers described in Section 4.3 above are in place.

For each noise modelling variant, the following additional scenarios have been run:

1. Temporary noise barriers in place, with no sawing or rock hammering activity.
2. Temporary noise barriers in place, with sawing or rock hammering (i.e. high noise) activity

Section 4.4.1 below summarise the impacts for each construction stage in each NCA in terms of compliance with the NMLs during standard construction hours. The colours in the table indicate whether receivers in the NCA comply with the NML and, where exceedance of the NML occurs, the perceived impact of the exceedance.

It is noted that assessment of OOHW associated with the Local Roads works has not been included in this report. Local Roads construction activities are planned to be undertaken during standard day time construction hours.

Some OOHW along the Campbell Road corridor are required during investigation and site establishment works, which precede construction works. There may also be some OOHW associated with the tie-ins to the existing road network, where this requires lane closure under a Road Occupancy Licence. These works have been assessed in separate OOHW Construction Noise and Vibration Impacts Statements in accordance with the CNVMP and the OOHW protocol. Temporary relocatable noise barriers will be recommended where they can provide noise mitigation benefit to sensitive receivers affected by the OOHW.

Table 4.1 Noise modelling assumptions - Local Road upgrade works

Construction Phase	Zone where work is carried out for each variant										
	2016	2017				2017				2018	
	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
UTILITIES	C, E, F, I	C, E, I	C	C							
SITE ESTABLISHMENT		E									
PRELIMINARY WORKS	C	A, C, E	A, C, D	D	D, E	E		A, C			
ENABLING WORKS - AUSGRID				F	F						
SERVICES RELOCATION		C, E, F	A, C, E, F, H	A, C, E, F, H	C, E, H	E, H	F	A, C, F	A, F		
CIVIL WORKS		H	H	H	H	H	H	H			
EARTHWORKS		B, G, J	C, E, G, J	A, C, E, G	A, C, E, F, G	C, E, F, G	E	C, E, G, H, J	C, E, F	A, F, H	
PAVEMENTS - FULL DEPTH			G, J	G	C, E, G	A, C, E, F, G	C, F, E, G	E, G	E	A, C, E, F	A, F
PAVEMENTS - MILL & Re-SHEET								B, J			B, J
FINISHING WORKS			B, G, J	G	G	A, G	C, E, F, G	B, E, G, J	E	C, E	A, B, F, G, J
TRAFFIC SWITCH							F				
PROPERTY WORKS						A, C	C, E, F, G	E	C, E	A, C, F	A, F, G
DEMOBILISATION										H	
ALBERT ST WORKS						C	C				
UNWIN BRIDGE & MAY STREET		H	H	H				H	H		H
BEDWIN INTERSECTION		H	H	H	H	H		H	H		
PEIERS & ABUTMENTS		D	D								
GIRDER INSTALLATION			D	D	D	D					
BRIDGE DECK & PARAPETS						D	D				
APPROACHES & AC							D				

4.4.1 Predicted noise levels for standard-hours local roads works

The impacts presented are as follows for **Standard Hours**:

- ◆ Complies with NML
- ◆ Exceeds NML by less than 10 dB(A) – noise affected
- ◆ Exceeds NML by more than 10 dB(A) – noise affected
- ◆ > 75 dB(A) – highly noise affected

Table 4.2 Summary of level of compliance with NML (standard hours)

NCA	V01		V02		V03		V04		V05		V06		V07		V08		V09		V10		V11	
	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²
NCA01	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA02	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA03	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA04	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NCA06A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA06B	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA07	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA08	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA10	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA11	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Notes: 1. WITHOUT Sawing and/or Hammering
 2. WITH Sawing and/or Hammering
 NCA05 does not contain any residential receivers
 Noise modelling assumes temporary noise barriers are in place

Predictions show that compliance will be achieved for receivers within NCA10 throughout the construction works. Furthermore, with temporary hoardings in place and no high noise activities (sawing/ rock hammering), compliance will also be achieved for NCA02 throughout the construction works. For receivers within NCA02 exceedances of 10 dB(A) above the NML are predicted to occur during sawing/rock hammering activity. The exception will be during V10 (Q1 2019), when construction activities are closer to NCA02 and higher noise impacts are anticipated.

Receivers within all NCAs except for NCA02 and NCA10 will be noise affected throughout the construction works. Receivers are typically highly noise affected during high noise activities (sawing/ rock hammering), requiring the use of respite periods to manage noise impacts during standard hours. Receivers in NCA03 and NCA07 that are closest to the works will be highly noise affected whenever construction activity is nearby. Note that the same receiver will not be highly noise affected for the duration of the works nor for the duration of each construction activity as equipment will shift/relocate as the works progress.

For most NCAs, Table 4.2 above does not show the acoustic benefits of implementing temporary noise barriers and the absence of sawing/rock hammering activity as the above table presents exceedances for the worst-case receiver within each NCA. The benefits of these noise management measures can be seen within APPENDIX D which presents the predicted noise level at each noise sensitive receiver in each NCA. A significant reduction in the number of exceedances and therefore the reduced requirement for additional mitigation measures can be seen by review of the predicted levels in Table D1 in APPENDIX D.

Measures for managing the noise impacts outlined in Section 4.5.

4.4.2 Receivers highly noise affected from road works along Euston Road

Construction noise from road works along Euston Road in isolation (i.e. without other local road works, such as Campbell Road works) have been predicted. The predictions found nearest residential receivers in the NCAs adjacent to the Euston Rd works (NCA01 and NCA04) may be highly noise affected by the Euston Road construction works. Receivers in NCAs further away from Euston Road, such as NCA02 and 03 would not be noise affected by the Euston Road works. The impacts are summarised in Table 4.3 below.

Table 4.3 Summary of level of compliance with NML (standard hours)

NCA	V01		V02		V03		V04		V05		V06		V07		V08		V09		V10		V11			
	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²	D ¹	D ²		
NCA01	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA02	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA03	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA04	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NCA06A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA06B	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA07	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA08	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA10	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
NCA11	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Notes: 1. WITHOUT Sawing and/or Hammering
 2. WITH Sawing and/or Hammering
 NCA05 does not contain any residential receivers
 Noise modelling assumes temporary noise barriers are in place

Table D2 in APPENDIX D highlights receivers along the Euston Road roadworks area where predicted noise levels indicate receivers will be 'highly noise affected (i.e. more than 75 dB(A)). For these properties, the tables show:

- Cumulative noise levels from all local road works;
- Partial levels from Euston Road Only works.

Predicted noise levels from all local road works are higher than noise levels from Euston Rd only works at the following properties:

- 34 Campbell Road, Alexandria (residential)
- 202-212 Euston Road, Alexandria (industrial)

4.4.3 Predicted noise levels for Compound C12 (24 hour operation)

Noise levels from the operation of the C12 compound at 34 Burrows Rd, St Peters have been predicted during typical operations, namely pick-up and delivery of materials. Plant that were included in the model include daymakers (evening and night), a franna crane and flatbed delivery trucks, as identified in Table C.1.

Noise levels were predicted with and without 2m noise screens/barriers around the compound. The level of compliance with the NML is summarised in TABLE X below. Note that predicted noise levels were found to comply with the NMLs at all receivers, with and without noise barriers. Noise barriers were therefore determined to be not required at Compound C12.

The impacts presented are as follows for **Standard Hours**:

- ◆ Complies with NML
- ◆ Exceeds NML by less than 10 dB(A) – noise affected
- ◆ Exceeds NML by more than 10 dB(A) – noise affected
- ◆ > 75 dB(A) – highly noise affected

The impacts presented are as follows for **OOHW Evening and Night**:

- ◆ Complies with NML
- ◆ < 5dB(A) above NML - construction noise noticeable
- ◆ 5 to 15dB(A) above NML - construction noise clearly audible
- ◆ > 15 to 25dB(A) above NML - construction noise moderately intrusive
- ◆ >25dB(A) above NML - construction noise highly intrusive

Table 4.4 Summary of level of compliance with NML (standard hours)

NCA	Without 2m barriers			With 2m barriers		
	Day	Evening	Night	Day	Evening	Night
NCA01	◆	◆	◆	◆	◆	◆
NCA02	◆	◆	◆	◆	◆	◆
NCA03	◆	◆	◆	◆	◆	◆
NCA04	◆	◆	◆	◆	◆	◆
NCA06A	◆	◆	◆	◆	◆	◆
NCA06B	◆	◆	◆	◆	◆	◆
NCA07	◆	◆	◆	◆	◆	◆
NCA08	◆	◆	◆	◆	◆	◆
NCA10	◆	◆	◆	◆	◆	◆
NCA11	◆	◆	◆	◆	◆	◆

Detailed predicted noise levels are presented in Table D3 in APPENDIX D.

4.5 Noise Mitigation and Management

4.5.1 At-property treatment

CoA D19 requires the CDS JV to implement, where feasible and reasonable, the operational noise mitigation measures (such as noise barriers or at-property architectural treatments) in areas where receivers would be subject to construction noise impacts as identified in:

- New M5 Environmental Impact Statement - Volumes 1A, 18, 1C, 2A, 28, 2C, 2D, 2E, 2F,2G and 2H prepared by AECOM Australia, dated November 2015; and
- New M5 Submissions and Preferred Infrastructure Report - Volumes 1A, 18 and 2 prepared by AECOM Australia, dated March 2016

Where this is not feasible and reasonable, CDS JV will submit to the Secretary for approval a report providing justification as to why along with details of the temporary measures that would be implemented to reduce construction noise impacts until such time that the operational noise mitigation measures are implemented. The report will be provided to the Secretary prior to the commencement of construction works which would affect the identified receivers.

Table E.1 in APPENDIX E summarises the properties identified in the above referenced documents and outlines the timeframe for at-property treatment.

It is noted that at-property treatment is not a typical mitigation measure for construction noise carried out during standard construction hours. The purpose of Condition D19 is to prioritise operational at-property treatment so that sensitive receivers get the noise benefit during the construction and operation of the Project, where this can be practicably achieved.

4.5.2 High noise impact activities

To limit the potential impact from high noise impact activities such as piling, jack hammering and rock hammering, the works will be carried out with respite periods as set out in condition of approval D16, such that:

- High noise impact activities (including jackhammering and rock breaking) are only carried out between:
 - 8 am and 6pm Monday to Friday; and
 - 8 am and 1 pm Saturday;
- High noise impact activities are carried out in continuous blocks of up to 3 hours. Respite from high noise impact activities will be provided between each block for at least 1 hour. No high noise impact activities will be carried out during this 1 hour respite period.

4.5.3 Other noise control measures

Other noise mitigation measures and noise monitoring requirements will be addressed in the following documents:

- Construction Noise and Vibration Impact Statement: Site Establishment (Project Wide) [ref: TH014-05 01F02 WCX_NM5]
- Construction Noise and Vibration Impact Statement: St Peters Interchange Local Roads [ref: TH014-06 01F27 WXC_NM5 CNVIS LR CV].

5 Conclusion

This Construction Noise and Vibration Temporary Noise Barrier Acoustic Report has been prepared to identify and confirm temporary noise barriers to mitigate construction noise associated with the road upgrade construction including:

- Fixed temporary noise barriers along the southern side of Campbell Street, between the Princes Highway and Unwins Bridge Road;
- Fixed temporary noise barriers along the northern side of Campbell Street, between May Street and Hutchison Street;
- Fixed temporary noise barriers along the northern side of Campbell Road, between between 36 Albert St and Harber Street;
- Fixed temporary noise barriers along the eastern site boundary of the Camdenville Basin ancillary facility access driveway with 119 May Street, St Peters;
- Relocatable temporary noise barriers Campbell Road, Alexandria Canal bridgeworks, Bourke Street, Euston Road, Sydney Park Road, Huntley Street, Bedwin Road, May Street, Unwins Bridge Road and Gardeners Road.

Impacts predicted from construction activity following the installation of temporary noise barriers have been quantified and reported in Section 4.

Noise management schedules for the site have been developed identifying the noise mitigation strategies that are to be incorporated into the site design to minimise noise impact where it may occur. The schedules are:

- Table C2 in APPENDIX C setting out the Construction Noise Management schedule
- Table C3 in APPENDIX C setting out the Noise Wall / Hoarding Design specifications
- Table C4 in APPENDIX C setting out the Noise Shed/ Enclosure Design specifications
- Figure B1 in APPENDIX B identifying noise walls and hoarding locations around the site.

References

1. Department of Environment and Climate Change 2009 NSW Interim Construction Noise Guideline (ICNG),
2. Environment Protection Authority 1999 NSW Environmental Criteria for Rd Traffic Noise
3. Department of Environment Conservation NSW 2006 Assessing Vibration; a technical guideline
4. British Standard BS 6472-2008, Evaluation of human exposure to vibration in buildings (1-80Hz)
5. British Standard BS 7385 Part 2-1993, Evaluation and measurement for vibration in buildings
6. German Standard DIN 4150-3 : 1999-02, Structural vibration - Effects of vibration on structures, February 1999
7. ASHRAE Applications Handbook (SI) 2003, Chapter 47 Sound and Vibration Control, pp47.39-47.40
8. Australian Standard 2834-1995 Computer Accommodation, Chapter 2.9 Vibration, p16
9. Australian Standard AS/NZS 2107:2000 *Acoustics - Recommended design sound levels and reverberation times for building interiors*
10. Roads and Maritime Services 2014 QA Specification G36 Environmental Protection Edition 4 / Revision 3
11. AECOM Australia Pty Ltd 2015 WestConnex The New M5 – Technical Working Paper: Noise and Vibration Report Revision 8 – 20-Nov-2015
12. Renzo Tonin & Associates WestConnex Stage 2 M5 East Operational Noise Management Report (ONMR), 8 July 2015 [ref: TH014-01 01BF01 ONMR (r5)]
13. Transport for NSW Construction Noise Strategy (ref: 7TP-ST-157/2.0) April 2012
14. Minister for Planning Infrastructure approval SSI 6788 dated 20 April 2016

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Absorption Coefficient α	The absorption coefficient of a material, usually measured for each octave or third-octave band and ranging between zero and one. For example, a value of 0.85 for an octave band means that 85% of the sound energy within that octave band is absorbed on coming into contact with the material. Conversely, a low value below about 0.1 means the material is acoustically reflective.
Adverse weather	Weather effects that enhance noise (particularly wind and temperature inversions) occurring at a site for a significant period of time. In the NSW INP this occurs when wind occurs for more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of nights in winter.
Active recreation	Active recreation area, characterised by sporting activities and activities which generate their own noise or focus for participants, making them less sensitive to external noise intrusion, e.g. school playground, golf course
Air-borne noise	Noise which is fundamentally transmitted by way of the air and can be attenuated by the use of barriers and walls placed physically between the noise source and receiver.
Alternate Solution	An Alternative Solution is a design that complies with the relevant Performance Requirements of the National Construction Code other than by using Deemed-to-Satisfy Provisions.
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Amenity	A desirable or useful feature or facility of a building or place.
AS	Australian Standard
Assessment period	The time period in which an assessment is made. e.g. Day 7am-6pm, Evening 6pm-10pm, Night 10pm-7am.
Assessment Point	A location at which a noise or vibration measurement is taken or estimated.
Attenuation	The reduction in the level of sound or vibration.
Audible Range	The limits of frequency which are audible or heard as sound. The normal hearing in young adults detects ranges from 20 Hz to 20 kHz, although some people can detect sound with frequencies outside these limits.
A-weighting	A filter applied to the sound recording made by a microphone to approximate the response of the human ear.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the LA90 noise level if measured as an overall level or an L90 noise level when measured in octave or third-octave bands.
Barrier (Noise)	A natural or constructed physical barrier which impedes the propagation of sound and includes fences, walls, earth mounds or berms and buildings.
Berm	Earth or overburden mound.
Buffer	An area of land between a source and a noise-sensitive receiver and may be an open space or a noise-tolerant land use.
Bund	A bund is an embankment or wall of brick, stone, concrete or other impervious material, which may form part or all of the perimeter of a compound.
BS	British Standard
CoRTN	United Kingdom Department of Environment entitled "Calculation of Road Traffic Noise (1988)"

Decibel [dB]	<p>The units of sound measurement. The following are examples of the decibel readings of every day sounds:</p> <p>0dB The faintest sound we can hear, defined as 20 micro Pascal</p> <p>30dB A quiet library or in a quiet location in the country</p> <p>45dB Typical office space. Ambience in the city at night</p> <p>60dB CBD mall at lunch time</p> <p>70dB The sound of a car passing on the street</p> <p>80dB Loud music played at home</p> <p>90dB The sound of a truck passing on the street</p> <p>100dB The sound of a rock band</p> <p>115dB Limit of sound permitted in industry</p> <p>120dB Deafening</p>
dB(A)	<p>A-weighted decibel. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter is denoted as dB(A). Practically all noise is measured using the A filter.</p>
dB(C)	<p>C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies. The dB(C) level is not widely used but has some applications.</p>
Diffraction	<p>The distortion of sound waves caused when passing tangentially around solid objects.</p>
DIN	<p>German Standard</p>
DnT,w	<p>Weighted Standardised Field Level Difference</p> <p>A measure of sound insulation performance of a building element. It is characterised by the difference in noise level on each side of a wall or floor. It is measured in-situ.</p> <p>It is a field measurement that relates to the Rw laboratory measured value but is not equal to it because an in-situ space is not of the same quality as a laboratory space.</p> <p>The value is indicative of the level of speech privacy between spaces. The higher its value the better the insulation performance.</p>
ECRTN	<p>Environmental Criteria for Road Traffic Noise, NSW, 1999</p>
EPA	<p>Environment Protection Authority</p>
Field Test	<p>A test of the sound insulation performance in-situ. See also 'Laboratory Test'</p> <p>The sound insulation performance between building spaces can be measured by conducting a field test, for example, early during the construction stage or on completion.</p> <p>A field test is conducted in a non-ideal acoustic environment. It is generally not possible to measure the performance of an individual building element accurately as the results can be affected by numerous field conditions.</p>
Fluctuating Noise	<p>Noise that varies continuously to an appreciable extent over the period of observation.</p>
Free-field	<p>An environment in which there are no acoustic reflective surfaces. Free field noise measurements are carried out outdoors at least 3.5m from any acoustic reflecting structures other than the ground.</p>
Frequency	<p>Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.</p>
Ground-borne noise	<p>Vibration propagated through the ground and then radiated as noise by vibrating building elements such as wall and floor surfaces. This noise is more noticeable in rooms that are well insulated from other airborne noise. An example would be vibration transmitted from an underground rail line radiating as sound in a bedroom of a building located above.</p>

Habitable Area	Includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom. Excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.
Heavy Vehicle	A truck, transporter or other vehicle with a gross weight above a specified level (for example: over 8 tonnes).
Impact Noise	The noise in a room, caused by impact or collision of an object onto the walls or the floor. Typical sources of impact noise are footsteps on the floor above a tenancy and the slamming of doors on cupboards mounted on the common wall between tenancies.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
INP	NSW Industrial Noise Policy, EPA 1999
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
Intrusive noise	Refers to noise that intrudes above the background level by more than 5 dB(A).
ISEPP	State Environmental Planning Policy (Infrastructure), NSW, 2007
ISEPP Guideline	Development Near Rail Corridors and Busy Roads - Interim Guideline, NSW Department of Planning, December 2008
L1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L10	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L10(1hr)	The L10 level measured over a 1 hour period.
L10(18hr)	The arithmetic average of the L10(1hr) levels for the 18 hour period between 6am and 12 midnight on a normal working day.
L90	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
LAeq or Leq	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time, which would produce the same energy as a fluctuating sound level. When A-weighted, this is written as the LAeq.
LAeq(1hr)	The LAeq noise level for a one-hour period. In the context of the NSW EPA's Road Noise Policy it represents the highest tenth percentile hourly A-weighted Leq during the period 7am to 10pm, or 10pm to 7am (whichever is relevant).
LAeq(8hr)	The LAeq noise level for the period 10pm to 6am.
LAeq(9hr)	The LAeq noise level for the period 10pm to 7am.
LAeq(15hr)	The LAeq noise level for the period 7am to 10pm.
LAeq (24hr)	The LAeq noise level during a 24 hour period, usually from midnight to midnight.
Lmax	The maximum sound pressure level measured over a given period. When A-weighted, this is usually written as the L _{Amax} .
Lmin	The minimum sound pressure level measured over a given period. When A-weighted, this is usually written as the L _{Amin} .
Ln,w	Weighted Normalised Impact Sound Pressure Level A measure of the sound level transmitted from impacts on a floor to a tenancy below. It is measured in very controlled conditions in a laboratory and is characterised by how much sound reaches the receiving room from a standard tapping machine. A lower value indicates a better performing floor.

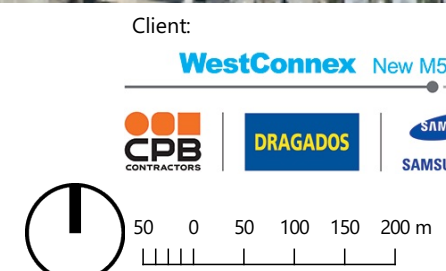
LnT,w	<p>Weighted Standardised Field Impact Sound Pressure Level</p> <p>As for Ln,w but measured in-situ and therefore subject to the inherent accuracies involved in such a measurement.</p> <p>The equivalent measurement in a laboratory is the Ln,w.</p> <p>A lower value indicates a better performing floor.</p>
Laboratory Test	<p>The performance of a building element when measured in a laboratory. The sound insulation performance of a building element installed in a building however can differ from its laboratory performance for many reasons including the quality of workmanship, the size and shape of the space in which the measurement is conducted, flanking paths and the specific characteristics of the material used which may vary from batch to batch.</p>
Loudness	<p>A rise of 10 dB in sound level corresponds approximately to a doubling of subjective loudness. That is, a sound of 85 dB is twice as loud as a sound of 75 dB which is twice as loud as a sound of 65 dB and so on. That is, the sound of 85 dB is four times or 400% the loudness of a sound of 65 dB.</p>
Microphone	<p>An electro-acoustic transducer which receives an acoustic signal and delivers a corresponding electric signal.</p>
NCA	<p>Noise Catchment Area. An area of study within which the noise environment is substantially constant.</p>
Noise	<p>Unwanted sound</p>
NRC	<p>Noise Reduction Coefficient.</p> <p>A measure of the ability of a material to absorb sound. The NRC is generally a number between 0 and 1 but in some circumstances can be slightly greater than 1 because of absorption at the edges of the material. A material with an NRC rating of 1 absorbs 100% of incoming sound, that is, no sound is reflected back from the material.</p> <p>The NRS is the average of the absorption coefficient measured in the octave bands 250Hz, 500Hz, 1kHz & 2kHz which correspond to the predominant frequencies associated with the human voice.</p>
Passive recreation	<p>Area specifically reserved for passive recreation, characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion e.g. reading, meditation</p>
Reflection	<p>Sound wave reflected from a solid object obscuring its path.</p>
Reverberation Time	<p>The time (in seconds) it takes for a noise signal within a confined space to decay by 60dB. The longer the reverberation time (usually denoted as RT60), the more echoic a room. Longer reverberation times generally result in higher noise levels within spaces.</p>
RMS	<p>Root Mean Square value representing the average value of a signal.</p>
Rw	<p>Weighted Sound Reduction Index</p> <p>A measure of the sound insulation performance of a building element. It is measured in very controlled conditions in a laboratory.</p> <p>The term supersedes the value STC which was used in older versions of the Building Code of Australia. Rw is measured and calculated using the procedure in ISO 717-1. The related field measurement is the DnT,w.</p> <p>The higher the value the better the acoustic performance of the building element.</p>
R'w	<p>Weighted Apparent Sound Reduction Index.</p> <p>As for Rw but measured in-situ and therefore subject to the inherent accuracies involved in such a measurement.</p> <p>The higher the value the better the acoustic performance of the building element.</p>
RNP	<p>Road Noise Policy, NSW, March 2011</p>
SEL	<p>Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.</p>
Sound	<p>A fluctuation of air pressure which is propagated as a wave through air.</p>

Sound absorption	The ability of a material to absorb sound energy by conversion to thermal energy.
Sound Insulation	Sound insulation refers to the ability of a construction or building element to limit noise transmission through the building element. The sound insulation of a material can be described by the R_w and the sound insulation between two rooms can be described by the $D_{nT,w}$.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power of 1 pico watt.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone referenced to 20 micro Pascal.
Spoil	Soil or materials arising from excavation activities.
Standardised	A method of adjusting the measured noise indices in-situ so that they are independent of the measuring space. The noise level in a room is affected by reverberation in the room. For example, the $L'_{n,w}$ impact sound pressure level measured in a room is dependent upon the amount of absorptive material in the receiving room. The value is adjusted to what would be measured if the reverberation time in the receiving room is set at 0.5 seconds. This enables the same value to be reported independent of whether the room contains carpet and furnishings and the like. See also 'Normalised'.
STC	Sound Transmission Class A measure of the sound insulation performance of a building element. It is measured in controlled conditions in a laboratory. The term has been superseded by R_w .
Structure-borne Noise	Audible noise generated by vibration induced in the ground and/or a structure. Vibration can be generated by impact or by solid contact with a vibrating machine. Structure-borne noise cannot be attenuated by barriers or walls but requires the isolation of the vibration source itself. This can be achieved using a resilient element placed between the vibration source and its support such as rubber, neoprene or springs or by physical separation (using an air gap for example). Examples of structure-borne noise include the noise of trains in underground tunnels heard to a listener above the ground, the sound of footsteps on the floor above a listener and the sound of a lift car passing in a shaft. See also 'Impact Noise'.
Tonal Noise	Sound containing a prominent frequency and characterised by a definite pitch.
Transmission Loss	The sound level difference between one room or area and another, usually of sound transmitted through an intervening partition or wall. Also the vibration level difference between one point and another. For example, if the sound level on one side of a wall is 100dB and 65dB on the other side, it is said that the transmission loss of the wall is 35dB. If the transmission loss is normalised or standardised, it then becomes the R_w or $R'w$ or $D_{nT,w}$.

APPENDIX B **Nearest Sensitive Receivers and Noise Management Levels**



- Building Type**
- Compound site
 - NCAs
 - Road works
 - Road tie-in works
 - St Peter's Local Road Works - Temporary 3m Noise Barriers
 - St Peter's Civil Works - Temporary 3m Noise Barrier



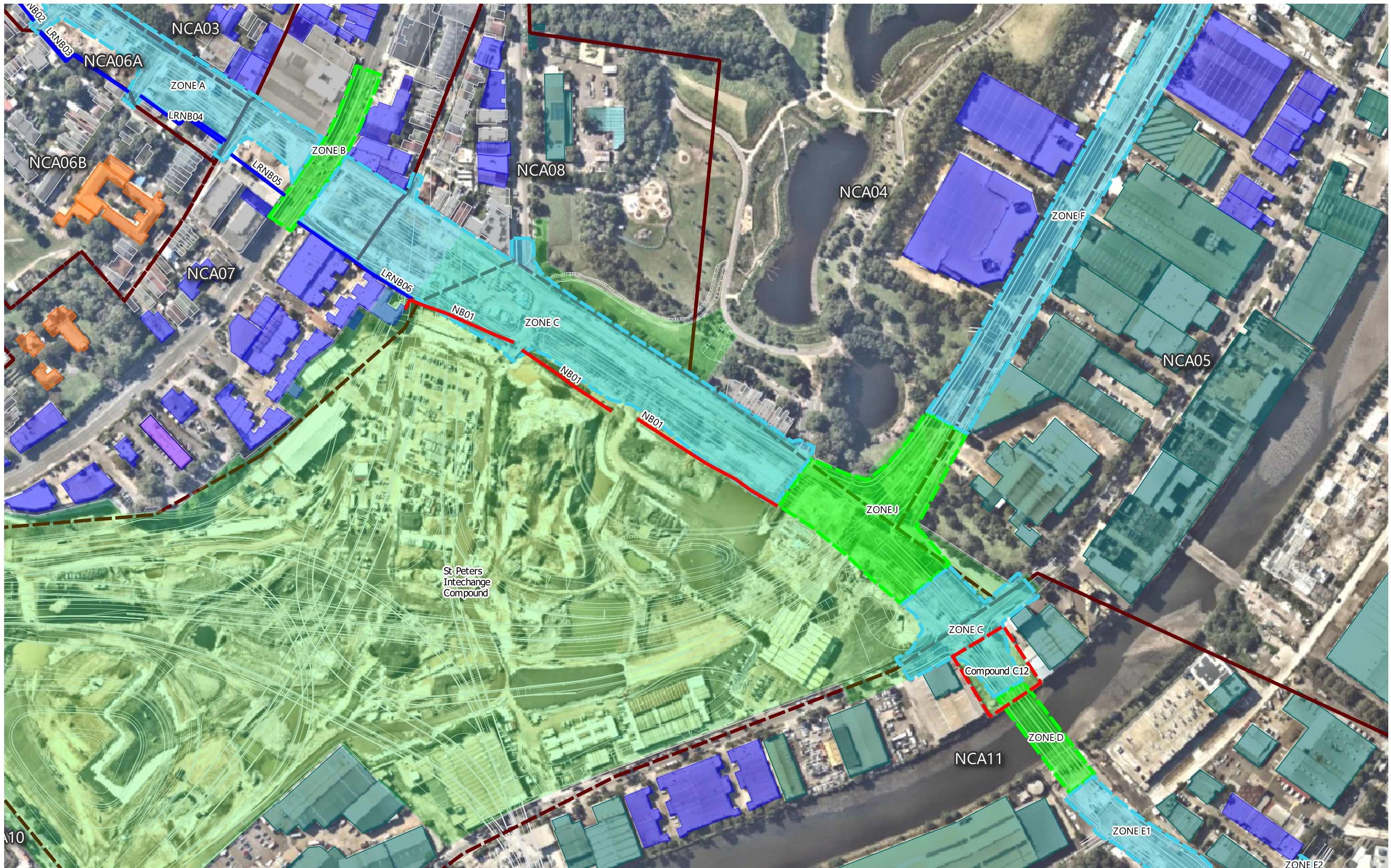
Client: **WestConnex** New M5

Project: **WestConnex Stage 2 M5**

Description: **St Peter Intersection Local road works**

Created by: THW
 Figure No: TH014-05 6 0 1 025 (r3)
 Date: 15.03.2017
 Scale: 1:7,500 @ A3

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Legend

- Compound site
- NCA
- Road works
- Road tie-in works

Building Type

- Education
- Residential
- Industrial
- Hotel
- Commercial

St Peter's Local Road Works - Temporary 3m Noise Barriers

St Peter's Civil Works - Temporary 3m Noise Barrier

Client: **WestConnex New M5**

Project: **WestConnex Stage 2 M5**

CPB CONTRACTORS | DRAGADOS | SAMSUNG SAMSUNG C&T

25 0 25 50 75 100 m

Description: **SPI Local Road Works Compound C12**

Noise Levels are approximate due to interpolation of contours and should be used for reference only. For information only and not for construction. This information is protected by copyright.

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Date: 07.04.2017
Scale: 1:3,000 @ A3

Table B1: Noise Sensitive Receivers and Construction Noise Management Levels

SPI - Local Road Upgrades

NCA	Receiver Type	Reference RBL	Rating Background Levels (RBLs)			Residential Noise Management Levels (NMLs) $L_{Aeq(15\ min)}$				Sleep Dist. L_{Amax}		Comments
			Day	Evening	Night	Day (S)	Day (O)	Evening	Night	Screening	Max	
NCA01	Residential Industrial	NL01	57	51	40	67	62	56	45	55	65	Based on NCAs and NMLs presented in the EIS.
NCA02	Residential Commercial	NL02	50	46	39	60	55	51	44	54	65	Based on NCAs and NMLs presented in the EIS.
NCA03	Residential Commercial	NL02	50	46	39	60	55	51	44	54	65	Based on NCAs and NMLs presented in the EIS.
NCA04	Residential Active recreation	NL01	57	51	40	67	62	56	45	55	65	Based on NCAs and NMLs presented in the EIS.
NCA05	Commercial Industrial	NL01	57	51	40	67	62	56	45	55	65	Based on NCAs and NMLs presented in the EIS.
NCA06	Residential School	NL02	50	46	39	60	55	51	44	54	65	Based on NCAs and NMLs presented in the EIS.
NCA07	Commercial Active recreation	NL05	52	50	44	62	57	55	49	59	65	Based on NCAs and NMLs presented in the EIS.
NCA08	Commercial Industrial	NL03	54	45	40	64	59	50	45	55	65	Based on NCAs and NMLs presented in the EIS.
NCA09	Residential Passive recreation	NL19	60	54	43	70	65	59	48	58	65	Based on NCAs and NMLs presented in the EIS.
NCA10	Industrial	NL06	58	56	49	68	63	61	54	64	65	Based on NCAs and NMLs presented in the EIS.
NCA11	Commercial Industrial	NL04	58	52	42	68	63	57	47	57	65	Based on NCAs and NMLs presented in the EIS.
ID Other Sensitive Receivers												
NCA07	St Peters Anglican Church, 187-11 Princes Hwy, St Peters	ICNG	-	-	-	55	55	55	55	-	-	NML of 55dB(A) is external equivalent of 45dB(A) internal goal for places of worship with windows open, when in use. Ref: ICNG p13
NCA08	Sydney Park, Sydney Park Rd St Peters	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA02	Tom Foster Community Centre	ICNG	-	-	-	55	55	55	55	-	-	NML of 55dB(A) is external equivalent of 45dB(A) internal goal with windows open, when in use. Ref: ICNG p13
NCA03	Camdenville Park	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA02	Camdenville Public School PREESCHOOL, 106 Wells Stret NEWTOWN	ICNG	-	-	-	55	-	55	55	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for classrooms with windows open. NML for passive recreation areas (outdoor play area) is 60dB(A)
NCA03	Simpson Park	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA06	Rowswell Playground	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA06	Sydney Park	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA09	St Peters/ Sydenham Library, 9 Unwins Bridge Rd Sydenham	ICNG	-	-	-	55	55	55	55	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for educational institutions with windows open.
	Francis Playground	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA09	Sydenham Green	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
	Nancy Bird-Walton Reserve	ICNG	-	-	-	65	65	65	65	-	-	Ref: ICNG p13
NCA11	Active Kids Mascot, 18 Church Ave Mascot	ICNG	-	-	-	55/ 60	55/ 60	55/ 60	55/ 60	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for classrooms with windows open. NML for passive recreation areas (outdoor play area) is 60dB(A)
NCA05	Building Blocks Early Child School Learning, 2/140 Bourke Rd, Alexandria	ICNG	-	-	-	55/ 60	55/ 60	55/ 60	55/ 60	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for classrooms with windows open. NML for passive recreation areas (outdoor play area) is 60dB(A)
NCA05	Hillsong Church Alexandria	ICNG	-	-	-	55	55	55	55	-	-	NML of 55dB(A) is external equivalent of 45dB(A) internal goal for places of worship with windows open, when in use. Ref: ICNG p13
NCA07	St Peters Public School, Church St, St Peters	ICNG	-	-	-	55	-	55	55	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for classrooms with windows open. NML for passive recreation areas (outdoor play area) is 60dB(A)
NCA07	IBIS Hotel, 178 Princes Hwy, St Peters	ICNG	-	-	-	60	60	60	60	-	-	NML of 60dB(A) is external equivalent of 40dB(A) internal goal for hotels on busy roads
NCA10	Southern Cross Hotel 340 Princes Hwy, St Peters	ICNG	-	-	-	60	60	60	60	-	-	based on AS2107:2000 assuming windows closed.

APPENDIX C **Construction Timetable/ Activities/ Management**

Table C1: Construction Timetable/ Activities/ Equipment

SPI - Local Road Upgrades

Activity/ Work Area	Aspect	Plant/ Equipment	Net Power kW	Operating Weight kg	Day	Evening	Night	Sound Power Level (Lw re: 1pW) in Noise Model, dB(A)		Notes	
					7am - 6pm	6pm - 10pm	10pm - 7am	L _{Aeq}	L _{A1}		
LOCAL ROAD WORKS Campbell St, Euston Rd, Bourke Rd, Bourke St, Gardiners Rd, Princes Hwy, Unwins Bridge Rd, May St, Bedwin Rd, Sydney Park Rd, Huntley St											
General Local Roads (concurrent with all activities)	Deliveries; Lighting	Light vehicles (Utes)			2	2	2	89			
		Daymakers		900kg		4	4	93		Other equipment: Truck. Franna crane. delivery truck	
		Truck		20t		3	3	108		See above	
		Franna Crane	205	20 tonne	1	1	1	98		See above	
		Flat bed delivery truck			2 p/h	2 p/h	2 p/h	107			
Local Road Works	Demolition of existing structures	Water cart		15kL	4 p.h.	4 p.h.	-	108		Will be working in isolation	
		Excavator w bucket	120	35 tonne	2	-	-	103		Other equipment: Truck & Dog, water cart, Road sweeper	
		Concrete saw / Demo Saw	22 hp		1	-	-	119		Will be working in isolation	
		Excavator w rockhammer		30 tonne	2	-	-	124		Will be working in isolation	
		Franna Crane	205	20 tonne	1	-	-	98		Will be working in isolation	
		Generator		5 Kva	2	-	-	93		Other equipment: Pneumatic Hammer, Water Blaster,	
		Air compressor		250 cfm	1	-	-	102		Will be working in isolation	
		Pneumatic Hammer			1	-	-	115		See above	
		Loader		30 tonne	1	-	-	110		Other equipment: Truck & Dog, water cart, Road sweeper	
		Water cart		15kL	1 p.h.	-	-	108		See above	
		Road Sweepers			1	-	-	108		See above	
		Pothole (Vacuum) Truck			1	-	-	107		Will be working in isolation	
		Water Blaster			1	-	-	94		See above	
		Truck & Dog	120		8 p.h.	-	-	108		See above	
		Earthworks / Pavement	Mulcher (separate and prior to earthworks machinery)				1	-	-	120	
	Chainsaw (separate and prior to earthworks machinery)				1	-	-	116		See above	
	Excavator w bucket		120	35 tonne	2	-	-	103		Other equipment: Truck & Dog, water cart, Road sweeper,	
	Road profiler			17 tonne	1	-	-	109		Other equipment: Truck & Dog, water cart, Road sweeper, Bobcat/Positrack	
	Excavator w rockhammer			30 tonne	1	-	-	124		Will be working in isolation	
	966 Loader			30 tonne	2	-	-	110		Other equipment: Truck & Dog, water cart, Road sweeper,	
	Pneumatic Hammer				1	-	-	115		Will be working in isolation	
	Bobcat/Positrack			3 tonne	1	-	-	107		See above	
	Plate Compactor			600 kg	2	-	-	108		Will be working in isolation	
	Concrete saw		22 hp		1	-	-	119		Will be working in isolation	
	Grader (14H0)			25 tonne	1	-	-	109		Other equipment: Water cart, Roller	
	Vibratory Roller			12 tonne	1	-	-	109		See above	
	Truck & Dog		120		4 p.h.	-	-	108		See above	
	Shotcrete Rig Diesel				1	-	-	104		Other equipment: concrete pump, compressor	
	Air compressor			250 cfm	1	-	-	102		See above	
	Underbore Machine (Ditchwitch)				1	-	-	114		Will be working in isolation	
	Generator			60 Kva	1	-	-	94		Other equipment: Concrete vibrators, Concrete Agi, Concrete pump	
	Daymakers			900kg	3	-	-	93		For above to add for Night Shift	
	Concrete Vibrators				3	-	-	97		See above	
Pothole (Vacuum) Truck				1	-	-	107		Will be working in isolation		
Concrete pump	120			4 p.h.	-	-	108		See above		
Concrete Agi	120			4 p.h.	-	-	108		See above		
Stormwater Drainage	Excavator w bucket			35T	1	-	-	103		Other equipment: Pedestrian roller or plate compactor	
	Excavator w hammer			30T	1	-	-	124		Will be working in isolation	
	Pedestrian Roller			1	-	-	109		See above		
	Plate Compactor			1	-	-	108		See above		
	Bobcat/Positrack			1	-	-	107		Other equipment: Pedestrian roller or plate compactor		
	Franna Crane		20 tonne	1	-	-	98		Other equipment: Hiab Truck		
	Hiab truck			1	-	-	96		See above		
Road tie-in works	Asphalt Paver			1	1	1	105		Other equipment: Road Asphalt truck, roller, pneumatic roller		
	Road Asphalt truck			4 p.h.	4 p.h.	4 p.h.	108		See above		
	Bobcat			1	1	1	107		Will be working in isolation		
	Daymakers		900kg	3	3	3	93		to add for Night Shift		
	Asphalt truck & sprayer		12 tonne	1	1	1	108		Other equipment: Roller, Water cart		
	Vibratory Roller		12 tonne	1	1	1	109		See above		
	Pneumatic roller			1	1	1	109		See above		
	Water cart		15kL	4 p.h.	4 p.h.	-	108		See above		
	Line marking truck			1	-	-	108		Will be working in isolation		
	Concrete saw		-	1	-	-	119		Will be working in isolation		
	Hiab truck		12 t	1	-	-	96		Other equipment: Franna crane,		
	Franna Crane			1	-	-	98		See above		
Kerbing & drainage	Concrete Vibrators			3	-	-	97		Other equipment: Concrete pump, Concrete agi		
	Pothole (Vacuum) Truck			1	-	-	107		See above		
	Concrete pump	120		4 p.h.	-	-	108		See above		
	Concrete Agi	120		4 p.h.	-	-	108		See above		

Table C1: Construction Timetable/ Activities/ Equipment

SPI - Local Road Upgrades

Activity/ Work Area	Aspect	Plant/ Equipment	Net Power kW	Operating Weight kg	Day	Evening	Night	Sound Power Level (Lw re: 1pW) in Noise Model, dB(A)		Notes		
					7am - 6pm	6pm - 10pm	10pm - 7am	L _{Aeq}	L _{A1}			
Utility Works	Utility Works / service relocation	Excavator w bucket	120	20 tonne	2	3	3	103		Other equipment: Truck & Doq		
		Excavator w bucket		12 tonne	3	3	2	98		Other equipment: Truck & Doq		
		Excavator w rockhammer		30 tonne	1	3	-	124		Will be working in isolation		
		Pneumatic Hammer			1	-	-	115		Will be working in isolation		
		Concrete saw	22 hp		1	4	-	119		Will be working in isolation		
		Bobcat/Positrack						107		Other equipment: Roller, Water cart		
		Roller		5 tonne	1	2	2	105		See above		
		Road profiler		17 tonne	1	2	-	109		Other equipment: Truck & Doq		
		Truck & Dog	120		4 p.h.	2	-	108		See above		
		Water cart			4 p.h.			108		See above		
		Franna Crane	205	20 tonne	1	2	2	98		Will be working in isolation		
		Cut and Cover	Piling	Excavator		20 tonne	1	-	-	103		Other equipment: Truck & Dog
				Truck & Dog	120		4 p.h.	-	-	108		See above
				Concrete Saw	130		1	-	-	119		Will be working in isolation
Mobile Crane				250 tonne	1	-	-	106		Will be working in isolation		
Franna Crane	205			20 tonne	1	-	-	98		Will be working in isolation		
Piling Rig (driven)	150			35T	1	-	-	122		Other equipment: Concrete vibrators, Concrete Aqi, Concrete pump		
Concrete Vibrators					1	-	-	97		See above		
Concrete Agi	120				4 p.h.	-	-	108		See above		
Concrete pump	120				1	-	-	108		See above		
Excavation	Excavator			30 T	1	-	-	103		Other equipment: Truck & Dog & Bobcat		
	Truck & Dog		120		4 p.h.	-	-	108		See above		
	Bobcat/Positrack			3 tonne	1	-	-	107		See above		
Structure Construction	Franna Crane		205	20 tonne	1	-	-	98		Will be working in isolation		
	Concrete Vibrators				2	-	-	97		Other Equipment: concrete Aqi, Concrete pump		
	Concrete Agi		120		4 p.h.	-	-	108		See above		
	Concrete pump		120		1	-	-	108		See above		
	Flatbed truck				1	1	1	107		Other Equipment: Mobile Crane		
	Mobile Crane			500T	1	1	1	106		See above		
Alexandra Canal Bridge	Piling & Ground improvement	Excavator		20 tonne	1	-	-	103		Other equipment: Truck & Dog		
		Truck & Dog	120		4 p.h.	-	-	108		See above		
		Concrete Saw	130		1	-	-	119		Will be working in isolation		
		Piling Rig (driven)	150	35T	1	-	-	122		Other equipment: Concrete vibrators, Concrete Aqi, Concrete pump		
		Mobile Crane		500 tonne	1	-	-	106		Will be working in isolation		
		Concrete Vibrators			3	-	-	97		See above		
		Franna Crane	205	20 tonne	1	-	-	98		Will be working in isolation		
		Concrete Agi	120		4 p.h.	-	-	108		See above		
		Concrete pump	120		1	-	-	108		See above		
		Girder installation	Mobile Crane		750 tonne	1	-	-	106		Will be working in isolation	
			Franna Crane	205	20 tonne	1	-	-	98		Will be working in isolation	
			Concrete Agi	120		4 p.h.	-	-	108		Other equipment: Concrete pump, vibrators, power tools, generator	
	Piers and Abutments	Concrete pump	120		1	-	-	108		See above		
		Concrete Vibrators			3	-	-	97		See above		
		Hand power tools			2	-	-	107		See above		
		Invertor generator	4.3kVA		1	-	-	93		See above		
		Bridge Decks and Parapets	Mobile Crane		750 tonne	1	-	-	106		Will be working in isolation	
			Concrete Vibrators			3	-	-	97		Other equipment: Concrete pump, and aqi	
	Franna Crane		205	20 tonne	1	-	-	98		Will be working in isolation		
	Concrete Agi		120		4 p.h.	-	-	108		See above		
	Concrete pump		120		1	-	-	108		See above		
	Paving	Asphalt Paver			1	1	1	105		Other equipment: Road Asphalt truck, roller, pneumatic roller		
		Road Asphalt truck			4 p.h.	4 p.h.	4 p.h.	108		See above		
		Bobcat			1	1	1	107		Will be working in isolation		
		Daymakers		900kg	3	3	3	93		to add for Night Shift		
		Asphalt truck & sprayer		12 tonne	1	1	1	108		Other equipment: Roller, Water cart		
		Vibratory Roller	22 hp		1	1	1	109		See above		
Pneumatic roller				1	1	1	109		See above			
Water cart			15kL	4 p.h.	4 p.h.	-	108		See above			
Line marking truck				1	-	-	108		Will be working in isolation			

Table C3: Construction Noise Management Schedule**SPI - Local Road Upgrades**

Area to be Managed	Mitigation/ Management Measure	Typical Details	Comments
Campbell St, Euston Rd, Bourke Rd, Bourke St, Gardiners Rd, Princes Hwy, Unwins Bridge Rd, May St, Bedwin Rd, Sydney Park Rd, Huntley St			
1	Operational At-Property Treatment	Residences identified for operational at-property treatment should be treated ASAP during construction phase.	Treatment installed as early as practicable.
2	Temporary Noise Walls/ Screens	2.5 m to 3 m temporary noise wall along site boundary at Campbell Road (property acquisition areas) Flexible noise screen attached to 1.8 m high temporary fencing surrounding high noise works area	See Table C4 for details Where installation does not compromise property access requirements Where installation does not compromise safety on the worksite
3	Work outside Standard Construction Hours	Only as required (e.g. Road Occupancy Licence)	
4	High noise impact works	Limit high noise plant/ equipment to evening only (where practicable) Some 'Highly Noise Affected' Receivers. Respite periods for high noise activities.	

Table C4: Noise Barrier Design Specifications

SPI - Local Road Upgrades

Noise barrier reference	Location	Noise barrier height	Required Rw	Proposed Construction	Acoustic Rating of Construction*
NB01	Campbell Road Compound	3m	Rw 15-20	17 mm plywood hoarding	Rw 24
	Northeast boundary between 36 Albert St and Harber Street		Medium		
LRNB01	Campbell Road - southern side of road Between Southern Cross Hotel and Brown Street	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB02	Campbell Road - southern side of road Between Brown Street and Florence Street	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB03	Campbell Road - southern side of road Between Florence Street and St Peters Street	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB04	Campbell Road - southern side of road Between St Peters Street and Church Street	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB05	Campbell Road - southern side of road Between Church Street and Princes Highway	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB06	Campbell Road - northern side of road Between May Street and Hutchison Street	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				LEXAN MARGARD® Soundglaze SC Sheet 8mm; OR	Rw 31
				PALGLAS 15mm	Rw 32
LRNB07	Eastern site boundary with 119 May Street, St Peters, along May Street access driveway to compound. Approx 30 m in length running north from May Street.	3.0m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Perspex 8mm; OR	Rw 29
				Fortress fencing A-Type RRP Soundproof Fence	Rw 18
				FlexShield, EchoBarrier or AcoustiFlex fixed to temporary fencing or scaffold	Rw 20
Relocatable noise barriers	All zones adjacent to noise sensitive receivers where there is no fixed temporary noise barrier.	2-2.5m	Rw 15-20	17 mm plywood hoarding; OR	Rw 24
			Medium	Fortress fencing A-Type RRP Soundproof Fence	Rw 18
				FlexShield, EchoBarrier or AcoustiFlex fixed to temporary fencing or scaffold	Rw 20

Notes:

Noise barrier performance: Low - Rw 10-15; Medium - Rw 15-220; Medium-High - Rw 20-25; High - Rw 25; Very High - Rw 30

* estimated by calculations and/or reference to other similar barrier type data

GENERAL

- The specified 'required rating' must be achieved by the product selected.
- By way of explanation, the Sound Insulation Rating Rw is a measure of the noise reduction property of the assembly, a higher rating implying a higher sound reduction performance.
- Note that the Rw rating of systems measured as built on site (Rw Field Test) may be up to 5 points lower than the laboratory result.
- The sealing of all gaps is critical in a sound rated construction. Use only sealer approved by the acoustic consultant.
- Check design of all junction details with acoustic consultant prior to construction.
- Check the necessity for HOLD POINTS with the acoustic consultant to ensure that all building details have been correctly interpreted and constructed.
- The information provided in this table is subject to modification and review without notice.
- The advice provided here is in respect of acoustics only. Supplementary professional advice may need to be sought in respect of fire ratings, structural design, buildability, fitness for purpose and the like.

APPENDIX D Detailed predicted noise levels

D.1 Predicted noise levels for standard-hours local roads works

The impacts presented in the Table D1 following are identified by colour coding of the text.

For **Standard Hours**:

- XX Complies with NML
- **XX** < 10dB(A) above NML - construction noise clearly audible
- **XX** > 10dB(A) above NML - construction noise clearly moderately intrusive
- **XX** > 75dB(A) - highly noise affected

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA01	351 BELMONT STREET ALEXANDRIA			I0402!	67	46	47	49	50	48	49	48	46	47	47	48	67	56	57	59	60	58	59	58	56	57	57	58
NCA01	352 BELMONT STREET ALEXANDRIA			I0402!	67	43	44	45	46	45	46	46	43	45	45	46	67	53	54	55	56	55	56	56	53	55	55	56
NCA01	353 BELMONT STREET ALEXANDRIA			I0402!	67	46	47	49	50	48	49	49	46	47	47	48	67	56	57	59	60	58	59	59	56	57	57	58
NCA01	353A BELMONT STREET ALEXANDRIA			I0402!	67	46	47	49	50	48	49	49	47	47	47	49	67	56	57	59	60	58	59	59	57	57	57	59
NCA01	354 BELMONT STREET ALEXANDRIA			I0402!	67	43	44	46	47	45	46	46	44	45	45	46	67	53	54	56	57	55	56	56	54	55	55	56
NCA01	355 BELMONT STREET ALEXANDRIA			I0402!	67	46	47	49	50	48	49	49	47	47	47	49	67	56	57	59	60	58	59	59	57	57	57	59
NCA01	357 BELMONT STREET ALEXANDRIA			I0402!	67	47	47	49	50	48	49	49	47	48	48	49	67	57	57	59	60	58	59	59	57	58	58	59
NCA01	358 BELMONT STREET ALEXANDRIA			I0402!	67	39	39	42	42	40	43	42	40	39	39	42	67	49	49	52	52	50	53	52	50	49	49	52
NCA01	359 BELMONT STREET ALEXANDRIA			I0402!	67	47	47	50	51	48	49	49	47	48	48	49	67	57	57	60	61	58	59	59	57	58	58	59
NCA01	360 BELMONT STREET ALEXANDRIA			I0402!	67	43	44	46	47	46	46	46	44	45	45	46	67	53	54	56	57	56	56	56	54	55	55	56
NCA01	361 BELMONT STREET ALEXANDRIA			I0402!	67	47	48	50	51	48	50	50	48	48	48	49	67	57	58	60	61	58	60	60	58	58	58	59
NCA01	362 BELMONT STREET ALEXANDRIA			I0402!	67	39	39	43	43	40	42	42	40	38	38	41	67	49	49	53	53	50	52	52	50	48	48	51
NCA01	363 BELMONT STREET ALEXANDRIA			I0402!	67	47	48	50	51	48	50	50	48	48	48	50	67	57	58	60	61	58	60	60	58	58	58	60
NCA01	364 BELMONT STREET ALEXANDRIA			I0402!	67	44	44	46	47	46	46	46	44	45	45	46	67	54	54	56	57	56	56	56	54	55	55	56
NCA01	365 BELMONT STREET ALEXANDRIA			I0402!	67	47	48	50	51	48	50	50	48	48	48	50	67	57	58	60	61	58	60	60	58	58	58	60
NCA01	366 BELMONT STREET ALEXANDRIA			I0402!	67	43	44	45	46	45	46	46	43	44	44	45	67	53	54	55	56	55	56	56	53	54	54	55
NCA01	367 BELMONT STREET ALEXANDRIA			I0402!	67	47	48	50	51	48	50	50	48	48	48	50	67	57	58	60	61	58	60	60	58	58	58	60
NCA01	368 BELMONT STREET ALEXANDRIA			I0402!	67	42	42	44	46	44	45	45	43	43	43	45	67	52	52	54	56	54	55	55	53	53	53	55
NCA01	369 BELMONT STREET ALEXANDRIA			I0402!	67	44	46	48	48	45	47	47	45	45	45	47	67	54	56	58	58	55	57	57	55	55	55	57
NCA01	369A BELMONT STREET ALEXANDRIA			I0402!	67	44	46	48	48	45	47	47	45	45	45	46	67	54	56	58	58	55	57	57	55	55	55	56
NCA01	370 BELMONT STREET ALEXANDRIA			I0402!	67	39	39	42	43	38	41	41	39	35	35	40	67	49	49	52	53	48	51	51	49	45	45	50
NCA01	371 BELMONT STREET ALEXANDRIA			I0402!	67	47	47	49	50	48	50	50	48	47	47	50	67	57	57	59	60	58	60	60	58	57	57	60
NCA01	372 BELMONT STREET ALEXANDRIA			I0402!	67	44	44	47	48	46	47	47	46	45	45	47	67	54	54	57	58	56	57	57	56	55	55	57
NCA01	373-375 BELMONT STREET ALEXANDRIA			I0402!	67	47	47	49	50	49	51	51	48	47	47	49	67	57	57	59	60	59	61	61	58	57	57	59
NCA01	374 BELMONT STREET ALEXANDRIA			I0402!	67	38	39	41	42	39	42	42	40	36	36	41	67	48	49	51	52	49	52	52	50	46	46	51
NCA01	376 BELMONT STREET ALEXANDRIA			I0402!	67	49	50	52	52	48	54	54	53	47	47	53	67	59	60	62	62	58	64	64	63	57	57	63
NCA01	377 BELMONT STREET ALEXANDRIA			I0402!	67	45	45	45	46	50	52	52	49	41	41	49	67	55	55	55	56	60	62	62	59	51	51	59
NCA01	378 BELMONT STREET ALEXANDRIA			I0402!	67	52	52	54	55	54	57	57	54	48	48	55	67	62	62	64	65	64	67	67	64	58	58	65
NCA01	1 COULSON STREET ERSKINEVILLE			I0402!	67	28	28	30	31	31	32	31	29	29	29	30	67	38	38	40	41	41	42	41	39	39	40	
NCA01	2 COULSON STREET ERSKINEVILLE			I0402!	67	41	43	44	43	43	43	42	43	43	43	44	67	51	53	54	53	53	53	52	53	53	53	54
NCA01	3 COULSON STREET ERSKINEVILLE			I0402!	67	28	28	29	31	31	32	31	29	28	29	30	67	38	38	39	41	41	42	41	39	38	39	40
NCA01	5 COULSON STREET ERSKINEVILLE			I0402!	67	29	29	31	31	31	32	31	31	29	29	32	67	39	39	41	41	41	42	41	41	39	39	42
NCA01	1B COULSON STREET ERSKINEVILLE			I0402!	67	38	38	36	37	45	46	46	41	34	34	41	67	48	48	46	47	55	56	56	51	44	44	51
NCA01	21-25 COULSON STREET ERSKINEVILLE			I0402!	67	38	38	39	40	41	41	40	39	39	40	41	67	48	48	49	50	51	51	50	49	49	50	51
NCA01	21-25 COULSON STREET ERSKINEVILLE			I0402!	67	35	35	35	37	36	37	36	36	37	38	38	67	45	45	45	47	46	47	46	46	47	48	48
NCA01	41 EUSTON LANE ALEXANDRIA			I0402!	67	42	42	45	46	43	45	45	44	43	43	45	67	52	52	55	56	53	55	55	54	53	53	55
NCA01	43 EUSTON LANE ALEXANDRIA			I0402!	67	43	43	45	46	44	46	46	44	43	43	46	67	53	53	55	56	54	56	56	54	53	53	56
NCA01	105-155 EUSTON ROAD ALEXANDRIA			I0402!	67	69	67	53	56	58	73	75	73	55	55	73	67	79	77	63	66	68	83	85	83	65	65	83
NCA01	105-155 EUSTON ROAD ALEXANDRIA			I0402!	67	75	70	64	65	67	76	79	76	59	59	74	67	85	80	74	75	77	86	89	86	69	69	84
NCA01	93-103 EUSTON ROAD ALEXANDRIA			I0402!	67	66	65	53	54	54	72	72	72	53	53	72	67	76	75	63	64	64	82	82	82	63	63	82
NCA01	3-9 EVE STREET ERSKINEVILLE			I0402!	67	40	40	41	42	44	45	45	42	42	42	43	67	50	50	51	52	54	55	55	52	52	53	
NCA01	8 EVE STREET ERSKINEVILLE			I0402!	67	33	33	34	35	38	39	39	36	33	33	37	67	43	43	44	45	48	49	49	46	43	47	
NCA01	8 EVE STREET ERSKINEVILLE			I0402!	67	32	32	32	34	34	37	37	35	31	31	36	67	42	42	42	44	44	47	47	45	41	41	46
NCA01	8 EVE STREET ERSKINEVILLE			I0402!	67	39	40	40	41	42	44	43	42	40	40	43	67	49	50	50	51	52	54	53	52	50	50	53
NCA01	8 EVE STREET ERSKINEVILLE			I0402!	67	34	35	34	35	40	41	41	37	33	33	38	67	44	45	44	45	50	51	51	47	43	43	48
NCA01	8 EVE STREET ERSKINEVILLE			I0402!	67	37	37	37	38	42	42	42	39	38	38	40	67	47	47	47	48	52	52	52	49	48	48	50
NCA01	11 EVE STREET ERSKINEVILLE			I0402!	67	29	29	31	31	30	31	30	31	29	30	32	67	39	39	41	41	40	41	40	41	39	40	42
NCA01	13 EVE STREET ERSKINEVILLE			I0402!	67	29	29	30	31	30	31	30	30	29	29	31	67	39	39	40	41	40	41	40	40	39	39	41
NCA01	15 EVE STREET ERSKINEVILLE			I0402!	67	29	29	31	31	31	32	31	31	29	29	32	67	39	39	41	41	41	42	41	41	39	39	42
NCA01	17 EVE STREET ERSKINEVILLE			I0402!	67	27	27	29	30	30	31	30	28	28	28	30	67	37	37	39	40	40	41	40	38	38	38	40
NCA01	20 EVE STREET ERSKINEVILLE			I0402!	67	36	36	36	37	43	43	43	37	37	37	38	67	46	46	46	47	53	53	53	47	47	47	48
NCA01	20 EVE STREET ERSKINEVILLE			I0402!	67	41	41	43	44	46	47	47	43	40	40	44	67	51	51	53	54	56	57	57	53	50	50	54
NCA01	23 EVE STREET ERSKINEVILLE			I0402!	67	30	30	32	32	31	32	30	31	29	30	32	67	40	40	42	42	41	42	40	41	39	40	42

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA01	27 EVE STREET ERSKINEVILLE			I0402!	67	30	30	32	32	31	32	30	31	29	29	32	67	40	40	42	42	41	42	40	41	39	39	42
NCA01	29 EVE STREET ERSKINEVILLE			I0402!	67	30	30	31	32	31	32	30	30	29	29	31	67	40	40	41	42	41	42	40	40	39	39	41
NCA01	31 EVE STREET ERSKINEVILLE			I0402!	67	30	30	32	32	31	32	30	31	29	29	32	67	40	40	42	42	41	42	40	41	39	39	42
NCA01	33 EVE STREET ERSKINEVILLE			I0402!	67	30	30	32	32	31	32	30	31	29	29	32	67	40	40	42	42	41	42	40	41	39	39	42
NCA01	35 EVE STREET ERSKINEVILLE			I0402!	67	30	30	32	32	31	32	30	31	29	29	32	67	40	40	42	42	41	42	40	41	39	39	42
NCA01	37 EVE STREET ERSKINEVILLE			I0402!	67	30	30	31	32	32	32	31	31	28	29	32	67	40	40	41	42	42	42	41	41	38	39	42
NCA01	39 EVE STREET ERSKINEVILLE			I0402!	67	30	30	31	32	31	32	31	31	28	29	32	67	40	40	41	42	41	42	41	41	38	39	42
NCA01	41 EVE STREET ERSKINEVILLE			I0402!	67	30	30	31	32	32	33	32	31	30	31	32	67	40	40	41	42	42	43	42	41	40	41	42
NCA01	1A GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	38	39	39	39	36	38	38	39	40	67	47	47	48	49	49	49	46	48	48	49	50
NCA01	1B GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	37	39	39	39	36	38	38	39	39	67	47	47	47	49	49	49	46	48	48	49	49
NCA01	1C GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	37	39	39	39	36	38	38	39	39	67	47	47	47	49	49	49	46	48	48	49	49
NCA01	1D GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	37	39	39	39	37	38	38	39	39	67	47	47	47	49	49	49	47	48	48	49	49
NCA01	1E GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	38	39	39	39	37	38	38	39	40	67	47	47	48	49	49	49	47	48	48	49	50
NCA01	1F GODDARD STREET ERSKINEVILLE			I0402!	67	37	37	38	39	39	39	37	38	39	39	40	67	47	47	48	49	49	49	47	48	49	49	50
NCA01	5 GODDARD STREET ERSKINEVILLE			I0402!	67	30	30	31	32	32	32	31	32	31	31	33	67	40	40	41	42	42	42	41	42	41	41	43
NCA01	201 LAWRENCE STREET ALEXANDRIA			I0402!	67	42	42	43	45	44	45	45	43	44	44	45	67	52	52	53	55	54	55	55	53	54	54	55
NCA01	203 LAWRENCE STREET ALEXANDRIA			I0402!	67	42	42	43	45	44	45	45	43	44	44	45	67	52	52	53	55	54	55	55	53	54	54	55
NCA01	203A LAWRENCE STREET ALEXANDRIA			I0402!	67	42	42	43	45	44	45	45	43	44	44	45	67	52	52	53	55	54	55	55	53	54	54	55
NCA01	205 LAWRENCE STREET ALEXANDRIA			I0402!	67	40	40	41	43	42	43	43	41	42	42	43	67	50	50	51	53	52	53	53	51	52	52	53
NCA01	209 LAWRENCE STREET ALEXANDRIA			I0402!	67	42	42	43	45	44	45	45	43	44	44	45	67	52	52	53	55	54	55	55	53	54	54	55
NCA01	211 LAWRENCE STREET ALEXANDRIA			I0402!	67	40	41	42	43	43	44	44	42	42	42	44	67	50	51	52	53	53	54	54	52	52	52	54
NCA01	213 LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	45	47	46	46	46	44	45	45	46	67	54	54	55	57	56	56	56	54	55	55	56
NCA01	215 LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	46	48	46	47	47	44	45	45	47	67	54	54	56	58	56	57	57	54	55	55	57
NCA01	217 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	44	46	45	46	46	43	44	44	45	67	53	53	54	56	55	56	56	53	54	54	55
NCA01	219 LAWRENCE STREET ALEXANDRIA			I0402!	67	41	41	42	44	43	44	44	42	42	42	44	67	51	51	52	54	53	54	54	52	52	52	54
NCA01	220-230 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	47	44	46	46	45	44	44	46	67	53	53	55	57	54	56	56	55	54	54	56
NCA01	221 LAWRENCE STREET ALEXANDRIA			I0402!	67	41	41	42	44	43	44	44	42	42	42	44	67	51	51	52	54	53	54	54	52	52	52	54
NCA01	223 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	46	45	46	46	44	45	45	46	67	53	53	55	56	55	56	56	54	55	55	56
NCA01	225 LAWRENCE STREET ALEXANDRIA			I0402!	67	41	41	42	44	43	44	44	42	42	42	44	67	51	51	52	54	53	54	54	52	52	52	54
NCA01	227 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	47	45	46	46	44	45	45	46	67	53	53	55	57	55	56	56	54	55	55	56
NCA01	229 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	47	46	46	46	44	45	45	46	67	53	53	55	57	56	56	56	54	55	55	56
NCA01	231 LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	45	47	46	47	47	44	45	45	46	67	54	54	55	57	56	57	57	54	55	55	56
NCA01	232 LAWRENCE STREET ALEXANDRIA			I0402!	67	35	35	38	38	35	40	40	39	33	33	40	67	45	45	48	48	45	50	50	49	43	43	50
NCA01	233 LAWRENCE STREET ALEXANDRIA			I0402!	67	41	41	43	45	43	44	44	42	42	42	44	67	51	51	53	55	53	54	54	52	52	52	54
NCA01	235 LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	46	48	46	47	47	45	46	46	47	67	54	54	56	58	56	57	57	55	56	56	57
NCA01	236 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	46	44	46	46	44	43	43	46	67	53	53	55	56	54	56	56	54	53	53	56
NCA01	236A LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	47	44	46	46	44	44	44	46	67	53	53	55	57	54	56	56	54	54	54	56
NCA01	237 LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	46	48	47	47	47	45	46	46	47	67	54	54	56	58	57	57	57	55	56	56	57
NCA01	238 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	46	47	44	46	46	45	44	44	46	67	53	53	56	57	54	56	56	55	54	54	56
NCA01	238A LAWRENCE STREET ALEXANDRIA			I0402!	67	44	44	46	47	45	46	46	45	44	44	46	67	54	54	56	57	55	56	56	55	54	54	56
NCA01	239 LAWRENCE STREET ALEXANDRIA			I0402!	67	46	46	48	50	48	49	49	46	48	48	49	67	56	56	58	60	58	59	59	56	58	58	59
NCA01	240-272 LAWRENCE STREET ALEXANDRIA			I0402!	67	48	49	51	52	51	53	53	51	49	49	52	67	58	59	61	62	61	63	63	61	59	59	62
NCA01	241 LAWRENCE STREET ALEXANDRIA			I0402!	67	47	47	50	51	49	49	49	47	48	48	49	67	57	57	60	61	59	59	59	57	58	58	59
NCA01	243 LAWRENCE STREET ALEXANDRIA			I0402!	67	45	46	47	49	47	48	48	46	47	47	48	67	55	56	57	59	57	58	58	56	57	57	58
NCA01	245 LAWRENCE STREET ALEXANDRIA			I0402!	67	42	43	45	46	44	45	45	43	43	43	45	67	52	53	55	56	54	55	55	53	53	53	55
NCA01	247 LAWRENCE STREET ALEXANDRIA			I0402!	67	43	43	45	47	45	46	46	44	44	44	45	67	53	53	55	57	55	56	56	54	54	54	55
NCA01	251 LAWRENCE STREET ALEXANDRIA			I0402!	67	46	46	48	50	48	49	49	46	48	48	48	67	56	56	58	60	58	59	59	56	58	58	58
NCA01	253 LAWRENCE STREET ALEXANDRIA			I0402!	67	46	46	49	50	48	49	49	46	48	48	49	67	56	56	59	60	58	59	59	56	58	58	59
NCA01	255 LAWRENCE STREET ALEXANDRIA			I0402!	67	46	47	49	50	48	49	49	47	48	48	49	67	56	57	59	60	58	59	59	57	58	58	59
NCA01	257 LAWRENCE STREET ALEXANDRIA			I0402!	67	47	47	49	51	49	49	49	47	48	48	49	67	57	57	59	61	59	59	59	57	58	58	59
NCA01	259 LAWRENCE STREET ALEXANDRIA			I0402!	67	47	47	50	51	49	50	50	47	49	49	49	67	57	57	60	61	59	60	60	57	59	59	59
NCA01	259A LAWRENCE STREET ALEXANDRIA			I0402!	67	41	41	46	46	43	44	44	42	41	41	44	67	51	51	56	56	53	54	54	52	51	51	54
NCA01	261 LAWRENCE STREET ALEXANDRIA			I0402!	67	48	49	51	52	50	51	51	48	50	50	50	67	58	59	61	62	60	61	61	58	60	60	60

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA01	263 LAWRENCE STREET ALEXANDRIA			!0402!	67	49	49	52	53	51	51	51	48	50	50	51	67	59	59	62	63	61	61	61	58	60	60	61
NCA01	265 LAWRENCE STREET ALEXANDRIA			!0402!	67	49	50	52	54	51	52	52	49	51	51	52	67	59	60	62	64	61	62	62	59	61	61	62
NCA01	269 LAWRENCE STREET ALEXANDRIA			!0402!	67	50	50	53	54	52	52	52	50	52	52	67	60	60	63	64	62	62	62	60	62	62	62	
NCA01	273 LAWRENCE STREET ALEXANDRIA			!0402!	67	53	53	56	57	54	55	55	53	54	54	55	67	63	63	66	67	64	65	65	63	64	64	65
NCA01	274 LAWRENCE STREET ALEXANDRIA			!0402!	67	41	41	42	43	42	45	45	44	40	40	45	67	51	51	52	53	52	55	55	54	50	50	55
NCA01	275-277 LAWRENCE STREET ALEXANDRIA			!0402!	67	54	54	56	57	54	58	58	57	54	54	57	67	64	64	66	67	64	68	68	67	64	64	67
NCA01	276 LAWRENCE STREET ALEXANDRIA			!0402!	67	40	40	43	44	41	45	45	43	38	38	44	67	50	50	53	54	51	55	55	53	48	48	54
NCA01	278 LAWRENCE STREET ALEXANDRIA			!0402!	67	39	39	42	43	39	43	43	41	36	36	42	67	49	49	52	53	49	53	53	51	46	46	52
NCA01	280 LAWRENCE STREET ALEXANDRIA			!0402!	67	39	39	42	43	40	44	45	43	36	36	43	67	49	49	52	53	50	54	55	53	46	46	53
NCA01	281 LAWRENCE STREET ALEXANDRIA			!0402!	67	55	55	56	58	54	59	59	58	54	54	58	67	65	65	66	68	64	69	69	68	64	64	68
NCA01	282 LAWRENCE STREET ALEXANDRIA			!0402!	67	38	39	42	43	38	43	43	42	34	35	42	67	48	49	52	53	48	53	53	52	44	45	52
NCA01	283 LAWRENCE STREET ALEXANDRIA			!0402!	67	55	55	56	58	55	60	59	58	54	54	59	67	65	65	66	68	65	70	69	68	64	64	69
NCA01	284-286 LAWRENCE STREET ALEXANDRIA			!0402!	67	54	54	56	57	56	57	58	55	53	53	56	67	64	64	66	67	66	67	68	65	63	63	66
NCA01	285 LAWRENCE STREET ALEXANDRIA			!0402!	67	56	56	57	58	57	61	61	59	54	54	60	67	66	66	67	68	67	71	71	69	64	64	70
NCA01	288-302 LAWRENCE STREET ALEXANDRIA			!0402!	67	61	61	63	64	61	65	65	64	58	58	64	67	71	71	73	74	71	75	75	74	68	68	74
NCA01	69 MACDONALD STREET ERSKINEVILLE			!0402!	67	37	37	38	39	39	39	36	39	38	39	40	67	47	47	48	49	49	49	46	49	48	49	50
NCA01	75-91 MACDONALD STREET ERSKINEVILLE			!0402!	67	39	39	40	41	43	44	44	41	40	40	43	67	49	49	50	51	53	54	54	51	50	50	53
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	49	50	54	54	50	51	51	48	49	49	50	67	59	60	64	64	60	61	61	58	59	59	60
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	47	48	49	50	50	50	50	48	49	49	50	67	57	58	59	60	60	60	60	58	59	59	60
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	52	52	56	57	53	53	53	51	52	52	53	67	62	62	66	67	63	63	63	61	62	62	63
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	55	56	61	61	55	56	55	53	54	54	55	67	65	66	71	71	65	66	65	63	64	64	65
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	54	54	60	60	52	53	53	50	52	52	52	67	64	64	70	70	62	63	63	60	62	62	62
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	48	49	51	52	51	52	52	48	50	50	51	67	58	59	61	62	61	62	62	58	60	60	61
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	40	41	42	42	46	47	47	41	41	42	42	67	50	51	52	52	56	57	57	51	51	52	52
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE	child care on ground floor		!0402!	67	48	49	51	51	51	53	52	49	48	48	51	67	58	59	61	61	61	63	62	59	58	58	61
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	45	45	47	48	50	51	51	47	43	43	47	67	55	55	57	58	60	61	61	57	53	53	57
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	43	44	45	45	46	46	45	44	44	44	45	67	53	54	55	55	56	56	55	54	54	54	55
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	42	44	44	45	45	46	45	44	44	44	45	67	52	54	54	55	55	56	55	54	54	54	55
NCA01	177-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	56	57	62	63	56	56	56	53	54	54	55	67	66	67	72	73	66	66	66	63	64	64	65
NCA01	183-219 MITCHELL ROAD ERSKINEVILLE			!0402!	67	46	46	47	48	50	51	51	47	47	47	48	67	56	56	57	58	60	61	61	57	57	57	58
NCA01	334 MITCHELL ROAD ALEXANDRIA			!0402!	67	36	36	38	39	38	39	39	37	36	37	39	67	46	46	48	49	48	49	49	47	46	47	49
NCA01	336 MITCHELL ROAD ALEXANDRIA			!0402!	67	38	38	40	41	39	42	41	40	37	37	41	67	48	48	50	51	49	52	51	50	47	47	51
NCA01	338-356 MITCHELL ROAD ALEXANDRIA			!0402!	67	40	40	41	42	41	44	44	42	39	39	43	67	50	50	51	52	51	54	54	52	49	49	53
NCA01	358 MITCHELL ROAD ALEXANDRIA			!0402!	67	39	40	41	42	42	44	44	42	39	39	43	67	49	50	51	52	52	54	54	52	49	49	53
NCA01	358A MITCHELL ROAD ALEXANDRIA			!0402!	67	39	39	41	42	41	44	43	41	39	39	42	67	49	49	51	52	51	54	53	51	49	49	52
NCA01	358B MITCHELL ROAD ALEXANDRIA			!0402!	67	40	40	41	42	41	44	44	42	40	40	43	67	50	50	51	52	51	54	54	52	50	50	53
NCA01	358C MITCHELL ROAD ALEXANDRIA			!0402!	67	40	40	41	43	42	44	44	42	40	40	43	67	50	50	51	53	52	54	54	52	50	50	53
NCA01	360 MITCHELL ROAD ALEXANDRIA			!0402!	67	41	41	41	43	42	46	45	44	39	39	44	67	51	51	51	53	52	56	55	54	49	49	54
NCA01	360A MITCHELL ROAD ALEXANDRIA			!0402!	67	41	42	41	42	43	47	47	45	38	38	46	67	51	52	51	52	53	57	57	55	48	48	56
NCA01	360B MITCHELL ROAD ALEXANDRIA			!0402!	67	42	42	41	42	46	49	49	46	37	37	46	67	52	52	51	52	56	59	59	56	47	47	56
NCA01	360C MITCHELL ROAD ALEXANDRIA			!0402!	67	45	45	42	43	50	52	52	49	37	37	49	67	55	55	52	53	60	62	62	59	47	47	59
NCA01	362 MITCHELL ROAD ALEXANDRIA			!0402!	67	67	66	73	73	59	60	60	57	57	57	59	67	77	76	83	83	69	70	70	67	67	67	69
NCA01	362 MITCHELL ROAD ALEXANDRIA			!0402!	67	47	47	50	51	50	52	52	48	43	43	49	67	57	57	60	61	60	62	62	58	53	53	59
NCA01	362 MITCHELL ROAD ALEXANDRIA			!0402!	67	57	57	62	63	58	59	59	56	55	55	57	67	67	67	72	73	68	69	69	66	65	65	67
NCA01	362 MITCHELL ROAD ALEXANDRIA			!0402!	67	49	49	54	54	53	54	54	47	48	48	49	67	59	59	64	64	63	64	64	57	58	58	59
NCA01	221-229 SYDNEY PARK ROAD ERSKINEVILLE			!0402!	67	37	39	40	39	39	39	38	38	38	39	39	67	47	49	50	49	49	49	48	48	48	49	49
NCA01	221-229 SYDNEY PARK ROAD ERSKINEVILLE			!0402!	67	46	47	49	49	48	48	48	46	47	47	48	67	56	57	59	59	58	58	58	56	57	57	58
NCA01	221-229 SYDNEY PARK ROAD ERSKINEVILLE			!0402!	67	48	49	51	52	51	51	50	49	50	50	51	67	58	59	61	62	61	61	60	59	60	60	61
NCA01	194-218 LAWRENCE STREET ALEXANDRIA			!04030100!	67	48	48	46	48	46	53	53	52	46	46	53	67	58	58	56	58	56	63	63	62	56	56	63
NCA01	57-63 EUSTON ROAD ALEXANDRIA			!04030100!	67	47	47	44	46	46	53	53	52	45	45	53	67	57	57	54	56	56	63	63	62	55	55	63
NCA01	33 EUSTON ROAD ALEXANDRIA			!04030100!	67	48	48	43	46	46	53	53	53	46	46	53	67	58	58	53	56	56	63	63	63	56	56	63
NCA02	86 DARLEY STREET NEWTOWN			!0402!	60	43	43	44	45	45	45	41	44	45	46	46	60	53	53	54	55	55	55	51	54	55	56	56
NCA02	88 DARLEY STREET NEWTOWN			!0402!	60	43	43	44	45	45	45	41	44	45	46	46	60	53	53	54	55	55	55	51	54	55	56	56

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA02	90 DARLEY STREET NEWTOWN			I0402!	60	43	43	43	45	45	45	40	43	44	46	46	60	53	53	53	55	55	55	50	53	54	56	56
NCA02	92 DARLEY STREET NEWTOWN			I0402!	60	43	43	43	44	44	45	40	43	44	45	45	60	53	53	53	54	54	55	50	53	54	55	55
NCA02	94 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	47	47	48	44	47	48	48	49	60	56	56	56	57	57	58	54	57	58	58	59
NCA02	98 DARLEY STREET NEWTOWN			I0402!	60	44	44	44	46	46	46	42	44	46	47	47	60	54	54	54	56	56	56	52	54	56	57	57
NCA02	100 DARLEY STREET NEWTOWN			I0402!	60	40	40	41	42	42	42	36	41	41	43	43	60	50	50	51	52	52	52	46	51	51	53	53
NCA02	102 DARLEY STREET NEWTOWN			I0402!	60	48	48	48	49	49	50	45	48	49	51	50	60	58	58	58	59	59	60	55	58	59	61	60
NCA02	106 DARLEY STREET NEWTOWN			I0402!	60	48	48	49	50	50	50	46	49	50	51	51	60	58	58	59	60	60	60	56	59	60	61	61
NCA02	108 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	47	47	47	44	46	48	49	48	60	56	56	56	57	57	57	54	56	58	59	58
NCA02	110 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	48	48	48	44	46	48	49	49	60	56	56	56	58	58	58	54	56	58	59	59
NCA02	112 DARLEY STREET NEWTOWN			I0402!	60	43	43	43	45	45	45	39	44	44	45	46	60	53	53	53	55	55	55	49	54	54	55	56
NCA02	114 DARLEY STREET NEWTOWN			I0402!	60	46	46	47	48	48	48	44	47	48	49	49	60	56	56	57	58	58	58	54	57	58	59	59
NCA02	116 DARLEY STREET NEWTOWN			I0402!	60	47	47	47	49	49	49	45	48	49	50	50	60	57	57	57	59	59	59	55	58	59	60	60
NCA02	120 DARLEY STREET NEWTOWN			I0402!	60	49	49	50	51	51	51	47	49	51	52	52	60	59	59	60	61	61	61	57	59	61	62	62
NCA02	122 DARLEY STREET NEWTOWN			I0402!	60	44	44	44	46	46	46	40	44	45	46	46	60	54	54	54	56	56	56	50	54	55	56	56
NCA02	124 DARLEY STREET NEWTOWN			I0402!	60	45	45	46	47	47	47	43	46	47	48	48	60	55	55	56	57	57	57	53	56	57	58	58
NCA02	130 DARLEY STREET NEWTOWN			I0402!	60	46	47	47	48	48	48	45	47	49	49	49	60	56	57	57	58	58	58	55	57	59	59	59
NCA02	132 DARLEY STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	50	49	60	57	57	57	58	58	58	55	57	59	60	59
NCA02	134 DARLEY STREET NEWTOWN			I0402!	60	50	50	50	51	51	52	47	50	51	53	52	60	60	60	60	61	61	62	57	60	61	63	62
NCA02	138 DARLEY STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	50	49	60	57	57	57	58	58	58	55	57	59	60	59
NCA02	140 DARLEY STREET NEWTOWN			I0402!	60	47	48	48	49	49	49	45	48	49	50	50	60	57	58	58	59	59	59	55	58	59	60	60
NCA02	142 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	48	47	47	44	46	48	49	48	60	56	56	56	58	57	57	54	56	58	59	58
NCA02	144 DARLEY STREET NEWTOWN			I0402!	60	47	47	48	49	49	49	45	48	49	50	50	60	57	57	58	59	59	59	55	58	59	60	60
NCA02	146 DARLEY STREET NEWTOWN			I0402!	60	47	48	48	49	49	49	45	48	49	50	50	60	57	58	58	59	59	59	55	58	59	60	60
NCA02	148 DARLEY STREET NEWTOWN			I0402!	60	43	43	44	46	45	45	39	44	44	46	46	60	53	53	54	56	55	55	49	54	54	56	56
NCA02	150 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	48	48	48	43	46	48	49	49	60	56	56	56	58	58	58	53	56	58	59	59
NCA02	152 DARLEY STREET NEWTOWN			I0402!	60	46	46	46	48	48	48	43	46	48	49	49	60	56	56	56	58	58	58	53	56	58	59	59
NCA02	154 DARLEY STREET NEWTOWN			I0402!	60	45	45	45	47	47	47	42	45	47	48	48	60	55	55	55	57	57	57	52	55	57	58	58
NCA02	160 DARLEY STREET NEWTOWN			I0402!	60	50	50	51	52	52	52	48	50	52	53	53	60	60	60	61	62	62	62	58	60	62	63	63
NCA02	160A DARLEY STREET NEWTOWN			I0402!	60	50	50	50	52	52	52	48	50	52	53	53	60	60	60	60	62	62	62	58	60	62	63	63
NCA02	162 DARLEY STREET NEWTOWN			I0402!	60	45	45	46	47	47	47	42	46	47	48	48	60	55	55	56	57	57	57	52	56	57	58	58
NCA02	168 DARLEY STREET NEWTOWN			I0402!	60	50	50	50	52	52	52	47	51	52	53	53	60	60	60	60	62	62	62	57	61	62	63	63
NCA02	170 DARLEY STREET NEWTOWN			I0402!	60	50	50	50	52	52	52	47	50	52	53	53	60	60	60	60	62	62	62	57	60	62	63	63
NCA02	172 DARLEY STREET NEWTOWN			I0402!	60	45	45	45	47	47	47	42	45	47	48	48	60	55	55	55	57	57	57	52	55	57	58	58
NCA02	174 DARLEY STREET NEWTOWN			I0402!	60	45	46	46	48	48	48	42	46	47	48	49	60	55	56	56	58	58	58	52	56	57	58	59
NCA02	306 EDGEWARE ROAD NEWTOWN			I0402!	60	49	49	49	51	51	51	46	49	51	52	52	60	59	59	59	61	61	61	56	59	61	62	62
NCA02	308 EDGEWARE ROAD NEWTOWN			I0402!	60	45	46	45	47	47	47	44	45	48	48	48	60	55	56	55	57	57	57	54	55	58	58	58
NCA02	310 EDGEWARE ROAD NEWTOWN			I0402!	60	48	48	49	50	50	50	46	49	50	51	51	60	58	58	59	60	60	60	56	59	60	61	61
NCA02	318 EDGEWARE ROAD NEWTOWN			I0402!	60	45	46	46	47	47	47	44	45	48	48	48	60	55	56	56	57	57	57	54	55	58	58	58
NCA02	320 EDGEWARE ROAD NEWTOWN			I0402!	60	45	46	45	47	47	47	44	45	48	48	48	60	55	56	55	57	57	57	54	55	58	58	58
NCA02	328-324 EDGEWARE ROAD NEWTOWN			I0402!	60	45	45	45	45	45	46	44	45	47	48	47	60	55	55	55	55	55	56	54	55	57	58	57
NCA02	330 EDGEWARE ROAD NEWTOWN			I0402!	60	50	50	50	51	51	52	47	50	52	53	53	60	60	60	60	61	61	62	57	60	62	63	63
NCA02	332 EDGEWARE ROAD NEWTOWN			I0402!	60	51	51	51	52	52	53	47	51	52	54	53	60	61	61	61	62	62	63	57	61	62	64	63
NCA02	334 EDGEWARE ROAD NEWTOWN			I0402!	60	48	48	48	49	49	49	47	48	50	51	50	60	58	58	58	59	59	59	57	58	60	61	60
NCA02	336 EDGEWARE ROAD NEWTOWN			I0402!	60	48	48	48	48	48	48	47	48	50	51	50	60	58	58	58	58	58	58	57	58	60	61	60
NCA02	338 EDGEWARE ROAD NEWTOWN			I0402!	60	51	51	51	52	52	52	48	51	53	53	53	60	61	61	61	62	62	62	58	61	63	63	63
NCA02	344 EDGEWARE ROAD NEWTOWN			I0402!	60	54	54	54	56	56	56	52	54	56	57	57	60	64	64	64	66	66	66	62	64	66	67	67
NCA02	350 EDGEWARE ROAD NEWTOWN			I0402!	60	52	52	53	55	54	55	51	53	54	55	55	60	62	62	63	65	64	65	61	63	64	65	65
NCA02	352 EDGEWARE ROAD NEWTOWN			I0402!	60	53	54	54	55	55	55	51	53	56	56	56	60	63	64	64	65	65	65	61	63	66	66	66
NCA02	354 EDGEWARE ROAD NEWTOWN			I0402!	60	55	55	55	56	56	56	52	54	57	57	57	60	65	65	65	66	66	66	62	64	67	67	67
NCA02	356 EDGEWARE ROAD NEWTOWN			I0402!	60	55	55	55	57	56	57	53	55	57	58	58	60	65	65	65	67	66	67	63	65	67	68	68
NCA02	358 EDGEWARE ROAD NEWTOWN			I0402!	60	56	56	56	57	57	57	54	56	58	59	58	60	66	66	66	67	67	67	64	66	68	69	68
NCA02	360 EDGEWARE ROAD NEWTOWN			I0402!	60	58	58	58	59	59	59	57	58	60	61	60	60	68	68	68	69	69	69	67	68	70	71	70
NCA02	2-10 JOHN STREET NEWTOWN			I0402!	60	48	48	49	50	50	50	46	49	50	51	51	60	58	58	59	60	60	60	56	59	60	61	61

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SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA02	18 JOHN STREET NEWTOWN			I0402!	60	47	47	47	49	49	49	44	47	49	50	50	60	57	57	57	59	59	59	54	57	59	60	60
NCA02	609 KING STREET NEWTOWN			I0402!	60	42	42	42	43	43	43	40	43	43	44	44	60	52	52	52	53	53	53	50	53	53	54	54
NCA02	51 LORD STREET NEWTOWN			I0402!	60	41	41	42	43	42	42	41	41	42	43	43	60	51	51	52	53	52	52	51	51	52	53	53
NCA02	57 LORD STREET NEWTOWN			I0402!	60	44	44	45	46	45	46	43	44	46	47	47	60	54	54	55	56	55	56	53	54	56	57	57
NCA02	59 LORD STREET NEWTOWN			I0402!	60	41	41	42	43	43	43	40	42	43	44	44	60	51	51	52	53	53	53	50	52	53	54	54
NCA02	63 LORD STREET NEWTOWN			I0402!	60	49	49	49	50	50	50	47	49	50	51	51	60	59	59	59	60	60	60	57	59	60	61	61
NCA02	71 LORD STREET NEWTOWN			I0402!	60	41	42	42	43	43	43	40	42	43	44	44	60	51	52	52	53	53	53	50	52	53	54	54
NCA02	72 LORD STREET NEWTOWN			I0402!	60	46	46	47	47	47	47	44	46	47	48	48	60	56	56	57	57	57	57	54	56	57	58	58
NCA02	74 LORD STREET NEWTOWN			I0402!	60	46	47	47	48	48	48	45	47	48	49	49	60	56	57	57	58	58	58	55	57	58	59	59
NCA02	75 LORD STREET NEWTOWN			I0402!	60	46	46	47	48	48	48	45	47	48	49	49	60	56	56	57	58	58	58	55	57	58	59	59
NCA02	76 LORD STREET NEWTOWN			I0402!	60	46	47	47	48	48	48	45	47	48	49	49	60	56	57	57	58	58	58	55	57	58	59	59
NCA02	77 LORD STREET NEWTOWN			I0402!	60	46	46	47	48	48	48	45	47	48	49	49	60	56	56	57	58	58	58	55	57	58	59	59
NCA02	79 LORD STREET NEWTOWN			I0402!	60	46	46	47	48	48	48	45	47	48	49	49	60	56	56	57	58	58	58	55	57	58	59	59
NCA02	81 LORD STREET NEWTOWN			I0402!	60	46	46	47	48	48	48	45	47	48	49	49	60	56	56	57	58	58	58	55	57	58	59	59
NCA02	82 LORD STREET NEWTOWN			I0402!	60	44	45	45	46	46	46	43	44	46	47	47	60	54	55	55	56	56	56	53	54	56	57	57
NCA02	83 LORD STREET NEWTOWN			I0402!	60	41	41	42	43	42	43	40	42	43	44	44	60	51	51	52	53	52	53	50	52	53	54	54
NCA02	84 LORD STREET NEWTOWN			I0402!	60	42	44	44	44	44	44	41	43	44	45	45	60	52	54	54	54	54	54	51	53	54	55	55
NCA02	85 LORD STREET NEWTOWN			I0402!	60	42	42	42	43	43	43	41	42	44	45	44	60	52	52	52	53	53	53	51	52	54	55	54
NCA02	86 LORD STREET NEWTOWN			I0402!	60	44	45	46	46	46	46	43	45	47	47	47	60	54	55	56	56	56	56	53	55	57	57	57
NCA02	87 LORD STREET NEWTOWN			I0402!	60	43	44	44	45	45	45	43	44	46	46	46	60	53	54	54	55	55	55	53	54	56	56	56
NCA02	88 LORD STREET NEWTOWN			I0402!	60	41	43	43	43	43	43	39	42	42	44	44	60	51	53	53	53	53	53	49	52	52	54	54
NCA02	89 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	43	44	46	47	46	60	54	54	54	55	55	55	53	54	56	57	56
NCA02	90 LORD STREET NEWTOWN			I0402!	60	41	42	42	42	42	42	40	41	42	43	43	60	51	52	52	52	52	52	50	51	52	53	53
NCA02	91 LORD STREET NEWTOWN			I0402!	60	42	42	43	44	44	44	40	42	44	45	45	60	52	52	53	54	54	54	50	52	54	55	55
NCA02	92 LORD STREET NEWTOWN			I0402!	60	45	46	46	47	47	47	44	46	48	48	48	60	55	56	56	57	57	57	54	56	58	58	58
NCA02	94 LORD STREET NEWTOWN			I0402!	60	47	48	48	49	49	49	46	48	49	50	50	60	57	58	58	59	59	59	56	58	59	60	60
NCA02	96A LORD STREET NEWTOWN			I0402!	60	46	47	47	48	48	48	45	47	48	49	49	60	56	57	57	58	58	58	55	57	58	59	59
NCA02	97 LORD STREET NEWTOWN			I0402!	60	44	45	45	46	46	46	43	45	47	47	47	60	54	55	55	56	56	56	53	55	57	57	57
NCA02	98 LORD STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	49	49	60	57	57	57	58	58	58	55	57	59	59	59
NCA02	99 LORD STREET NEWTOWN			I0402!	60	45	45	45	46	46	46	43	45	47	48	47	60	55	55	55	56	56	56	53	55	57	58	57
NCA02	100 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	50	46	48	50	51	50	60	58	58	58	59	59	60	56	58	60	61	60
NCA02	100A LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	50	46	48	50	51	50	60	58	58	58	59	59	60	56	58	60	61	60
NCA02	101 LORD STREET NEWTOWN			I0402!	60	43	43	44	45	45	45	42	44	46	46	46	60	53	53	54	55	55	55	52	54	56	56	56
NCA02	102 LORD STREET NEWTOWN			I0402!	60	48	48	48	50	49	50	46	48	50	51	51	60	58	58	58	60	59	60	56	58	60	61	61
NCA02	102A LORD STREET NEWTOWN			I0402!	60	48	48	48	50	49	50	46	48	50	51	50	60	58	58	58	60	59	60	56	58	60	61	60
NCA02	103 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	47	46	60	54	54	54	55	55	55	52	54	56	57	56
NCA02	104 LORD STREET NEWTOWN			I0402!	60	47	48	48	49	49	49	46	48	50	50	50	60	57	58	58	59	59	59	56	58	60	60	60
NCA02	105 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	47	46	60	54	54	54	55	55	55	52	54	56	57	56
NCA02	106 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	46	48	50	51	50	60	58	58	58	59	59	59	56	58	60	61	60
NCA02	107 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	46	43	44	46	47	47	60	54	54	54	55	55	56	53	54	56	57	57
NCA02	108 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	46	48	50	51	50	60	58	58	58	59	59	59	56	58	60	61	60
NCA02	109 LORD STREET NEWTOWN			I0402!	60	42	42	43	43	43	43	41	43	43	44	44	60	52	52	53	53	53	53	51	53	53	53	54
NCA02	110 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	50	46	48	50	51	50	60	58	58	58	59	59	60	56	58	60	61	60
NCA02	111 LORD STREET NEWTOWN			I0402!	60	48	49	49	50	50	50	46	49	50	51	51	60	58	59	59	60	60	60	56	59	60	61	61
NCA02	112 LORD STREET NEWTOWN			I0402!	60	48	48	48	50	50	50	46	48	50	51	51	60	58	58	58	60	60	60	56	58	60	61	61
NCA02	113 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	43	45	46	47	47	60	54	54	54	55	55	55	53	55	56	57	57
NCA02	114 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	46	48	50	51	50	60	58	58	58	59	59	59	56	58	60	61	60
NCA02	116 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	46	48	50	51	50	60	58	58	58	59	59	59	56	58	60	61	60
NCA02	117 LORD STREET NEWTOWN			I0402!	60	43	43	44	45	45	45	42	44	45	46	46	60	53	53	54	55	55	55	52	54	55	56	56
NCA02	118 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	47	48	50	51	50	60	58	58	58	59	59	59	57	58	60	61	60
NCA02	119 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	47	46	60	54	54	54	55	55	55	52	54	56	57	56
NCA02	121 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	46	46	60	54	54	54	55	55	55	52	54	56	56	56
NCA02	122 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	50	47	48	50	51	51	60	58	58	58	59	59	60	57	58	60	61	61

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SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA02	123 LORD STREET NEWTOWN			I0402!	60	46	46	46	47	47	47	44	46	48	48	48	60	56	56	56	57	57	57	54	56	58	58	58
NCA02	124 LORD STREET NEWTOWN			I0402!	60	48	48	49	50	50	50	47	49	50	51	51	60	58	58	59	60	60	60	57	59	60	61	61
NCA02	125 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	46	46	60	54	54	54	55	55	55	52	54	56	56	56
NCA02	126 LORD STREET NEWTOWN			I0402!	60	49	49	49	50	50	50	47	49	51	52	51	60	59	59	59	60	60	60	57	59	61	62	61
NCA02	127 LORD STREET NEWTOWN			I0402!	60	44	44	44	45	45	45	42	44	46	47	46	60	54	54	54	55	55	55	52	54	56	57	56
NCA02	128 LORD STREET NEWTOWN			I0402!	60	49	49	49	50	50	50	47	49	51	52	51	60	59	59	59	60	60	60	57	59	61	62	61
NCA02	129 LORD STREET NEWTOWN			I0402!	60	46	46	46	47	47	47	44	46	48	49	48	60	56	56	56	57	57	57	54	56	58	59	58
NCA02	130 LORD STREET NEWTOWN			I0402!	60	49	49	50	51	51	51	48	50	51	52	52	60	59	59	60	61	61	61	58	60	61	62	62
NCA02	131 LORD STREET NEWTOWN			I0402!	60	46	47	47	48	48	48	45	47	49	49	49	60	56	57	57	58	58	58	55	57	59	59	59
NCA02	132 LORD STREET NEWTOWN			I0402!	60	50	50	50	51	51	51	48	50	52	52	52	60	60	60	60	61	61	61	58	60	62	62	62
NCA02	133 LORD STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	50	49	60	57	57	57	58	58	58	55	57	59	60	59
NCA02	134 LORD STREET NEWTOWN			I0402!	60	50	50	50	51	51	51	48	50	52	53	52	60	60	60	60	61	61	61	58	60	62	63	62
NCA02	135 LORD STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	50	49	60	57	57	57	58	58	58	55	57	59	60	59
NCA02	136 LORD STREET NEWTOWN			I0402!	60	50	50	50	52	51	52	48	50	52	53	53	60	60	60	60	62	61	62	58	60	62	63	63
NCA02	137 LORD STREET NEWTOWN			I0402!	60	35	35	35	36	36	36	32	35	36	37	37	60	45	45	45	46	46	46	42	45	46	47	47
NCA02	138 LORD STREET NEWTOWN			I0402!	60	50	51	51	52	52	52	49	51	53	53	53	60	60	61	61	62	62	62	59	61	63	63	63
NCA02	139 LORD STREET NEWTOWN			I0402!	60	47	47	47	49	48	49	45	47	49	50	50	60	57	57	57	59	58	59	55	57	59	60	60
NCA02	140 LORD STREET NEWTOWN			I0402!	60	51	51	51	52	52	52	49	51	53	53	53	60	61	61	61	62	62	62	59	61	63	63	63
NCA02	141 LORD STREET NEWTOWN			I0402!	60	47	47	47	49	48	49	45	47	49	50	50	60	57	57	57	59	58	59	55	57	59	60	60
NCA02	142 LORD STREET NEWTOWN			I0402!	60	51	51	51	52	52	52	49	51	53	54	53	60	61	61	61	62	62	62	59	61	63	64	63
NCA02	143 LORD STREET NEWTOWN			I0402!	60	48	48	48	49	49	49	46	48	50	50	50	60	58	58	58	59	59	59	56	58	60	60	60
NCA02	144 LORD STREET NEWTOWN			I0402!	60	51	51	51	52	52	52	49	51	53	54	53	60	61	61	61	62	62	62	59	61	63	64	63
NCA02	145 LORD STREET NEWTOWN			I0402!	60	47	47	47	49	48	48	45	47	49	50	49	60	57	57	57	59	58	58	55	57	59	60	59
NCA02	146 LORD STREET NEWTOWN			I0402!	60	51	51	51	52	52	52	50	51	53	54	53	60	61	61	61	62	62	62	60	61	63	64	63
NCA02	147 LORD STREET NEWTOWN			I0402!	60	47	47	47	48	48	48	45	47	49	50	49	60	57	57	57	58	58	58	55	57	59	60	59
NCA02	148 LORD STREET NEWTOWN			I0402!	60	51	51	51	52	52	52	50	51	53	54	54	60	61	61	61	62	62	62	60	61	63	64	64
NCA02	150 LORD STREET NEWTOWN			I0402!	60	51	52	52	53	53	53	50	52	54	54	54	60	61	62	62	63	63	63	60	62	64	64	64
NCA02	151 LORD STREET NEWTOWN			I0402!	60	47	47	47	49	49	49	45	47	49	50	50	60	57	57	57	59	59	59	55	57	59	60	60
NCA02	152 LORD STREET NEWTOWN			I0402!	60	52	52	52	53	53	53	50	52	54	55	54	60	62	62	62	63	63	63	60	62	64	65	64
NCA02	153 LORD STREET NEWTOWN			I0402!	60	47	47	47	49	48	49	45	47	49	50	50	60	57	57	57	59	58	59	55	57	59	60	60
NCA02	154 LORD STREET NEWTOWN			I0402!	60	52	52	52	53	53	53	51	52	54	55	54	60	62	62	62	63	63	63	61	62	64	65	64
NCA02	156 LORD STREET NEWTOWN			I0402!	60	52	52	53	54	53	54	51	52	55	55	55	60	62	62	63	64	63	64	61	62	65	65	65
NCA02	157 LORD STREET NEWTOWN			I0402!	60	45	45	45	46	46	46	43	45	47	47	47	60	55	55	55	56	56	56	53	55	57	57	57
NCA02	158 LORD STREET NEWTOWN			I0402!	60	53	53	53	54	54	54	51	53	55	56	55	60	63	63	63	64	64	64	61	63	65	66	65
NCA02	159 LORD STREET NEWTOWN			I0402!	60	47	47	48	49	48	49	46	47	49	50	50	60	57	57	58	59	58	59	56	57	59	60	60
NCA02	160 LORD STREET NEWTOWN			I0402!	60	53	53	53	54	54	54	51	53	55	56	55	60	63	63	63	64	64	64	61	63	65	66	65
NCA02	161 LORD STREET NEWTOWN			I0402!	60	48	49	49	50	50	50	47	49	51	51	51	60	58	59	59	60	60	60	57	59	61	61	61
NCA02	162 LORD STREET NEWTOWN			I0402!	60	53	53	53	55	54	55	52	53	55	56	56	60	63	63	63	65	64	65	62	63	65	66	66
NCA02	163 LORD STREET NEWTOWN			I0402!	60	48	48	48	50	49	50	46	48	50	51	50	60	58	58	58	60	59	60	56	58	60	61	60
NCA02	164 LORD STREET NEWTOWN			I0402!	60	53	53	54	55	55	55	52	53	56	56	56	60	63	63	64	65	65	65	62	63	66	66	66
NCA02	165 LORD STREET NEWTOWN			I0402!	60	52	52	53	54	54	54	50	52	54	55	55	60	62	62	63	64	64	64	60	62	64	65	65
NCA02	166 LORD STREET NEWTOWN			I0402!	60	49	49	49	52	51	51	45	49	51	52	52	60	59	59	59	62	61	61	55	59	61	62	62
NCA02	167 LORD STREET NEWTOWN			I0402!	60	47	47	48	49	49	49	44	47	49	50	50	60	57	57	58	59	59	59	54	57	59	60	60
NCA02	168 LORD STREET NEWTOWN			I0402!	60	54	54	54	55	55	55	52	54	56	57	56	60	64	64	64	65	65	65	62	64	66	67	66
NCA02	169 LORD STREET NEWTOWN			I0402!	60	51	51	51	53	53	53	46	51	52	53	53	60	61	61	61	63	63	63	56	61	62	63	63
NCA02	170 LORD STREET NEWTOWN			I0402!	60	54	54	54	55	55	55	52	54	56	57	56	60	64	64	64	65	65	65	62	64	66	67	66
NCA02	174 LORD STREET NEWTOWN			I0402!	60	54	54	54	55	55	55	53	54	56	57	57	60	64	64	64	65	65	65	63	64	66	67	67
NCA02	174 LORD STREET NEWTOWN			I0402!	60	54	54	54	55	55	55	52	54	56	57	56	60	64	64	64	65	65	65	62	64	66	67	66
NCA02	175 LORD STREET NEWTOWN			I0402!	60	45	45	45	46	46	46	44	46	47	47	47	60	55	55	55	56	56	56	54	56	57	57	57
NCA02	176 LORD STREET NEWTOWN			I0402!	60	56	56	56	57	57	57	54	56	58	59	58	60	66	66	66	67	67	67	64	66	68	69	68
NCA02	177 LORD STREET NEWTOWN			I0402!	60	46	46	46	48	48	48	44	46	48	49	49	60	56	56	56	58	58	58	54	56	58	59	59
NCA02	178 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	57	54	56	58	59	58	60	66	66	66	68	67	67	64	66	68	69	68
NCA02	179 LORD STREET NEWTOWN			I0402!	60	44	45	45	46	46	46	42	45	46	47	47	60	54	55	55	56	56	56	52	55	56	57	57

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Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)													
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering													
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	
NCA02	180 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	57	54	56	58	59	58	60	66	66	66	68	67	67	64	66	68	69	68	
NCA02	181 LORD STREET NEWTOWN			I0402!	60	45	45	46	47	47	47	42	46	47	48	48	60	55	55	56	57	57	57	52	56	57	58	58	
NCA02	182 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	57	54	56	58	59	58	60	66	66	66	68	67	67	64	66	68	69	68	
NCA02	184 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	58	54	56	58	59	59	60	66	66	66	68	67	68	64	66	68	69	69	
NCA02	186 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	58	54	56	58	59	59	60	66	66	66	68	67	68	64	66	68	69	69	
NCA02	188 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	58	54	56	58	59	59	60	66	66	66	68	67	68	64	66	68	69	69	
NCA02	190 LORD STREET NEWTOWN			I0402!	60	56	56	56	58	57	57	54	56	58	59	58	60	66	66	66	68	67	67	64	66	68	69	68	
NCA03	3 APPLEBEE STREET ST PETERS			I0402!	60	43	44	44	46	46	46	37	44	44	44	46	60	53	54	54	56	56	56	47	54	54	56	56	
NCA03	5 APPLEBEE STREET ST PETERS			I0402!	60	49	50	51	51	51	51	45	50	50	52	52	60	59	60	61	61	61	61	55	60	60	62	62	
NCA03	7 APPLEBEE STREET ST PETERS			I0402!	60	44	44	45	47	47	47	40	45	45	47	47	60	54	54	55	57	57	57	50	55	55	57	57	
NCA03	7A APPLEBEE STREET ST PETERS			I0402!	60	49	49	49	52	52	51	43	50	49	52	52	60	59	59	59	62	62	61	53	60	59	62	62	
NCA03	49 APPLEBEE STREET ST PETERS			I0402!	60	46	46	47	49	49	49	42	47	47	49	49	60	56	56	57	59	59	59	52	57	57	59	59	
NCA03	51 APPLEBEE STREET ST PETERS			I0402!	60	45	45	46	48	48	48	40	46	46	48	48	60	55	55	56	58	58	58	50	56	56	58	58	
NCA03	53 APPLEBEE STREET ST PETERS			I0402!	60	49	50	52	48	48	49	46	52	47	48	52	60	59	60	62	58	58	59	56	62	57	58	62	
NCA03	55 APPLEBEE STREET ST PETERS			I0402!	60	49	50	51	52	52	52	46	51	50	52	52	60	59	60	61	62	62	62	56	61	60	62	62	
NCA03	57 APPLEBEE STREET ST PETERS			I0402!	60	51	52	53	53	53	53	47	53	51	53	54	60	61	62	63	63	63	63	57	63	61	63	64	
NCA03	67 CAMPBELL STREET ST PETERS			I0402!	60	69	70	70	73	73	72	53	70	70	72	72	60	79	80	80	83	83	83	82	63	80	80	82	82
NCA03	63-65 CAMPBELL STREET ST PETERS			I0402!	60	70	70	70	73	73	72	53	70	69	72	72	60	80	80	80	83	83	82	63	80	79	82	82	
NCA03	1 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	53	53	53	51	52	55	55	54	60	62	62	62	63	63	63	61	62	65	65	64	
NCA03	3 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	53	53	53	51	52	55	55	54	60	62	62	62	63	63	63	61	62	65	65	64	
NCA03	5 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	53	53	53	51	52	54	55	54	60	62	62	62	63	63	63	61	62	64	65	64	
NCA03	7 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	53	53	53	51	52	54	55	54	60	62	62	62	63	63	63	61	62	64	65	64	
NCA03	9 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	52	52	53	51	52	54	55	54	60	62	62	62	62	62	63	61	62	64	65	64	
NCA03	11 COUNCIL STREET ST PETERS			I0402!	60	52	52	52	52	52	53	50	52	54	54	54	60	62	62	62	62	62	63	60	62	64	64	64	
NCA03	13 COUNCIL STREET ST PETERS			I0402!	60	51	51	52	52	52	52	50	52	54	54	54	60	61	61	62	62	62	62	60	62	64	64	64	
NCA03	15 COUNCIL STREET ST PETERS			I0402!	60	51	51	51	52	52	52	50	51	54	54	54	60	61	61	61	62	62	62	60	61	64	64	64	
NCA03	17 COUNCIL STREET ST PETERS			I0402!	60	51	51	51	52	52	52	50	51	53	54	53	60	61	61	61	62	62	62	60	61	63	64	63	
NCA03	19 COUNCIL STREET ST PETERS			I0402!	60	51	51	51	52	52	52	50	51	53	54	53	60	61	61	61	62	62	62	60	61	63	64	63	
NCA03	43 GOODSSELL STREET ST PETERS			I0402!	60	45	45	45	46	46	46	44	45	47	48	47	60	55	55	55	56	56	56	54	55	57	58	57	
NCA03	45 GOODSSELL STREET ST PETERS			I0402!	60	45	45	45	46	46	46	44	45	47	48	47	60	55	55	55	56	56	56	54	55	57	58	57	
NCA03	47 GOODSSELL STREET ST PETERS			I0402!	60	44	45	45	45	45	45	44	45	47	47	47	60	54	55	55	55	55	55	54	55	57	57	57	
NCA03	49 GOODSSELL STREET ST PETERS			I0402!	60	45	45	45	46	46	46	44	45	47	48	47	60	55	55	55	56	56	56	54	55	57	58	57	
NCA03	51 GOODSSELL STREET ST PETERS			I0402!	60	45	45	46	46	46	46	44	45	48	48	48	60	55	55	56	56	56	56	54	55	58	58	58	
NCA03	53 GOODSSELL STREET ST PETERS			I0402!	60	45	46	46	46	46	46	44	45	48	48	48	60	55	56	56	56	56	56	54	55	58	58	58	
NCA03	55 GOODSSELL STREET ST PETERS			I0402!	60	45	45	46	46	46	46	44	45	47	48	47	60	55	55	56	56	56	56	54	55	57	58	57	
NCA03	57 GOODSSELL STREET ST PETERS			I0402!	60	46	46	46	47	47	47	45	46	48	49	48	60	56	56	56	57	57	57	55	56	58	59	58	
NCA03	59 GOODSSELL STREET ST PETERS			I0402!	60	46	46	47	48	47	48	45	46	48	49	49	60	56	56	57	58	57	58	55	56	58	59	59	
NCA03	61 GOODSSELL STREET ST PETERS			I0402!	60	45	46	46	47	47	47	44	46	48	48	48	60	55	56	56	57	57	57	54	56	58	58	58	
NCA03	63 GOODSSELL STREET ST PETERS			I0402!	60	49	50	50	51	51	51	48	50	52	52	52	60	59	60	60	61	61	61	58	60	62	62	62	
NCA03	86 GOODSSELL STREET ST PETERS			I0402!	60	46	47	47	47	47	47	46	47	49	49	49	60	56	57	57	57	57	57	56	57	59	59	59	
NCA03	88 GOODSSELL STREET ST PETERS			I0402!	60	45	45	45	46	45	46	44	45	47	47	47	60	55	55	55	56	55	56	54	55	57	57	57	
NCA03	90 GOODSSELL STREET ST PETERS			I0402!	60	43	44	44	44	44	44	43	44	46	46	46	60	53	54	54	54	54	54	53	54	56	56	56	
NCA03	92 GOODSSELL STREET ST PETERS			I0402!	60	45	45	45	46	46	46	44	45	48	48	47	60	55	55	55	56	56	56	54	55	58	58	57	
NCA03	94 GOODSSELL STREET ST PETERS			I0402!	60	45	45	46	46	46	46	44	45	48	48	47	60	55	55	56	56	56	56	54	55	58	58	57	
NCA03	96 GOODSSELL STREET ST PETERS			I0402!	60	41	41	41	41	41	41	41	41	44	44	43	60	51	51	51	51	51	51	51	51	54	54	53	
NCA03	98 GOODSSELL STREET ST PETERS			I0402!	60	46	46	46	47	47	47	45	46	48	49	48	60	56	56	56	57	57	57	55	56	58	59	58	
NCA03	100 GOODSSELL STREET ST PETERS			I0402!	60	45	45	46	46	46	46	44	45	48	48	48	60	55	55	56	56	56	56	54	55	58	58	58	
NCA03	102 GOODSSELL STREET ST PETERS			I0402!	60	46	47	47	47	47	47	45	46	49	49	49	60	56	57	57	57	57	57	55	56	59	59	59	
NCA03	104 GOODSSELL STREET ST PETERS			I0402!	60	49	49	49	50	50	50	47	49	51	51	51	60	59	59	59	60	60	60	57	59	61	61	61	
NCA03	106 GOODSSELL STREET ST PETERS			I0402!	60	46	46	46	47	47	47	45	46	48	49	48	60	56	56	56	57	57	57	55	56	58	59	58	
NCA03	108 GOODSSELL STREET ST PETERS			I0402!	60	47	47	48	49	49	49	46	48	50	50	50	60	57	57	58	59	59	59	56	58	60	60	60	
NCA03	9 HUTCHINSON STREET ST PETERS			I0402!	60	45	45	46	47	47	47	39	46	44	47	48	60	55	55	56	57	57	57	49	56	54	57	58	
NCA03	11 HUTCHINSON STREET ST PETERS			I0402!	60	46	46	47	50	50	49	40	48	46	50	50	60	56	56	57	60	60	59	50	58	56	60	60	

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA03	19 HUTCHINSON STREET ST PETERS			I0402!	60	52	52	53	54	54	54	49	53	53	55	55	60	62	62	63	64	64	64	59	63	63	65	65
NCA03	43 HUTCHINSON STREET ST PETERS			I0402!	60	50	49	49	54	54	52	40	51	49	54	53	60	60	59	59	64	64	62	50	61	59	64	63
NCA03	48 HUTCHINSON STREET ST PETERS			I0402!	60	49	47	48	53	53	52	41	50	48	53	52	60	59	57	58	63	63	62	51	60	58	63	62
NCA03	50 HUTCHINSON STREET ST PETERS			I0402!	60	50	48	48	54	54	53	41	51	49	54	53	60	60	58	58	64	64	63	51	61	59	64	63
NCA03	52 HUTCHINSON STREET ST PETERS			I0402!	60	50	48	49	55	55	53	41	52	49	55	54	60	60	58	59	65	65	63	51	62	59	65	64
NCA03	54 HUTCHINSON STREET ST PETERS			I0402!	60	51	49	49	55	55	54	41	52	50	55	54	60	61	59	59	65	65	64	51	62	60	65	64
NCA03	55 HUTCHINSON STREET ST PETERS			I0402!	60	51	50	50	56	56	54	41	53	50	56	54	60	61	60	60	66	66	64	51	63	60	66	64
NCA03	57 HUTCHINSON STREET ST PETERS			I0402!	60	52	51	51	58	58	55	41	55	51	57	55	60	62	61	61	68	68	65	51	65	61	67	65
NCA03	58 HUTCHINSON STREET ST PETERS			I0402!	60	51	49	49	56	56	54	40	53	50	56	54	60	61	59	59	66	66	64	50	63	60	66	64
NCA03	59 HUTCHINSON STREET ST PETERS			I0402!	60	52	51	51	58	58	55	41	55	51	58	56	60	62	61	61	68	68	65	51	65	61	68	66
NCA03	60-68 HUTCHINSON STREET ST PETERS			I0402!	60	63	63	63	66	66	66	51	63	63	66	66	60	73	73	73	76	76	76	61	73	73	76	76
NCA03	61 HUTCHINSON STREET ST PETERS			I0402!	60	53	52	52	59	59	56	39	56	52	59	56	60	63	62	62	69	69	66	49	66	62	69	66
NCA03	63 HUTCHINSON STREET ST PETERS			I0402!	60	53	52	53	59	59	56	39	56	53	59	57	60	63	62	63	69	69	66	49	66	63	69	67
NCA03	65 HUTCHINSON STREET ST PETERS			I0402!	60	54	53	53	59	59	57	39	56	53	59	57	60	64	63	63	69	69	67	49	66	63	69	67
NCA03	67 HUTCHINSON STREET ST PETERS			I0402!	60	55	54	54	60	60	58	38	57	54	60	58	60	65	64	64	70	70	68	48	67	64	70	68
NCA03	69 HUTCHINSON STREET ST PETERS			I0402!	60	55	55	55	61	60	58	39	58	55	61	59	60	65	65	65	71	70	68	49	68	65	71	69
NCA03	71 HUTCHINSON STREET ST PETERS			I0402!	60	57	56	57	62	62	60	43	59	56	62	60	60	67	66	67	72	72	70	53	69	66	72	70
NCA03	73 HUTCHINSON STREET ST PETERS			I0402!	60	58	57	58	63	63	61	42	60	58	63	61	60	68	67	68	73	73	71	52	70	68	73	71
NCA03	77 HUTCHINSON STREET ST PETERS			I0402!	60	59	59	59	64	64	62	43	61	59	64	62	60	69	69	69	74	74	72	53	71	69	74	72
NCA03	79 HUTCHINSON STREET ST PETERS			I0402!	60	60	59	59	65	64	62	44	62	59	64	63	60	70	69	69	75	74	72	54	72	69	74	73
NCA03	81 HUTCHINSON STREET ST PETERS			I0402!	60	60	60	60	65	65	63	44	62	60	65	63	60	70	70	70	75	75	73	54	72	70	75	73
NCA03	83 HUTCHINSON STREET ST PETERS			I0402!	60	60	60	60	65	65	63	45	62	60	65	64	60	70	70	70	75	75	73	55	72	70	75	74
NCA03	85 HUTCHINSON STREET ST PETERS			I0402!	60	61	60	61	66	66	64	47	63	61	66	64	60	71	70	71	76	76	74	57	73	71	76	74
NCA03	87 HUTCHINSON STREET ST PETERS			I0402!	60	61	61	61	67	67	64	51	64	61	67	65	60	71	71	71	77	77	74	61	74	71	77	75
NCA03	3 LACKEY STREET ST PETERS			I0402!	60	46	47	47	48	48	48	39	47	46	48	49	60	56	57	57	58	58	58	49	57	56	58	59
NCA03	5 LACKEY STREET ST PETERS			I0402!	60	49	49	50	51	51	50	44	50	49	51	51	60	59	59	60	61	61	60	54	60	59	61	61
NCA03	6 LACKEY STREET ST PETERS			I0402!	60	53	53	53	55	55	55	44	53	53	55	56	60	63	63	63	65	65	65	54	63	63	65	66
NCA03	7 LACKEY STREET ST PETERS			I0402!	60	49	49	49	52	51	51	44	50	49	52	52	60	59	59	59	62	61	61	54	60	59	62	62
NCA03	8 LACKEY STREET ST PETERS			I0402!	60	53	53	53	56	56	56	44	54	53	56	56	60	63	63	63	66	66	66	54	64	63	66	66
NCA03	9 LACKEY STREET ST PETERS			I0402!	60	49	49	50	53	52	51	44	50	50	53	52	60	59	59	60	63	62	61	54	60	60	63	62
NCA03	10 LACKEY STREET ST PETERS			I0402!	60	50	50	50	53	53	53	41	50	50	53	53	60	60	60	60	63	63	63	51	60	60	63	63
NCA03	11 LACKEY STREET ST PETERS			I0402!	60	53	54	54	57	57	56	46	55	54	57	57	60	63	64	64	67	67	66	56	65	64	67	67
NCA03	12 LACKEY STREET ST PETERS			I0402!	60	49	49	50	51	51	51	43	50	49	51	52	60	59	59	60	61	61	61	53	60	59	61	62
NCA03	13 LACKEY STREET ST PETERS			I0402!	60	54	54	55	58	58	57	46	56	54	58	57	60	64	64	65	68	68	67	56	66	64	68	67
NCA03	14 LACKEY STREET ST PETERS			I0402!	60	47	47	48	50	50	50	43	48	47	50	50	60	57	57	58	60	60	60	53	58	57	60	60
NCA03	15-17 LACKEY STREET ST PETERS			I0402!	60	54	54	54	58	58	57	42	55	54	58	57	60	64	64	64	68	68	67	52	65	64	68	67
NCA03	16 LACKEY STREET ST PETERS			I0402!	60	60	60	60	64	64	63	45	61	60	64	63	60	70	70	70	74	74	73	55	71	70	74	73
NCA03	19 LACKEY STREET ST PETERS			I0402!	60	56	56	57	60	60	59	47	58	57	60	59	60	66	66	67	70	70	69	57	68	67	70	69
NCA03	21 LACKEY STREET ST PETERS			I0402!	60	57	57	57	61	61	60	46	58	57	61	60	60	67	67	67	71	71	70	56	68	67	71	70
NCA03	23 LACKEY STREET ST PETERS			I0402!	60	58	58	58	61	62	61	46	59	58	62	61	60	68	68	68	71	72	71	56	69	68	72	71
NCA03	25 LACKEY STREET ST PETERS			I0402!	60	58	58	59	62	62	61	47	59	59	62	61	60	68	68	69	72	72	71	57	69	69	72	71
NCA03	27 LACKEY STREET ST PETERS			I0402!	60	58	59	59	62	62	61	47	59	59	62	61	60	68	69	69	72	72	71	57	69	69	72	71
NCA03	29 LACKEY STREET ST PETERS			I0402!	60	58	58	58	62	62	61	46	59	59	62	61	60	68	68	68	72	72	71	56	69	69	72	71
NCA03	31 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	60	59	63	62	60	69	69	69	73	73	72	57	70	69	73	72
NCA03	33 LACKEY STREET ST PETERS			I0402!	60	59	59	59	62	62	62	46	60	59	63	62	60	69	69	69	72	72	72	56	70	69	73	72
NCA03	35 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	60	60	63	62	60	69	69	69	73	73	72	57	70	70	73	72
NCA03	37 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	46	60	59	63	62	60	69	69	69	73	73	72	56	70	69	73	72
NCA03	39 LACKEY STREET ST PETERS			I0402!	60	59	60	60	63	63	62	47	60	60	63	62	60	69	70	70	73	73	72	57	70	70	73	72
NCA03	41 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	60	59	63	62	60	69	69	69	73	73	72	57	70	69	73	72
NCA03	43 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	60	60	63	62	60	69	69	69	73	73	72	57	70	70	73	72
NCA03	45 LACKEY STREET ST PETERS			I0402!	60	60	60	60	63	64	63	47	61	60	64	63	60	70	70	70	73	74	73	57	71	70	74	73
NCA03	47 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	60	60	63	62	60	69	69	69	73	73	72	57	70	70	73	72
NCA03	49 LACKEY STREET ST PETERS			I0402!	60	59	59	59	63	63	62	47	61	60	64	63	60	69	69	69	73	73	72	57	71	70	74	73

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SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA03	51 LACKEY STREET ST PETERS			I0402!	60	60	60	60	63	64	63	47	61	60	64	63	60	70	70	70	73	74	73	57	71	70	74	73
NCA03	53 LACKEY STREET ST PETERS			I0402!	60	60	60	60	64	64	63	48	61	60	64	63	60	70	70	70	74	74	73	58	71	70	74	73
NCA03	55 LACKEY STREET ST PETERS			I0402!	60	61	61	61	65	65	64	49	62	61	65	64	60	71	71	71	75	75	74	59	72	71	75	74
NCA03	9 MAY STREET ST PETERS			I0402!	60	45	45	46	47	46	46	45	45	47	47	47	60	55	55	56	57	56	56	55	55	57	57	57
NCA03	11 MAY STREET ST PETERS			I0402!	60	46	46	46	47	47	47	45	46	48	49	48	60	56	56	56	57	57	57	55	56	58	59	58
NCA03	20 MAY STREET ST PETERS			I0402!	60	43	43	43	44	44	44	43	43	46	46	45	60	53	53	53	54	54	54	53	53	56	56	55
NCA03	22 MAY STREET ST PETERS			I0402!	60	43	43	43	43	43	43	42	43	45	45	45	60	53	53	53	53	53	53	52	53	55	55	55
NCA03	24 MAY STREET ST PETERS			I0402!	60	40	40	41	41	41	41	40	40	43	43	42	60	50	50	51	51	51	51	50	50	53	53	52
NCA03	26 MAY STREET ST PETERS			I0402!	60	48	48	48	48	48	48	47	48	50	50	50	60	58	58	58	58	58	58	57	58	60	60	60
NCA03	27 MAY STREET ST PETERS			I0402!	60	43	44	44	45	44	44	42	44	46	46	46	60	53	54	54	55	54	54	52	54	56	56	56
NCA03	29 MAY STREET ST PETERS			I0402!	60	47	47	48	48	48	48	46	47	50	50	49	60	57	57	58	58	58	58	56	57	60	60	59
NCA03	36 MAY STREET ST PETERS			I0402!	60	49	49	49	49	49	49	49	49	52	52	51	60	59	59	59	59	59	59	59	59	62	62	61
NCA03	37 MAY STREET ST PETERS			I0402!	60	43	43	44	44	44	44	42	43	45	45	45	60	53	53	54	54	54	54	52	53	55	55	55
NCA03	39 MAY STREET ST PETERS			I0402!	60	36	37	37	38	38	38	35	37	38	39	39	60	46	47	47	48	48	48	45	47	48	49	49
NCA03	40 MAY STREET ST PETERS			I0402!	60	48	48	48	48	48	48	48	48	51	51	50	60	58	58	58	58	58	58	58	58	61	61	60
NCA03	42 MAY STREET ST PETERS			I0402!	60	49	49	49	50	50	50	49	49	52	52	51	60	59	59	59	60	60	60	59	59	62	62	61
NCA03	43 MAY STREET ST PETERS			I0402!	60	48	49	49	49	49	49	48	49	51	51	51	60	58	59	59	59	59	59	58	59	61	61	61
NCA03	45 MAY STREET ST PETERS			I0402!	60	49	49	49	49	49	49	48	49	51	51	51	60	59	59	59	59	59	59	58	59	61	61	61
NCA03	47 MAY STREET ST PETERS			I0402!	60	48	49	49	49	49	49	48	49	51	51	51	60	58	59	59	59	59	59	58	59	61	61	61
NCA03	49 MAY STREET ST PETERS			I0402!	60	48	49	49	49	49	49	47	49	51	51	50	60	58	59	59	59	59	59	57	59	61	61	60
NCA03	55 MAY STREET ST PETERS			I0402!	60	48	49	49	49	49	49	47	48	51	51	51	60	58	59	59	59	59	59	57	58	61	61	61
NCA03	57 MAY STREET ST PETERS			I0402!	60	47	47	47	48	48	48	46	47	49	50	49	60	57	57	57	58	58	58	56	57	59	60	59
NCA03	62 MAY STREET ST PETERS			I0402!	60	50	50	50	50	50	50	50	50	53	53	52	60	60	60	60	60	60	60	60	60	63	63	62
NCA03	64 MAY STREET ST PETERS			I0402!	60	49	49	49	49	49	49	49	49	52	52	51	60	59	59	59	59	59	59	59	59	62	62	61
NCA03	66 MAY STREET ST PETERS			I0402!	60	46	47	47	47	47	47	46	47	49	49	49	60	56	57	57	57	57	57	56	57	59	59	59
NCA03	76 MAY STREET ST PETERS			I0402!	60	54	54	54	54	54	54	54	54	57	57	56	60	64	64	64	64	64	64	64	64	67	67	66
NCA03	78 MAY STREET ST PETERS			I0402!	60	55	55	55	55	55	55	54	55	58	58	57	60	65	65	65	65	65	65	64	65	68	68	67
NCA03	80 MAY STREET ST PETERS			I0402!	60	55	55	55	55	55	55	55	55	58	58	57	60	65	65	65	65	65	65	65	65	68	68	67
NCA03	92 MAY STREET ST PETERS			I0402!	60	61	61	61	61	61	61	61	61	64	64	63	60	71	71	71	71	71	71	71	71	74	74	73
NCA03	94 MAY STREET ST PETERS			I0402!	60	62	62	62	62	62	62	62	62	65	65	64	60	72	72	72	72	72	72	72	72	75	75	74
NCA03	105 MAY STREET ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA03	107 MAY STREET ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA03	109 MAY STREET ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA03	111 MAY STREET ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA03	113 MAY STREET ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA03	115 MAY STREET ST PETERS			I0402!	60	73	73	73	73	73	73	73	73	76	76	75	60	83	83	83	83	83	83	83	83	86	86	85
NCA03	117 MAY STREET ST PETERS			I0402!	60	74	74	74	74	74	74	74	74	77	77	76	60	84	84	84	84	84	84	84	84	87	87	86
NCA03	119 MAY STREET ST PETERS			I0402!	60	75	75	75	75	75	75	75	75	78	78	77	60	85	85	85	85	85	85	85	85	88	88	87
NCA03	124 MAY STREET ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA03	126 MAY STREET ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA03	128 MAY STREET ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA03	130 MAY STREET ST PETERS			I0402!	60	73	73	73	74	73	73	72	73	75	75	75	60	83	83	83	84	83	83	82	83	85	86	85
NCA04	2 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	71	74	74	74	74	74	74	74	74	64	81	81	81	84	84	84	84	84	84	84	84
NCA04	4 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	6 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	8 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	10 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	12 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	14 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84
NCA04	16 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84
NCA04	18 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	20 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
NCA04	22 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)													
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering													
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	
NCA04	24 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84	84
NCA04	26 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84	84	84
NCA04	28 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84	84	84
NCA04	30 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	72	72	74	74	74	74	74	74	74	64	81	82	82	84	84	84	84	84	84	84	84	84	84
NCA04	32 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84	84	84
NCA04	34 CAMPBELL ROAD ALEXANDRIA			I0402!	64	71	71	72	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84	84	84
NCA04	641 KING STREET ST PETERS			I0402!	64	42	44	45	44	44	44	43	43	43	44	64	52	54	55	54	54	54	53	53	53	53	53	54	
NCA04	643 KING STREET ST PETERS			I0402!	64	42	44	45	45	44	44	43	43	42	44	64	52	54	55	55	54	54	53	53	52	52	52	54	
NCA04	665 KING STREET ST PETERS			I0402!	64	43	45	46	46	45	45	45	44	44	45	64	53	55	56	56	55	55	55	54	54	54	55	55	
NCA04	667 KING STREET ST PETERS			I0402!	64	41	41	43	44	43	44	43	41	42	43	64	51	51	53	54	53	54	53	51	52	52	53	53	
NCA04	669 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	46	46	45	45	46	64	54	56	57	57	56	56	56	55	55	55	56	56	
NCA04	671 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	46	46	45	45	46	64	54	56	57	57	56	56	56	55	55	55	56	56	
NCA04	673 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	46	46	46	45	46	64	54	56	57	57	56	56	56	56	55	55	56	56	
NCA04	675 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	46	46	46	45	46	64	54	56	57	57	56	56	56	56	55	55	56	56	
NCA04	677 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	47	46	46	45	47	64	54	56	57	57	56	57	56	56	55	55	57	57	
NCA04	679 KING STREET ST PETERS			I0402!	64	44	46	47	47	46	47	46	46	45	47	64	54	56	57	57	56	57	56	56	55	55	57	57	
NCA04	681 KING STREET ST PETERS			I0402!	64	46	47	48	48	48	48	47	47	48	48	64	56	57	58	58	58	58	57	57	58	58	58	58	
NCA04	1 MAY STREET ST PETERS			I0402!	64	43	46	47	46	45	46	44	44	44	45	64	53	56	57	56	55	56	54	54	54	55	55	55	
NCA04	3 MAY STREET ST PETERS			I0402!	64	40	40	41	42	42	42	41	40	42	42	64	50	50	51	52	52	52	51	50	52	52	52	52	
NCA04	5 MAY STREET ST PETERS			I0402!	64	43	43	44	45	45	45	44	43	45	45	64	53	53	54	55	55	55	54	53	55	55	55	55	
NCA04	7 MAY STREET ST PETERS			I0402!	64	40	40	41	43	42	42	41	41	42	43	64	50	50	51	53	52	52	51	51	52	53	53	53	
NCA06A	3 BROWN STREET ST PETERS			I0402!	60	74	73	73	77	76	77	58	73	73	77	77	60	84	83	83	87	86	87	68	83	83	87	87	
NCA06A	5 BROWN STREET ST PETERS			I0402!	60	72	68	68	76	75	76	49	71	68	76	76	60	82	78	78	86	85	86	59	81	78	86	86	
NCA06A	6 BROWN STREET ST PETERS			I0402!	60	74	72	72	77	76	77	56	72	72	77	77	60	84	82	82	87	86	87	66	82	82	87	87	
NCA06A	7 BROWN STREET ST PETERS			I0402!	60	69	65	65	73	73	73	49	67	65	73	73	60	79	75	75	83	83	83	59	77	75	83	83	
NCA06A	8 BROWN STREET ST PETERS			I0402!	60	73	67	68	77	76	76	53	70	68	76	77	60	83	77	78	87	86	86	63	80	78	86	87	
NCA06A	9 BROWN STREET ST PETERS			I0402!	60	67	63	63	72	71	71	48	65	63	71	71	60	77	73	73	82	81	81	58	75	73	81	81	
NCA06A	10 BROWN STREET ST PETERS			I0402!	60	68	63	63	72	72	72	47	65	63	72	72	60	78	73	73	82	82	82	57	75	73	82	82	
NCA06A	11 BROWN STREET ST PETERS			I0402!	60	65	61	62	69	69	69	48	64	62	69	69	60	75	71	72	79	79	79	58	74	72	79	79	
NCA06A	12 BROWN STREET ST PETERS			I0402!	60	65	61	62	69	69	69	46	63	62	69	69	60	75	71	72	79	79	79	56	73	72	79	79	
NCA06A	13 BROWN STREET ST PETERS			I0402!	60	63	60	61	67	67	67	47	62	60	67	67	60	73	70	71	77	77	77	57	72	70	77	77	
NCA06A	75 CHURCH STREET ST PETERS			I0402!	60	71	73	71	76	76	76	56	72	78	75	76	60	81	83	81	86	86	86	66	82	88	85	86	
NCA06A	77 CHURCH STREET ST PETERS			I0402!	60	65	66	66	69	69	69	55	67	77	69	70	60	75	76	76	79	79	79	65	77	87	79	80	
NCA06A	79 CHURCH STREET ST PETERS			I0402!	60	64	65	64	67	67	68	50	65	78	67	68	60	74	75	74	77	77	78	60	75	88	77	78	
NCA06A	81 CHURCH STREET ST PETERS			I0402!	60	63	63	63	66	66	66	47	63	68	66	67	60	73	73	73	76	76	76	57	73	78	76	77	
NCA06A	7 FLORENCE STREET ST PETERS			I0402!	60	70	69	70	72	73	75	53	70	70	74	75	60	80	79	80	82	83	85	63	80	80	84	85	
NCA06A	9 FLORENCE STREET ST PETERS			I0402!	60	65	65	66	68	69	73	50	65	66	72	72	60	75	75	76	78	79	83	60	75	76	82	82	
NCA06A	4 ST PETERS STREET ST PETERS			I0402!	60	71	71	70	74	76	76	52	71	75	76	76	60	81	81	80	84	86	86	62	81	85	86	86	
NCA06A	6 ST PETERS STREET ST PETERS			I0402!	60	67	67	67	70	72	72	49	67	73	71	71	60	77	77	77	80	82	82	59	77	83	81	81	
NCA06A	4 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	6 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	8 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	10 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	12 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA06A	14 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA06A	16 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA06A	18 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA06A	20 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	72	72	72	72	72	72	72	72	72	75	75	74	60	82	82	82	82	82	82	82	82	85	85	84
NCA06A	22 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	24 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	71	71	71	71	71	71	71	71	71	74	74	73	60	81	81	81	81	81	81	81	81	84	84	83
NCA06A	26 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	70	70	70	70	70	70	70	70	70	73	73	72	60	80	80	80	80	80	80	80	80	83	83	82
NCA06A	28 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	70	70	70	70	70	70	70	70	70	73	73	72	60	80	80	80	80	80	80	80	80	83	83	82
NCA06A	32 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	54	54	54	55	55	55	51	54	56	57	56	60	64	64	64	65	65	65	61	64	66	67	66	

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SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)														
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering														
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11		
NCA06A	34 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	69	69	69	69	69	69	69	69	69	72	72	71	60	79	79	79	79	79	79	79	79	79	82	82	81
NCA06A	36 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	70	70	70	70	70	70	70	70	70	73	73	72	60	80	80	80	80	80	80	80	80	80	83	83	82
NCA06A	38 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	69	69	69	69	69	69	69	69	69	72	72	71	60	79	79	79	79	79	79	79	79	82	82	81	
NCA06A	40 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	69	69	69	69	69	69	69	69	69	72	72	71	60	79	79	79	79	79	79	79	79	82	82	81	
NCA06A	42 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	69	69	69	69	69	69	69	69	69	72	72	71	60	79	79	79	79	79	79	79	79	82	82	81	
NCA06A	44 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	63	63	63	63	63	63	63	63	63	66	66	65	60	73	73	73	73	73	73	73	73	76	76	75	
NCA06A	46 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	61	61	61	61	61	61	61	61	61	64	64	63	60	71	71	71	71	71	71	71	71	74	74	73	
NCA06A	48 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	59	59	59	59	59	59	59	59	59	62	62	61	60	69	69	69	69	69	69	69	69	72	72	71	
NCA06A	50 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	58	58	58	58	58	58	58	58	58	61	61	60	60	68	68	68	68	68	68	68	68	71	71	70	
NCA06A	52 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	57	57	57	57	57	57	57	57	57	60	60	59	60	67	67	67	67	67	67	67	67	70	70	69	
NCA06A	54 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	57	57	57	57	57	57	57	57	57	60	60	59	60	67	67	67	67	67	67	67	67	70	70	69	
NCA06A	58 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	55	55	55	55	55	55	55	55	55	58	58	57	60	65	65	65	65	65	65	65	65	68	68	67	
NCA06A	60 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	54	54	54	54	54	54	54	54	54	57	57	56	60	64	64	64	64	64	64	64	64	67	67	66	
NCA06A	62 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	53	53	53	53	53	53	53	53	53	56	56	55	60	63	63	63	63	63	63	63	63	66	66	65	
NCA06A	64 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	53	53	53	53	53	53	53	53	53	56	56	55	60	63	63	63	63	63	63	63	63	66	66	65	
NCA06A	66 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	52	52	52	52	52	52	52	52	52	55	55	54	60	62	62	62	62	62	62	62	62	65	65	64	
NCA06A	68 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	52	52	52	52	52	52	52	52	52	55	55	54	60	62	62	62	62	62	62	62	62	65	65	64	
NCA06A	70 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	49	49	49	50	50	50	49	50	52	52	52	60	59	59	59	60	60	60	59	60	62	62	62		
NCA06A	72 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	47	47	47	47	47	47	47	47	47	50	50	49	60	57	57	57	57	57	57	57	60	60	59		
NCA06A	74 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	49	49	49	49	49	49	49	49	49	52	52	51	60	59	59	59	59	59	59	59	59	62	62	61	
NCA06A	76 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	48	48	48	48	48	48	48	48	48	51	51	50	60	58	58	58	58	58	58	58	58	61	61	60	
NCA06A	78 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	43	43	43	43	43	43	43	43	43	46	46	45	60	53	53	53	53	53	53	53	53	56	56	55	
NCA06A	80 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	43	43	43	43	43	43	42	43	46	46	45	60	53	53	53	53	53	53	52	53	56	56	55		
NCA06A	82 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	43	43	43	43	43	43	42	43	45	45	45	60	53	53	53	53	53	53	52	53	55	55	55		
NCA06A	84 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	42	42	42	43	43	43	42	42	45	45	44	60	52	52	52	53	53	53	52	52	55	55	54		
NCA06A	86 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	42	42	42	43	43	43	42	42	45	45	44	60	52	52	52	53	53	53	52	52	55	55	54		
NCA06A	88 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	39	39	39	39	39	39	38	39	41	42	41	60	49	49	49	49	49	49	48	49	51	52	51		
NCA06A	90 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	41	41	41	42	42	42	41	41	44	44	43	60	51	51	51	52	52	52	51	51	54	54	53		
NCA06A	92 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	41	41	41	41	41	41	41	41	44	44	43	60	51	51	51	51	51	51	51	51	54	54	53		
NCA06A	94 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	41	41	41	42	42	42	41	41	44	44	43	60	51	51	51	52	52	52	51	51	54	54	53		
NCA06A	96 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	40	40	40	40	40	40	40	40	43	43	42	60	50	50	50	50	50	50	50	50	53	53	52		
NCA06A	98 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	40	40	40	41	41	41	40	40	43	43	42	60	50	50	50	51	51	51	50	50	53	53	52		
NCA06A	100 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	40	40	40	40	40	40	39	40	43	43	42	60	50	50	50	50	50	50	49	50	53	53	52		
NCA06A	102 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	40	40	40	40	40	40	39	40	42	43	42	60	50	50	50	50	50	50	49	50	52	53	52		
NCA06A	104 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	39	39	39	40	40	40	39	39	42	42	41	60	49	49	49	50	50	50	49	49	52	52	51		
NCA06A	106 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	39	39	39	39	39	39	39	39	42	42	41	60	49	49	49	49	49	49	49	49	52	52	51		
NCA06A	108 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	39	39	39	39	39	39	39	39	42	42	41	60	49	49	49	49	49	49	49	49	52	52	51		
NCA06A	110 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	36	38	38	38	60	45	45	45	46	46	46	45	46	48	48	48		
NCA06A	112 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	39	39	39	39	39	39	38	39	41	41	41	60	49	49	49	49	49	49	48	49	51	51	51		
NCA06A	114 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	38	38	38	39	39	39	38	39	41	41	41	60	48	48	48	49	49	49	48	49	51	51	51		
NCA06A	116-118 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	37	37	37	38	38	38	37	37	40	40	39	60	47	47	47	48	48	48	47	47	50	50	49		
NCA06A	120 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	35	35	35	34	35	37	37	37	60	45	45	45	45	45	45	44	45	47	47	47		
NCA06A	122 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	36	36	36	36	35	36	38	38	38	60	45	45	46	46	46	46	45	46	48	48	48		
NCA06A	124 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	36	36	36	36	36	36	35	36	38	39	38	60	46	46	46	46	46	46	45	46	48	49	48		
NCA06A	126 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	36	38	38	38	60	45	45	45	46	46	46	45	46	48	48	48		
NCA06A	128 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	36	36	36	36	35	36	38	38	38	60	45	45	46	46	46	46	45	46	48	48	48		
NCA06A	130 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	36	38	38	38	60	45	45	45	46	46	46	45	46	48	48	48		
NCA06A	132 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	36	36	36	36	36	36	35	36	38	38	38	60	46	46	46	46	46	46	45	46	48	48	48		
NCA06A	134 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	36	36	36	36	35	36	38	38	38	60	45	45	46	46	46	46	45	46	48	48	48		
NCA06A	136 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	36	36	36	36	35	36	38	38	38	60	45	45	46	46	46	46	45	46	48	48	48		
NCA06A	138 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47		
NCA06A	140 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47		
NCA06A	142 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47		

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA06A	144 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	35	35	35	34	35	37	38	37	60	45	45	45	45	45	45	44	45	47	48	47
NCA06A	146 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	35	35	35	34	35	38	38	37	60	45	45	45	45	45	45	44	45	48	48	47
NCA06A	148 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	36	38	38	37	60	45	45	45	46	46	46	45	46	48	48	47
NCA06A	150 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47
NCA06A	152 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47
NCA06A	154 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47
NCA06A	156 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	35	35	35	36	36	36	35	35	38	38	37	60	45	45	45	46	46	46	45	45	48	48	47
NCA06A	158 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	37	37	37	38	38	38	36	38	39	40	39	60	47	47	47	48	48	48	46	48	49	50	49
NCA06A	160 UNWINS BRIDGE ROAD ST PETERS			I0402!	60	36	36	36	36	36	36	35	36	39	39	38	60	46	46	46	46	46	46	45	46	49	49	48
NCA06B	15 BROWN STREET ST PETERS			I0402!	52	62	59	59	65	65	65	48	61	59	65	65	52	72	69	69	75	75	75	58	71	69	75	75
NCA06B	16 BROWN STREET ST PETERS			I0402!	52	63	60	60	67	66	67	45	61	60	66	67	52	73	70	70	77	76	77	55	71	70	76	77
NCA06B	17 BROWN STREET ST PETERS			I0402!	52	60	58	58	63	63	63	48	59	58	63	64	52	70	68	68	73	73	73	58	69	68	73	74
NCA06B	19 BROWN STREET ST PETERS			I0402!	52	59	57	57	62	62	63	49	58	57	62	63	52	69	67	67	72	72	73	59	68	67	72	73
NCA06B	21 BROWN STREET ST PETERS			I0402!	52	58	55	56	61	60	61	49	57	56	61	61	52	68	65	66	71	70	71	59	67	66	71	71
NCA06B	22 BROWN STREET ST PETERS			I0402!	52	60	57	57	63	63	63	45	59	58	63	64	52	70	67	67	73	73	73	55	69	68	73	74
NCA06B	23 BROWN STREET ST PETERS			I0402!	52	57	54	55	60	59	60	48	56	55	60	60	52	67	64	65	70	69	70	58	66	65	70	70
NCA06B	24 BROWN STREET ST PETERS			I0402!	52	58	56	56	62	61	62	44	57	57	62	62	52	68	66	66	72	71	72	54	67	67	72	72
NCA06B	25 BROWN STREET ST PETERS			I0402!	52	56	54	55	59	59	60	48	56	55	59	60	52	66	64	65	69	69	70	58	66	65	69	70
NCA06B	26 BROWN STREET ST PETERS			I0402!	52	57	55	56	60	60	61	45	56	56	60	61	52	67	65	66	70	70	71	55	66	66	70	71
NCA06B	28 BROWN STREET ST PETERS			I0402!	52	57	55	55	60	60	60	45	56	55	60	60	52	67	65	65	70	70	70	55	66	65	70	70
NCA06B	30 BROWN STREET ST PETERS			I0402!	52	56	54	55	59	59	60	45	55	55	59	60	52	66	64	65	69	69	70	55	65	65	69	70
NCA06B	32 BROWN STREET ST PETERS			I0402!	52	56	54	54	59	59	59	45	55	55	59	59	52	66	64	64	69	69	69	55	65	65	69	69
NCA06B	33 BROWN STREET ST PETERS			I0402!	52	55	53	54	58	58	58	49	54	54	58	58	52	65	63	64	68	68	68	59	64	64	68	68
NCA06B	34-36 BROWN STREET ST PETERS			I0402!	52	55	53	54	58	58	58	45	54	54	58	58	52	65	63	64	68	68	68	55	64	64	68	68
NCA06B	35 BROWN STREET ST PETERS			I0402!	52	55	53	54	58	58	58	49	54	54	58	59	52	65	63	64	68	68	68	59	64	64	68	69
NCA06B	37 BROWN STREET ST PETERS			I0402!	52	55	53	53	57	57	58	48	54	53	57	58	52	65	63	63	67	67	68	58	64	63	67	68
NCA06B	38 BROWN STREET ST PETERS			I0402!	52	55	53	53	57	57	58	45	54	54	58	58	52	65	63	63	67	67	68	55	64	64	68	68
NCA06B	40 BROWN STREET ST PETERS			I0402!	52	54	52	53	57	57	57	44	53	53	57	58	52	64	62	63	67	67	67	54	63	63	67	68
NCA06B	41 BROWN STREET ST PETERS			I0402!	52	54	53	53	57	57	57	46	54	53	57	58	52	64	63	63	67	67	67	56	64	63	67	68
NCA06B	42 BROWN STREET ST PETERS			I0402!	52	56	55	56	59	58	59	49	56	56	59	59	52	66	65	66	69	68	69	59	66	66	69	69
NCA06B	43 BROWN STREET ST PETERS			I0402!	52	54	52	52	56	56	57	45	53	52	57	57	52	64	62	62	66	66	67	55	63	62	67	67
NCA06B	44 BROWN STREET ST PETERS			I0402!	52	55	54	54	57	57	58	47	54	55	58	58	52	65	64	64	67	67	68	57	64	65	68	68
NCA06B	45 BROWN STREET ST PETERS			I0402!	52	53	52	52	56	56	56	47	53	52	56	57	52	63	62	62	66	66	66	57	63	62	66	67
NCA06B	46 BROWN STREET ST PETERS			I0402!	52	53	53	53	56	56	55	47	53	53	56	56	52	63	63	63	66	66	65	57	63	63	66	66
NCA06B	47 BROWN STREET ST PETERS			I0402!	52	53	51	52	56	56	56	48	52	52	56	56	52	63	61	62	66	66	66	58	62	62	66	66
NCA06B	48 BROWN STREET ST PETERS			I0402!	52	52	51	52	54	54	54	47	52	53	55	55	52	62	61	62	64	64	64	57	62	63	65	65
NCA06B	49 BROWN STREET ST PETERS			I0402!	52	52	51	51	55	55	55	47	52	51	55	56	52	62	61	61	65	65	65	57	62	61	65	66
NCA06B	50 BROWN STREET ST PETERS			I0402!	52	52	50	51	54	54	55	44	51	52	55	55	52	62	60	61	64	64	65	54	61	62	65	65
NCA06B	51 BROWN STREET ST PETERS			I0402!	52	52	51	51	55	55	55	48	52	52	55	55	52	62	61	61	65	65	65	58	62	62	65	65
NCA06B	53 BROWN STREET ST PETERS			I0402!	52	52	50	51	55	55	55	47	51	51	55	55	52	62	60	61	65	65	65	57	61	61	65	65
NCA06B	54 BROWN STREET ST PETERS			I0402!	52	52	50	51	54	54	55	44	51	51	54	55	52	62	60	61	64	64	65	54	61	61	64	65
NCA06B	55 BROWN STREET ST PETERS			I0402!	52	51	49	50	54	53	54	48	50	51	54	54	52	61	59	60	64	63	64	58	60	61	64	64
NCA06B	56 BROWN STREET ST PETERS			I0402!	52	51	50	50	54	53	54	43	50	51	54	54	52	61	60	60	64	63	64	53	60	61	64	64
NCA06B	57 BROWN STREET ST PETERS			I0402!	52	51	50	50	54	54	54	49	51	52	54	55	52	61	60	60	64	64	64	59	61	62	64	65
NCA06B	58 BROWN STREET ST PETERS			I0402!	52	52	52	52	55	55	55	47	52	53	55	55	52	62	62	62	65	65	65	57	62	63	65	65
NCA06B	59 BROWN STREET ST PETERS			I0402!	52	53	53	53	56	55	56	49	53	54	56	56	52	63	63	63	66	65	66	59	63	64	66	66
NCA06B	61 BROWN STREET ST PETERS			I0402!	52	53	52	52	55	55	56	48	53	53	56	56	52	63	62	62	65	65	66	58	63	63	66	66
NCA06B	62 BROWN STREET ST PETERS			I0402!	52	48	48	48	51	50	51	43	48	49	51	51	52	58	58	58	61	60	61	53	58	59	61	61
NCA06B	63 BROWN STREET ST PETERS			I0402!	52	54	54	54	57	56	56	51	54	55	57	57	52	64	64	64	67	66	66	61	64	65	67	67
NCA06B	63A BROWN STREET ST PETERS			I0402!	52	53	53	53	56	56	56	51	53	55	56	56	52	63	63	63	66	66	66	61	63	65	66	66
NCA06B	64 BROWN STREET ST PETERS			I0402!	52	49	48	49	52	52	52	42	49	49	52	53	52	59	58	59	62	62	62	52	59	59	62	63
NCA06B	65 BROWN STREET ST PETERS			I0402!	52	47	46	47	50	50	50	41	47	47	50	50	52	57	56	57	60	60	60	51	57	57	60	60
NCA06B	66 BROWN STREET ST PETERS			I0402!	52	48	48	48	50	50	50	40	48	48	50	50	52	58	58	58	60	60	60	50	58	58	60	60

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SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)															Predicted Noise Levels, dB(A)											
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA06B	67 BROWN STREET ST PETERS			I0402!	52	47	46	47	50	50	50	45	47	48	50	50	52	57	56	57	60	60	60	55	57	58	60	60
NCA06B	68 BROWN STREET ST PETERS			I0402!	52	48	47	48	51	51	51	42	48	48	51	51	52	58	57	58	61	61	61	52	58	58	61	61
NCA06B	69 BROWN STREET ST PETERS			I0402!	52	48	47	47	51	51	51	46	48	49	51	51	52	58	57	57	61	61	61	56	58	59	61	61
NCA06B	70 BROWN STREET ST PETERS			I0402!	52	47	47	48	50	50	50	41	48	47	50	50	52	57	57	58	60	60	60	51	58	57	60	60
NCA06B	71 BROWN STREET ST PETERS			I0402!	52	48	47	47	50	50	50	46	48	49	51	51	52	58	57	57	60	60	61	56	58	59	61	61
NCA06B	83 CHURCH STREET ST PETERS			I0402!	52	63	63	63	66	66	66	45	63	63	66	66	52	73	73	73	76	76	76	55	73	73	76	76
NCA06B	85 CHURCH STREET ST PETERS			I0402!	52	61	61	60	64	64	64	44	61	61	64	64	52	71	71	70	74	74	74	54	71	71	74	74
NCA06B	87 CHURCH STREET ST PETERS			I0402!	52	60	60	59	62	63	63	44	60	60	63	63	52	70	70	69	72	73	73	54	70	70	73	73
NCA06B	89 CHURCH STREET ST PETERS			I0402!	52	59	59	58	61	62	61	44	59	59	62	62	52	69	69	68	71	72	71	54	69	69	72	72
NCA06B	91A CHURCH STREET ST PETERS			I0402!	52	55	55	55	58	58	58	41	55	56	58	58	52	65	65	65	68	68	68	51	65	66	68	68
NCA06B	91B CHURCH STREET ST PETERS			I0402!	52	55	55	55	58	58	58	43	56	57	58	58	52	65	65	65	68	68	68	53	66	67	68	68
NCA06B	91C CHURCH STREET ST PETERS			I0402!	52	57	57	57	60	60	60	43	57	57	60	60	52	67	67	67	70	70	70	53	67	67	70	70
NCA06B	91D CHURCH STREET ST PETERS			I0402!	52	57	57	57	60	60	60	44	57	58	60	60	52	67	67	67	70	70	70	54	67	68	70	70
NCA06B	95 CHURCH STREET ST PETERS			I0402!	52	52	52	52	54	54	55	46	52	52	55	55	52	62	62	62	64	64	65	56	62	62	65	65
NCA06B	97 CHURCH STREET ST PETERS			I0402!	52	50	50	50	52	52	52	45	50	50	53	52	52	60	60	60	62	62	62	55	60	60	63	62
NCA06B	99 CHURCH STREET ST PETERS			I0402!	52	47	47	47	50	49	50	41	48	48	50	50	52	57	57	57	60	59	60	51	58	58	60	60
NCA06B	101 CHURCH STREET ST PETERS			I0402!	52	49	50	50	51	51	51	47	50	50	51	52	52	59	60	60	61	61	61	57	60	60	61	62
NCA06B	103 CHURCH STREET ST PETERS			I0402!	52	49	50	50	51	51	51	47	50	50	50	51	52	59	60	60	61	61	61	57	60	60	61	62
NCA06B	1A CONWAY PLACE ST PETERS			I0402!	52	48	48	48	49	49	49	46	48	50	50	50	52	58	58	58	59	59	59	56	58	60	60	60
NCA06B	3 CONWAY PLACE ST PETERS			I0402!	52	50	50	50	52	52	52	48	51	51	52	52	52	60	60	60	62	62	62	58	61	61	62	62
NCA06B	7 CONWAY PLACE ST PETERS			I0402!	52	51	51	52	54	54	54	46	52	52	54	54	52	61	61	62	64	64	64	56	62	62	64	64
NCA06B	9 CONWAY PLACE ST PETERS			I0402!	52	51	51	51	53	53	53	46	51	51	53	54	52	61	61	61	63	63	63	56	61	61	63	64
NCA06B	3 EDITH STREET ST PETERS			I0402!	52	35	37	38	37	37	38	35	37	36	37	37	52	45	47	48	47	47	48	45	47	46	47	47
NCA06B	5 EDITH STREET ST PETERS			I0402!	52	35	37	37	37	37	38	34	37	36	38	38	52	45	47	47	47	47	48	44	47	46	48	48
NCA06B	8 EDITH STREET ST PETERS			I0402!	52	38	39	39	39	39	40	35	38	38	39	40	52	48	49	49	49	49	50	45	48	48	49	50
NCA06B	10 EDITH STREET ST PETERS			I0402!	52	38	39	39	40	40	40	37	39	39	40	40	52	48	49	49	50	50	50	47	49	49	50	50
NCA06B	11 EDITH STREET ST PETERS			I0402!	52	40	41	41	42	42	42	38	40	40	42	42	52	50	51	51	52	52	52	48	50	50	52	52
NCA06B	12 EDITH STREET ST PETERS			I0402!	52	38	39	39	39	39	40	37	39	38	39	40	52	48	49	49	49	49	50	47	49	49	50	50
NCA06B	14 EDITH STREET ST PETERS			I0402!	52	38	40	40	40	40	40	37	39	39	40	40	52	48	50	50	50	50	50	47	49	49	50	50
NCA06B	18 EDITH STREET ST PETERS			I0402!	52	38	40	40	40	40	40	35	38	38	40	40	52	48	50	50	50	50	50	45	48	48	50	50
NCA06B	20 EDITH STREET ST PETERS			I0402!	52	38	39	39	40	40	40	35	39	39	40	40	52	48	49	49	50	50	50	45	49	49	50	50
NCA06B	22 EDITH STREET ST PETERS			I0402!	52	39	39	39	40	40	40	37	39	39	41	41	52	49	49	49	50	50	50	47	49	49	51	51
NCA06B	32 EDITH STREET ST PETERS			I0402!	52	39	40	40	41	41	41	37	40	40	41	41	52	49	50	50	51	51	51	47	50	50	51	51
NCA06B	32 EDITH STREET ST PETERS			I0402!	52	39	40	41	41	41	42	37	40	40	41	42	52	49	50	51	51	51	52	47	50	50	51	52
NCA06B	33 EDITH STREET ST PETERS			I0402!	52	41	42	42	44	43	44	39	42	42	44	44	52	51	52	52	54	53	54	49	52	52	54	54
NCA06B	34 EDITH STREET ST PETERS			I0402!	52	39	39	40	40	40	40	36	39	39	40	41	52	49	49	50	50	50	50	46	49	49	50	51
NCA06B	36 EDITH STREET ST PETERS			I0402!	52	38	39	39	40	40	40	36	39	39	40	41	52	48	49	49	50	50	50	46	49	49	50	51
NCA06B	38 EDITH STREET ST PETERS			I0402!	52	38	39	39	40	40	40	36	39	38	40	40	52	48	49	49	50	50	50	46	49	48	50	50
NCA06B	40 EDITH STREET ST PETERS			I0402!	52	39	40	40	41	41	41	37	40	39	40	41	52	49	50	50	51	51	51	47	50	49	50	51
NCA06B	42 EDITH STREET ST PETERS			I0402!	52	38	39	39	39	39	40	36	39	38	39	40	52	48	49	49	49	49	50	46	49	48	49	50
NCA06B	43 EDITH STREET ST PETERS			I0402!	52	41	42	43	43	43	43	38	42	41	43	43	52	51	52	53	53	53	53	48	52	51	53	53
NCA06B	44 EDITH STREET ST PETERS			I0402!	52	37	38	38	38	38	39	35	38	37	38	39	52	47	48	48	48	48	49	45	48	47	48	49
NCA06B	45 EDITH STREET ST PETERS			I0402!	52	41	42	42	44	44	44	37	41	42	45	45	52	51	52	52	54	54	54	47	51	52	55	55
NCA06B	46 EDITH STREET ST PETERS			I0402!	52	37	38	38	39	39	39	34	37	37	39	39	52	47	48	48	49	49	49	44	47	47	49	49
NCA06B	48 EDITH STREET ST PETERS			I0402!	52	38	39	39	40	40	40	35	38	38	40	40	52	48	49	49	50	50	50	45	48	48	50	50
NCA06B	50 EDITH STREET ST PETERS			I0402!	52	37	38	38	39	39	39	33	38	37	39	40	52	47	48	48	49	49	49	43	48	47	49	50
NCA06B	52 EDITH STREET ST PETERS			I0402!	52	38	38	39	40	40	40	35	39	38	40	40	52	48	48	49	50	50	50	45	49	48	50	50
NCA06B	59 EDITH STREET ST PETERS			I0402!	52	45	46	46	48	48	47	43	46	46	48	48	52	55	56	56	58	58	57	53	56	56	58	58
NCA06B	61 EDITH STREET ST PETERS			I0402!	52	46	46	46	48	48	48	42	46	46	48	48	52	56	56	56	58	58	58	52	56	56	58	58
NCA06B	63 EDITH STREET ST PETERS			I0402!	52	39	40	40	41	41	41	36	40	40	42	42	52	49	50	50	51	51	51	46	50	50	52	52
NCA06B	65 EDITH STREET ST PETERS			I0402!	52	46	46	46	48	48	48	43	47	46	48	48	52	56	56	56	58	58	58	53	57	56	58	58
NCA06B	75 EDITH STREET ST PETERS			I0402!	52	42	41	42	44	44	44	37	42	42	44	44	52	52	51	52	54	54	54	47	52	52	54	54
NCA06B	78 EDITH STREET ST PETERS			I0402!	52	47	47	48	49	49	50	44	48	47	50	50	52	57	57	58	59	59	60	54	58	57	60	60

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA06B	4 FLORENCE STREET ST PETERS			I0402!	52	66	66	66	69	69	74	44	66	66	73	73	52	76	76	76	79	79	84	54	76	76	83	83
NCA06B	6 FLORENCE STREET ST PETERS			I0402!	52	66	66	66	69	69	73	50	66	66	72	72	52	76	76	76	79	79	83	60	76	76	82	82
NCA06B	8 FLORENCE STREET ST PETERS			I0402!	52	60	60	60	63	64	67	45	61	60	66	66	52	70	70	70	73	74	77	55	71	70	76	76
NCA06B	8A FLORENCE STREET ST PETERS			I0402!	52	60	60	61	63	64	67	46	61	61	66	67	52	70	70	71	73	74	77	56	71	71	76	77
NCA06B	10 FLORENCE STREET ST PETERS			I0402!	52	60	60	61	63	63	66	47	60	61	66	66	52	70	70	71	73	73	76	57	70	71	76	76
NCA06B	11 FLORENCE STREET ST PETERS			I0402!	52	63	63	63	66	66	70	43	63	63	69	69	52	73	73	73	76	76	80	53	73	73	79	79
NCA06B	12 FLORENCE STREET ST PETERS			I0402!	52	60	60	60	63	63	65	47	60	60	65	65	52	70	70	70	73	73	75	57	70	70	75	75
NCA06B	13 FLORENCE STREET ST PETERS			I0402!	52	60	60	61	63	64	67	45	60	60	66	66	52	70	70	71	73	74	77	55	70	70	76	76
NCA06B	14 FLORENCE STREET ST PETERS			I0402!	52	59	59	60	62	62	65	46	59	60	64	65	52	69	69	70	72	72	75	56	69	70	74	75
NCA06B	15 FLORENCE STREET ST PETERS			I0402!	52	58	58	59	61	62	64	45	58	58	64	64	52	68	68	69	71	72	74	55	68	68	74	74
NCA06B	16 FLORENCE STREET ST PETERS			I0402!	52	59	59	59	61	62	64	46	59	59	64	64	52	69	69	69	71	72	74	56	69	69	74	74
NCA06B	17 FLORENCE STREET ST PETERS			I0402!	52	57	57	57	60	60	62	44	57	57	62	62	52	67	67	67	70	70	72	54	67	67	72	72
NCA06B	18 FLORENCE STREET ST PETERS			I0402!	52	58	58	59	61	61	64	47	58	59	63	63	52	68	68	69	71	71	74	57	68	69	73	73
NCA06B	19 FLORENCE STREET ST PETERS			I0402!	52	54	54	55	57	58	60	43	55	55	60	60	52	64	64	65	67	68	70	53	65	65	70	70
NCA06B	20 FLORENCE STREET ST PETERS			I0402!	52	58	58	58	61	61	63	46	58	58	63	63	52	68	68	68	71	71	73	56	68	68	73	73
NCA06B	21 FLORENCE STREET ST PETERS			I0402!	52	54	54	55	57	57	60	43	54	55	59	60	52	64	64	65	67	67	70	53	64	65	69	70
NCA06B	22 FLORENCE STREET ST PETERS			I0402!	52	55	54	55	57	58	60	44	55	55	60	60	52	65	64	65	67	68	70	54	65	65	70	70
NCA06B	23 FLORENCE STREET ST PETERS			I0402!	52	53	53	54	57	57	59	41	54	54	58	58	52	63	63	64	67	67	69	51	64	64	68	68
NCA06B	24 FLORENCE STREET ST PETERS			I0402!	52	54	54	55	57	57	60	41	54	55	59	60	52	64	64	65	67	67	70	51	64	65	69	70
NCA06B	25 FLORENCE STREET ST PETERS			I0402!	52	53	53	54	57	57	59	43	54	54	58	58	52	63	63	64	67	67	69	53	64	64	68	68
NCA06B	26 FLORENCE STREET ST PETERS			I0402!	52	54	54	54	57	57	59	40	54	54	59	59	52	64	64	64	67	67	69	50	64	64	69	69
NCA06B	27 FLORENCE STREET ST PETERS			I0402!	52	53	53	54	56	56	58	43	53	53	58	58	52	63	63	64	66	66	68	53	63	63	68	68
NCA06B	28 FLORENCE STREET ST PETERS			I0402!	52	53	53	53	56	56	58	40	53	53	58	58	52	63	63	63	66	66	68	50	63	63	68	68
NCA06B	29 FLORENCE STREET ST PETERS			I0402!	52	52	52	52	55	55	57	43	52	52	57	57	52	62	62	62	65	65	67	53	62	62	67	67
NCA06B	30 FLORENCE STREET ST PETERS			I0402!	52	52	52	53	55	55	57	40	52	53	57	57	52	62	62	63	65	65	67	50	62	63	67	67
NCA06B	31 FLORENCE STREET ST PETERS			I0402!	52	51	51	52	54	54	56	43	51	51	56	56	52	61	61	62	64	64	66	53	61	61	66	66
NCA06B	32 FLORENCE STREET ST PETERS			I0402!	52	52	51	52	54	54	56	40	51	52	56	56	52	62	61	62	64	64	66	50	61	62	66	66
NCA06B	33 FLORENCE STREET ST PETERS			I0402!	52	51	51	52	54	54	55	43	51	51	55	55	52	61	61	62	64	64	65	53	61	61	65	65
NCA06B	34 FLORENCE STREET ST PETERS			I0402!	52	54	54	54	56	56	57	45	54	54	57	58	52	64	64	64	66	66	67	55	64	64	67	68
NCA06B	35 FLORENCE STREET ST PETERS			I0402!	52	51	51	51	54	54	55	43	51	51	55	55	52	61	61	61	64	64	65	53	61	61	65	65
NCA06B	36 FLORENCE STREET ST PETERS			I0402!	52	53	52	53	55	55	56	44	53	53	56	57	52	63	62	63	65	65	66	54	63	63	66	67
NCA06B	37 FLORENCE STREET ST PETERS			I0402!	52	50	51	51	53	53	55	41	51	51	55	55	52	60	61	61	63	63	65	51	61	61	65	65
NCA06B	38 FLORENCE STREET ST PETERS			I0402!	52	50	50	50	53	53	55	40	50	51	54	55	52	60	60	60	63	63	65	50	60	61	64	65
NCA06B	39 FLORENCE STREET ST PETERS			I0402!	52	50	50	50	53	53	54	42	50	50	54	54	52	60	60	60	63	63	64	52	60	60	64	64
NCA06B	40 FLORENCE STREET ST PETERS			I0402!	52	50	50	50	53	53	54	41	50	50	54	54	52	60	60	60	63	63	64	51	60	60	64	64
NCA06B	41 FLORENCE STREET ST PETERS			I0402!	52	50	50	50	53	53	54	41	50	50	54	54	52	60	60	60	63	63	64	51	60	60	64	64
NCA06B	42 FLORENCE STREET ST PETERS			I0402!	52	49	49	50	52	52	54	42	49	49	54	54	52	59	59	60	62	62	64	52	59	60	64	64
NCA06B	43 FLORENCE STREET ST PETERS			I0402!	52	49	49	50	52	52	54	38	50	50	53	53	52	59	59	60	62	62	64	48	60	60	63	63
NCA06B	44 FLORENCE STREET ST PETERS			I0402!	52	49	49	49	52	52	53	42	49	49	53	53	52	59	59	59	62	62	63	52	59	59	63	63
NCA06B	45-47 FLORENCE STREET ST PETERS			I0402!	52	48	48	49	51	51	52	43	49	49	52	52	52	58	58	59	61	61	62	53	59	59	62	62
NCA06B	46 FLORENCE STREET ST PETERS			I0402!	52	48	48	49	51	51	53	43	49	49	53	53	52	58	58	59	61	61	63	53	59	59	63	63
NCA06B	48 FLORENCE STREET ST PETERS			I0402!	52	48	48	48	51	51	52	43	48	49	52	52	52	58	58	58	61	61	62	53	58	58	62	62
NCA06B	49 FLORENCE STREET ST PETERS			I0402!	52	48	48	48	51	51	52	40	48	48	52	52	52	58	58	58	61	61	62	50	58	58	62	62
NCA06B	50 FLORENCE STREET ST PETERS			I0402!	52	50	51	51	53	53	53	46	51	51	53	53	52	60	61	61	63	63	63	56	61	61	63	63
NCA06B	51 FLORENCE STREET ST PETERS			I0402!	52	47	47	48	50	50	51	39	47	47	51	51	52	57	57	58	60	60	61	49	57	57	61	61
NCA06B	5 MARY STREET ST PETERS			I0402!	52	40	42	42	42	42	42	39	41	40	42	42	52	50	52	52	52	52	52	49	51	50	52	52
NCA06B	1 ROBERTS STREET ST PETERS			I0402!	52	37	38	38	38	38	39	35	38	37	38	39	52	47	48	48	48	48	49	45	48	47	48	49
NCA06B	3 ROBERTS STREET ST PETERS			I0402!	52	38	40	40	39	39	40	36	39	38	39	39	52	48	50	50	49	49	50	46	49	48	49	49
NCA06B	5 ROBERTS STREET ST PETERS			I0402!	52	36	38	38	38	38	39	36	38	37	38	38	52	46	48	48	48	48	49	46	48	47	48	48
NCA06B	9 ROBERTS STREET ST PETERS			I0402!	52	37	39	40	39	39	39	36	38	37	39	39	52	47	49	50	49	49	49	46	48	47	49	49
NCA06B	17 ROBERTS STREET ST PETERS			I0402!	52	37	38	39	38	38	39	36	38	37	38	39	52	47	48	49	48	48	49	46	48	47	48	49
NCA06B	19 ROBERTS STREET ST PETERS			I0402!	52	38	39	39	39	39	40	36	38	38	39	40	52	48	49	49	49	49	50	46	48	48	49	50
NCA06B	23 ROBERTS STREET ST PETERS			I0402!	52	37	39	39	39	39	39	35	38	37	39	39	52	47	49	49	49	49	49	45	48	47	49	49

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA06B	25 ROBERTS STREET ST PETERS			I0402!	52	37	39	38	38	38	39	35	38	37	39	39	52	47	49	48	48	48	49	45	48	47	49	49
NCA06B	27 ROBERTS STREET ST PETERS			I0402!	52	37	38	38	38	38	38	35	37	37	38	39	52	47	48	48	48	48	48	45	47	47	48	49
NCA06B	29 ROBERTS STREET ST PETERS			I0402!	52	37	38	38	38	38	38	35	37	37	38	38	52	47	48	48	48	48	48	45	47	47	48	48
NCA06B	31 ROBERTS STREET ST PETERS			I0402!	52	36	37	37	38	38	38	34	37	36	38	38	52	46	47	47	48	48	48	44	47	46	48	48
NCA06B	33 ROBERTS STREET ST PETERS			I0402!	52	36	37	38	38	38	38	34	37	37	38	39	52	46	47	48	48	48	48	44	47	47	48	49
NCA06B	35 ROBERTS STREET ST PETERS			I0402!	52	36	37	37	38	38	38	34	37	36	38	38	52	46	47	47	48	48	48	44	47	46	48	48
NCA06B	37 ROBERTS STREET ST PETERS			I0402!	52	37	37	37	39	39	39	34	38	37	39	39	52	47	47	47	49	49	49	44	48	47	49	49
NCA06B	39 ROBERTS STREET ST PETERS			I0402!	52	36	37	37	38	38	38	34	37	36	38	38	52	46	47	47	48	48	48	44	47	46	48	48
NCA06B	41 ROBERTS STREET ST PETERS			I0402!	52	36	37	37	38	38	38	33	37	36	38	38	52	46	47	47	48	48	48	43	47	46	48	48
NCA06B	43 ROBERTS STREET ST PETERS			I0402!	52	37	37	37	39	39	39	34	38	37	39	39	52	47	47	47	49	49	49	44	48	47	49	49
NCA06B	6 SILVER STREET ST PETERS			I0402!	52	37	38	38	38	38	38	35	38	37	38	39	52	47	48	48	48	48	48	45	48	47	48	49
NCA06B	8 SILVER STREET ST PETERS			I0402!	52	38	38	38	39	39	39	36	39	38	39	40	52	48	48	48	49	49	49	46	49	48	49	50
NCA06B	10 SILVER STREET ST PETERS			I0402!	52	38	39	39	39	39	39	37	39	39	40	40	52	48	49	49	49	49	49	47	49	49	50	50
NCA06B	11 SILVER STREET ST PETERS			I0402!	52	41	41	42	43	43	43	40	42	41	43	43	52	51	51	52	53	53	53	50	52	51	53	53
NCA06B	12 SILVER STREET ST PETERS			I0402!	52	39	39	39	40	40	40	37	39	40	40	41	52	49	49	49	50	50	50	47	49	50	50	51
NCA06B	13 SILVER STREET ST PETERS			I0402!	52	47	47	48	49	49	49	43	47	47	49	49	52	57	57	58	59	59	59	53	57	57	59	59
NCA06B	14 SILVER STREET ST PETERS			I0402!	52	39	40	40	41	41	41	37	40	40	41	42	52	49	50	50	51	51	51	47	50	50	51	52
NCA06B	21-23 SILVER STREET ST PETERS			I0402!	52	48	49	49	51	51	51	44	49	49	51	51	52	58	59	59	61	61	61	54	59	59	61	61
NCA06B	24 SILVER STREET ST PETERS			I0402!	52	40	41	41	43	43	43	37	41	41	43	43	52	50	51	51	53	53	53	47	51	51	53	53
NCA06B	26 SILVER STREET ST PETERS			I0402!	52	41	41	42	43	43	43	38	42	42	43	44	52	51	51	52	53	53	53	48	52	52	53	54
NCA06B	28 SILVER STREET ST PETERS			I0402!	52	40	40	40	41	41	42	36	40	40	41	42	52	50	50	50	51	51	52	46	50	50	51	52
NCA06B	30 SILVER STREET ST PETERS			I0402!	52	40	40	41	41	41	41	36	41	39	41	42	52	50	50	51	51	51	51	46	51	49	51	52
NCA06B	34 SILVER STREET ST PETERS			I0402!	52	35	36	36	37	37	37	31	36	36	38	38	52	45	46	46	47	47	47	41	46	46	48	48
NCA06B	37 SILVER STREET ST PETERS			I0402!	52	48	48	49	50	50	50	44	49	49	50	50	52	58	58	59	60	60	60	54	59	59	60	60
NCA06B	38 SILVER STREET ST PETERS			I0402!	52	40	41	41	42	42	42	38	41	41	42	42	52	50	51	51	52	52	52	48	51	51	52	52
NCA06B	39 SILVER STREET ST PETERS			I0402!	52	46	46	46	48	48	48	42	46	46	48	48	52	56	56	56	58	58	58	52	56	56	58	58
NCA06B	40 SILVER STREET ST PETERS			I0402!	52	39	40	40	41	41	41	37	40	40	41	42	52	49	50	50	51	51	51	47	50	50	51	52
NCA06B	41 SILVER STREET ST PETERS			I0402!	52	46	47	47	49	49	49	44	47	47	49	49	52	56	57	57	59	59	59	54	57	57	59	59
NCA06B	42 SILVER STREET ST PETERS			I0402!	52	40	40	41	42	42	42	37	41	40	42	42	52	50	50	51	52	52	52	47	51	50	52	52
NCA06B	43 SILVER STREET ST PETERS			I0402!	52	46	46	46	48	48	48	42	46	46	48	48	52	56	56	56	58	58	58	52	56	56	58	58
NCA06B	44 SILVER STREET ST PETERS			I0402!	52	39	40	40	41	41	41	37	40	40	41	42	52	49	50	50	51	51	51	47	50	50	51	52
NCA06B	45 SILVER STREET ST PETERS			I0402!	52	46	46	47	48	48	48	43	47	46	48	48	52	56	56	57	58	58	58	53	57	56	58	58
NCA06B	46 SILVER STREET ST PETERS			I0402!	52	39	40	41	41	41	41	37	40	40	41	42	52	49	50	51	51	51	51	47	50	50	51	52
NCA06B	47 SILVER STREET ST PETERS			I0402!	52	46	47	47	49	49	49	44	47	47	49	49	52	56	57	57	59	59	59	54	57	57	59	59
NCA06B	49 SILVER STREET ST PETERS			I0402!	52	47	47	47	49	49	49	43	47	47	49	49	52	57	57	57	59	59	59	53	57	57	59	59
NCA06B	51 SILVER STREET ST PETERS			I0402!	52	47	47	47	49	49	49	43	48	47	49	49	52	57	57	57	59	59	59	53	58	57	59	59
NCA06B	53 SILVER STREET ST PETERS			I0402!	52	45	45	45	47	47	47	37	45	45	47	47	52	55	55	55	57	57	57	47	55	55	57	57
NCA06B	55 SILVER STREET ST PETERS			I0402!	52	46	46	47	48	48	48	43	47	46	48	48	52	56	56	57	58	58	58	53	57	56	58	58
NCA06B	61 SILVER STREET ST PETERS			I0402!	52	45	45	46	47	47	47	43	46	45	47	47	52	55	55	56	57	57	57	53	56	55	57	57
NCA06B	63 SILVER STREET ST PETERS			I0402!	52	44	44	44	46	46	47	38	44	45	47	47	52	54	54	54	56	56	57	48	54	55	57	57
NCA06B	66 SILVER STREET ST PETERS			I0402!	52	41	42	43	43	43	43	39	42	41	43	43	52	51	52	53	53	53	53	49	52	51	53	53
NCA06B	66 SILVER STREET ST PETERS			I0402!	52	40	41	41	42	42	42	38	41	40	42	42	52	50	51	51	52	52	52	48	51	50	52	52
NCA06B	68 SILVER STREET ST PETERS			I0402!	52	40	41	41	42	42	42	38	41	40	42	42	52	50	51	51	52	52	52	48	51	50	52	52
NCA06B	70 SILVER STREET ST PETERS			I0402!	52	41	41	42	42	42	43	39	41	42	43	43	52	51	51	52	52	52	53	49	51	52	53	53
NCA06B	70 SILVER STREET ST PETERS			I0402!	52	40	40	41	42	42	42	38	41	40	42	42	52	50	50	51	52	52	52	48	51	50	52	52
NCA06B	72 SILVER STREET ST PETERS			I0402!	52	40	41	41	42	42	42	38	41	41	42	42	52	50	51	51	52	52	52	48	51	51	52	52
NCA06B	73 SILVER STREET ST PETERS			I0402!	52	46	46	47	48	48	48	42	46	46	48	48	52	56	56	57	58	58	58	52	56	56	58	58
NCA06B	75 SILVER STREET ST PETERS			I0402!	52	45	46	46	47	47	47	41	45	45	47	48	52	55	56	56	57	57	57	51	55	55	57	58
NCA06B	76 SILVER STREET ST PETERS			I0402!	52	41	41	42	42	42	43	38	41	41	43	43	52	51	51	52	52	52	53	48	51	51	53	53
NCA06B	77 SILVER STREET ST PETERS			I0402!	52	46	46	47	49	49	48	41	47	47	49	49	52	56	56	57	59	59	58	51	57	57	59	59
NCA06B	79 SILVER STREET ST PETERS			I0402!	52	46	47	47	49	49	49	41	47	47	49	49	52	56	57	57	59	59	59	51	57	57	59	59
NCA06B	80 SILVER STREET ST PETERS			I0402!	52	48	48	49	50	51	51	44	49	49	51	51	52	58	58	59	60	61	61	54	59	59	61	61
NCA06B	81 SILVER STREET ST PETERS			I0402!	52	46	46	47	48	48	48	40	46	46	49	49	52	56	56	57	58	58	58	50	56	56	59	59

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA06B	82 SILVER STREET ST PETERS			I0402!	52	47	47	47	49	49	49	43	47	47	49	50	52	57	57	57	59	59	59	53	57	57	59	60
NCA06B	82A SILVER STREET ST PETERS			I0402!	52	43	43	43	45	45	45	39	43	43	45	45	52	53	53	53	55	55	55	49	53	53	55	55
NCA06B	84 SILVER STREET ST PETERS			I0402!	52	42	42	43	44	44	44	40	43	43	44	45	52	52	52	53	54	54	54	50	53	53	54	55
NCA06B	85 SILVER STREET ST PETERS			I0402!	52	44	45	45	47	47	46	40	45	44	47	47	52	54	55	55	57	57	56	50	55	54	57	57
NCA06B	86 SILVER STREET ST PETERS			I0402!	52	42	43	43	44	44	44	39	43	43	44	45	52	52	53	53	54	54	54	49	53	53	54	55
NCA06B	88 SILVER STREET ST PETERS			I0402!	52	41	42	42	43	43	43	38	42	42	43	44	52	51	52	52	53	53	53	48	52	52	53	54
NCA06B	89 SILVER STREET ST PETERS			I0402!	52	42	42	43	43	43	43	40	43	42	43	44	52	52	52	53	53	53	53	50	53	52	53	54
NCA06B	90 SILVER STREET ST PETERS			I0402!	52	42	42	43	44	44	44	38	42	42	44	44	52	52	52	53	54	54	54	48	52	52	54	54
NCA06B	91 SILVER STREET ST PETERS			I0402!	52	43	43	43	45	45	46	37	43	42	46	46	52	53	53	53	55	55	56	47	53	52	56	56
NCA06B	92 SILVER STREET ST PETERS			I0402!	52	41	42	42	43	43	43	38	42	42	43	44	52	51	52	52	53	53	53	48	52	52	53	54
NCA06B	93 SILVER STREET ST PETERS			I0402!	52	44	45	45	47	47	47	43	46	45	47	47	52	54	55	55	57	57	57	53	56	55	57	57
NCA06B	93A SILVER STREET ST PETERS			I0402!	52	45	45	45	46	46	46	44	45	47	48	47	52	55	55	55	56	56	56	54	55	57	58	57
NCA06B	94 SILVER STREET ST PETERS			I0402!	52	41	42	42	43	43	43	38	42	41	43	43	52	51	52	52	53	53	53	48	52	51	53	53
NCA06B	95 SILVER STREET ST PETERS			I0402!	52	42	42	42	44	44	44	39	42	44	45	44	52	52	52	52	54	54	54	49	52	54	55	54
NCA06B	96 SILVER STREET ST PETERS			I0402!	52	41	42	42	43	43	43	38	42	41	43	43	52	51	52	52	53	53	53	48	52	51	53	53
NCA06B	98 SILVER STREET ST PETERS			I0402!	52	41	42	42	43	43	43	38	42	42	43	44	52	51	52	52	53	53	53	48	52	52	53	54
NCA06B	100 SILVER STREET ST PETERS			I0402!	52	42	43	43	45	45	45	38	43	42	45	45	52	52	53	53	55	55	55	48	53	52	55	55
NCA06B	101 SILVER STREET ST PETERS			I0402!	52	42	42	43	44	44	44	41	43	45	45	45	52	52	52	53	54	54	54	51	53	55	55	55
NCA06B	103 SILVER STREET ST PETERS			I0402!	52	45	45	45	46	46	46	44	45	47	48	48	52	55	55	55	56	56	56	54	55	57	58	58
NCA06B	112 SILVER STREET ST PETERS			I0402!	52	40	40	41	43	43	43	37	41	41	43	43	52	50	50	51	53	53	53	47	51	51	53	53
NCA06B	114 SILVER STREET ST PETERS			I0402!	52	46	46	46	48	48	48	45	47	48	48	48	52	56	56	56	58	58	58	55	57	58	58	58
NCA06B	116 SILVER STREET ST PETERS			I0402!	52	40	40	40	42	42	42	38	41	41	42	43	52	50	50	50	52	52	52	48	51	51	52	53
NCA06B	118 SILVER STREET ST PETERS			I0402!	52	40	40	40	41	41	41	37	40	41	42	42	52	50	50	50	51	51	51	47	50	51	52	52
NCA06B	120 SILVER STREET ST PETERS			I0402!	52	46	46	46	48	48	48	43	46	47	49	48	52	56	56	56	58	58	58	53	56	57	59	58
NCA06B	1 ST PETERS STREET ST PETERS			I0402!	52	68	68	68	71	72	72	50	69	72	72	72	52	78	78	78	81	82	82	60	79	82	82	82
NCA06B	5 ST PETERS STREET ST PETERS			I0402!	52	64	64	64	67	67	67	50	64	65	67	67	52	74	74	74	77	77	77	60	74	75	77	77
NCA06B	7 ST PETERS STREET ST PETERS			I0402!	52	61	61	61	64	65	65	46	61	63	64	65	52	71	71	71	74	75	75	56	71	73	74	75
NCA06B	8 ST PETERS STREET ST PETERS			I0402!	52	64	64	64	67	68	68	41	64	70	68	68	52	74	74	74	77	78	78	51	74	80	78	78
NCA06B	9 ST PETERS STREET ST PETERS			I0402!	52	57	57	57	60	61	61	44	57	60	61	61	52	67	67	67	70	71	71	54	67	70	71	71
NCA06B	11 ST PETERS STREET ST PETERS			I0402!	52	56	56	57	59	60	60	44	57	59	60	60	52	66	66	67	69	70	70	54	67	69	70	70
NCA06B	12 ST PETERS STREET ST PETERS			I0402!	52	61	61	61	64	65	65	43	61	64	64	64	52	71	71	71	74	75	75	53	71	74	74	74
NCA06B	13 ST PETERS STREET ST PETERS			I0402!	52	56	56	56	59	59	59	42	56	57	59	59	52	66	66	66	69	69	69	52	66	67	69	69
NCA06B	15 ST PETERS STREET ST PETERS			I0402!	52	58	58	58	61	61	61	48	58	58	61	61	52	68	68	68	71	71	71	58	68	68	71	71
NCA06B	16 ST PETERS STREET ST PETERS			I0402!	52	59	59	60	62	63	63	46	59	61	63	63	52	69	69	70	72	73	73	56	69	71	73	73
NCA06B	17 ST PETERS STREET ST PETERS			I0402!	52	55	55	55	58	58	58	43	55	56	58	58	52	65	65	65	68	68	68	53	65	66	68	68
NCA06B	18 ST PETERS STREET ST PETERS			I0402!	52	60	60	60	63	63	63	48	60	60	63	63	52	70	70	70	73	73	73	58	70	70	73	73
NCA06B	19 ST PETERS STREET ST PETERS			I0402!	52	52	52	53	55	56	56	42	53	54	56	56	52	62	62	63	65	66	66	52	63	64	66	66
NCA06B	21 ST PETERS STREET ST PETERS			I0402!	52	53	53	53	56	56	56	42	53	54	56	56	52	63	63	63	66	66	66	52	63	64	66	66
NCA06B	23 ST PETERS STREET ST PETERS			I0402!	52	52	52	53	55	56	56	41	53	54	56	56	52	62	62	63	65	66	66	51	63	64	66	66
NCA06B	25 ST PETERS STREET ST PETERS			I0402!	52	52	51	52	54	55	55	41	52	53	55	55	52	62	61	62	64	65	65	51	62	63	65	65
NCA06B	27-31 ST PETERS STREET ST PETERS			I0402!	52	53	52	53	55	55	55	46	52	53	55	55	52	63	62	63	65	65	65	56	62	63	65	65
NCA06B	27-31 ST PETERS STREET ST PETERS			I0402!	52	56	56	56	59	59	58	46	56	56	59	58	52	66	66	66	69	69	68	56	66	66	69	68
NCA06B	27-31 ST PETERS STREET ST PETERS			I0402!	52	54	54	55	57	57	57	46	55	55	57	57	52	64	64	65	67	67	67	56	65	65	67	67
NCA07	2 APPLEBEE STREET ST PETERS			I0402!	62	48	48	48	50	50	50	45	48	49	51	51	62	58	58	58	60	60	60	55	58	59	61	61
NCA07	4 APPLEBEE STREET ST PETERS			I0402!	62	48	49	49	50	51	51	44	49	49	51	51	62	58	59	59	60	61	61	54	59	59	61	61
NCA07	6 APPLEBEE STREET ST PETERS			I0402!	62	48	48	48	50	50	50	45	48	49	51	51	62	58	58	58	60	60	60	55	58	59	61	61
NCA07	8 APPLEBEE STREET ST PETERS			I0402!	62	51	52	53	53	53	53	47	53	51	53	54	62	61	62	63	63	63	63	57	63	61	63	64
NCA07	62 APPLEBEE STREET ST PETERS			I0402!	62	46	46	46	48	48	49	38	46	46	49	49	62	56	56	56	58	58	59	48	56	56	59	59
NCA07	64 APPLEBEE STREET ST PETERS			I0402!	62	46	47	48	48	48	48	42	47	46	48	49	62	56	57	58	58	58	58	52	57	56	58	59
NCA07	66 APPLEBEE STREET ST PETERS			I0402!	62	45	45	45	47	47	47	40	45	45	47	48	62	55	55	55	57	57	57	50	55	55	57	58
NCA07	68 APPLEBEE STREET ST PETERS			I0402!	62	45	46	46	48	48	48	39	46	46	48	49	62	55	56	56	58	58	58	49	56	56	58	59
NCA07	70 APPLEBEE STREET ST PETERS			I0402!	62	46	46	46	48	48	48	38	46	46	48	49	62	56	56	56	58	58	58	48	56	56	58	59
NCA07	72 APPLEBEE STREET ST PETERS			I0402!	62	47	48	49	49	49	49	41	49	47	49	50	62	57	58	59	59	59	59	51	59	57	59	60

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)															Predicted Noise Levels, dB(A)											
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA07	112 CHURCH STREET ST PETERS			I0402!	62	63	64	63	66	66	67	42	63	67	67	67	62	73	74	73	76	76	77	52	73	77	77	77
NCA07	134 CHURCH STREET ST PETERS			I0402!	62	53	54	54	57	56	57	45	54	55	57	57	62	63	64	64	67	66	67	55	64	65	67	67
NCA07	136 CHURCH STREET ST PETERS			I0402!	62	53	53	53	56	56	56	45	53	54	56	56	62	63	63	63	66	66	66	55	63	64	66	66
NCA07	138 CHURCH STREET ST PETERS			I0402!	62	53	53	53	56	56	56	41	53	54	56	56	62	63	63	63	66	66	66	51	63	64	66	66
NCA07	140 CHURCH STREET ST PETERS			I0402!	62	52	53	53	56	55	56	44	53	54	56	56	62	62	63	63	66	65	66	54	63	64	66	66
NCA07	142 CHURCH STREET ST PETERS			I0402!	62	52	53	52	55	55	55	44	53	53	55	55	62	62	63	62	65	65	65	54	63	63	65	65
NCA07	144 CHURCH STREET ST PETERS			I0402!	62	52	52	52	55	55	55	44	52	53	55	55	62	62	62	62	65	65	65	54	62	63	65	65
NCA07	146 CHURCH STREET ST PETERS			I0402!	62	51	52	52	55	54	55	44	52	53	55	55	62	61	62	62	65	64	65	54	62	63	65	65
NCA07	146A CHURCH STREET ST PETERS			I0402!	62	52	52	52	55	55	55	44	52	53	55	55	62	62	62	62	65	65	65	54	62	63	65	65
NCA07	148 CHURCH STREET ST PETERS			I0402!	62	48	48	48	51	51	51	40	48	49	51	51	62	58	58	58	61	61	61	50	58	59	61	61
NCA07	150 CHURCH STREET ST PETERS			I0402!	62	49	49	49	52	52	52	39	49	50	52	52	62	59	59	59	62	62	62	49	59	60	62	62
NCA07	152 CHURCH STREET ST PETERS			I0402!	62	46	46	46	48	48	48	42	46	46	49	49	62	56	56	56	58	58	58	52	56	56	59	59
NCA07	154 CHURCH STREET ST PETERS			I0402!	62	48	48	48	51	51	51	42	48	49	51	51	62	58	58	58	61	61	61	52	58	59	61	61
NCA07	156 CHURCH STREET ST PETERS			I0402!	62	47	47	47	50	50	50	44	48	48	50	50	62	57	57	57	60	60	60	54	58	58	60	60
NCA07	19-23 CROWN STREET, ST PETERS			I0402!	62	51	53	54	53	53	53	52	53	52	52	53	62	61	63	64	63	63	63	62	63	62	62	63
NCA07	25 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	50	50	49	49	50	62	57	59	60	60	60	60	60	60	59	59	60
NCA07	27 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	49	50	49	49	50	62	57	59	60	60	60	60	59	60	59	59	60
NCA07	29 CROWN STREET ST PETERS			I0402!	62	47	49	50	49	49	50	49	49	49	48	49	62	57	59	60	59	59	60	59	59	58	59	59
NCA07	31 CROWN STREET ST PETERS			I0402!	62	47	49	49	49	49	50	49	49	49	49	49	62	57	59	59	59	59	60	59	59	58	59	59
NCA07	33 CROWN STREET ST PETERS			I0402!	62	50	51	52	52	52	52	52	52	52	52	62	60	61	62	62	62	62	62	62	62	62	62	62
NCA07	39 CROWN STREET ST PETERS			I0402!	62	54	55	57	53	53	53	52	57	52	53	57	62	64	65	67	63	63	63	62	67	62	63	67
NCA07	41 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	49	50	49	49	50	62	57	59	60	60	60	60	59	60	59	59	60
NCA07	43 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	49	50	49	49	50	62	57	59	60	60	60	60	59	60	59	59	60
NCA07	45 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	50	50	49	49	50	62	57	59	60	60	60	60	60	60	59	59	60
NCA07	47 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	49	50	49	49	50	62	57	59	60	60	60	60	59	60	59	59	60
NCA07	49 CROWN STREET ST PETERS			I0402!	62	47	49	50	50	50	50	49	50	49	49	50	62	57	59	60	60	60	60	59	60	59	59	60
NCA07	51 CROWN STREET ST PETERS			I0402!	62	47	49	49	50	50	50	49	50	49	49	50	62	57	59	59	60	60	60	59	60	59	59	60
NCA07	53 CROWN STREET ST PETERS			I0402!	62	47	49	49	50	50	50	50	50	49	50	62	57	59	59	60	60	60	60	60	60	59	60	60
NCA07	55 CROWN STREET ST PETERS			I0402!	62	47	49	49	50	50	50	50	50	49	50	62	57	59	59	60	60	60	60	60	60	59	60	60
NCA07	57 CROWN STREET ST PETERS			I0402!	62	48	49	49	51	50	51	50	50	49	50	62	58	59	59	61	60	61	60	60	59	60	60	
NCA07	61 CROWN STREET ST PETERS			I0402!	62	59	59	62	51	51	51	50	62	50	50	62	62	69	69	72	61	61	61	60	72	60	60	72
NCA07	63 CROWN STREET ST PETERS			I0402!	62	46	47	48	48	48	48	48	49	47	48	48	62	56	57	58	58	58	58	58	59	57	58	58
NCA07	65 CROWN STREET ST PETERS			I0402!	62	51	52	53	54	54	54	54	54	53	54	54	62	61	62	63	64	64	64	64	64	63	64	64
NCA07	67 CROWN STREET ST PETERS			I0402!	62	51	52	53	54	54	54	53	54	53	53	53	62	61	62	63	64	64	64	63	64	63	63	63
NCA07	69 CROWN STREET ST PETERS			I0402!	62	49	50	50	52	52	52	51	52	51	52	62	59	60	60	62	62	62	61	62	61	62	62	
NCA07	71 CROWN STREET ST PETERS			I0402!	62	49	50	50	53	52	53	52	53	52	52	62	59	60	60	63	62	63	62	63	62	62	62	
NCA07	73 CROWN STREET ST PETERS			I0402!	62	51	52	52	54	54	54	54	54	53	54	53	62	61	62	62	64	64	64	64	64	63	64	63
NCA07	75 CROWN STREET ST PETERS			I0402!	62	53	54	54	57	56	57	56	56	55	56	56	62	63	64	64	67	66	67	66	66	65	66	66
NCA07	77 CROWN STREET ST PETERS			I0402!	62	55	56	56	59	59	59	58	59	58	58	58	62	65	66	66	69	69	69	68	69	68	68	68
NCA07	1 EDITH STREET ST PETERS			I0402!	62	39	40	41	41	41	41	38	40	40	41	41	62	49	50	51	51	51	51	48	50	50	51	51
NCA07	1-11 PRINCES HIGHWAY ST PETERS			I0402!	62	50	52	53	49	49	50	49	52	48	48	52	62	60	62	63	59	59	60	59	62	58	58	62
NCA07	13-19 PRINCES HIGHWAY ST PETERS			I0402!	62	50	52	54	50	49	50	49	53	49	49	53	62	60	62	64	60	59	60	59	63	59	59	63
NCA07	21-27 PRINCES HIGHWAY ST PETERS			I0402!	62	52	53	54	53	53	54	50	54	52	53	55	62	62	63	64	63	63	64	60	64	62	63	65
NCA07	31 PRINCES HIGHWAY ST PETERS			I0402!	62	51	51	54	47	47	47	46	53	46	46	53	62	61	61	64	57	57	57	56	63	56	56	63
NCA07	60-82 PRINCES HIGHWAY ST PETERS			I0402!	62	59	59	62	55	55	55	52	62	54	55	62	62	69	69	72	65	65	65	62	72	64	65	72
NCA07	83-85 PRINCES HIGHWAY ST PETERS			I0402!	62	58	58	61	51	51	51	46	61	49	52	61	62	68	68	71	61	61	61	56	71	59	62	71
NCA07	89 PRINCES HIGHWAY ST PETERS			I0402!	62	59	60	62	49	49	49	48	62	48	49	62	62	69	70	72	59	59	59	58	72	58	59	72
NCA07	91 PRINCES HIGHWAY ST PETERS			I0402!	62	61	61	64	52	52	52	48	64	50	53	64	62	71	71	74	62	62	62	58	74	60	63	74
NCA07	93 PRINCES HIGHWAY ST PETERS			I0402!	62	63	63	66	52	52	52	49	66	50	52	66	62	73	73	76	62	62	62	59	76	60	62	76
NCA07	95 PRINCES HIGHWAY ST PETERS			I0402!	62	64	64	67	52	52	52	49	67	50	52	67	62	74	74	77	62	62	62	59	77	60	62	77
NCA07	97 PRINCES HIGHWAY ST PETERS			I0402!	62	65	65	68	52	52	52	50	68	51	52	68	62	75	75	78	62	62	62	60	78	61	62	78
NCA07	145 PRINCES HIGHWAY ST PETERS			I0402!	62	79	79	82	69	68	69	65	82	67	69	82	62	89	89	92	79	78	79	75	92	77	79	92
NCA07	145 PRINCES HIGHWAY ST PETERS			I0402!	62	69	69	69	71	71	71	59	70	70	71	72	62	79	79	79	81	81	81	69	80	80	81	82

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA07	147 PRINCES HIGHWAY ST PETERS			I0402!	62	80	80	83	64	64	64	64	83	65	65	83	62	90	90	93	74	74	74	74	93	75	75	93
NCA07	159 PRINCES HIGHWAY ST PETERS			I0402!	62	66	66	68	60	60	60	60	69	60	60	69	62	76	76	78	70	70	70	70	79	70	70	79
NCA07	159 PRINCES HIGHWAY ST PETERS			I0402!	62	63	64	65	65	65	65	58	65	62	65	66	62	73	74	75	75	75	75	68	75	72	75	76
NCA07	175 PRINCES HIGHWAY ST PETERS			I0402!	62	54	55	57	48	48	48	48	57	49	48	57	62	64	65	67	58	58	58	58	67	59	58	67
NCA07	177 PRINCES HIGHWAY ST PETERS			I0402!	62	53	53	56	48	48	48	48	56	48	48	56	62	63	63	66	58	58	58	58	66	58	58	66
NCA07	179 PRINCES HIGHWAY ST PETERS			I0402!	62	45	46	47	46	46	46	45	48	45	46	48	62	55	56	57	56	56	56	55	58	55	56	58
NCA07	181 PRINCES HIGHWAY ST PETERS			I0402!	62	46	47	48	47	47	47	46	49	46	47	49	62	56	57	58	57	57	57	56	59	56	57	59
NCA07	187 PRINCES HIGHWAY ST PETERS			I0402!	62	45	47	47	47	47	48	46	48	47	47	48	62	55	57	57	57	57	58	56	58	57	57	58
NCA07	1 SILVER STREET ST PETERS			I0402!	62	42	43	44	45	45	45	42	44	44	45	45	62	52	53	54	55	55	55	52	54	54	55	55
NCA07	2 SILVER STREET ST PETERS			I0402!	62	37	38	38	38	38	39	35	38	37	38	39	62	47	48	48	48	48	49	45	48	47	48	49
NCA07	3 SILVER STREET ST PETERS			I0402!	62	46	46	47	48	48	48	46	48	47	48	48	62	56	56	57	58	58	58	56	58	57	58	58
NCA07	5 SILVER STREET ST PETERS			I0402!	62	34	35	36	36	36	36	33	37	35	36	37	62	44	45	46	46	46	46	43	47	45	46	47
NCA07	5A SILVER STREET ST PETERS			I0402!	62	48	49	49	50	50	51	48	50	49	50	51	62	58	59	59	60	60	61	58	60	59	60	61
NCA07	7 SILVER STREET ST PETERS			I0402!	62	44	44	45	46	46	46	41	45	45	47	47	62	54	54	55	56	56	56	51	55	55	57	57
NCA07	7A SILVER STREET ST PETERS			I0402!	62	46	46	46	48	48	48	44	47	47	48	49	62	56	56	56	58	58	58	54	57	57	58	59
NCA07	9 SILVER STREET ST PETERS			I0402!	62	46	47	47	48	48	48	44	47	47	48	48	62	56	57	57	58	58	58	54	57	57	58	58
NCA07	9A SILVER STREET ST PETERS			I0402!	62	46	47	47	48	48	48	44	47	47	48	48	62	56	57	57	58	58	58	54	57	57	58	58
NCA07	22 VICTORIA STREET ST PETERS			I0402!	62	47	49	50	49	49	49	48	50	48	48	50	62	57	59	60	59	59	59	58	60	58	58	60
NCA08	13 BARWON PARK ROAD ST PETERS			I0402!	64	49	50	51	51	51	52	51	51	51	51	52	64	59	60	61	61	61	62	61	61	61	61	62
NCA08	13A BARWON PARK ROAD ST PETERS			I0402!	64	48	50	51	51	51	51	51	51	51	51	51	64	58	60	61	61	61	61	61	61	61	61	61
NCA08	31 BARWON PARK ROAD ST PETERS			I0402!	64	53	54	54	56	56	56	56	56	55	56	56	64	63	64	64	66	66	66	66	66	65	66	66
NCA08	35 BARWON PARK ROAD ST PETERS			I0402!	64	56	57	57	59	59	59	59	59	59	59	59	64	66	67	67	69	69	69	69	69	69	69	69
NCA08	47 BARWON PARK ROAD ST PETERS			I0402!	64	55	56	56	57	57	58	58	58	57	58	58	64	65	66	66	67	67	68	68	68	67	68	68
NCA08	49 BARWON PARK ROAD ST PETERS			I0402!	64	55	56	56	58	58	58	58	58	58	58	59	64	65	66	66	68	68	68	68	68	68	68	69
NCA08	51 BARWON PARK ROAD ST PETERS			I0402!	64	60	61	61	63	63	63	64	63	63	64	64	64	70	71	71	73	73	73	74	73	73	74	74
NCA08	53 BARWON PARK ROAD ST PETERS			I0402!	64	70	70	70	73	72	73	73	73	73	73	72	64	80	80	80	83	82	83	83	83	83	83	82
NCA08	19 CAMPBELL STREET ST PETERS			I0402!	64	69	70	70	73	73	74	73	73	74	73	72	64	79	80	80	83	83	84	83	83	84	83	82
NCA08	21 CAMPBELL STREET ST PETERS			I0402!	64	69	70	70	73	73	74	73	73	74	73	72	64	79	80	80	83	83	84	83	83	84	83	82
NCA08	25 CAMPBELL STREET ST PETERS			I0402!	64	69	70	70	73	72	73	73	73	73	73	72	64	79	80	80	83	82	83	83	83	83	83	82
NCA08	27 CAMPBELL STREET ST PETERS			I0402!	64	69	70	70	73	73	73	73	73	73	73	72	64	79	80	80	83	83	83	83	83	83	83	82
NCA08	29 CAMPBELL STREET ST PETERS			I0402!	64	69	70	71	73	73	73	73	73	73	73	72	64	79	80	81	83	83	83	83	83	83	83	82
NCA08	31 CAMPBELL STREET ST PETERS			I0402!	64	61	62	62	66	65	65	64	65	64	65	64	64	71	72	72	76	75	75	74	75	74	75	74
NCA08	33 CAMPBELL STREET ST PETERS			I0402!	64	62	62	63	66	65	66	65	65	65	65	64	64	72	72	73	76	75	76	75	75	75	75	74
NCA08	35 CAMPBELL STREET ST PETERS			I0402!	64	62	64	63	69	65	65	65	65	65	64	65	64	72	74	73	79	75	75	75	75	74	75	74
NCA08	2 CROWN STREET ST PETERS			I0402!	64	47	49	50	50	49	50	49	49	49	49	50	64	57	59	60	60	59	60	59	59	59	59	60
NCA08	4 CROWN STREET ST PETERS			I0402!	64	47	49	50	50	50	50	50	50	49	49	50	64	57	59	60	60	60	60	60	60	59	59	60
NCA08	6 CROWN STREET ST PETERS			I0402!	64	47	49	50	50	50	50	50	50	49	50	50	64	57	59	60	60	60	60	60	60	59	60	60
NCA08	22 CROWN STREET ST PETERS			I0402!	64	44	44	45	47	47	47	46	47	46	46	47	64	54	54	55	57	57	57	56	57	56	56	57
NCA08	24 CROWN STREET ST PETERS			I0402!	64	45	45	46	47	47	48	47	48	47	47	48	64	55	55	56	57	57	58	57	58	57	57	58
NCA08	26 CROWN STREET ST PETERS			I0402!	64	45	45	46	48	48	48	47	48	47	47	48	64	55	55	56	58	58	58	57	58	57	57	58
NCA08	28 CROWN STREET ST PETERS			I0402!	64	46	46	47	48	48	49	47	49	48	48	49	64	56	56	57	58	58	59	57	59	58	58	59
NCA08	30 CROWN STREET ST PETERS			I0402!	64	46	46	47	49	49	49	48	49	49	49	49	64	56	56	57	59	59	59	58	59	59	59	59
NCA08	32 CROWN STREET ST PETERS			I0402!	64	46	46	47	49	49	49	48	49	48	48	49	64	56	56	57	59	59	59	58	59	58	58	59
NCA08	34 CROWN STREET ST PETERS			I0402!	64	47	47	48	50	50	50	49	51	50	50	50	64	57	57	58	60	60	60	59	61	60	60	60
NCA08	36 CROWN STREET ST PETERS			I0402!	64	48	48	49	51	51	51	50	51	50	51	51	64	58	58	59	61	61	61	60	61	60	61	61
NCA08	38 CROWN STREET ST PETERS			I0402!	64	48	49	50	51	51	52	51	52	51	51	52	64	58	59	60	61	61	62	61	62	61	61	62
NCA08	40 CROWN STREET ST PETERS	Currently construction site office		I0402!	64	51	53	53	54	54	54	54	54	54	54	54	64	61	63	63	64	64	64	64	64	64	64	64
NCA10	1 BELLEVUE STREET TEMPE			I0402!	68	19	19	-	-	-	-	-	-	-	-	68	29	29	10	10	10	10	10	10	10	10	10	
NCA10	2 BELLEVUE STREET TEMPE			I0402!	68	19	19	-	-	-	-	-	-	-	-	68	29	29	10	10	10	10	10	10	10	10	10	
NCA10	3 BELLEVUE STREET TEMPE			I0402!	68	23	23	-	-	-	-	-	-	-	-	68	33	33	10	10	10	10	10	10	10	10	10	
NCA10	4 BELLEVUE STREET TEMPE			I0402!	68	23	23	-	-	-	-	-	-	-	-	68	33	33	10	10	10	10	10	10	10	10	10	
NCA10	1 FREDERICK STREET ST PETERS			I0402!	68	37	37	37	39	39	39	33	37	37	39	68	47	47	47	49	49	49	43	47	47	49	49	
NCA10	6 FREDERICK STREET SYDENHAM			I0402!	68	38	38	38	40	40	40	36	39	39	40	40	68	48	48	48	50	50	50	46	49	49	50	50

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SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA10	1 GEORGE STREET SYDENHAM			I0402!	68	35	35	34	36	36	36	35	36	36	36	37	68	45	45	44	46	46	46	45	46	46	46	47
NCA10	3 GEORGE STREET SYDENHAM			I0402!	68	33	33	32	34	34	34	31	33	33	34	34	68	43	43	42	44	44	44	41	43	43	44	44
NCA10	4 GEORGE STREET SYDENHAM			I0402!	68	36	36	36	38	38	38	37	38	37	38	38	68	46	46	46	48	48	48	47	48	47	48	48
NCA10	6 GEORGE STREET SYDENHAM			I0402!	68	31	31	28	30	30	30	28	30	29	30	31	68	41	41	38	40	40	40	38	40	39	40	41
NCA10	8 GEORGE STREET SYDENHAM			I0402!	68	31	31	27	29	29	29	26	29	28	29	30	68	41	41	37	39	39	39	36	39	38	39	40
NCA10	10 GEORGE STREET SYDENHAM			I0402!	68	32	32	30	31	31	31	29	31	31	32	32	68	42	42	40	41	41	41	39	41	41	42	42
NCA10	12 GEORGE STREET SYDENHAM			I0402!	68	31	31	31	33	33	33	28	32	32	33	33	68	41	41	41	43	43	43	38	42	42	43	43
NCA10	14 GEORGE STREET SYDENHAM			I0402!	68	34	34	34	35	35	35	32	35	34	35	36	68	44	44	44	45	45	45	42	45	44	45	46
NCA10	16 GEORGE STREET SYDENHAM			I0402!	68	33	33	33	35	35	35	33	35	34	35	36	68	43	43	43	45	45	45	43	45	44	45	46
NCA10	18 GEORGE STREET SYDENHAM			I0402!	68	34	34	34	36	36	36	35	36	35	36	36	68	44	44	44	46	46	46	45	46	45	46	46
NCA10	20 GEORGE STREET SYDENHAM			I0402!	68	34	34	33	36	36	36	34	35	35	36	36	68	44	44	43	46	46	46	44	45	45	46	46
NCA10	22 GEORGE STREET SYDENHAM			I0402!	68	33	33	31	33	33	33	31	33	33	34	34	68	43	43	41	43	43	43	41	43	43	44	44
NCA10	12 MARY STREET ST PETERS			I0402!	68	38	40	41	39	39	40	37	39	38	39	40	68	48	50	51	49	49	50	47	49	48	49	50
NCA10	307-309 PRINCES HIGHWAY ST PETERS			I0402!	68	41	43	44	42	42	43	41	42	41	41	42	68	51	53	54	52	52	53	51	52	51	51	52
NCA10	311 PRINCES HIGHWAY ST PETERS			I0402!	68	36	40	40	37	37	38	35	36	34	35	35	68	46	50	50	47	47	48	45	46	44	45	45
NCA10	313 PRINCES HIGHWAY ST PETERS			I0402!	68	38	41	41	40	40	40	39	40	38	38	39	68	48	51	51	50	50	50	49	50	48	48	49
NCA10	315 PRINCES HIGHWAY ST PETERS			I0402!	68	39	42	42	40	40	41	39	40	38	39	39	68	49	52	52	50	50	51	49	50	48	49	49
NCA10	317 PRINCES HIGHWAY ST PETERS			I0402!	68	39	42	42	40	40	41	39	40	38	39	39	68	49	52	52	50	50	51	49	50	48	49	49
NCA10	319 PRINCES HIGHWAY ST PETERS			I0402!	68	39	42	42	40	40	41	39	40	39	39	40	68	49	52	52	50	50	51	49	50	49	49	50
NCA10	383 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	36	39	37	38	39	68	47	47	47	48	48	48	46	49	47	48	49
NCA10	385 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	36	38	37	38	39	68	47	47	47	48	48	48	46	48	47	48	49
NCA10	387 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	39	38	38	39	68	47	47	47	48	48	48	47	49	48	48	49
NCA10	389 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	39	38	38	39	68	47	47	47	48	48	48	47	49	48	48	49
NCA10	391 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	39	38	38	39	68	47	47	47	48	48	48	47	49	48	48	49
NCA10	393 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	38	37	38	39	68	47	47	47	48	48	48	47	48	47	48	49
NCA10	395 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	38	38	38	39	68	47	47	47	48	48	48	47	48	48	48	49
NCA10	397 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	38	37	38	39	68	47	47	47	48	48	48	47	48	47	48	49
NCA10	399 PRINCES HIGHWAY SYDENHAM			I0402!	68	37	37	37	38	38	38	37	38	37	38	39	68	47	47	47	48	48	48	47	48	47	48	49
NCA10	401 PRINCES HIGHWAY SYDENHAM			I0402!	68	38	38	38	39	39	39	38	39	39	40	40	68	48	48	48	49	49	49	48	49	49	49	50
NCA10	1 SUTHERLAND STREET ST PETERS			I0402!	68	37	37	37	38	38	38	34	37	36	37	38	68	47	47	47	48	48	48	44	47	46	47	48
NCA10	2 SUTHERLAND STREET ST PETERS			I0402!	68	41	41	41	42	42	42	39	42	41	42	43	68	51	51	51	52	52	52	49	52	51	52	53
NCA10	2 YELVERTON STREET SYDENHAM			I0402!	68	33	33	32	34	34	34	32	34	34	34	35	68	43	43	42	44	44	44	42	44	44	44	45
NCA10	4 YELVERTON STREET SYDENHAM			I0402!	68	34	34	33	35	35	35	33	35	34	35	35	68	44	44	43	45	45	45	43	45	44	45	45
NCA10	5 YELVERTON STREET SYDENHAM			I0402!	68	34	34	33	33	33	33	31	34	32	33	34	68	44	44	43	43	43	43	41	44	42	43	44
NCA10	7 YELVERTON STREET SYDENHAM			I0402!	68	31	31	28	29	29	29	26	29	28	29	30	68	41	41	38	39	39	39	36	39	38	39	40
NCA10	9 YELVERTON STREET SYDENHAM			I0402!	68	30	30	28	29	29	29	26	29	28	30	30	68	40	40	38	39	39	39	36	39	38	40	40
NCA10	11 YELVERTON STREET SYDENHAM			I0402!	68	29	29	29	30	30	30	26	30	29	30	31	68	39	39	39	40	40	40	36	40	39	40	41
NCA10	11A YELVERTON STREET SYDENHAM			I0402!	68	31	31	31	33	33	33	29	32	32	33	33	68	41	41	41	43	43	43	39	42	42	43	43
NCA11	1-5 BOURKE STREET MASCOT			I0402!	68	47	49	56	56	56	56	56	50	49	49	45	68	57	59	66	66	66	66	66	60	59	59	55
NCA11	1-5 BOURKE STREET MASCOT			I0402!	68	55	55	65	65	65	65	65	52	51	51	47	68	65	65	75	75	75	75	75	62	61	61	57
NCA11	7 BOURKE STREET MASCOT			I0402!	68	47	47	56	56	56	56	56	47	47	47	40	68	57	57	66	66	66	66	66	57	57	57	50
NCA11	8 BOURKE STREET MASCOT			I0402!	68	46	46	56	56	56	56	56	47	47	47	41	68	56	56	66	66	66	66	66	57	57	57	51
NCA11	8 BOURKE STREET MASCOT			I0402!	68	52	52	62	62	62	62	62	50	50	50	45	68	62	62	72	72	72	72	72	60	60	60	55
NCA11	1 CHURCH AVENUE MASCOT			I0402!	68	41	46	49	47	47	48	47	46	44	44	41	68	51	56	59	57	57	58	57	56	54	54	51
NCA11	3-9 CHURCH AVENUE MASCOT			I0402!	68	42	47	49	47	47	48	47	47	45	45	42	68	52	57	59	57	57	58	57	57	55	55	52
NCA11	3-9 CHURCH AVENUE MASCOT			I0402!	68	42	48	50	48	48	49	48	48	46	46	43	68	52	58	60	58	58	59	58	58	56	56	53
NCA11	3-9 CHURCH AVENUE MASCOT			I0402!	68	43	48	51	49	49	50	49	48	47	47	45	68	53	58	61	59	59	60	59	58	57	57	55
NCA11	19-21 CHURCH AVENUE MASCOT			I0402!	68	40	46	48	46	46	48	47	46	44	44	40	68	50	56	58	56	56	58	57	56	54	54	50
NCA11	19-21 CHURCH AVENUE MASCOT			I0402!	68	44	48	52	51	51	52	51	49	48	48	43	68	54	58	62	61	61	62	61	59	58	58	53
NCA11	19-21 CHURCH AVENUE MASCOT			I0402!	68	44	48	52	51	51	51	50	48	47	47	43	68	54	58	62	61	61	61	60	58	57	57	53
NCA11	42 CHURCH STREET, MASCOT	Current industrial site has been bough		I0402!	68	66	66	76	76	76	76	76	56	56	56	53	68	76	76	86	86	86	86	86	66	66	66	63
NCA11	55 CHURCH AVENUE MASCOT			I0402!	68	38	41	44	44	44	44	44	38	37	37	38	68	48	51	54	54	54	54	48	47	47	48	
NCA11	61 CHURCH AVENUE MASCOT			I0402!	68	48	49	46	45	45	45	43	45	43	43	45	68	58	59	56	55	55	55	53	55	53	53	55

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA11	208-210 COWARD STREET MASCOT			!0402!	68	43	48	51	49	49	50	48	48	46	46	42	68	53	58	61	59	59	60	58	58	56	56	52
NCA11	214-220 COWARD STREET MASCOT			!0402!	68	43	48	51	49	49	50	49	48	47	47	42	68	53	58	61	59	59	60	59	58	57	57	52
NCA11	222-228 COWARD STREET MASCOT			!0402!	68	38	40	44	44	44	44	43	44	43	39	68	48	50	54	54	54	54	53	54	53	53	49	
NCA11	222-228 COWARD STREET MASCOT			!0402!	68	36	37	42	43	43	44	42	43	43	36	68	46	47	52	53	53	54	52	53	53	53	46	
NCA11	230 COWARD STREET MASCOT			!0402!	68	45	46	54	54	54	54	53	47	46	41	68	55	56	64	64	64	64	63	57	56	56	51	
NCA11	230 COWARD STREET MASCOT			!0402!	68	44	45	54	54	54	54	54	46	45	37	68	54	55	64	64	64	64	64	56	55	55	47	
NCA11	246-248 COWARD STREET MASCOT	Currently 2 storey office block		!0402!	68	39	46	47	45	45	45	45	43	41	41	40	68	49	56	57	55	55	55	55	53	51	51	50
NCA11	280 COWARD STREET MASCOT	Currently 4 storey office block		!0402!	68	42	47	47	44	44	45	44	44	43	43	42	68	52	57	57	54	54	55	54	54	53	53	52
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	57	58	62	62	62	62	62	62	62	62	68	67	68	72	72	72	72	72	72	72	72	72	72
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	50	52	56	55	55	55	55	55	54	54	53	68	60	62	66	65	65	65	65	65	64	64	63
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	47	50	53	52	52	52	52	51	51	51	50	68	57	60	63	62	62	62	62	61	61	61	60
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	45	49	52	50	50	51	50	50	49	49	48	68	55	59	62	60	60	61	60	60	59	59	58
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	43	49	51	49	49	50	49	49	47	47	46	68	53	59	61	59	59	60	59	59	57	57	56
NCA11	629 GARDENERS ROAD MASCOT			!0402!	68	46	52	54	51	51	52	51	50	49	49	47	68	56	62	64	61	61	62	61	60	59	59	57
NCA11	635 GARDENERS ROAD MASCOT	Active Kids child care centre on ground		!0402!	68	44	49	52	50	50	51	50	49	48	48	44	68	54	59	62	60	60	61	60	59	58	58	54
NCA11	635 GARDENERS ROAD MASCOT			!0402!	68	63	63	68	68	68	68	68	68	68	68	68	68	73	73	78	78	78	78	78	78	78	78	78
NCA11	635 GARDENERS ROAD MASCOT			!0402!	68	41	45	48	47	47	48	47	44	43	43	43	68	51	55	58	57	57	58	57	54	53	53	53
NCA11	635 GARDENERS ROAD MASCOT			!0402!	68	52	54	59	59	59	60	59	57	56	56	54	68	62	64	69	69	69	70	69	67	66	66	64
NCA11	635 GARDENERS ROAD MASCOT			!0402!	68	52	54	59	59	59	59	59	57	56	56	53	68	62	64	69	69	69	69	69	67	66	66	63
NCA11	635 GARDENERS ROAD MASCOT			!0402!	68	48	51	55	54	54	55	54	53	52	49	68	58	61	65	64	64	65	64	63	62	62	59	
NCA11	659-669 GARDENERS ROAD MASCOT	Avantra apartments under construction		!0402!	68	63	63	67	67	67	67	67	67	67	67	68	73	73	77	77	77	77	77	77	77	77	77	77
NCA11	659-669 GARDENERS ROAD MASCOT	Avantra apartments under construction		!0402!	68	56	56	65	65	65	65	65	58	58	58	55	68	66	66	75	75	75	75	75	68	68	68	65
NCA11	671-683 GARDENERS ROAD MASCOT	Apartments approved DA: DA13/172		!0402!	68	68	68	60	57	56	58	57	58	56	56	55	68	78	78	70	67	66	68	67	68	66	66	65
NCA11	671-683 GARDENERS ROAD MASCOT	Apartments approved DA: DA13/172		!0402!	68	66	66	61	59	59	60	59	60	59	59	58	68	76	76	71	69	69	70	69	70	69	69	68
NCA11	671-683 GARDENERS ROAD MASCOT	Apartments approved DA: DA13/172		!0402!	68	64	64	65	65	65	65	65	65	65	65	65	68	74	74	75	75	75	75	75	75	75	75	75
NCA11	5 HARAN STREET MASCOT			!0402!	68	38	45	46	41	41	43	42	42	39	39	38	68	48	55	56	51	51	53	52	52	49	49	48
NCA11	28 JOHN STREET MASCOT			!0402!	68	35	37	41	40	40	41	40	40	39	39	37	68	45	47	51	50	50	51	50	50	49	49	47
NCA11	1-5 KENT ROAD MASCOT	Kiara by Meriton approved DA		!0402!	68	63	63	54	48	48	50	49	49	46	46	49	68	73	73	64	58	58	60	59	59	56	56	59
NCA11	1-5 KENT ROAD MASCOT	Kiara by Meriton approved DA		!0402!	68	49	55	54	49	49	50	49	50	47	47	47	68	59	65	64	59	59	60	59	60	57	57	57
NCA11	1-5 KENT ROAD MASCOT	Kiara by Meriton approved DA		!0402!	68	47	54	55	50	50	52	51	51	48	48	47	68	57	64	65	60	60	62	61	61	58	58	57
NCA11	9 KENT ROAD MASCOT	Esprit by Bridgehill under construction		!0402!	68	54	54	50	47	47	47	46	47	45	45	47	68	64	64	60	57	57	57	56	57	55	55	57
NCA11	9 KENT ROAD MASCOT	Esprit by Bridgehill under construction		!0402!	68	42	46	49	48	48	48	48	47	44	44	43	68	52	56	59	58	58	58	58	57	54	54	53
NCA11	39 KENT ROAD MASCOT			!0402!	68	44	45	44	43	43	43	42	43	41	41	43	68	54	55	54	53	53	53	52	53	51	51	53
NCA11	103-105 O'RIORDAN STREET MASCOT			!0402!	68	45	51	53	50	50	51	50	49	48	48	46	68	55	61	63	60	60	61	60	59	58	58	56
NCA11	109-123 O'RIORDAN STREET MASCOT			!0402!	68	30	35	37	34	34	35	34	33	32	32	32	68	40	45	47	44	44	45	44	43	42	42	42
NCA11	143 O'RIORDAN STREET MASCOT			!0402!	68	23	27	30	28	28	29	28	26	25	25	23	68	33	37	40	38	38	39	38	36	35	35	33
NCA11	149-161 O'RIORDAN STREET MASCOT			!0402!	68	38	45	46	42	42	44	43	43	41	41	38	68	48	55	56	52	52	54	53	53	51	51	48
OSR	57 ASHMORE STREET ERSKINEVILLE	DA approved to be redeveloped into z		!0402!	75	41	41	42	44	43	44	44	43	42	42	44	75	51	51	52	54	53	54	54	53	52	52	54
OSR	57 ASHMORE STREET ERSKINEVILLE	DA approved to be redeveloped into z		!0402!	75	43	43	44	46	45	46	46	44	44	44	46	75	53	53	54	56	55	56	56	54	54	54	56
OSR	1A COULSON STREET ERSKINEVILLE			!0402!	75	33	33	34	36	35	38	37	36	34	34	37	75	43	43	44	46	45	48	47	46	44	44	47
OSR	1A COULSON STREET ERSKINEVILLE			!0402!	75	33	33	34	35	35	37	36	35	34	34	36	75	43	43	44	45	45	47	46	45	44	44	46
OSR	7-19 COULSON STREET ERSKINEVILLE			!0402!	75	32	32	33	35	35	35	35	34	34	34	35	75	42	42	43	45	45	45	45	44	44	44	45
OSR	7-19 COULSON STREET ERSKINEVILLE			!0402!	75	34	34	35	37	37	38	37	36	36	36	37	75	44	44	45	47	47	48	47	46	46	46	47
OSR	7-19 COULSON STREET ERSKINEVILLE			!0402!	75	30	30	31	33	34	34	34	31	31	32	33	75	40	40	41	43	44	44	44	41	41	42	43
OSR	19-21 EVE STREET ERSKINEVILLE			!0402!	75	32	32	33	34	34	34	34	33	33	33	35	75	42	42	43	44	44	44	44	43	43	43	45
OSR	13 GODDARD STREET ERSKINEVILLE			!0402!	75	33	33	35	34	34	35	34	35	35	35	36	75	43	43	45	44	44	45	44	45	45	45	46
OSR	18 HUNTLEY STREET ALEXANDRIA			!0402!	75	68	68	74	75	62	66	65	64	60	60	65	75	78	78	84	85	72	76	75	74	70	70	75
OSR	165-175 MITCHELL ROAD ERSKINEVILLE	DA approved to be redeveloped into z		!0402!	75	38	38	39	41	41	44	43	41	39	39	42	75	48	48	49	51	51	54	53	51	49	49	52
OSR	165-175 MITCHELL ROAD ERSKINEVILLE	DA approved to be redeveloped into z		!0402!	75	42	42	43	44	47	49	49	44	41	41	45	75	52	52	53	54	57	59	59	54	51	51	55
OSR	1-13 DARLEY STREET NEWTOWN	Tom Foster Community Centre		!0402!	60	39	39	40	40	40	41	37	40	41	42	42	60	49	49	50	50	50	51	47	50	51	52	52
OSR	106 WELLS STREET NEWTOWN	Camdenville Public School Preschool C		!0402!	55	44	44	44	46	45	46	41	44	45	46	46	55	54	54	54	56	55	56	51	54	55	56	56
OSR	27 APPLEBEE STREET ST PETERS			!0402!	70	47	47	47	49	49	49	42	47	48	50	50	70	57	57	57	59	59	59	52	57	58	60	60
OSR	35 APPLEBEE STREET ST PETERS			!0402!	70	48	48	48	50	50	50	42	48	49	51	51	70	58	58	58	60	60	60	52	58	59	61	61

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver				Predicted Noise Levels, dB(A)												Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering												DAY (STANDARD) WITH Sawing and/or Hammering											
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	37 APPLEBEE STREET ST PETERS			I0402!	70	48	48	49	50	50	50	44	49	49	51	51	70	58	58	59	60	60	60	54	59	59	61	61
OSR	39 APPLEBEE STREET ST PETERS			I0402!	70	49	49	51	49	49	49	44	51	47	49	52	70	59	59	61	59	59	59	54	61	57	59	62
OSR	43 APPLEBEE STREET ST PETERS			I0402!	70	50	51	52	51	52	52	46	52	50	52	53	70	60	61	62	61	62	62	56	62	60	62	63
OSR	45-47 APPLEBEE STREET ST PETERS	Possibly some resi in here		I0402!	70	54	55	55	57	57	57	47	55	54	57	57	70	64	65	65	67	67	67	57	65	64	67	67
OSR	CAMDENVILLE PARK			I0402!	65	58	58	58	59	59	59	57	58	61	61	60	65	68	68	68	69	69	69	67	68	71	71	70
OSR	59 CAMPBELL STREET ST PETERS			I0402!	75	71	71	71	73	74	73	56	71	70	73	73	75	81	81	81	83	84	83	66	81	80	83	83
OSR	61 CAMPBELL STREET ST PETERS			I0402!	70	67	68	68	69	70	68	53	67	65	68	69	70	77	78	78	79	80	78	63	77	75	78	79
OSR	12 HUTCHINSON STREET ST PETERS			I0402!	70	43	42	43	46	46	46	38	43	44	46	46	70	53	52	53	56	56	56	48	53	54	56	56
OSR	15 HUTCHINSON STREET ST PETERS			I0402!	70	47	47	47	50	50	50	40	48	46	50	50	70	57	57	57	60	60	60	50	58	56	60	60
OSR	26 HUTCHINSON STREET ST PETERS			I0402!	70	46	45	46	48	48	48	42	46	47	49	49	70	56	55	56	58	58	58	52	56	57	59	59
OSR	35-37 HUTCHINSON STREET ST PETERS			I0402!	70	41	43	44	43	43	43	40	43	42	43	44	70	51	53	54	53	53	53	50	53	52	53	54
OSR	35-37 HUTCHINSON STREET ST PETERS			I0402!	70	48	48	48	53	53	51	42	50	48	53	52	70	58	58	58	63	63	61	52	60	58	63	62
OSR	41 HUTCHINSON STREET ST PETERS			I0402!	70	53	53	54	56	56	56	47	54	54	56	56	70	63	63	64	66	66	66	57	64	64	66	66
OSR	45 HUTCHINSON STREET ST PETERS			I0402!	70	51	51	51	56	56	54	40	53	51	56	54	70	61	61	61	66	66	64	50	63	61	66	64
OSR	46 HUTCHINSON STREET ST PETERS			I0402!	70	51	51	51	55	54	53	45	52	51	55	54	70	62	62	62	67	67	65	52	64	62	67	65
OSR	49 HUTCHINSON STREET ST PETERS			I0402!	70	52	52	52	57	57	55	42	54	52	57	55	70	62	62	62	67	67	65	52	64	62	67	65
OSR	53 HUTCHINSON STREET ST PETERS			I0402!	70	53	53	53	57	57	55	47	55	54	57	56	70	63	63	63	67	67	65	57	65	64	67	66
OSR	75 HUTCHINSON STREET ST PETERS			I0402!	70	59	59	59	64	64	62	49	61	59	64	63	70	69	69	69	74	74	72	59	71	69	74	73
OSR	91-99 HUTCHINSON STREET ST PETERS			I0402!	70	68	68	69	73	72	71	60	69	69	72	72	70	78	78	79	83	82	81	70	79	79	82	82
OSR	2-4 LACKEY STREET ST PETERS			I0402!	75	46	46	46	49	48	48	39	46	46	48	49	75	56	56	56	59	58	58	49	56	56	58	59
OSR	23 MAY STREET ST PETERS			I0402!	70	47	47	47	48	48	48	46	47	49	49	49	70	57	57	57	58	58	58	56	57	59	59	59
OSR	30 MAY STREET ST PETERS			I0402!	70	49	49	49	49	49	49	49	49	49	52	52	51	70	59	59	59	59	59	59	59	62	62	61
OSR	31-35 MAY STREET ST PETERS			I0402!	70	44	45	45	45	45	45	43	45	46	47	47	70	54	55	55	55	55	55	53	55	56	57	57
OSR	51 MAY STREET ST PETERS			I0402!	70	48	48	49	49	49	49	47	48	50	51	50	70	58	58	59	59	59	59	57	58	60	61	60
OSR	58 MAY STREET ST PETERS			I0402!	70	52	52	52	52	52	52	52	52	55	55	54	70	62	62	62	62	62	62	62	62	65	65	64
OSR	68 MAY STREET ST PETERS			I0402!	70	53	53	53	53	53	53	53	53	56	56	55	70	63	63	63	63	63	63	63	63	66	66	65
OSR	70 MAY STREET ST PETERS			I0402!	70	50	50	50	52	53	52	47	51	51	53	53	70	60	60	60	62	63	62	57	61	61	63	63
OSR	82 MAY STREET ST PETERS			I0402!	70	53	53	54	56	56	56	51	54	54	56	56	70	63	63	64	66	66	66	61	64	64	66	66
OSR	86 MAY STREET ST PETERS			I0402!	70	53	54	54	56	56	57	47	54	54	57	57	70	63	64	64	66	66	67	57	64	64	67	67
OSR	90 MAY STREET ST PETERS			I0402!	70	59	59	59	59	59	59	59	59	62	62	61	70	69	69	69	69	69	69	69	69	72	72	71
OSR	96 MAY STREET ST PETERS			I0402!	70	66	66	66	66	66	66	66	66	69	69	68	70	76	76	76	76	76	76	76	76	79	79	78
OSR	100 MAY STREET ST PETERS			I0402!	70	71	71	71	71	71	71	71	71	74	74	73	70	81	81	81	81	81	81	81	81	84	84	83
OSR	100A MAY STREET ST PETERS			I0402!	70	72	72	72	72	72	72	72	72	75	75	74	70	82	82	82	82	82	82	82	82	85	85	84
OSR	104 MAY STREET ST PETERS			I0402!	70	72	72	72	72	72	72	72	72	75	75	74	70	82	82	82	82	82	82	82	82	85	85	84
OSR	108 MAY STREET ST PETERS			I0402!	70	73	73	73	73	73	73	73	73	76	76	75	70	83	83	83	83	83	83	83	83	86	86	85
OSR	112 MAY STREET ST PETERS			I0402!	70	74	74	74	74	74	74	74	74	77	77	76	70	84	84	84	84	84	84	84	84	87	87	86
OSR	132A MAY STREET ST PETERS			I0402!	70	73	73	73	73	73	73	73	73	76	76	75	70	83	83	83	83	83	83	83	83	86	86	85
OSR	SIMPSON PARK			I0402!	65	67	66	66	70	69	68	50	67	66	69	69	65	77	76	76	80	79	78	60	77	76	79	79
OSR	171A EUSTON ROAD ALEXANDRIA			I0402!	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	76	79	79	79
OSR	171A EUSTON ROAD ALEXANDRIA			I0402!	75	68	68	68	71	71	71	71	68	71	71	71	75	78	78	78	81	81	81	81	78	81	81	81
OSR	171A EUSTON ROAD ALEXANDRIA			I0402!	75	61	61	62	64	64	64	64	61	64	64	64	75	71	71	72	74	74	74	74	71	74	74	74
OSR	205-213 EUSTON ROAD ALEXANDRIA			I0402!	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	215-225 EUSTON ROAD ALEXANDRIA			I0402!	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	645-657 KING STREET ST PETERS			I0402!	70	44	46	46	46	46	46	45	45	46	46	47	70	54	56	56	56	56	55	55	56	56	57	
OSR	659 KING STREET ST PETERS			I0402!	70	43	45	46	46	45	46	45	45	44	44	46	70	53	55	56	56	55	56	55	55	54	54	56
OSR	661 KING STREET ST PETERS			I0402!	70	34	35	36	35	35	35	33	35	34	35	36	70	44	45	46	45	45	45	43	45	44	45	46
OSR	SYDNEY PARK KIOSK			I0402!	70	45	47	48	47	47	48	47	46	46	46	47	70	55	57	58	57	57	58	57	56	56	56	57
OSR	408 SYDNEY PARK ROAD ALEXANDRIA			I0402!	65	58	59	60	62	61	61	61	59	61	61	61	65	68	69	70	72	71	71	71	69	71	71	71
OSR	410-416 SYDNEY PARK ROAD ALEXANDRIA			I0402!	65	46	46	49	50	47	48	48	46	46	46	47	65	56	56	59	60	57	58	58	56	56	56	57
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	43	45	47	46	47	48	48	45	42	42	45	75	53	55	57	56	57	58	58	55	52	52	55
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	46	47	45	44	56	56	56	45	40	40	45	75	56	57	55	54	66	66	66	55	50	50	55
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	45	46	46	45	53	54	54	45	42	42	45	75	55	56	56	55	63	64	64	55	52	52	55
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	38	41	42	42	41	43	43	39	36	36	40	75	48	51	52	52	51	53	53	49	46	46	50

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	39	42	44	43	43	45	44	40	37	37	41	75	49	52	54	53	53	55	54	50	47	47	51
OSR	35-39 BOURKE ROAD ALEXANDRIA			I0402!	75	41	44	44	42	50	50	50	41	39	39	41	75	51	54	54	52	60	60	60	51	49	49	51
OSR	41-45 BOURKE ROAD ALEXANDRIA			I0402!	70	40	44	45	43	50	50	50	41	41	41	41	70	50	54	55	53	60	60	60	51	51	51	51
OSR	41-45 BOURKE ROAD ALEXANDRIA			I0402!	70	42	45	46	45	45	46	46	43	43	43	44	70	52	55	56	55	55	56	56	53	53	53	54
OSR	47-49 BOURKE ROAD ALEXANDRIA			I0402!	75	37	44	44	40	40	42	41	39	38	38	39	75	47	54	54	50	50	52	51	49	48	48	49
OSR	51 BOURKE ROAD ALEXANDRIA			I0402!	70	43	47	48	46	45	46	46	44	44	44	45	70	53	57	58	56	55	56	56	54	54	54	55
OSR	53 BOURKE ROAD ALEXANDRIA			I0402!	70	45	52	52	48	47	48	48	46	46	46	47	70	55	62	62	58	57	58	58	56	56	56	57
OSR	55-63 BOURKE ROAD ALEXANDRIA			I0402!	75	44	54	54	47	47	49	47	46	45	45	46	75	54	64	64	57	57	59	57	56	55	55	56
OSR	55-63 BOURKE ROAD ALEXANDRIA			I0402!	75	45	52	53	48	48	49	48	47	47	47	48	75	55	62	63	58	58	59	58	57	57	57	58
OSR	69-71 BOURKE ROAD ALEXANDRIA			I0402!	75	48	57	57	52	52	52	50	52	52	52	49	75	58	67	67	62	62	62	60	62	62	62	59
OSR	44-46 BURROWS ROAD ALEXANDRIA			I0402!	75	59	65	65	61	61	62	56	58	52	52	57	75	69	75	75	71	71	72	66	68	62	62	67
OSR	48 BURROWS ROAD ALEXANDRIA			I0402!	75	55	62	62	58	58	58	54	54	51	51	52	75	65	72	72	68	68	68	64	64	61	61	62
OSR	53-57 BURROWS ROAD ALEXANDRIA			I0402!	75	49	49	49	52	52	52	52	49	52	52	52	75	59	59	59	62	62	62	62	59	62	62	62
OSR	53-57 BURROWS ROAD ALEXANDRIA			I0402!	75	49	51	51	52	52	52	48	48	48	48	48	75	59	61	61	62	62	62	58	58	58	58	58
OSR	59-61 BURROWS ROAD ALEXANDRIA			I0402!	75	51	52	53	54	54	54	54	52	53	53	54	75	61	62	63	64	64	64	64	62	63	63	64
OSR	62A BURROWS ROAD ALEXANDRIA			I0402!	75	52	56	56	54	54	54	51	51	51	51	52	75	62	66	66	64	64	64	61	61	61	61	62
OSR	63-65 BURROWS ROAD ALEXANDRIA			I0402!	75	42	48	48	45	45	46	43	43	43	43	43	75	52	58	58	55	55	56	53	53	53	53	53
OSR	64-66 BURROWS ROAD ALEXANDRIA			I0402!	75	46	49	50	48	47	48	47	47	46	46	48	75	56	59	60	58	57	58	57	57	56	56	58
OSR	68-70 BURROWS ROAD ALEXANDRIA			I0402!	75	45	47	48	48	47	47	45	44	45	45	46	75	55	57	58	58	57	57	55	54	55	55	56
OSR	71 BURROWS ROAD ALEXANDRIA			I0402!	75	42	46	46	45	45	45	45	43	45	45	45	75	52	56	56	55	55	55	55	53	55	55	55
OSR	71A BURROWS ROAD ALEXANDRIA			I0402!	75	43	44	45	46	46	46	46	44	45	46	46	75	53	54	55	56	56	56	56	54	55	56	56
OSR	72-74 BURROWS ROAD ALEXANDRIA			I0402!	75	46	47	48	48	48	48	48	46	48	48	48	75	56	57	58	58	58	58	58	56	58	58	58
OSR	73 BURROWS ROAD ALEXANDRIA			I0402!	75	48	48	48	50	50	50	50	48	50	50	51	75	58	58	58	60	60	60	60	58	60	60	61
OSR	73A BURROWS ROAD ALEXANDRIA			I0402!	75	43	44	45	46	45	46	45	45	45	45	46	75	53	54	55	56	55	56	55	55	55	55	56
OSR	75 BURROWS ROAD ALEXANDRIA			I0402!	75	43	44	45	45	45	45	45	44	44	44	46	75	53	54	55	55	55	55	55	54	54	54	56
OSR	75A BURROWS ROAD ALEXANDRIA			I0402!	75	42	46	47	44	44	44	44	43	43	43	45	75	52	56	57	54	54	54	54	53	53	53	55
OSR	76-82 BURROWS ROAD ALEXANDRIA			I0402!	75	48	50	51	51	51	51	51	49	50	50	51	75	58	60	61	61	61	61	61	59	60	60	61
OSR	77 BURROWS ROAD ALEXANDRIA			I0402!	75	51	51	52	54	54	54	54	51	54	54	54	75	61	61	62	64	64	64	64	61	64	64	64
OSR	84-88 BURROWS ROAD ALEXANDRIA			I0402!	75	41	43	44	44	43	44	44	42	42	42	43	75	51	53	54	54	53	54	54	52	52	52	53
OSR	90 BURROWS ROAD ALEXANDRIA			I0402!	75	39	43	43	42	42	43	42	40	40	40	41	75	49	53	53	52	52	53	52	50	50	50	51
OSR	92 BURROWS ROAD ALEXANDRIA			I0402!	75	48	48	48	50	55	56	56	47	47	47	49	75	58	58	58	60	65	66	66	57	57	57	59
OSR	92 BURROWS ROAD ALEXANDRIA			I0402!	75	50	50	45	45	61	61	61	46	42	42	47	75	60	60	55	55	71	71	71	56	52	52	57
OSR	95 BURROWS ROAD ALEXANDRIA			I0402!	75	59	59	60	62	62	62	62	59	62	62	62	75	69	69	70	72	72	72	72	69	72	72	72
OSR	95 BURROWS ROAD ALEXANDRIA	Little Learning School child care centr		I0402!	55	42	45	46	45	44	45	44	42	44	44	44	55	52	55	56	55	54	55	54	52	54	54	54
OSR	98 BURROWS ROAD ALEXANDRIA	Sewage Pumping Station no. 39		I0402!	75	51	51	41	41	62	62	62	42	40	40	43	75	61	61	51	51	72	72	72	52	50	50	53
OSR	58-68 EUSTON ROAD ALEXANDRIA			I0402!	75	62	62	46	47	47	69	69	69	46	46	69	75	72	72	56	57	57	79	79	79	56	56	79
OSR	70-80 EUSTON ROAD ALEXANDRIA			I0402!	75	68	68	60	60	82	83	83	77	56	56	77	75	78	78	70	70	92	93	93	87	66	66	87
OSR	90 EUSTON ROAD ALEXANDRIA			I0402!	70	68	68	66	68	80	80	80	72	66	66	73	70	78	78	76	78	90	90	90	82	76	76	83
OSR	90 EUSTON ROAD ALEXANDRIA			I0402!	75	70	70	70	73	72	73	73	70	72	72	73	75	80	80	80	83	82	83	83	80	82	82	83
OSR	92 EUSTON ROAD ALEXANDRIA			I0402!	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	94-98 EUSTON ROAD ALEXANDRIA			I0402!	75	64	64	65	67	67	67	67	64	67	67	67	75	74	74	75	77	77	77	77	74	77	77	77
OSR	100-104 EUSTON ROAD ALEXANDRIA			I0402!	75	66	66	66	69	68	69	69	66	68	68	69	75	76	76	76	79	78	79	79	76	78	78	79
OSR	112-120 EUSTON ROAD ALEXANDRIA			I0402!	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85
OSR	122-130 EUSTON ROAD ALEXANDRIA			I0402!	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	76	79	79	79
OSR	134-148 EUSTON ROAD ST PETERS	Technicolor - Video Production Service		I0402!	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	150-152 EUSTON ROAD ST PETERS			I0402!	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85
OSR	154-164 EUSTON ROAD ALEXANDRIA			I0402!	75	66	67	67	69	69	69	69	67	69	69	69	75	76	77	77	79	79	79	79	77	79	79	79
OSR	168-174 EUSTON ROAD ALEXANDRIA			I0402!	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	176-180 EUSTON ROAD ALEXANDRIA			I0402!	75	70	70	70	73	73	73	73	70	73	73	73	75	80	80	80	83	83	83	83	80	83	83	83
OSR	182-190 EUSTON ROAD ALEXANDRIA			I0402!	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	76	79	79	79
OSR	192-200 EUSTON ROAD ST PETERS			I0402!	75	70	70	71	73	73	73	73	71	73	73	73	75	80	80	81	83	83	83	83	81	83	83	83
OSR	202-212 EUSTON ROAD ALEXANDRIA			I0402!	75	65	67	68	66	66	66	60	67	60	60	68	75	75	77	78	76	76	76	70	77	70	70	78
OSR	4 HUNTLEY STREET ALEXANDRIA	Child care centre opening Aug 2016 (C		I0402!	55	45	48	49	47	52	52	52	46	45	45	47	55	55	58	59	57	62	62	62	56	55	55	57

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver				Predicted Noise Levels, dB(A)												Predicted Noise Levels, dB(A)													
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering												DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	
OSR	4B HUNTLEY STREET ALEXANDRIA	Oz Education child care centre		I0402!	55	43	48	49	46	48	49	49	44	43	43	45	55	53	58	59	56	58	59	59	54	53	53	55	
OSR	4D HUNTLEY STREET ALEXANDRIA			I0402!	75	43	49	49	46	46	47	47	44	43	43	45	75	53	59	59	56	56	57	57	54	53	53	55	
OSR	4E HUNTLEY STREET ALEXANDRIA			I0402!	75	43	49	50	46	45	46	46	44	43	43	45	75	53	59	60	56	55	56	56	54	53	53	55	
OSR	4F HUNTLEY STREET ALEXANDRIA			I0402!	75	44	50	51	47	46	47	46	45	44	44	45	75	54	60	61	57	56	57	56	55	54	54	55	
OSR	6-8 HUNTLEY STREET ALEXANDRIA			I0402!	75	45	46	47	48	51	51	51	44	45	45	46	75	55	56	57	58	61	61	61	54	55	55	56	
OSR	6B HUNTLEY STREET ALEXANDRIA			I0402!	75	44	51	52	47	46	47	46	45	44	44	45	75	54	61	62	57	56	57	56	55	54	54	55	
OSR	35-39 HUNTLEY STREET ALEXANDRIA			I0402!	75	65	65	55	54	76	76	76	55	41	41	55	75	75	75	65	64	86	86	86	65	51	51	65	
OSR	45-51 HUNTLEY STREET ALEXANDRIA			I0402!	75	52	52	46	46	63	63	63	50	42	42	50	75	62	62	56	56	73	73	73	60	52	52	60	
OSR	20 MADDOX STREET ALEXANDRIA			I0402!	70	66	67	45	48	48	73	72	72	47	47	72	70	76	77	55	58	58	83	82	82	57	57	82	
OSR	30 MADDOX STREET ALEXANDRIA			I0402!	75	39	39	38	39	41	44	44	42	38	38	43	75	49	49	48	49	51	54	54	52	48	48	53	
OSR	32-36 MADDOX STREET ALEXANDRIA			I0402!	75	40	40	40	41	42	45	45	43	38	38	44	75	50	50	50	51	52	55	55	53	48	48	54	
OSR	38-40 MADDOX STREET ALEXANDRIA			I0402!	75	38	41	41	39	40	42	42	40	37	37	41	75	48	51	51	49	50	52	52	50	47	47	51	
OSR	40A-42 MADDOX STREET ALEXANDRIA			I0402!	75	36	42	43	38	39	42	42	39	33	33	39	75	46	52	53	48	49	52	52	49	43	43	49	
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	65	65	65	66	66	66	64	65	68	68	67	70	75	75	75	76	76	76	74	75	78	78	77	
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	70	70	70	70	70	70	70	70	70	70	73	73	73	72	70	80	80	80	80	80	80	83	83	82
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	56	56	56	56	56	56	56	56	59	59	58	70	66	66	66	66	66	66	66	66	69	69	68	
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	63	63	63	64	64	64	61	63	65	66	65	70	73	73	73	74	74	74	71	73	75	76	75	
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	73	73	73	73	73	73	73	73	73	73	76	76	76	75	70	83	83	83	83	83	83	86	86	85
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	68	68	68	69	69	69	68	68	71	71	70	70	78	78	78	79	79	79	78	78	81	81	80	
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	58	58	58	59	59	59	57	58	60	61	60	70	68	68	68	69	69	69	67	68	70	71	70	
OSR	2 UNWINS BRIDGE ROAD ST PETERS	Hotel, currently closed		I0402!	60	71	72	72	74	74	74	70	71	74	75	74	60	81	82	82	84	84	84	80	81	84	85	84	
OSR	2 UNWINS BRIDGE ROAD ST PETERS	Hotel		I0402!	60	71	73	72	75	75	75	65	72	73	75	75	60	81	83	82	85	85	85	75	82	83	85	85	
OSR	2 UNWINS BRIDGE ROAD ST PETERS	Hotel		I0402!	60	72	74	73	76	76	76	63	73	73	76	75	60	82	84	83	86	86	86	73	83	83	86	85	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	42	42	42	42	42	42	41	42	44	45	44	75	52	52	52	52	52	52	51	52	54	55	54	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	42	42	43	44	44	44	40	43	44	45	45	75	52	52	53	54	54	54	50	53	54	55	55	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	52	52	52	53	53	53	51	52	54	55	54	75	62	62	62	63	63	63	61	62	64	65	64	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	60	60	60	60	60	60	59	60	63	63	62	75	70	70	70	70	70	70	69	70	73	73	72	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	38	38	38	39	39	39	37	38	40	41	40	75	48	48	48	49	49	49	47	48	50	51	50	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	40	39	40	41	41	41	37	40	41	42	42	75	50	49	50	51	51	51	47	50	51	52	52	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	42	42	42	43	43	43	41	42	45	45	44	75	52	52	52	53	53	53	51	52	55	55	54	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	41	41	41	42	42	42	39	41	42	43	43	75	51	51	51	52	52	52	49	51	52	53	53	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	39	39	40	41	41	41	37	40	41	42	42	75	49	49	50	51	51	51	47	50	51	52	52	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	40	40	41	42	42	42	38	41	42	43	43	75	50	50	51	52	52	52	48	51	52	53	53	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	38	38	38	39	39	39	38	38	41	41	40	75	48	48	48	49	49	49	48	48	51	51	50	
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	41	41	42	42	42	42	41	42	44	44	44	75	51	51	52	52	52	52	51	52	54	54	54	
OSR	15 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	39	39	39	40	40	40	38	39	41	42	41	75	49	49	49	50	50	50	48	49	51	52	51	
OSR	15 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	37	37	37	39	39	39	35	38	38	39	39	75	47	47	47	49	49	49	45	48	48	49	49	
OSR	15 UNWINS BRIDGE ROAD ST PETERS			I0402!	75	41	41	41	43	42	42	39	42	43	44	43	75	51	51	51	53	52	52	49	52	53	54	53	
OSR	19 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	38	38	38	40	40	40	37	39	40	41	41	70	48	48	48	50	50	50	47	49	50	51	51	
OSR	162 UNWINS BRIDGE ROAD ST PETERS			I0402!	70	33	33	33	34	34	34	31	34	35	36	35	70	43	43	43	44	44	44	41	44	45	46	45	
OSR	73 MARY STREET ST PETERS			I0402!	70	48	48	48	50	50	50	46	49	49	51	51	70	58	58	58	60	60	60	56	59	59	61	61	
OSR	73 MARY STREET ST PETERS			I0402!	70	42	42	43	44	44	44	40	43	43	45	45	70	52	52	53	54	54	54	50	53	53	55	55	
OSR	73 MARY STREET ST PETERS			I0402!	70	40	40	40	42	42	42	38	41	41	42	43	70	50	50	50	52	52	52	48	51	51	52	53	
OSR	73 MARY STREET ST PETERS			I0402!	70	42	43	43	45	44	44	39	43	43	44	45	70	52	53	53	55	54	54	49	53	53	54	55	
OSR	73 MARY STREET ST PETERS			I0402!	70	44	45	45	47	46	46	42	45	45	47	47	70	54	55	55	57	56	56	52	55	55	57	57	
OSR	ST PETERS PUBLIC SCHOOL			I0402!	55	57	57	57	59	60	60	46	57	58	60	60	55	67	67	67	69	70	70	56	67	68	70	70	
OSR	ST PETERS PUBLIC SCHOOL			I0402!	55	53	54	54	56	57	57	43	54	55	57	57	55	63	64	64	66	67	67	53	64	65	67	67	
OSR	ST PETERS PUBLIC SCHOOL			I0402!	55	49	50	50	52	53	53	41	50	51	53	53	55	59	60	60	62	63	63	51	60	61	63	63	
OSR	36 ALBERT STREET ST PETERS			I0402!	70	69	67	68	71	71	70	71	71	70	71	72	70	79	77	78	81	81	80	81	81	80	81	82	
OSR	74 APPLEBEE STREET ST PETERS			I0402!	70	49	49	52	50	50	50	39	52	48	50	52	70	59	59	62	60	60	60	49	62	58	60	62	
OSR	76 APPLEBEE STREET ST PETERS			I0402!	70	54	54	57	52	52	52	43	57	50	52	57	70	64	64	67	62	62	62	53	67	60	62	67	
OSR	78 APPLEBEE STREET ST PETERS			I0402!	70	49	49	49	51	51	51	42	49	50	52	52	70	59	59	59	61	61	61	52	59	60	62	62	
OSR	3 BARWON PARK ROAD ST PETERS			I0402!	70	50	53	53	52	52	53	52	52	51	52	53	70	60	63	63	62	62	63	62	62	61	62	63	

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	2 BISHOP STREET ST PETERS			I0402!	70	74	70	70	71	73	71	73	73	73	73	75	70	84	80	80	81	83	81	83	83	83	83	85
OSR	2 BISHOP STREET ST PETERS			I0402!	70	52	53	53	55	55	55	54	55	55	55	55	70	62	63	63	65	65	65	64	65	65	65	65
OSR	2 BISHOP STREET ST PETERS			I0402!	70	51	52	52	54	54	54	53	54	53	53	54	70	61	62	62	64	64	64	63	64	63	63	64
OSR	2 BISHOP STREET ST PETERS			I0402!	70	51	51	52	53	53	53	53	53	53	53	70	61	61	62	63	63	63	63	63	63	63	63	63
OSR	2 BISHOP STREET ST PETERS			I0402!	70	70	68	69	71	72	71	71	72	71	72	73	70	80	78	79	81	82	81	81	82	81	82	83
OSR	85 CROWN STREET ST PETERS			I0402!	70	64	65	66	68	67	68	67	67	67	67	70	74	75	76	78	77	78	77	77	77	77	77	
OSR	31 PRINCES HIGHWAY ST PETERS			I0402!	70	45	46	46	48	48	48	40	46	46	49	49	70	55	56	56	58	58	58	50	56	56	59	59
OSR	36 PRINCES HIGHWAY ST PETERS			I0402!	70	47	51	52	50	50	50	49	49	48	49	49	70	57	61	62	60	60	60	59	59	58	59	59
OSR	38 PRINCES HIGHWAY ST PETERS			I0402!	70	52	52	55	50	50	51	50	55	49	49	55	70	62	62	65	60	60	61	60	65	59	59	65
OSR	41-45 PRINCES HIGHWAY ST PETERS			I0402!	70	51	52	54	50	50	50	46	54	48	51	54	70	61	62	64	60	60	60	56	64	58	61	64
OSR	42 PRINCES HIGHWAY ST PETERS			I0402!	70	52	52	55	47	47	48	47	55	46	46	55	70	62	62	65	57	57	58	57	65	56	56	65
OSR	44-46 PRINCES HIGHWAY ST PETERS			I0402!	70	53	53	56	44	44	44	44	56	43	44	56	70	63	63	66	54	54	54	54	66	53	54	66
OSR	47-49 PRINCES HIGHWAY ST PETERS			I0402!	70	52	52	55	50	50	50	44	55	49	51	55	70	62	62	65	60	60	60	54	65	59	61	65
OSR	62-60 PRINCES HIGHWAY ST PETERS			I0402!	70	54	54	56	55	55	55	48	56	53	55	57	70	64	64	66	65	65	65	58	66	63	65	67
OSR	63 PRINCES HIGHWAY ST PETERS			I0402!	70	53	53	56	50	50	50	46	56	49	51	56	70	63	63	66	60	60	60	56	66	59	61	66
OSR	73-79 PRINCES HIGHWAY ST PETERS			I0402!	70	54	54	56	43	44	44	44	56	45	45	56	70	64	64	66	53	54	54	54	66	55	55	66
OSR	81 PRINCES HIGHWAY ST PETERS	Possibly apartments upstairs, unsure		I0402!	70	54	54	57	52	53	53	45	57	51	53	57	70	64	64	67	62	63	63	55	67	61	63	67
OSR	84 PRINCES HIGHWAY ST PETERS			I0402!	70	64	64	67	51	50	51	44	67	49	51	67	70	74	74	77	61	60	61	54	77	59	61	77
OSR	90 PRINCES HIGHWAY ST PETERS			I0402!	70	78	78	81	59	58	59	49	81	57	59	81	70	88	88	91	69	68	69	59	91	67	69	91
OSR	99 PRINCES HIGHWAY ST PETERS			I0402!	70	73	73	76	52	52	52	51	76	51	52	76	70	83	83	86	62	62	62	61	86	61	62	86
OSR	116 PRINCES HIGHWAY ST PETERS			I0402!	70	77	77	79	71	71	72	71	79	70	71	80	70	87	87	89	81	81	82	81	89	80	81	90
OSR	129 PRINCES HIGHWAY ST PETERS			I0402!	70	79	79	82	74	74	73	61	82	70	73	82	70	89	89	92	84	84	83	71	92	80	83	92
OSR	140 PRINCES HIGHWAY ST PETERS			I0402!	70	73	70	71	71	72	71	73	74	74	73	75	70	83	80	81	81	82	81	83	84	84	83	85
OSR	151 PRINCES HIGHWAY ST PETERS	Olix Budget Accommodation		I0402!	60	78	78	81	63	63	63	63	81	64	63	81	60	88	88	91	73	73	73	73	91	74	73	91
OSR	156 PRINCES HIGHWAY ST PETERS			I0402!	70	58	58	61	52	52	53	51	61	51	52	61	70	68	68	71	62	62	63	61	71	61	62	71
OSR	158 PRINCES HIGHWAY ST PETERS			I0402!	70	57	57	60	49	49	50	46	60	49	50	60	70	67	67	70	59	59	60	56	70	59	60	70
OSR	161 PRINCES HIGHWAY ST PETERS	Hotel		I0402!	60	60	61	63	54	54	55	54	63	55	55	63	60	70	71	73	64	64	65	64	73	65	65	73
OSR	169 PRINCES HIGHWAY ST PETERS			I0402!	70	50	51	52	51	51	51	51	53	51	51	53	70	60	61	62	61	61	61	61	63	61	61	63
OSR	176 PRINCES HIGHWAY ST PETERS			I0402!	70	50	50	52	49	49	50	48	53	49	49	53	70	60	60	62	59	59	60	58	63	59	59	63
OSR	178 PRINCES HIGHWAY ST PETERS	Motel		I0402!	60	52	52	54	52	52	52	51	54	51	52	55	60	62	62	64	62	62	62	61	64	61	62	65
OSR	180 PRINCES HIGHWAY ST PETERS			I0402!	70	48	48	50	45	46	46	43	50	45	46	50	70	58	58	60	55	56	56	53	60	55	56	60
OSR	183 PRINCES HIGHWAY ST PETERS			I0402!	70	50	51	52	48	49	49	48	52	48	48	52	70	60	61	62	58	59	59	58	62	58	58	62
OSR	187 PRINCES HIGHWAY ST PETERS	St Peters Anglican Church		I0402!	55	50	51	51	52	52	52	49	51	51	52	52	55	60	61	61	62	62	62	59	61	61	62	62
OSR	187 PRINCES HIGHWAY ST PETERS	St Peters Anglican Church		I0402!	55	47	48	48	50	50	50	46	48	48	50	50	55	57	58	58	60	60	60	56	58	58	60	60
OSR	231 PRINCES HIGHWAY ST PETERS			I0402!	70	49	50	51	51	51	51	49	51	50	51	52	70	59	60	61	61	61	61	59	61	60	61	62
OSR	233-247 PRINCES HIGHWAY ST PETERS			I0402!	70	41	43	43	43	43	44	42	43	42	43	43	70	51	53	53	53	53	54	52	53	52	53	53
OSR	238 PRINCES HIGHWAY ST PETERS			I0402!	70	50	51	52	48	48	48	47	52	47	48	52	70	60	61	62	58	58	58	57	62	57	58	62
OSR	249 PRINCES HIGHWAY ST PETERS			I0402!	70	39	41	41	40	40	41	38	40	39	40	41	70	49	51	51	50	50	51	48	50	49	50	51
OSR	271 PRINCES HIGHWAY ST PETERS			I0402!	70	41	45	45	43	43	43	42	43	41	42	43	70	51	55	55	53	53	53	52	53	51	52	53
OSR	283 PRINCES HIGHWAY ST PETERS	Maggie's rundown guest house		I0402!	60	41	44	45	42	42	43	42	43	41	42	43	60	51	54	55	52	52	53	52	53	51	52	53
OSR	310 PRINCES HIGHWAY ST PETERS			I0402!	70	44	46	46	43	43	44	43	47	42	42	47	70	54	56	56	53	53	54	53	57	52	52	57
OSR	22 VICTORIA STREET ST PETERS			I0402!	70	47	48	49	50	49	50	49	50	49	49	50	70	57	58	59	60	59	60	59	60	59	59	60
OSR	15-21 BARWON PARK ROAD ST PETERS			I0402!	70	49	50	51	51	51	51	51	51	51	51	70	59	60	61	61	61	61	61	61	61	61	61	61
OSR	23-29 BARWON PARK ROAD ST PETERS			I0402!	70	50	52	52	53	53	53	53	53	53	53	70	60	62	62	63	63	63	63	63	63	63	63	63
OSR	38 BARWON PARK ROAD ALEXANDRIA			I0402!	70	55	56	56	57	57	57	58	57	57	57	70	65	66	66	67	67	67	68	67	67	67	67	68
OSR	39 BARWON PARK ROAD ST PETERS	DA approved to be redeveloped into		I0402!	70	53	54	54	56	56	56	56	56	55	56	56	70	63	64	64	66	66	66	66	66	65	66	66
OSR	41 BARWON PARK ROAD ST PETERS			I0402!	70	54	56	56	57	57	57	57	57	56	57	70	64	66	66	67	67	67	67	67	67	66	67	67
OSR	45 BARWON PARK ROAD ST PETERS			I0402!	70	55	57	57	58	58	58	58	58	57	58	58	70	65	67	67	68	68	68	68	68	67	68	68
OSR	SYDNEY PARK	Passive recreation		I0402!	60	72	72	72	75	75	75	75	75	75	75	75	60	82	82	82	85	85	85	85	85	85	85	85
OSR	5 BELLEVUE STREET TEMPE			I0402!	70	20	20	-	-	-	-	-	-	-	-	70	30	30	10	10	10	10	10	10	10	10	10	
OSR	2 BERNE STREET ST PETERS			I0402!	70	40	43	43	41	41	42	40	42	40	42	70	50	53	53	51	51	52	50	52	50	50	52	
OSR	1 BURROWS ROAD SOUTH ST PETERS			I0402!	70	43	49	49	42	42	44	43	43	41	41	42	70	53	59	59	52	52	54	53	53	51	51	52
OSR	2 BURROWS ROAD SOUTH ST PETERS			I0402!	75	42	46	46	43	43	44	43	43	42	42	43	75	52	56	56	53	53	54	53	53	52	52	53

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	3 BURROWS ROAD SOUTH ST PETERS			I0402!	75	41	46	46	40	40	42	40	40	40	40	41	75	51	56	56	50	50	52	50	50	50	50	51
OSR	4 BURROWS ROAD SOUTH ST PETERS			I0402!	70	44	47	47	45	45	46	44	45	44	44	45	70	54	57	57	55	55	56	54	55	54	54	55
OSR	5 BURROWS ROAD SOUTH ST PETERS			I0402!	75	43	47	47	43	43	44	43	44	42	43	44	75	53	57	57	53	53	54	53	54	52	53	54
OSR	6-10 BURROWS ROAD SOUTH ST PETERS			I0402!	75	40	43	43	40	40	41	39	41	39	39	41	75	50	53	53	50	50	51	49	51	49	49	51
OSR	7 BURROWS ROAD SOUTH ST PETERS			I0402!	75	42	46	46	41	41	42	41	42	39	39	41	75	52	56	56	51	51	52	51	52	49	49	51
OSR	9 BURROWS ROAD SOUTH ST PETERS			I0402!	75	41	45	45	40	40	42	40	41	38	38	40	75	51	55	55	50	50	52	50	51	48	48	50
OSR	11 BURROWS ROAD SOUTH ST PETERS			I0402!	75	43	46	46	43	43	44	43	44	42	42	43	75	53	56	56	53	53	54	53	54	52	52	53
OSR	13-15 BURROWS ROAD SOUTH ST PETERS			I0402!	75	40	45	45	41	41	41	40	42	40	40	42	75	50	55	55	51	51	51	50	52	50	50	52
OSR	17 BURROWS ROAD SOUTH ST PETERS			I0402!	70	39	44	44	38	38	40	38	38	35	35	36	70	49	54	54	48	48	50	48	48	45	45	46
OSR	19 BURROWS ROAD SOUTH ST PETERS			I0402!	75	38	43	43	39	39	39	38	40	38	38	40	75	48	53	53	49	49	49	48	50	48	48	50
OSR	21 BURROWS ROAD SOUTH ST PETERS			I0402!	70	38	43	43	40	40	40	39	40	39	39	40	70	48	53	53	50	50	50	49	50	49	49	50
OSR	1-3 BURROWS ROAD ST PETERS			I0402!	75	49	51	52	50	50	50	48	49	48	48	49	75	59	61	62	60	60	60	58	59	58	58	59
OSR	1-3 BURROWS ROAD ST PETERS			I0402!	75	48	51	51	49	49	49	48	49	47	47	49	75	58	61	61	59	59	59	58	59	57	57	59
OSR	1-3 BURROWS ROAD ST PETERS			I0402!	75	47	49	48	44	44	45	44	44	43	43	44	75	57	59	58	54	54	55	54	54	53	53	54
OSR	4-6 CANAL ROAD ST PETERS			I0402!	70	42	44	45	43	43	43	42	43	41	42	43	70	52	54	55	53	53	53	52	53	51	52	53
OSR	8 CANAL ROAD ST PETERS			I0402!	70	42	45	45	43	43	43	42	44	42	42	44	70	52	55	55	53	53	53	52	54	52	52	54
OSR	1 HILTON AVENUE SYDENHAM			I0402!	70	28	28	29	30	30	30	26	29	30	31	31	70	38	38	39	40	40	40	36	39	40	41	41
OSR	293 PRINCES HIGHWAY ST PETERS			I0402!	70	40	43	44	41	41	42	40	41	40	40	41	70	50	53	54	51	51	52	50	51	50	50	51
OSR	295 PRINCES HIGHWAY ST PETERS			I0402!	70	42	44	45	44	44	44	42	44	43	43	44	70	52	54	55	54	54	54	52	54	53	53	54
OSR	321-323 PRINCES HIGHWAY ST PETERS			I0402!	70	39	42	43	40	40	41	40	41	39	39	40	70	49	52	53	50	50	51	50	51	49	49	50
OSR	327-337 PRINCES HIGHWAY ST PETERS			I0402!	70	39	43	43	41	41	41	40	41	39	40	41	70	49	53	53	51	51	51	50	51	49	50	51
OSR	340 PRINCES HIGHWAY ST PETERS	Southern Cross Hotel		I0402!	60	41	44	44	42	42	43	42	43	41	41	43	60	51	54	54	52	52	53	52	53	51	51	53
OSR	344 PRINCES HIGHWAY ST PETERS			I0402!	70	39	41	42	40	40	40	39	40	38	39	41	70	49	51	52	50	50	50	49	50	48	49	51
OSR	345 PRINCES HIGHWAY ST PETERS			I0402!	70	41	41	41	43	43	43	40	42	42	42	43	70	51	51	51	53	53	53	50	52	52	52	53
OSR	347 PRINCES HIGHWAY ST PETERS			I0402!	70	39	39	39	40	40	40	39	41	39	39	41	70	49	49	49	50	50	50	49	51	49	49	51
OSR	358 PRINCES HIGHWAY ST PETERS			I0402!	70	41	43	43	42	42	42	41	42	41	41	42	70	51	53	53	52	52	52	51	52	51	51	52
OSR	364 PRINCES HIGHWAY ST PETERS			I0402!	70	41	43	44	42	42	42	41	42	41	41	42	70	51	53	54	52	52	52	51	52	51	51	52
OSR	370 PRINCES HIGHWAY ST PETERS			I0402!	70	40	43	44	42	42	42	41	42	41	41	42	70	50	53	54	52	52	52	51	52	51	51	52
OSR	372 PRINCES HIGHWAY ST PETERS			I0402!	70	39	42	43	40	40	41	39	40	38	39	40	70	49	52	53	50	50	51	49	50	48	49	50
OSR	374 PRINCES HIGHWAY ST PETERS			I0402!	70	39	42	43	40	40	41	39	40	39	39	40	70	49	52	53	50	50	51	49	50	49	49	50
OSR	375-377 PRINCES HIGHWAY SYDENHAM			I0402!	70	38	39	39	40	40	40	39	41	39	40	41	70	48	49	49	50	50	50	49	51	49	50	51
OSR	376 PRINCES HIGHWAY ST PETERS			I0402!	70	39	42	42	40	40	40	39	40	39	39	40	70	49	52	52	50	50	50	49	50	49	49	50
OSR	378 PRINCES HIGHWAY ST PETERS			I0402!	70	39	41	41	40	40	40	38	40	39	39	40	70	49	51	51	50	50	50	48	50	49	49	50
OSR	379 PRINCES HIGHWAY SYDENHAM			I0402!	70	31	31	28	29	29	29	26	29	28	29	30	70	41	41	38	39	39	39	36	39	38	39	40
OSR	380 PRINCES HIGHWAY ST PETERS			I0402!	70	40	42	43	41	41	41	40	41	40	40	41	70	50	52	53	51	51	51	50	51	50	50	51
OSR	396 PRINCES HIGHWAY ST PETERS			I0402!	70	41	42	42	42	42	42	40	42	41	42	43	70	51	52	52	52	52	52	50	52	51	52	53
OSR	400 PRINCES HIGHWAY ST PETERS	Hungry Jack's		I0402!	70	38	38	38	40	40	40	38	40	39	40	40	70	48	48	48	50	50	50	48	50	49	50	50
OSR	405 PRINCES HIGHWAY SYDENHAM			I0402!	70	37	37	37	39	39	39	37	39	38	39	39	70	47	47	47	49	49	49	47	49	48	49	49
OSR	407 PRINCES HIGHWAY SYDENHAM			I0402!	70	36	36	36	37	37	37	36	37	36	37	38	70	46	46	46	47	47	47	46	47	46	47	48
OSR	409 PRINCES HIGHWAY SYDENHAM			I0402!	70	34	33	35	35	35	35	34	36	34	34	36	70	44	43	45	45	45	45	44	46	44	44	46
OSR	411 PRINCES HIGHWAY SYDENHAM			I0402!	70	33	33	34	33	33	33	32	35	33	33	35	70	43	43	44	43	43	43	42	45	43	43	45
OSR	455 PRINCES HIGHWAY SYDENHAM			I0402!	70	29	29	28	31	30	31	29	30	30	31	31	70	39	39	38	41	40	41	39	40	40	41	41
OSR	475 PRINCES HIGHWAY SYDENHAM			I0402!	70	30	30	31	29	30	29	20	31	30	30	32	70	40	40	41	39	40	39	30	41	40	40	42
OSR	483 PRINCES HIGHWAY SYDENHAM			I0402!	70	26	27	27	28	29	29	19	27	27	29	30	70	36	37	37	38	39	39	29	37	37	39	40
OSR	485 PRINCES HIGHWAY SYDENHAM			I0402!	70	23	24	23	25	27	27	17	23	25	27	27	70	33	34	33	35	37	37	27	33	35	37	37
OSR	487 PRINCES HIGHWAY SYDENHAM			I0402!	70	22	22	14	22	22	19	14	19	20	24	19	70	32	32	24	32	32	29	24	29	30	34	29
OSR	489 PRINCES HIGHWAY SYDENHAM			I0402!	70	22	22	15	15	15	15	15	15	18	18	17	70	32	32	25	25	25	25	25	25	28	28	27
OSR	493 PRINCES HIGHWAY SYDENHAM			I0402!	70	19	19	16	16	16	16	16	16	19	19	18	70	29	29	26	26	26	26	26	26	29	29	28
OSR	500 PRINCES HIGHWAY ST PETERS			I0402!	70	39	39	39	40	40	40	38	40	39	40	41	70	49	49	49	50	50	50	48	50	49	50	51
OSR	574 PRINCES HIGHWAY SYDENHAM			I0402!	75	37	37	37	38	38	38	36	38	38	39	39	75	47	47	47	48	48	48	46	48	48	49	49
OSR	576 PRINCES HIGHWAY SYDENHAM			I0402!	75	32	32	30	32	32	32	29	32	31	32	33	75	42	42	40	42	42	42	39	42	41	42	43
OSR	578 PRINCES HIGHWAY SYDENHAM			I0402!	75	31	32	30	32	32	32	29	31	30	32	33	75	41	42	40	42	42	42	39	41	40	42	43
OSR	580-590 PRINCES HIGHWAY SYDENHAM			I0402!	75	26	26	26	27	27	28	20	26	27	28	29	75	36	36	36	37	37	38	30	36	37	38	39

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	594 PRINCES HIGHWAY SYDENHAM			!0402!	70	21	21	15	15	15	15	15	15	18	18	17	70	31	31	25	25	25	25	25	25	28	28	27
OSR	598 PRINCES HIGHWAY SYDENHAM			!0402!	70	15	15	14	14	14	14	14	17	17	16	70	25	25	24	24	24	24	24	24	24	27	27	26
OSR	600 PRINCES HIGHWAY TEMPE			!0402!	70	19	19	-	-	-	-	-	-	-	-	70	29	29	10	10	10	10	10	10	10	10	10	
OSR	2 TALBOT STREET ST PETERS			!0402!	75	17	17	11	11	11	11	11	11	14	14	13	75	27	27	21	21	21	21	21	21	24	24	23
OSR	4 TALBOT STREET ST PETERS			!0402!	75	25	25	11	11	11	11	11	11	14	14	13	75	35	35	21	21	21	21	21	21	24	24	23
OSR	5 TALBOT STREET ST PETERS			!0402!	75	29	29	27	25	26	25	17	27	26	26	28	75	39	39	37	35	36	35	27	37	36	36	38
OSR	67 BOURKE ROAD ALEXANDRIA			!0402!	75	61	76	77	62	62	71	71	69	55	55	54	75	71	86	87	72	72	81	81	79	65	65	64
OSR	73-75 BOURKE ROAD ALEXANDRIA			!0402!	75	48	52	54	56	56	57	54	56	56	56	47	75	58	62	64	66	66	67	64	66	66	66	57
OSR	73-75 BOURKE ROAD ALEXANDRIA			!0402!	75	47	53	56	48	48	55	54	54	46	46	46	75	57	63	66	58	58	65	64	64	56	56	56
OSR	73-75 BOURKE ROAD ALEXANDRIA			!0402!	75	58	58	63	66	66	66	63	66	66	66	49	75	68	68	73	76	76	76	73	76	76	76	59
OSR	75A BOURKE ROAD ALEXANDRIA			!0402!	75	52	54	58	60	60	60	58	60	60	60	48	75	62	64	68	70	70	70	68	70	70	70	58
OSR	77 BOURKE ROAD ALEXANDRIA			!0402!	70	63	63	68	71	71	71	68	71	71	71	46	70	73	73	78	81	81	81	78	81	81	81	56
OSR	77 BOURKE ROAD ALEXANDRIA			!0402!	70	52	59	62	53	53	60	60	60	52	52	48	70	62	69	72	63	63	70	70	70	62	62	58
OSR	79 BOURKE ROAD ALEXANDRIA			!0402!	70	66	66	73	74	74	74	72	74	74	74	48	70	76	76	83	84	84	84	82	84	84	84	58
OSR	79 BOURKE ROAD ALEXANDRIA			!0402!	70	63	69	74	60	60	73	73	73	58	58	53	70	73	79	84	70	70	83	83	83	68	68	63
OSR	83 BOURKE ROAD ALEXANDRIA			!0402!	75	65	66	71	73	73	73	70	73	73	73	54	75	75	76	81	83	83	83	80	83	83	83	64
OSR	85 BOURKE ROAD ALEXANDRIA			!0402!	70	71	71	77	79	79	79	77	79	79	79	62	70	81	81	87	89	89	89	87	89	89	89	72
OSR	1/140 BOURKE ROAD ALEXANDRIA			!0402!	70	45	50	51	48	48	49	47	48	47	47	46	70	55	60	61	58	58	59	57	58	57	57	56
OSR	2/140 BOURKE ROAD ALEXANDRIA	Alexandria Early Education child care c		!0402!	55	43	49	50	46	46	47	45	46	44	44	44	55	53	59	60	56	56	57	55	56	54	54	54
OSR	154 BOURKE ROAD ALEXANDRIA			!0402!	70	44	49	50	48	48	48	47	48	47	47	44	70	54	59	60	58	58	58	57	58	57	57	54
OSR	160 BOURKE ROAD ALEXANDRIA			!0402!	70	44	50	51	48	47	48	47	47	46	46	46	70	54	60	61	58	57	58	57	57	56	56	56
OSR	2/160 BOURKE ROAD ALEXANDRIA	Alexandria Montessori Academy child		!0402!	55	41	45	46	44	44	45	44	45	43	43	42	55	51	55	56	54	54	55	54	55	53	53	52
OSR	170-184 BOURKE ROAD ALEXANDRIA			!0402!	70	48	54	55	53	53	53	51	53	52	52	48	70	58	64	65	63	63	63	61	63	62	62	58
OSR	190 BOURKE ROAD ALEXANDRIA			!0402!	70	49	51	54	56	56	56	54	56	56	56	49	70	59	61	64	66	66	66	64	66	66	66	59
OSR	200 BOURKE ROAD ALEXANDRIA			!0402!	75	56	58	62	63	63	64	62	64	63	63	48	75	66	68	72	73	73	74	72	74	73	73	58
OSR	8-10 BURROWS ROAD ST PETERS			!0402!	70	51	55	54	46	46	47	46	46	45	45	47	70	61	65	64	56	56	57	56	56	55	55	57
OSR	8-10 BURROWS ROAD ST PETERS			!0402!	75	51	55	53	45	45	47	46	45	43	44	45	75	61	65	63	55	55	57	56	55	53	54	55
OSR	12-18 BURROWS ROAD ST PETERS			!0402!	75	52	56	55	49	49	49	48	49	48	48	49	75	62	66	65	59	59	59	58	59	58	58	59
OSR	12-18 BURROWS ROAD ST PETERS			!0402!	75	49	50	50	51	51	51	49	50	49	49	50	75	59	60	60	61	61	61	59	60	59	59	60
OSR	20 BURROWS ROAD ST PETERS			!0402!	75	52	57	57	53	53	54	51	52	51	51	52	75	62	67	67	63	63	64	61	62	61	61	62
OSR	22 BURROWS ROAD ST PETERS	Fairground Follies		!0402!	70	51	57	57	53	53	53	50	51	50	50	52	70	61	67	67	63	63	63	60	61	60	60	62
OSR	24-26 BURROWS ROAD ST PETERS			!0402!	70	57	58	58	58	58	58	53	57	53	53	58	70	67	68	68	68	68	68	63	67	63	63	68
OSR	24-26 BURROWS ROAD ST PETERS			!0402!	70	55	60	60	56	56	56	52	55	52	52	56	70	65	70	70	66	66	66	62	65	62	62	66
OSR	24-26 BURROWS ROAD ST PETERS			!0402!	70	51	58	58	52	52	52	50	52	50	50	53	70	61	68	68	62	62	62	60	62	60	60	63
OSR	28-30 BURROWS ROAD ST PETERS			!0402!	75	61	66	66	62	62	62	56	60	55	55	60	75	71	76	76	72	72	72	66	70	65	65	70
OSR	28-30 BURROWS ROAD ST PETERS			!0402!	75	58	62	62	59	59	59	54	58	54	54	58	75	68	72	72	69	69	69	64	68	64	64	68
OSR	32 BURROWS ROAD ST PETERS			!0402!	75	76	76	76	79	79	79	65	62	55	55	62	75	86	86	86	89	89	89	75	72	65	65	72
OSR	34A-36 BURROWS ROAD ST PETERS			!0402!	75	73	76	76	76	76	76	65	61	54	54	61	75	83	86	86	86	86	86	75	71	64	64	71
OSR	38 BURROWS ROAD ST PETERS			!0402!	75	64	72	72	67	67	67	62	60	53	53	60	75	74	82	82	77	77	77	72	70	63	63	70
OSR	2A CANAL ROAD ST PETERS			!0402!	75	48	53	52	47	47	48	47	47	46	46	47	75	58	63	62	57	57	58	57	57	56	56	57
OSR	2A CANAL ROAD ST PETERS			!0402!	75	47	51	51	44	44	46	45	45	43	44	44	75	57	61	61	54	54	56	55	55	53	54	54
OSR	13A CHURCH AVENUE MASCOT			!0402!	75	33	37	39	38	38	38	38	36	35	35	34	75	43	47	49	48	48	48	46	45	45	44	
OSR	13B CHURCH AVENUE MASCOT			!0402!	75	36	43	45	41	41	42	41	40	38	38	36	75	46	53	55	51	51	52	51	50	48	48	46
OSR	23 CHURCH AVENUE MASCOT			!0402!	75	40	45	49	48	48	48	47	44	42	42	38	75	50	55	59	58	58	58	57	54	52	52	48
OSR	27 CHURCH AVENUE MASCOT			!0402!	75	38	43	46	44	44	45	44	43	42	42	38	75	48	53	56	54	54	55	54	53	52	52	48
OSR	56 CHURCH AVENUE MASCOT			!0402!	70	34	35	41	38	38	41	41	40	36	36	35	70	44	45	51	48	48	51	51	50	46	46	45
OSR	1 COGGINS PLACE MASCOT			!0402!	75	41	46	46	42	42	43	42	43	40	40	42	75	51	56	56	52	52	53	52	53	50	50	52
OSR	5 COGGINS PLACE MASCOT			!0402!	75	41	45	45	41	41	42	42	42	40	40	42	75	51	55	55	51	51	52	52	52	50	50	52
OSR	284 COWARD STREET MASCOT			!0402!	75	32	36	36	32	32	33	32	32	30	30	32	75	42	46	46	42	42	43	42	42	40	40	42
OSR	286 COWARD STREET MASCOT			!0402!	75	39	42	42	40	40	40	39	40	38	38	40	75	49	52	52	50	50	50	49	50	48	48	50
OSR	288 COWARD STREET MASCOT			!0402!	75	39	43	43	40	40	40	39	40	38	38	40	75	49	53	53	50	50	50	49	50	48	48	50
OSR	290 COWARD STREET MASCOT			!0402!	75	38	42	42	39	39	40	39	40	38	38	39	75	48	52	52	49	49	50	49	50	48	48	49
OSR	298-300 COWARD STREET MASCOT			!0402!	75	46	48	47	44	44	45	43	44	42	43	43	75	56	58	57	54	54	55	53	54	52	53	53

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver					Predicted Noise Levels, dB(A)											Predicted Noise Levels, dB(A)												
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering												
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
OSR	65 DOODY STREET ALEXANDRIA	Hillsong Church Alexandria		I0402!	55	38	43	44	42	42	42	42	41	40	40	39	55	48	53	54	52	52	52	52	51	50	50	49
OSR	494-504 GARDENERS ROAD ALEXANDRIA			I0402!	70	53	54	58	58	58	58	58	58	58	58	58	70	63	64	68	68	68	68	68	68	68	68	68
OSR	520-530 GARDENERS ROAD ALEXANDRIA			I0402!	70	62	64	68	70	70	70	68	70	69	69	62	70	72	74	78	80	80	80	78	80	79	79	72
OSR	532-536 GARDENERS ROAD ALEXANDRIA			I0402!	70	61	61	67	69	69	69	67	68	68	68	64	70	71	71	77	79	79	79	79	78	78	78	74
OSR	538 GARDENERS ROAD ALEXANDRIA			I0402!	70	65	65	70	70	70	70	70	70	70	70	70	70	75	75	80	80	80	80	80	80	80	80	80
OSR	546-548 GARDENERS ROAD ALEXANDRIA			I0402!	75	63	64	67	58	58	65	65	64	57	57	57	75	73	74	77	68	68	75	75	74	67	67	67
OSR	562-564 GARDENERS ROAD ALEXANDRIA			I0402!	70	69	69	59	52	52	57	57	57	51	51	51	70	79	79	69	62	62	67	67	67	61	61	61
OSR	566-590 GARDENERS ROAD ALEXANDRIA			I0402!	75	61	61	52	47	47	48	48	48	45	45	47	75	71	71	62	57	57	58	58	58	55	55	57
OSR	566-590 GARDENERS ROAD ALEXANDRIA			I0402!	75	66	66	53	46	46	50	50	50	44	44	46	75	76	76	63	56	56	60	60	60	54	54	56
OSR	566-590 GARDENERS ROAD ALEXANDRIA			I0402!	75	69	69	52	50	50	51	50	50	50	50	50	75	79	79	62	60	60	61	60	60	60	60	60
OSR	639 GARDENERS ROAD MASCOT			I0402!	70	64	64	69	69	69	69	69	69	69	69	68	70	74	74	79	79	79	79	79	79	79	79	78
OSR	639 GARDENERS ROAD MASCOT			I0402!	75	66	66	76	76	76	76	76	61	60	60	58	75	76	76	86	86	86	86	86	71	70	70	68
OSR	685 GARDENERS ROAD MASCOT			I0402!	75	65	65	52	49	49	50	49	50	48	48	49	75	75	75	62	59	59	60	59	60	58	58	59
OSR	687 GARDENERS ROAD MASCOT			I0402!	75	62	62	53	49	49	50	49	49	48	48	48	75	72	72	63	59	59	60	59	59	58	58	58
OSR	689 GARDENERS ROAD MASCOT			I0402!	75	65	66	52	49	49	50	49	49	48	48	49	75	75	76	62	59	59	60	59	59	58	58	59
OSR	697 GARDENERS ROAD ALEXANDRIA			I0402!	75	64	76	76	62	62	70	70	69	54	54	54	75	74	86	86	72	72	80	80	79	64	64	64
OSR	6 JOHN STREET MASCOT			I0402!	75	36	41	43	41	41	42	41	41	41	40	36	75	46	51	53	51	51	52	51	51	50	50	46
OSR	8 JOHN STREET MASCOT			I0402!	75	25	28	32	31	31	31	31	31	28	27	24	75	35	38	42	41	41	41	41	38	37	37	34
OSR	16 JOHN STREET MASCOT			I0402!	75	34	39	42	41	41	42	41	41	40	40	32	75	44	49	52	51	51	52	51	51	50	50	42
OSR	18A JOHN STREET MASCOT			I0402!	75	32	33	38	39	39	39	37	39	39	39	29	75	42	43	48	49	49	49	47	49	49	49	39
OSR	31 JOHN STREET MASCOT			I0402!	70	45	45	55	55	55	55	55	47	47	47	39	70	55	55	65	65	65	65	65	57	57	57	49
OSR	2 KENT ROAD MASCOT			I0402!	75	68	68	53	51	51	51	51	51	50	50	51	75	78	78	63	61	61	61	61	61	60	60	61
OSR	10-22 KENT ROAD MASCOT			I0402!	70	57	58	52	48	48	49	48	48	46	46	47	70	67	68	62	58	58	59	58	58	56	56	57
OSR	24 KENT ROAD MASCOT			I0402!	75	49	51	48	42	42	43	42	42	40	40	41	75	59	61	58	52	52	53	52	52	50	50	51
OSR	30 KENT ROAD MASCOT			I0402!	75	48	50	47	41	41	42	41	42	40	40	41	75	58	60	57	51	51	52	51	52	50	50	51
OSR	34 KENT ROAD MASCOT			I0402!	75	41	44	43	40	40	41	40	41	39	39	40	75	51	54	53	50	50	51	50	51	49	49	50
OSR	40-44 KENT ROAD MASCOT			I0402!	75	45	48	47	42	42	43	41	42	40	40	42	75	55	58	57	52	52	53	51	52	50	50	52
OSR	46-50 KENT ROAD MASCOT			I0402!	70	44	47	46	41	41	42	41	41	40	40	41	70	54	57	56	51	51	52	51	51	50	50	51
OSR	NANCY BIRD WALTON RESERVE	Passive recreation		I0402!	60	40	40	50	50	50	50	50	41	41	41	34	60	50	50	60	60	60	60	60	51	51	51	44
OSR	61-67 O'RIORDAN STREET ALEXANDRIA	Kiddie Academy child care centre		I0402!	70	36	40	42	39	39	40	39	38	38	38	70	46	50	52	49	49	50	49	49	48	48	48	
OSR	61-67 O'RIORDAN STREET ALEXANDRIA			I0402!	55	42	47	48	45	45	46	45	45	44	44	43	55	52	57	58	55	55	56	55	55	53	53	53
OSR	69-73 O'RIORDAN STREET ALEXANDRIA			I0402!	70	42	47	48	45	45	46	45	45	43	43	43	70	52	57	58	55	55	56	55	55	53	53	53
OSR	75 O'RIORDAN STREET ALEXANDRIA			I0402!	70	47	52	53	51	51	52	51	51	49	49	48	70	57	62	63	61	61	62	61	61	59	59	58
OSR	75 O'RIORDAN STREET ALEXANDRIA			I0402!	70	45	50	51	48	48	49	48	48	46	46	46	70	55	60	61	58	58	59	58	58	56	56	56
OSR	91 O'RIORDAN STREET ALEXANDRIA			I0402!	70	48	51	54	53	53	54	53	53	52	52	50	70	58	61	64	63	63	64	63	63	62	62	60
OSR	127 O'RIORDAN STREET MASCOT			I0402!	70	25	28	32	31	31	32	31	28	26	26	25	70	35	38	42	41	41	42	41	38	36	36	35
OSR	141 O'RIORDAN STREET MASCOT	Father Chris Riley's Youth Off the Stre		I0402!	60	32	40	40	35	35	36	34	34	33	33	60	42	50	50	45	45	46	44	44	43	43	43	
OSR	145 O'RIORDAN STREET MASCOT			I0402!	70	23	26	30	28	28	29	28	26	25	25	23	70	33	36	40	38	38	39	38	36	35	35	33
OSR	147 O'RIORDAN STREET MASCOT			I0402!	70	25	28	31	30	30	31	30	28	27	27	25	70	35	38	41	40	40	41	40	38	37	37	35
OSR	25 OSSARY STREET MASCOT			I0402!	75	42	44	45	42	42	42	41	42	41	41	43	75	52	54	55	52	52	52	51	52	51	51	53
OSR	1-3 RICKETTY STREET MASCOT			I0402!	75	64	64	52	48	48	49	48	49	47	48	48	75	74	74	62	58	58	59	58	59	57	58	58
OSR	1-3 RICKETTY STREET MASCOT			I0402!	75	67	67	49	45	45	46	45	46	44	45	46	75	77	77	59	55	55	56	55	56	54	55	56
OSR	5-9 RICKETTY STREET MASCOT			I0402!	70	67	67	51	47	47	48	47	48	46	46	47	70	77	77	61	57	57	58	57	58	56	56	57
OSR	5-9 RICKETTY STREET MASCOT			I0402!	75	70	70	52	49	49	50	49	49	48	48	49	75	80	80	62	59	59	60	59	59	58	58	59
OSR	6-8 RICKETTY STREET MASCOT			I0402!	70	46	46	43	43	43	43	42	43	42	42	44	70	56	56	53	53	53	53	52	53	52	52	54
OSR	6-8 RICKETTY STREET MASCOT			I0402!	70	50	51	45	43	43	44	43	43	43	43	44	70	60	61	55	53	53	54	53	53	53	53	54
OSR	10 RICKETTY STREET MASCOT			I0402!	75	48	49	44	42	42	43	42	43	41	42	43	75	58	59	54	52	52	53	52	53	51	52	53
OSR	14 RICKETTY STREET MASCOT			I0402!	75	46	49	47	42	42	43	42	42	41	41	41	75	56	59	57	52	52	53	52	52	51	51	51
OSR	22 RICKETTY STREET MASCOT			I0402!	75	45	48	47	43	43	44	43	44	42	42	43	75	55	58	57	53	53	54	53	54	52	52	53
OSR	24-26 RICKETTY STREET MASCOT			I0402!	75	43	45	45	42	42	42	42	43	41	41	43	75	53	55	55	52	52	52	52	53	51	51	53
OSR	24-26 RICKETTY STREET MASCOT			I0402!	75	46	47	45	43	43	44	43	44	43	43	44	75	56	57	55	53	53	54	53	54	53	53	54
OSR	24-26 RICKETTY STREET MASCOT			I0402!	75	45	48	47	42	42	43	43	43	41	41	42	75	55	58	57	52	52	53	53	53	51	51	52
OSR	25-29 RICKETTY STREET MASCOT			I0402!	70	42	45	46	42	42	43	42	43	41	42	42	70	52	55	56	52	52	53	52	53	51	52	52

Table D1: Predicted Construction Noise Levels

SPI Local Road Works

Receiver		Predicted Noise Levels, dB(A)														Predicted Noise Levels, dB(A)													
NCA	Address	Description	Floor	ID	DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering													
					NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	
OSR	33 RICKETTY STREET MASCOT			!0402!	75	39	42	42	38	38	39	38	38	37	37	38	75	49	52	52	48	48	49	48	48	47	47	48	
OSR	34 RICKETTY STREET MASCOT			!0402!	75	43	45	45	42	42	43	42	43	41	41	42	75	53	55	55	52	52	53	52	53	51	51	52	
OSR	34 RICKETTY STREET MASCOT			!0402!	75	41	45	46	41	41	42	41	42	40	40	41	75	51	55	56	51	51	52	51	52	50	50	51	
OSR	36 RICKETTY STREET MASCOT			!0402!	75	42	45	46	43	43	44	43	43	42	42	43	75	52	55	56	53	53	54	53	53	52	52	53	
OSR	38 RICKETTY STREET MASCOT			!0402!	75	42	45	45	42	42	43	42	43	41	41	43	75	52	55	55	52	52	53	52	53	51	51	53	
OSR	40 RICKETTY STREET MASCOT			!0402!	70	46	50	50	45	45	47	46	46	43	43	45	70	56	60	60	55	55	57	56	56	53	53	55	
OSR	653 GARDENERS ROAD MASCOT			!0402!	75	70	70	80	80	80	80	80	69	69	69	68	75	80	80	90	90	90	90	90	90	79	79	79	78
OSR	1 EDINBURGH ROAD MARRICKVILLE			!04030200!	75	49	49	50	51	51	51	47	50	51	52	52	75	59	59	60	61	61	61	57	60	61	62	62	
OSR	213-215 EDGEWARE ROAD NEWTOWN			!04030200!	75	51	51	52	53	53	53	48	52	53	54	54	75	61	61	62	63	63	63	58	62	63	64	64	
OSR	58 SMIDMORE STREET MARRICKVILLE			!04030200!	75	48	48	49	50	50	50	45	49	50	51	51	75	58	58	59	60	60	60	55	59	60	61	61	
OSR	5-15 MURRAY STREET MARRICKVILLE			!04030200!	75	41	42	42	43	43	43	39	42	43	44	44	75	51	52	52	53	53	53	49	52	53	54	54	
OSR	2-10 EDINBURGH ROAD MARRICKVILLE			!04030200!	75	47	47	47	48	48	48	45	47	49	49	49	75	57	57	57	58	58	58	55	57	59	59	59	
OSR	2-10 EDINBURGH ROAD MARRICKVILLE			!04030200!	75	51	51	51	52	52	52	49	51	53	53	53	75	61	61	61	62	62	62	59	61	63	63	63	
OSR	38-46 MURRAY STREET MARRICKVILLE			!04030200!	75	46	46	47	48	48	48	43	47	48	49	49	75	56	56	57	58	58	58	53	57	58	59	59	
OSR	50-52 MURRAY STREET MARRICKVILLE			!04030200!	75	50	50	50	52	52	52	46	50	51	52	52	75	60	60	60	62	62	62	56	60	61	62	62	
OSR	5-15 MURRAY STREET MARRICKVILLE			!04030200!	75	44	44	44	46	46	46	41	45	46	47	47	75	54	54	54	56	56	56	51	55	56	57	57	
OSR	71-91 EUSTON ROAD ALEXANDRIA			!04030200!	70	55	55	46	49	50	61	61	61	49	49	61	70	65	65	56	59	60	71	71	71	59	59	71	
OSR	46a EUSTON ROAD ALEXANDRIA			!04030200!	70	58	58	47	50	50	64	63	63	50	50	63	70	68	68	57	60	60	74	73	73	60	60	73	
OSR	8-40 EUSTON ROAD ALEXANDRIA			!04030200!	70	49	48	45	47	47	54	54	53	47	47	54	70	59	58	55	57	57	64	64	63	57	57	64	
OSR	601-609 GARDENERS ROAD MASCOT			!04030200!	70	47	50	52	51	51	52	51	51	51	51	50	70	57	60	62	61	61	62	61	61	61	61	60	
OSR	601-609 GARDENERS ROAD MASCOT			!04030200!	70	47	50	52	51	51	52	51	51	51	51	50	70	57	60	62	61	61	62	61	61	61	61	60	

D.2 Predicted noise levels for standard-hours local roads works (Euston Road Highly Noise Affected receivers)

The impacts presented in the Table D2 following are identified by colour coding of the text.

For **Standard Hours**:

- XX Complies with NML
- **XX** < 10dB(A) above NML - construction noise clearly audible
- **XX** > 10dB(A) above NML - construction noise clearly moderately intrusive
- **XX** > 75dB(A) - highly noise affected

Table D2: Predicted Construction Noise Levels

Euston Rd Only

Receiver	Address	Euston Rd Only											Euston Rd Only											All SPI LR											All SPI LR														
		DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering											DAY (STANDARD) WITHOUT Sawing and/or Hammering											DAY (STANDARD) WITH Sawing and/or Hammering														
		NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11	NML	V01	V02	V03	V04	V05	V06	V07	V08	V09	V10	V11
NCA01	105-155 EUSTON ROAD ALEXANDRIA	67	69	67	53	56	58	73	75	73	55	55	73	67	79	77	63	66	68	83	85	83	65	65	83	67	69	67	53	56	58	73	75	73	55	55	73	67	79	77	63	66	68	83	85	83	65	65	83
NCA01	105-155 EUSTON ROAD ALEXANDRIA	67	69	67	53	56	58	73	75	73	55	55	73	67	79	77	63	66	68	83	85	83	65	65	83	67	69	67	53	56	58	73	75	73	55	55	73	67	79	77	63	66	68	83	85	83	65	65	83
NCA01	93-103 EUSTON ROAD ALEXANDRIA	67	66	65	52	54	54	72	72	72	53	53	72	67	76	75	62	64	64	82	82	82	63	63	82	67	66	65	53	54	54	72	72	72	53	53	72	67	76	75	63	64	64	82	82	82	63	63	82
NCA01	288-302 LAWRENCE STREET ALEXANDRIA	67	61	61	63	64	62	66	65	64	58	58	65	67	71	71	73	74	72	76	75	74	68	68	75	67	61	61	63	64	61	65	65	64	58	58	64	67	71	71	73	74	71	75	75	74	68	68	74
NCA01	362 MITCHELL ROAD ALEXANDRIA	67	67	66	73	73	59	60	60	57	57	57	59	67	77	76	83	83	69	70	70	67	67	69	67	67	66	73	73	59	60	60	57	57	59	67	77	76	83	83	69	70	70	67	67	69			
NCA04	34 CAMPBELL ROAD ALEXANDRIA	64	62	62	65	55	55	55	55	65	55	55	65	64	72	72	75	65	65	65	65	75	65	65	75	64	71	71	72	74	74	74	74	74	74	74	74	64	81	81	82	84	84	84	84	84	84	84	84
OSR	18 HUNTLEY STREET ALEXANDRIA	75	68	68	74	75	62	66	65	64	60	60	65	75	78	78	84	85	72	76	75	74	70	70	75	75	68	68	74	75	62	66	65	64	60	60	65	75	78	78	84	85	72	76	75	74	70	70	75
OSR	171A EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79
OSR	171A EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79
OSR	171A EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79
OSR	205-213 EUSTON ROAD ALEXANDRIA	75	71	71	71	74	74	74	74	74	71	74	74	75	81	81	81	84	84	84	84	84	81	84	84	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	215-225 EUSTON ROAD ALEXANDRIA	75	71	71	71	74	74	74	74	74	71	74	74	75	81	81	81	84	84	84	84	84	81	84	84	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	58-68 EUSTON ROAD ALEXANDRIA	75	63	62	46	47	47	69	69	69	45	45	69	75	73	72	56	57	57	79	79	79	55	55	79	75	62	62	46	47	47	69	69	69	46	46	69	75	72	72	56	57	57	79	79	79	56	56	79
OSR	70-80 EUSTON ROAD ALEXANDRIA	75	68	68	60	60	83	83	83	77	57	57	77	75	78	78	70	70	93	93	93	87	67	67	87	75	68	68	60	60	82	83	83	77	56	56	77	75	78	78	70	70	92	93	93	87	66	66	87
OSR	90 EUSTON ROAD ALEXANDRIA	70	68	68	66	68	80	80	80	73	66	66	73	70	78	78	76	78	90	90	90	83	76	76	83	70	68	68	66	68	80	80	80	72	66	66	73	70	78	78	76	78	90	90	90	82	76	76	83
OSR	90 EUSTON ROAD ALEXANDRIA	70	68	68	66	68	80	80	80	73	66	66	73	70	78	78	76	78	90	90	90	83	76	76	83	70	68	68	66	68	80	80	80	72	66	66	73	70	78	78	76	78	90	90	90	82	76	76	83
OSR	92 EUSTON ROAD ALEXANDRIA	75	71	71	71	74	74	74	74	74	71	74	74	75	81	81	81	84	84	84	84	84	81	84	84	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	94-98 EUSTON ROAD ALEXANDRIA	75	64	64	65	68	67	67	67	64	67	67	67	75	74	74	75	78	77	77	77	74	77	77	77	75	64	64	65	67	67	67	67	64	67	67	67	75	74	74	75	77	77	77	77	74	77	77	77
OSR	100-104 EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	68	69	69	66	68	68	69	75	76	76	76	79	78	79	79	76	78	78	79
OSR	112-120 EUSTON ROAD ALEXANDRIA	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85
OSR	122-130 EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	76	79	79	79
OSR	134-148 EUSTON ROAD ST PETERS	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	84	81	84	84	65	71	71	71	74	74	74	74	71	74	74	74	65	81	81	81	84	84	84	84	81	84	84	84
OSR	150-152 EUSTON ROAD ST PETERS	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85	75	72	72	72	75	75	75	75	72	75	75	75	75	82	82	82	85	85	85	85	82	85	85	85
OSR	154-164 EUSTON ROAD ALEXANDRIA	75	66	66	67	69	69	69	69	67	69	69	69	75	76	76	77	79	79	79	79	79	77	79	79	75	66	67	69	69	69	69	69	67	69	69	69	75	76	77	77	79	79	79	79	77	79	79	79
OSR	168-174 EUSTON ROAD ALEXANDRIA	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	84	81	84	84	75	71	71	71	74	74	74	74	71	74	74	74	75	81	81	81	84	84	84	84	81	84	84	84
OSR	176-180 EUSTON ROAD ALEXANDRIA	75	70	70	70	73	73	73	73	70	73	73	73	75	80	80	80	83	83	83	83	80	83	83	83	75	70	70	70	73	73	73	73	70	73	73	73	75	80	80	80	83	83	83	83	80	83	83	83
OSR	182-190 EUSTON ROAD ALEXANDRIA	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	79	76	79	79	75	66	66	66	69	69	69	69	66	69	69	69	75	76	76	76	79	79	79	79	76	79	79	79
OSR	192-200 EUSTON ROAD ST PETERS	75	70	70	71	73	73	73	73	71	73	73	73	75	80	80	81	83	83	83	83	81	83	83	83	75	70	70	71	73	73	73	73	71	73	73	73	75	80	80	81	83	83	83	83	81	83	83	83
OSR	202-212 EUSTON ROAD ALEXANDRIA	75	64	63	67	58	58	58	67	58	58	58	67	75	74	73	77	68	68	68	68	77	68	68	77	75	65	67	68	66	66	66	60	67	60	60	68	75	75	77	78	76	76	76	70	77	70	70	78
OSR	35-39 HUNTLEY STREET ALEXANDRIA	75	65	65	55	55	76	76	76	55	41	41	55	75	75	75	65	65	86	86	86	65	51	51	65	75	65	65	55	54	76	76	76	55	41	41	55	75	75	75	65	64	86	86	86	65	51	51	65
OSR	20 MADDOX STREET ALEXANDRIA	70	67	67	45	48	48	73	73	73	48	48	73	70	77	77	55	58	58	83	83	83	58	58	83	70	66	67	45	48	48	73	72	72	47	47	72	70	76	77	55	58	58	83	82	82	57	57	82

D.3 Predicted noise levels for Compound C12 (24 hour operation)

The impacts presented in the Table D3 following are identified by colour coding of the text.

For **Standard Hours**:

- XX Complies with NML
- **XX** < 10dB(A) above NML - construction noise clearly audible
- **XX** > 10dB(A) above NML - construction noise clearly moderately intrusive
- **XX** > 75dB(A) - highly noise affected

For **OOHW Evening and Night**:

- **XX** Complies with NML
- **XX** < 5dB(A) above NML - construction noise noticeable
- **XX** 5 to 15dB(A) above NML - construction noise clearly audible
- **XX** > 15 to 25dB(A) above NML - construction noise moderately intrusive
- **XX** >25dB(A) above NML - construction noise highly intrusive

Table D3: Predicted Construction Noise Levels

Compound C12

Receiver			Predicted Noise Levels, dB(A)								
			DAY (STANDARD)			EVENING (OOHW)			NIGHT (OOHW)		
NCA	Address	Description	NML	With barriers	Without barriers	NML	With barriers	Without barriers	NML	With barriers	Without barriers
NCA04	28 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	20 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	16 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	42	50	37	42	45	37	42
NCA04	18 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	24 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	10 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	42	50	37	42	45	37	42
NCA04	22 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	8 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	41	50	37	41	45	37	41
NCA04	6 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	41	50	37	41	45	37	41
NCA04	12 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	4 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	41	50	37	41	45	37	41
NCA04	14 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	42	50	37	42	45	37	42
NCA04	34 CAMPBELL ROAD ALEXANDRIA	Residential	64	39	44	50	39	44	45	39	44
NCA04	32 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	44	50	38	44	45	38	44
NCA04	2 CAMPBELL ROAD ALEXANDRIA	Residential	64	37	41	50	37	41	45	37	41
NCA04	26 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	42	50	38	42	45	38	42
NCA04	30 CAMPBELL ROAD ALEXANDRIA	Residential	64	38	44	50	38	44	45	38	44
NCA11	671-683 GARDENERS ROAD MASCOT	Residential	68	36	36	57	36	36	47	36	36
NCA11	671-683 GARDENERS ROAD MASCOT	Residential	68	37	37	57	37	37	47	37	37
NCA11	671-683 GARDENERS ROAD MASCOT	Residential	68	37	37	57	37	37	47	37	37
NCA11	659-669 GARDENERS ROAD MASCOT	Residential	68	36	36	57	36	36	47	36	36
OSR	192-200 EUSTON ROAD ST PETERS	Industrial	75	41	46	75	41	46	75	41	46
OSR	24-26 BURROWS ROAD ST PETERS	Industrial	70	40	45	70	40	45	70	40	45
OSR	67 BOURKE ROAD ALEXANDRIA	Industrial	75	47	49	75	47	49	75	47	49
OSR	53-57 BURROWS ROAD ALEXANDRIA	Industrial	75	39	45	75	39	45	75	39	45
OSR	53-57 BURROWS ROAD ALEXANDRIA	Industrial	75	39	39	75	39	39	75	39	39
OSR	22 BURROWS ROAD ST PETERS	Industrial	70	38	38	70	38	38	70	38	38
OSR	24-26 BURROWS ROAD ST PETERS	Industrial	70	38	44	70	38	44	70	38	44
OSR	63-65 BURROWS ROAD ALEXANDRIA	Industrial	75	38	38	75	38	38	75	38	38
OSR	73-75 BOURKE ROAD ALEXANDRIA	Industrial	75	38	38	75	38	38	75	38	38
OSR	44-46 BURROWS ROAD ALEXANDRIA	Industrial	75	45	50	75	45	50	75	45	50
OSR	154-164 EUSTON ROAD ALEXANDRIA	Industrial	75	37	37	75	37	37	75	37	37
OSR	32 BURROWS ROAD ST PETERS	Industrial	75	64	63	75	64	63	75	64	63
OSR	77 BOURKE ROAD ALEXANDRIA	Industrial	70	37	37	70	37	37	70	37	37
OSR	28-30 BURROWS ROAD ST PETERS	Industrial	75	46	46	75	46	46	75	46	46
OSR	79 BOURKE ROAD ALEXANDRIA	Industrial	70	43	45	70	43	45	70	43	45
OSR	77 BOURKE ROAD ALEXANDRIA	Industrial	70	37	37	70	37	37	70	37	37
OSR	62A BURROWS ROAD ALEXANDRIA	Industrial	75	37	42	75	37	42	75	37	42
OSR	28-30 BURROWS ROAD ST PETERS	Industrial	75	43	43	75	43	43	75	43	43
OSR	546-548 GARDENERS ROAD ALEXANDRIA	Industrial	75	38	38	75	38	38	75	38	38
OSR	75A BOURKE ROAD ALEXANDRIA	Industrial	75	37	37	75	37	37	75	37	37
OSR	202-212 EUSTON ROAD ALEXANDRIA	Industrial	75	48	52	75	48	52	75	48	52
OSR	24-26 BURROWS ROAD ST PETERS	Industrial	70	36	36	70	36	36	70	36	36

Table D2: Predicted Construction Noise Levels

Compound C12

Receiver			Predicted Noise Levels, dB(A)								
			DAY (STANDARD)			EVENING (OOHW)			NIGHT (OOHW)		
NCA	Address	Description	NML	With barriers	Without barriers	NML	With barriers	Without barriers	NML	With barriers	Without barriers
OSR	34A-36 BURROWS ROAD ST PETERS	Industrial	75	57	59	75	57	59	75	57	59
OSR	83 BOURKE ROAD ALEXANDRIA	Industrial	75	41	43	75	41	43	75	41	43
OSR	48 BURROWS ROAD ALEXANDRIA	Industrial	75	42	47	75	42	47	75	42	47
OSR	79 BOURKE ROAD ALEXANDRIA	Industrial	70	36	36	70	36	36	70	36	36
OSR	697 GARDENERS ROAD ALEXANDRIA	Industrial	75	47	49	75	47	49	75	47	49
OSR	59-61 BURROWS ROAD ALEXANDRIA	Industrial	75	39	39	75	39	39	75	39	39
OSR	38 BURROWS ROAD ST PETERS	Industrial	75	44	44	75	44	44	75	44	44
OSR	520-530 GARDENERS ROAD ALEXANDRIA	Industrial	70	37	40	70	37	40	70	37	40
OSR	215-225 EUSTON ROAD ALEXANDRIA	Industrial	75	39	42	75	39	42	75	39	42

APPENDIX E Properties eligible for consideration of at-property treatment

At-property treatments identified in Table E1 will be installed in accordance with reports submitted addressing the requirements of SSI 6788 Condition of Approval D19.

Table E.1: Properties identified as eligible for consideration of operational at-property treatment in the EIS and affected by construction noise

NCA	Address	EIS Outcomes		Construction design outcomes				Treatment type (TBC)	Condition D19 satisfied?
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise			
				Std Hours	OOHW				
NCA01	93-103 Euston Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA01	125 Euston Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA01	220-230 Lawrence St Alexandria	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA01	288-302 Lawrence St Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA03	58 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	71 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	73 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	77 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	79 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	81 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	83 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	85 Hutchinson Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA03	87 Hutchinson Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA03	101 Hutchinson Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	
NCA03	60-68 Hutchinson Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	19 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	21 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	23 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	25 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	27 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	29 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	31 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	33 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA03	35 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	

NCA	Address	EIS Outcomes		Construction design outcomes				Condition D19 satisfied?
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise	Treatment type (TBC)	
				Std Hours	OOHW			
NCA03	37 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	39 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	41 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	43 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	45 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	47 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	49 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	51 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	53 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	55 Lackey Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA03	63-65 Campbell Street Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA03	67 Campbell Street Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	2 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	4 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	6 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	8 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	10 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	12 Campbell Road Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA04	14 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	16 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	18 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	20 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	22 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	24 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	26 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1

NCA	Address	EIS Outcomes		Construction design outcomes				
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise	Treatment type (TBC)	Condition D19 satisfied?
				Std Hours	OOHW			
NCA04	28 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	30 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	32 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA04	34 Campbell Road Alexandria	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Yes1
NCA06	75 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	77 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	79 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	81 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	83 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	85 Church Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	87 Church Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	89 Church Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	91A-D Church Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	1b St Peters Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	4 St Peters Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	5 St Peters Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	6 St Peters Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	7 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	8 St Peters Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	9 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	11 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	12 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	13 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	15 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	16 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary

NCA	Address	EIS Outcomes		Construction design outcomes				Condition D19 satisfied?
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise	Treatment type (TBC)	
				Std Hours	OOHW			
NCA06	17 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	18 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	21 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	23 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	31 St Peters Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	4 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	6 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	7 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	8 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	9 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	10 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	11 Florence Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	12 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	13 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	14 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	15 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	16 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	17 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	18 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	19 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	20 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	21 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	24 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	26 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	29 Florence Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary

NCA	Address	EIS Outcomes		Construction design outcomes				Condition D19 satisfied?
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise	Treatment type (TBC)	
				Std Hours	OOHW			
NCA06	3 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	5 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	7 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	9 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	10 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	12 Brown Street St Peters	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary
NCA06	11 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	13 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	15 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	16 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	17 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	19 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	21 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	22 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	23 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	24 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	25 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA06	30 Brown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA07	159 Princes Highway St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary
NCA08	19 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA08	21 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA08	23 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA08	25 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA08	27 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1
NCA08	29 Campbell Street Alexandria	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1

NCA	Address	EIS Outcomes		Construction design outcomes				Treatment type (TBC)	Condition D19 satisfied?
		Identified for operational noise treatment?	Treatment type	Exceeds NML?		Source of construction noise			
				Std Hours	OOHW				
NCA08	53 Barwon Park Road St Peters	Yes	Type 2	Yes	Yes	Local roadworks/ SPI Tunnel Support	Type 2	Yes1	
NCA08	31 Barwon Park Road St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	35 Barwon Park Road St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	47 Barwon Park Road St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	49 Barwon Park Road St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	51 Barwon Park Road St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	38 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	44 Crown Street St Peters	Yes	Type 1	No (currently construction site)		Local roadworks	None	Report to Secretary	
NCA08	65 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	67 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	71 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	73 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA08	75 Crown Street St Peters	Yes	Type 1	Yes	TBC	Local roadworks	Type 1	Report to Secretary	
NCA11	8/635 Gardeners Road Mascot	Yes	Type 2	Yes	TBC	Local roadworks	Type 2	Report to Secretary	

Notes: 1. Subject to installation of at-property treatment

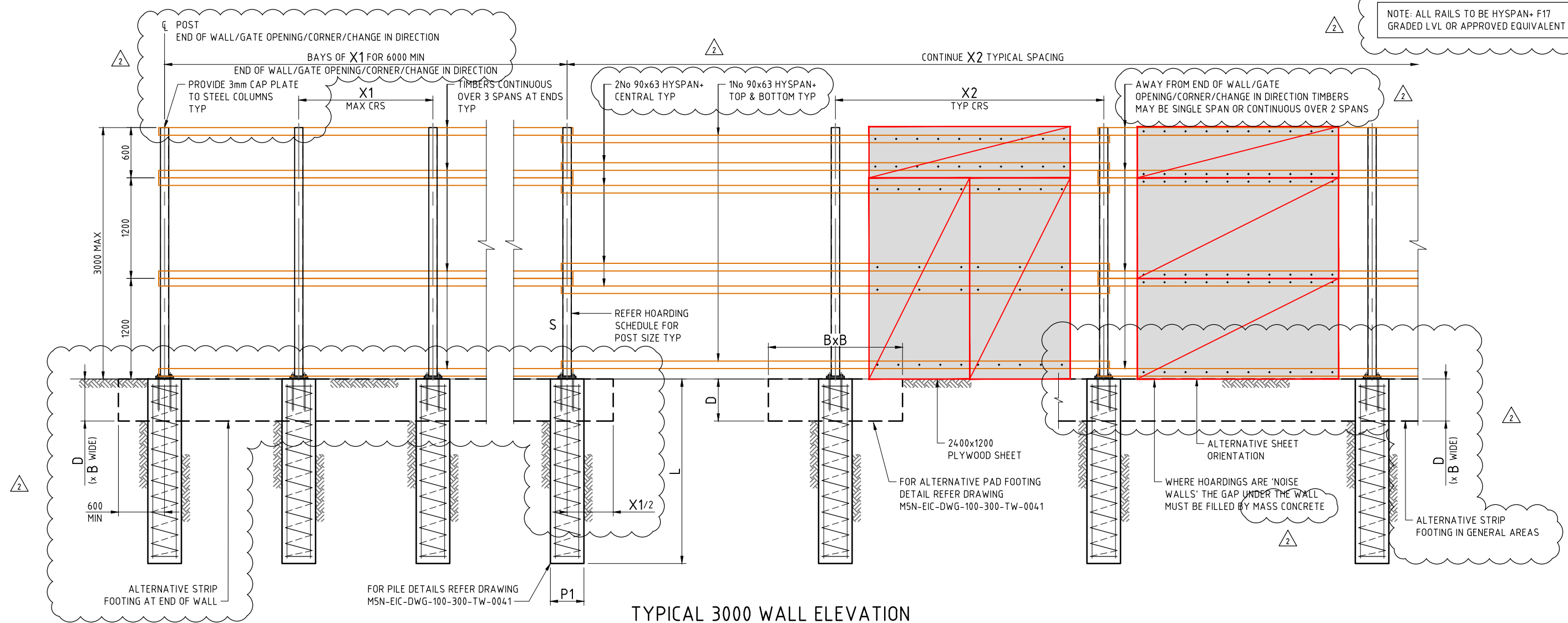
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Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Attachment B: Indicative Temporary Noise Barrier Design

NOTE: ALL RAILS TO BE HYSpan+ F17 GRADED LVL OR APPROVED EQUIVALENT



TYPICAL 3000 WALL ELEVATION

SCALE 1:25

HOARDING SCHEDULE

LOAD CASE	TOPOGRAPHIC CONFIGURATION	POST CENTRES		POST SIZE	PILE DEPTH SAND OR ENG. FILL Cu = COHESIONLESS	PILE DEPTH SOFT CLAY 12kPa < Cu < 25kPa	PILE DEPTH FIRM CLAY 25kPa ≤ Cu < 50kPa	PILE DEPTH STIFF CLAY 50kPa ≤ Cu < 100kPa	PILE DEPTH VERY STIFF CLAY 100kPa ≤ Cu < 200kPa	PILE DEPTH HARD CLAY Cu ≥ 200kPa OR CLASS V SHALE	PAD FOOTING 100kPa MIN ALLOWABLE BEARING	STRIP FOOTING 100kPa MIN ALLOWABLE BEARING (AT END OF WALL)
		X1	X2	S STEEL	L	L	L	L	L	L	B x B x D	B x D
CASE A Mt=1.0		3300	6600	150x100x4 RHS	2300	4300	3000	2200	1700	1400	1800x1800x500	925x500 (1350x500)
CASE B Mt=1.1		3000	6000	150x100x4 RHS	2400	4600	3100	2300	1700	1400	1850x1850x500	1100x500 (1475x500)
CASE C Mt=1.1		3000	6000	150x100x4 RHS	2400	4600	3100	2300	1700	1400	1850x1850x500	1100x500 (1475x500)
CASE D Mt=1.3		2500	5000	200x100x4 RHS	2600	5000	3400	2400	1800	1500	1950x1950x500	1225x500 (1725x500)

NOTES:

- DRAWING TO BE READ IN CONJUNCTION WITH NOTES LISTED ON DRAWING MSN-EIC-DWG-100-300-TW-0005.
- REFER TO NOISE CONSULTANTS ADVICES FOR HEIGHTS AND PERFORMANCE CRITERIA (TYPICAL).
- ALTERNATIVE FOUNDATION WITH NO REINFORCEMENT AVAILABLE. FOR DETAIL REFER DRAWING MSN-EIC-DWG-100-300-TW-0041.
- PLYWOOD SHEET SIZES AND ADDITIONAL WALER FOR PLYWOOD FIXING IS SHOWN AS INDICATIVE ARRANGEMENT ONLY.
- GEOTECHNICAL REPRESENTATIVE TO CONFIRM SOIL TYPE FOR EACH HOARDING LOCATION TYP. RANGE OF UNDRAINED SHEAR STRENGTH, Cu, SHOWN IN THE SCHEDULE, REFERS TO GROUND CONDITIONS AT 1.5x PILE DIA BELOW GROUND LEVEL. THE BASIC GEOTECHNICAL STRENGTH REDUCTION FACTOR $\phi_{gb} = 0.45$ ADOPTED FOR DESIGN IN ACCORDANCE WITH AS2159.
- CONTACT DESIGNER FOR ADVICE IF:
 - BATTER SLOPE STEEPER THAN 2:1 OR HOARDING LOCATED ADJACENT VERTICAL DROP.
 - THE HOARDING CANNOT BE SET BACK H/4 AND 2 x PILE DIAMETERS FROM TOP OF BATTER.
 - THE BATTER IS GREATER THAN 8m HIGH.
 - GROUND IS SOFTER THAN SOFT CLAY. (12kPa ≤ Cu ≤ 25kPa).
- REFER TO CIVIL PACKAGE FOR VEHICLE SEPARATION BARRIERS REQUIRED BETWEEN LIVE TRAFFIC AND SITE.

ACCEPTED FOR CONSTRUCTION

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

DRAWING FILE LOCATION / NAME K:\04 SPECIALIST DESIGN\07 Projects\15052_Westconnex M5East\CAD\drawings\MSN-EIC-DWG-100-300-TW-0016.dwg		PROJECT BREAKDOWN STRUCTURE -	
DESIGN MODEL FILE(S) USED FOR DOCUMENTATION OF THIS DRAWING	REV	DATE	AMENDMENT / REVISION DESCRIPTION
	A	24.02.16	ISSUED FOR FINAL DESIGN
	B	03.03.16	RE-ISSUED FOR FINAL DESIGN
	0	11.04.16	ISSUED FOR CONSTRUCTION
	1	03.05.16	END BAY MINIMUM LENGTH REVISED
	2	15.07.16	GENERAL REVISION
			APPROVAL
			NB
			DN
			GF
			DH

SCALES ON A1 SIZE DRAWING	
	SCALE 1:25
CO-ORDINATE SYSTEM MGA ZONE 56	HEIGHT DATUM AHD

CPB CONTRACTORS DRAGADOS SAMSUNG SAMSUNG & C T WestConnex Stage 2 M5 AUJV AURECON JACOBS NEW M5 JOINT VENTURE HASSELL

PLOT DATE / TIME 15/07/2016 4:14:41 PM		PLOT BY	
TITLE	NAME	DATE	
DRAWN			
DRG CHECK		24.02.16	
DESIGN		24.02.16	
DESIGN CHECK		-	
DESIGN MNGR		-	
PROJECT MNGR		-	

CLIENT
Sydney Motorway Corporation WestConnex

DOCUMENT NUMBER M5N-EIC-DWG-100-300-TW-0016			
WESTCONNEX NEW M5			
PROJECT WIDE TEMPORARY WORKS DESIGN TEMPORARY NOISE WALLS AND HOARDINGS 3000 HIGH PLYWOOD HOARDING - OPTION 3			
RMS REGISTRATION No	-		
ISSUE STATUS FOR CONSTRUCTION	BRIDGE No.	SHEET No.	REV
	-	-	2

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road

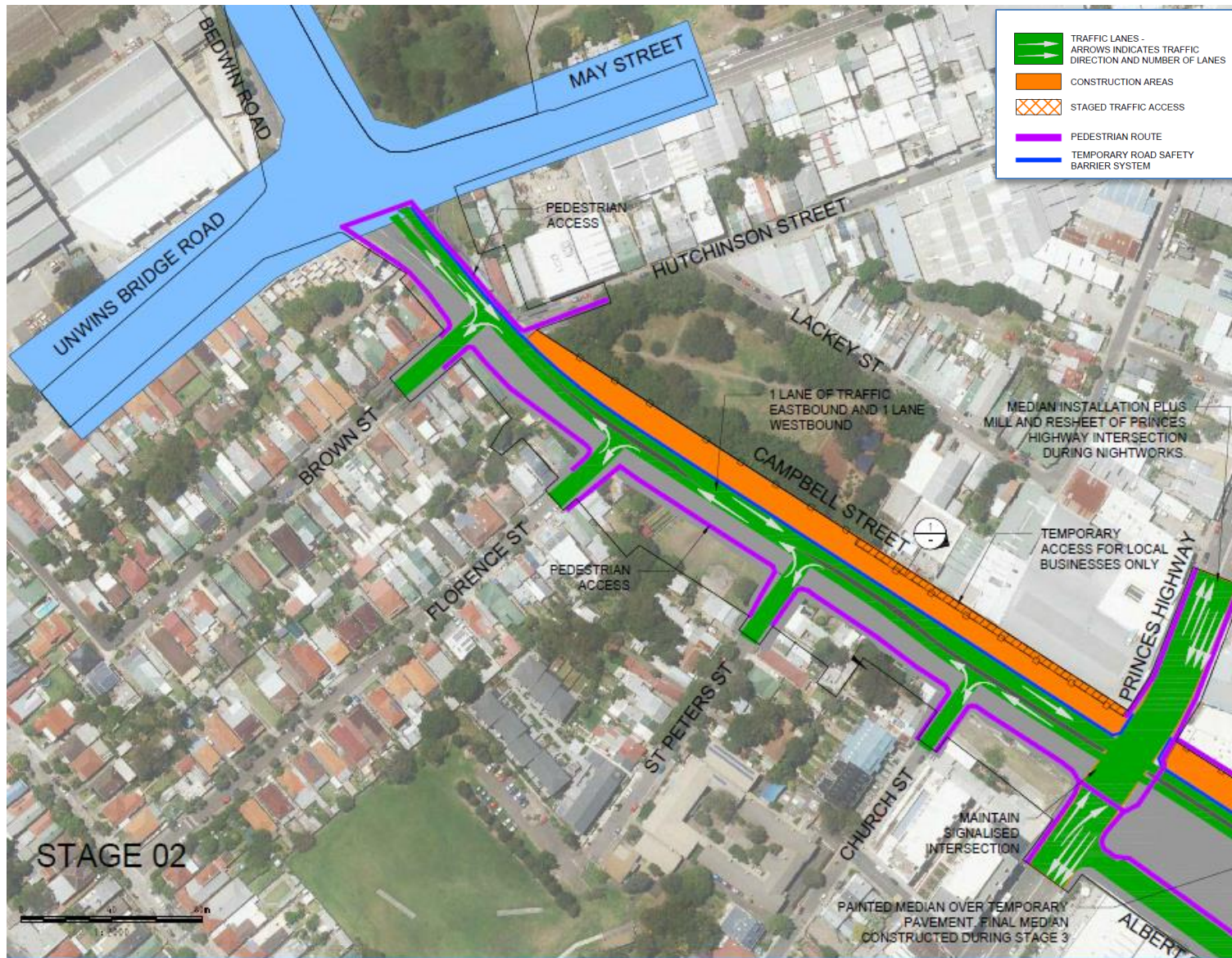


Attachment C: Campbell Road and Campbell Street Construction Staging

Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road



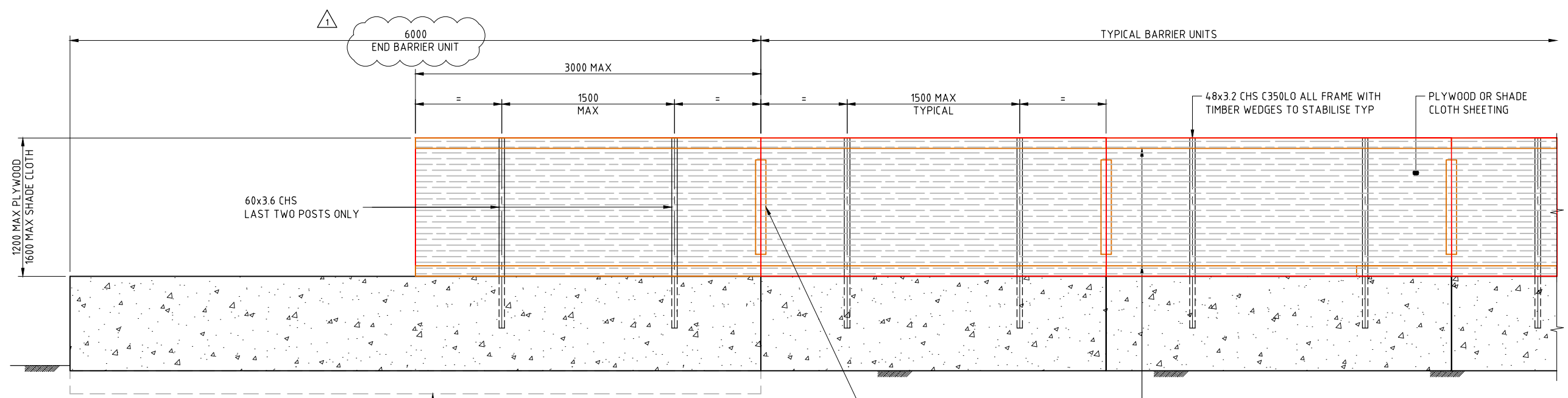
Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road





Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

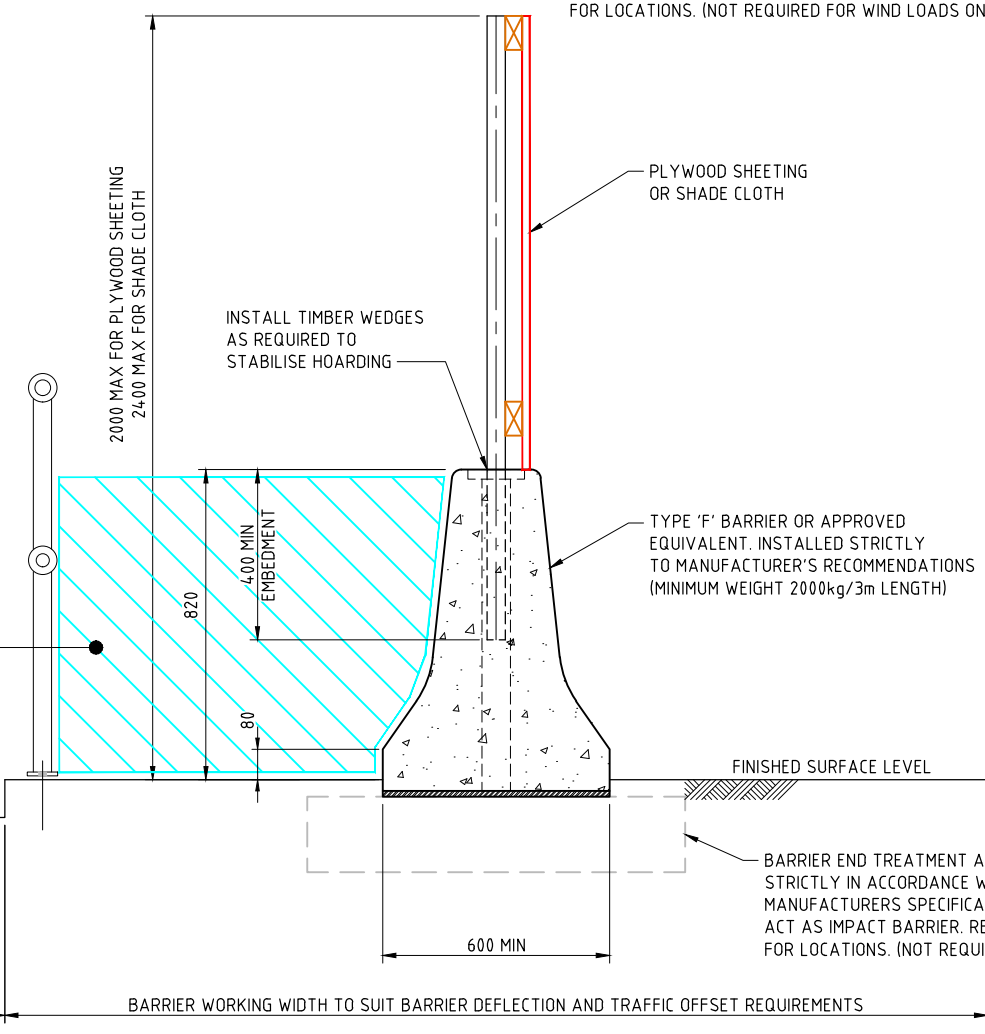
Attachment D: Indicative Relocatable Noise Screen Design



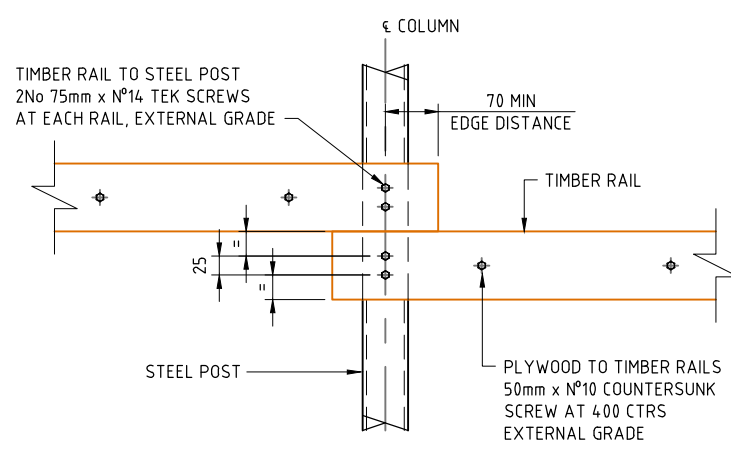
BARRIER END TREATMENT AND INSTALLATION TO BE STRICTLY IN ACCORDANCE WITH RMS STANDARDS AND MANUFACTURERS SPECIFICATION WHERE BARRIER IS TO ACT AS IMPACT BARRIER. REFER TO CIVIL DESIGN PACKAGE FOR LOCATIONS. (NOT REQUIRED FOR WIND LOADS ONLY)

TYPICAL ELEVATION
SCALE 1:20

NOTE: SHADE CLOTH OPTION ASSUMES MAXIMUM 30% UV ($k_p=0.51$). IF LESS POROUS SHADE CLOTH ADOPTED THEN PLYWOOD HEIGHT LIMIT APPLIES.



TYPICAL SECTION
SCALE 1:10



TYPICAL TIMBER RAIL FIXING ELEVATION
SCALE 1:5

SAFETY IN DESIGN

- TO BE ADDRESSED BY PROJECT ENGINEER
1. BARRIER END TREATMENT AND INSTALLATION TO BE STRICTLY IN ACCORDANCE WITH RMS STANDARDS AND MANUFACTURERS SPECIFICATION WHERE BARRIER IS TO ACT AS IMPACT BARRIER. REFER TO CIVIL DESIGN PACKAGE FOR LOCATIONS. (NOT REQUIRED FOR WIND LOADS ONLY)
 2. ALL BARRIERS TO BE INSPECTED PRIOR TO EACH LIFT.
 3. LIFTING OF BARRIER STRICTLY TO MANUFACTURER'S GUIDELINES.
 4. PROJECT ENGINEER AND CIVIL DESIGNER TO CONFIRM WHERE BARRIERS ARE REQUIRED TO ACT AS IMPACT BARRIERS ADJACENT LIVE ROAD TRAFFIC, THE BARRIERS INCLUDING TERMINATING ENDS (NOT SHOWN) SHALL BE RMS APPROVED BARRIERS (AND SCREENS), AND INSTALLED STRICTLY TO:
 - MANUFACTURER'S RECOMMENDATIONS.
 - ROAD AUTHORITY GUIDELINES.
 - SITE SPECIFIC RISK ASSESSMENT.
 - TRAFFIC MANAGEMENT PLAN FOR THE WORKSITE.

NOTES

1. DRAWING TO BE READ IN CONJUNCTION WITH NOTES LISTED ON DRAWING MSN-EIC-DWG-100-300-TW-0005.
2. PLYWOOD SHEET SIZES SHOWN ARE INDICATIVE ONLY.
3. CONTACT DESIGNER FOR ADVICE IF:
 - HOARDING IS REQUIRED TO EXTEND TO THE END OF THE LAST BARRIER.

ACCEPTED FOR CONSTRUCTION

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

REV	DATE	AMENDMENT / REVISION DESCRIPTION	APPROVAL
A	24.02.16	ISSUED FOR FINAL DESIGN	NB
B	03.03.16	RE-ISSUED FOR FINAL DESIGN	NB
0	11.04.16	ISSUED FOR CONSTRUCTION	DN
1	15.07.16	GENERAL REVISION	DH

SCALE	SCALE	SCALE
0 100 200 300mm	0 200 400 600mm	0 400 800 1200mm
SCALE 1:5	SCALE 1:10	SCALE 1:20

PROJECT BREAKDOWN STRUCTURE

CPB CONTRACTORS | DRAGADOS | SAMSUNG SAMSUNG C&T

WestConnex Stage 2 M5

ajjv | Golder Associates | HASSELL

AURECON JACOBS NEW M5 JOINT VENTURE

TITLE	NAME	DATE
DRAWN		
DRG CHECK		24.02.16
DESIGN		24.02.16
DESIGN CHECK		
DESIGN MNGR		
PROJECT MNGR		

CLIENT

Sydney Motorway Corporation | WestConnex

DOCUMENT NUMBER			
M5N-EIC-DWG-100-300-TW-0051			
WESTCONNEX NEW M5			
PROJECT WIDE			
TEMPORARY WORKS DESIGN			
TEMPORARY NOISE WALLS AND HOARDINGS			
HOARDING ON BARRIER TYPICAL DETAILS			
RMS REGISTRATION No -			
ISSUE STATUS	BRIDGE No.	SHEET No.	REV
FOR CONSTRUCTION	-	-	1

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Attachment E: Community Consultation Records

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Attachment F: Consultation Materials

Temporary noise barrier alignment:





Road/site side

Temporary noise barriers:

- 3m tall, made from plywood (2.4m) and clear acrylic (0.6m), fixed into the ground.
- Noise reduction of approx. 24 decibels.
- Installation in early 2017, following property clearing.



Resident/property side

Colour options for plywood:



Pale Eucalypt



Dune



Windspray

Temporary Noise Barrier Strategy – Local Roads, Campbell Street and Campbell Road



Attachment G: Noise modelling for the operation of the minor ancillary facility at Camdenville Basin

WESTCONNEX NEW M5

Construction Noise and Vibration Impact Statement: Camdenville Basin Compound

9 March 2017

CPB Dragados Samsung Joint Venture

TH014-06 01F27.3 CNVIS Add 3 Cville Cmpd (r1)

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1 Introduction

This Construction Noise and Vibration Impact Statement (CNVIS) has been prepared on behalf of CPB Contractors Dragados Samsung Joint Venture (CSD JV) in accordance with the Construction Noise and Vibration Management Plan (CNVMP) [TH014-05 01D01 WCX_NM5 CNVMP] [1] for the construction of the WestConnex New M5 Project (New M5 or Project).

1.1 Relevant requirements and purpose of this CNVIS

This CNVIS assesses noise and vibration impacts associated with the proposed use of the Camdenville Basin as ancillary facility to support the local roads works near the St Peters Interchange, and where required outlines the required mitigation measures. The compound will be in use during standard and outside standard constructions hours. The construction hours of work are defined by the Project Conditions of Approval (CoAs) as outlined in the CNVMP.

Condition D57 requires that the potential environmental impacts associated with the establishment and operation of any ancillary facility be identified. Details of the mitigation, monitoring and management procedures for the compound should also be provided.

This report addresses Conditions D57 by assessing and identifying noise and vibration impacts associated with the use of the new compound and forms part of the CNVMP for the Project.

1.2 Structure of this CNVIS

This CNVIS is structured as follows:

- **Section 2** - Description of construction work and hours;
- **Section 3** - Identification of noise and vibration sensitive receivers surrounding the site;
- **Section 4** - Construction noise and vibration objectives; and
- **Section 5** - Construction Noise Assessment.

1.3 Quality assurance

The work documented in this report was carried out in accordance with the Renzo Tonin & Associates Quality Assurance System, which is based on Australian Standard / NZS ISO 9001. Appendix A contains a glossary of acoustic terms used in this report.

2 Description of construction works and hours

2.1 Summary of works addressed in this CNVIS

This CNVIS provides an assessment of noise and vibration impacts from activities associated with the use of the part Camdenville Basin as a construction compound to support the local road works associated with the M5N. The main purpose of the compound is for light vehicle access/ parking and worker facilities only. There will be no stockpile facility and minimal storage areas available. There may be infrequent heavy vehicles accessing the compound for deliveries due to the proximity to the work areas and for initial compound set-up and decommissioning.

The compound will serve as a meeting point for pre-start briefings and as an emergency muster point. It may be accessed during standard hours or outside of standard hours, depending on the local roads works being undertaken.

The local road works supported by this compound have already been assessed in the Local Roads CNVIS (ref: TH014-06 01F27 WXC_NM5 CNVIS LR CV [2]).

2.2 Construction hours

The construction hours for the Project are defined by Conditions of Approval D12, D13, D14, and D15. D15 applies to all construction works other than tunnelling (and tunnel support) work and outlines the out-of-hours work periods (as indicated in Table 2.1).

The standard construction hours of work and the admissible hours for activities resulting in impulsive or tonal noise emissions (e.g. rock hammering, sheet piling etc.) are summarised in Table 2.1. The out-of-hours work (OOHW) period are also defined in Table 2.1 as OOHW Period 1 and 2, as are the admissible hours for tunnelling (including tunnel support). OOHW are not applicable to this CNVIS, which addresses work during standard construction hours.

Table 2.1: Construction hours

Reference	Construction activity	Monday to Friday	Saturday	Sunday/ public holiday
Recommended standard construction hours				
D12	Standard Construction	7am to 6pm	8am to 1pm	No work
D13	Tunnelling (and tunnel support)	24 hours	24 hours	24 hours
D14	Construction activities with impulsive or tonal noise emissions	8am to 6pm [^]	8am to 1pm [^]	No work
Outside recommended standard construction hours				
D15 and TfNSW CNS*	Out-of-Hours Work (OOHW) Period 1	6pm to 10pm	7am to 8am 1pm to 10pm	8am to 6pm
	Out-of-Hours Work (OOHW) Period 2	10pm to 7am	10pm to 7am	10pm to 8am

Notes: [^] In continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block in accordance with D14 (see CNVMP Section 3.2.3)

* Transport for NSW Construction Noise Strategy (ref: 7TP-ST-157/2.0) April 2012

2.3 Construction traffic

When construction-related traffic moves on the public road network, a different noise assessment methodology is appropriate as vehicle movements would be regarded as additional road traffic on public roads rather than as part of the construction site's activities.

Based on the proposed activities/operations, construction traffic is not significant and has not been considered further in this CNVIS.

2.4 Construction vibration

The main function of the Camdenville Basin compound will be for light vehicle access/ parking and worker facilities. There is no significant vibration generating plant anticipated to be used on the site.

Based on the proposed activities/operations, construction vibration is not significant and has not been considered further in this CNVIS.

3 Nearest sensitive receivers

3.1 Residential receivers

To assess and manage construction noise and vibration impact, the residential areas surrounding the Project have been divided into Noise Catchment Areas (NCAs) based on each area's similar acoustic environment prior to the commencement of construction works. The NCAs have been based on those established in the EIS for the New M5 project [4], with some modifications to allow for site specific characteristics.

An indicative list of the nearest and potentially worst affected noise and vibration sensitive receivers and their respective NCAs are summarised in Table 3.1 below.

Table 3.1: Nearest residential noise and vibration sensitive receivers

NCA	Approx. number of receivers in NCA			Nearest residential receiver address	Approx. distance receiver boundary to works
	Residential	Other	C/I		
NCA02	406	2	1	160-172 Lord Street, Newtown	40m
NCA03	198	2	38	119 May Street, St Peters	<5m (adjacent) to access 65, from compound
NCA06A	94	0	26	6 Unwins Bridge Road, St Peters	100m
NCA06B	459	3	12	15 Brown Street, St Peters	130m

Notes: 'Other' refers to 'other sensitive receivers', including but not limited to educational facilities (schools, child care centres), places of worship, recreation areas
'C/I' refers to 'commercial/ industrial' facilities

All relevant residential sensitive receivers in the vicinity of the worksite are identified on aerial photographs located in APPENDIX B. At receivers more than approximately 500m from the construction area, potential construction noise and vibration levels are expected to be within the adopted noise and vibration management levels described in Section 4 of this CNVIS. Receivers beyond 500m are typically not included in this CNVIS assessment.

3.2 Other sensitive receivers

Additional to residential receivers, there are 'other' noise and vibration sensitive receivers (e.g. educational institutions, places of worship, recreational areas, etc.) surrounding the construction sites that have been identified and the nearest sensitive properties to the proposed works are summarised in APPENDIX B.

All commercial and industrial premises near the worksite have been considered in this assessment.

3.3 Heritage receivers

Heritage receivers have also been identified in the Land Use Survey in Annexure A of the CNVMP. There are no heritage-listed buildings close to the work areas.

4 Construction noise and vibration objectives

4.1 Noise management levels

Construction noise management levels have been determined using the NSW Interim Construction Noise Guideline (ICNG) [5]. Table B1 in APPENDIX B identifies the adopted construction noise management levels (NMLs) for the nearest noise sensitive receivers to the worksite. The NMLs for residential receivers are based on long-term noise logging conducted by AECOM on behalf of Sydney Motorway Corporation (SMC) to quantify ambient noise levels for the Environmental Impact Statement (EIS) [4].

Additional pre-construction noise monitoring was carried out to establish more accurate noise goals for the updated Noise Catchment Areas (NCAs) around the construction compounds. Long-term, unattended noise monitoring was carried out between 16th to 30th June 2016. The results of the noise monitoring are documented in the Additional Noise Monitoring Report [ref: TH014-05 01F16 WXC_M5 Additional Monitoring (r1) dated 2016.07.04] [6].

The NMLs for 'other' sensitive receivers are from the ICNG, as reported in Section 3.1.1 of the draft CNVMP. Residential receivers are considered 'noise affected' where construction noise levels are greater than the noise management levels identified in APPENDIX B. The noise affected level represents the point above which there may be some community reaction to noise. Where predicted and/or measured construction noise levels exceed NMLs, all feasible and reasonable work practices will be applied to meet the NMLs.

During standard construction hours a highly affected noise objective of $L_{Aeq(15min)} 75dB(A)$ applies at all receivers.

In addition to the objectives identified in APPENDIX B, where construction activities are tonal or impulsive in nature and are described in the ICNG as being particularly annoying, a +5dB(A) correction must be added to the activity noise, in accordance with the Condition of Approval D14. Activities that are defined in the ICNG as particularly annoying include, but are not limited to the use of 'beeper' style reversing or movement alarms; power saws; vibratory rolling; jack hammering, rock hammering or rock breaking; impact piling.

In addition to the background noise levels and NMLs reported in the CNVMP, shoulder periods have been defined for the use of the facility between 6:00 am to 7:00 am. This is because review of the noise monitoring data found that existing background noise levels are steadily rising in the early morning. It would therefore be unduly stringent to apply stricter 'night' criteria during this period. The midpoint between the RBL for the night period and the RBL for the day period has therefore conservatively been adopted for the RBL for the shoulder period. The shoulder RBL has then been adopted as the basis for setting the NML for this period (see 'Out of Hours Work – Shoulder' in APPENDIX B **Error! Reference source not found.**).

Construction related activities that could exceed the NMLs shall be identified and managed in accordance with the CNVMP.

5 Construction noise assessment

5.1 Detailed design outcomes

During the development of the site design, Renzo Tonin & Associates played a key role in assisting CDS JV to determine the noise mitigation measures required to reduce noise impact from the use of the site. The following design measures set out in Table 5.1 below form part of the noise mitigation and management measures for the Camdenville Basin compound.

Table 5.1: Noise mitigation and management design measures

Activity / plant Item	Mitigation measure that must be in place and specific requirements
Vehicles accessing site during OOHW period	Community notification The following noise barrier (see Table C3, APPENDIX C) must be installed: <ul style="list-style-type: none"> • CBNB: 3m high, eastern site boundary along May Street access driveway to compound. Approx. 30 m in length running north from May Street.
Site inductions & Toolbox Talks	All employees, contractors and subcontractors are to receive site induction and toolbox talks, so that the above design measures are implemented accordingly.
Non-tonal reversing beepers and warning alarms	Must be fitted (or an equivalent mechanism) to all mobile plant that will be used on site.

The following tables identify the additional noise mitigation strategies and management measures that are to be incorporated into the site design to minimise noise impact where it may occur:

- Table C2 in APPENDIX C sets out the noise management schedule
- Table C3 in APPENDIX C sets out the noise barrier design specifications.

5.2 Noise prediction methodology

Modelling and assessment of airborne noise impacts from activities associated with the construction works were determined by modelling the noise sources, receiver locations, topographical features, and possible noise mitigation measures using a Cadna-A computer noise model developed for this project. The model calculates the contribution of each noise source at identified sensitive receiver locations and allows for the prediction of the total noise from a site for the various stages of the construction works.

The noise prediction models consider:

- Location of noise sources and sensitive receiver locations;
- Height of sources and receivers referenced to one metre digital ground contours for the site area and surrounding area;
- Sound Power Levels (L_w) of plant and equipment likely to be used during the various construction activities are included in Table C1 in APPENDIX C. Table C1 also identifies the plant and equipment that will be operating during standard construction hours and outside of standard construction hours;

- Separation distances between sources and receivers;
- Ground type between sources and receivers; and
- Attenuation from barriers (natural and purpose built).

Key details regarding the construction work locations, the likely plant and equipment, and hours of operation were informed by the Design and Construction Teams. This information is presented in APPENDIX C and formed the basis for all modelling assumptions used in this assessment.

5.3 Predicted noise levels

Noise emissions were determined by modelling the noise sources, receiver locations, and operating activities, based on the information presented in Table C1 of APPENDIX C. Predicted L_{Aeq} noise levels from the sites are presented in APPENDIX D for all receivers in each NCA. The predictions are representative of noise levels during the works.

Table 5.2 below summarises the predicted impacts for each construction stage in each NCA in terms of compliance with the NMLs. The colours in the table indicate whether receivers in the NCA comply with the NML and, where exceedance of the NML occurs, the perceived impact of the exceedance.

The impacts presented are as follow for **Standard Hours**:

- ◆ Complies with NML
- ◆ < 10dB(A) above NML - construction noise clearly audible
- ◆ > 10dB(A) above NML - construction noise clearly moderately intrusive
- ◆ > 75dB(A) - highly noise affected

The impacts presented are as follows for **OOHW Day, Evening and Night**:

- ◆ Complies with NML
- ◆ < 5 dB(A) above NML - construction noise noticeable
- ◆ 5 to 15 dB(A) above NML - construction noise clearly audible
- ◆ > 15 to 25 dB(A) above NML - construction noise moderately intrusive
- ◆ > 25 dB(A) above NML - construction noise highly intrusive

Table 5.2: Summary of construction noise impacts

NCA	Level of compliance with NML		
	Day	Evening	Night
NCA02	◆	◆	◆
NCA03	◆	◆	◆
NCA06A	◆	◆	◆
NCA06B	◆	◆	◆

Predictions show that compliance will be achieved for all receivers.

For more detailed predictions see APPENDIX D.

5.4 Noise mitigation and management

5.4.1 Noise control and management measures

The following noise mitigation and management measures are recommended to reduce potential noise impacts.

Table 5.3: Site noise control measures

Control type	Control measure	Typical use
At-source Control Measures	Limit equipment in use	Only the equipment necessary will be used during OOHW.
	Limit activity duration	Any equipment not in use for extended periods shall be switched off. For example, heavy vehicles should switch engines off when not in use.
	Non-tonal reversing alarms	Alternatives reverse alarm, such as 'quackers' will be installed on all plant and equipment, where practicable.
Path Control Measures	Noise barriers	As described in Section 5.1 and APPENDIX C.
	Use of site buildings as a noise screen	Site buildings should be positioned, where practicable, to provide additional shielding to receivers.
Noise Management Measures	Site inductions & Toolbox Talks	All employees, contractors and subcontractors are to receive a Project induction. The environmental component may be covered in toolboxes and should include: <ul style="list-style-type: none"> • location of nearest sensitive receivers • relevant project specific and standard noise and vibration mitigation measures; • permissible hours of work; • OOHW Procedure and Form • construction employee parking areas.
	Community consultation	Inform community of construction activity and potential impacts.
	Behavioural practices	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.
	Noise monitoring	Noise monitoring is to be carried out as detailed in Section 5.4.3.

5.4.2 Additional noise mitigation measures

Table 5.4 should be used to advise the appropriate additional mitigation during construction, based on the Transport for New South Wales Construction Noise Strategy (TfNSW CNS) [10].

Table 5.4: Additional airborne noise mitigation measures.

Construction hours	Predicted airborne $L_{Aeq(15min)}$ noise level at receiver			Additional mitigation measures	Additional mitigation measure code
	Receiver perception	dB(A) above RBL	dB(A) above NML		
Standard Hours	Noticeable	5 to 10	0	-	
	Clearly Audible	10 to 20	≤ 10	-	
	Moderately intrusive	20 to 30	10 to 20	LB, V	AM2
	Highly intrusive	> 30	> 20	LB, V	AM2
	75dBA or greater	N/A	N/A	LB, V, SN	AM3
OOHW Period 1	Noticeable	5 to 10	≤ 5	-	
	Clearly Audible	10 to 20	5 to 15	LB	AM1
	Moderately intrusive	20 to 30	15 to 25	LB, V	AM2
	Highly intrusive	> 30	> 25	LB, V, SN, RO	AM4
OOHW Period 2	Noticeable	0 to 10	< 5	LB, V	AM1
	Clearly Audible	10 to 20	5 to 15	LB, V	AM2
	Moderately intrusive	20 to 30	15 to 25	LB, V, SN	AM3
	Highly intrusive	> 30	> 25	LB, V, SN, AA	AM5

Notes: LB = Letter box drops
V = Validation of predicted noise levels
SN = Specific notifications (personalised letter, individual briefing or phone call)
RO = Project specific respite offer
AA = Alternative accommodation

No additional noise mitigation measures are applicable for the Camdenville Basin compound as construction noise generated by the compound are predicted to comply with the NMLs.

Prior to the commencement of use of the facility, residential receivers around the site will be notified to advise that noise from the works may at times be audible. All potentially impacted receivers will be kept informed of the nature of works to be carried out, the expected noise levels and duration, as well as be given appropriate enquiries and complaints contact details (see Section 5.4.4).

5.4.3 Attended noise monitoring

Attended noise monitoring is to be undertaken to verify that noise levels resulting from construction works are in accordance with the levels predicted in this CNVIS, subject to obtaining the property owner/occupier's consent to access the property (where required).

Table 5.5: Nominated verification monitoring locations.

NCA	Nominated receiver address	Monitoring location
NCA02	160-172 Lord Street, Newtown	Rear boundary of properties. If access to properties unable to be obtained, south eastern end of Edgeware Road, on rail corridor boundary
NCA03	119 May Street, St Peters	Inside western boundary, behind noise barrier. If access to the property is not able to be obtained, then on the western boundary line, in the Camdenville Basin reserve.

Noise monitoring should follow the procedures outlined in Appendix F of the CNVMP. Note that monitoring at all properties may be undertaken from the property boundary to limit any inconvenience to property owners.

5.4.4 Complaints handling

Noise complaints received and responded to will be managed in accordance with the CNVMP and Construction Complaints Management System.

Sydney Motorway Corporation (SMC) operate a 24-hour construction complaints line (1800 660 248). Enquiries/ complaints may also be received through the New M5 project email (info@westconnex.com.au).

6 Conclusion

In conclusion, noise and vibration impacts associated with the use of the Camdenville Basin as a construction compound to support local road works for the M5N Project have been identified and described in this report. The potentially affected noise sensitive receivers and relevant construction noise objectives have been identified and discussed to allow the assessment of potential construction noise impacts.

The expected construction noise levels have been predicted and presented in Section 5.3 and APPENDIX D and were found to comply with the NMLs for the Project.

Noise mitigation and management measures have been presented in Section 5.4.

References

1. WestConnex New M5 Construction Noise and Vibration Management Plan (TH014-05 01F01 WCX_NM5 CNVMP)
2. WestConnex New M5 Construction Noise and Vibration Impact Statement: St Peters Interchange Local Roads (TH014-06 01F27 WXC_NM5 CNVIS LR CV)
3. WestConnex New M5 Construction Noise and Vibration Impact Statement: St Peters Interchange Tunnel Support Site (TH014-06 01F24 WXC_NM5 CNVIS SPI TS)
4. AECOM Australia Pty Ltd 2015 WestConnex The New M5 project - Technical Working Paper: Noise and Vibration Revision 8 – 20-Nov-2015
5. Department of Environment and Climate Change 2009 NSW Interim Construction Noise Guideline (ICNG)
6. Additional Noise Monitoring Report (ref: TH014-05 01F16 WXC_M5 Additional Monitoring (r1) dated 2016.07.04)
7. Department of Environment Conservation NSW 2006 Assessing Vibration; a technical guideline
8. German Standard DIN 4150-3: 1999-02, Structural vibration - Effects of vibration on structures, February 1999
9. British Standard BS 6472-2008, Evaluation of human exposure to vibration in buildings (1-80Hz)
10. Transport for NSW Construction Noise Strategy (ref: 7TP-ST-157/2.0) April 2012

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Absorption Coefficient α	The absorption coefficient of a material, usually measured for each octave or third-octave band and ranging between zero and one. For example, a value of 0.85 for an octave band means that 85% of the sound energy within that octave band is absorbed on coming into contact with the material. Conversely, a low value below about 0.1 means the material is acoustically reflective.
Adverse weather	Weather effects that enhance noise (particularly wind and temperature inversions) occurring at a site for a significant period of time. In the NSW INP this occurs when wind occurs for more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of nights in winter.
Active recreation	Active recreation area, characterised by sporting activities and activities which generate their own noise or focus for participants, making them less sensitive to external noise intrusion, e.g. school playground, golf course
Air-borne noise	Noise which is fundamentally transmitted by way of the air and can be attenuated by the use of barriers and walls placed physically between the noise source and receiver.
Alternate Solution	An Alternative Solution is a design that complies with the relevant Performance Requirements of the National Construction Code other than by using Deemed-to-Satisfy Provisions.
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Amenity	A desirable or useful feature or facility of a building or place.
AS	Australian Standard
Assessment period	The time period in which an assessment is made. e.g. Day 7am-6pm, Evening 6pm-10pm, Night 10pm-7am.
Assessment Point	A location at which a noise or vibration measurement is taken or estimated.
Attenuation	The reduction in the level of sound or vibration.
Audible Range	The limits of frequency which are audible or heard as sound. The normal hearing in young adults detects ranges from 20 Hz to 20 kHz, although some people can detect sound with frequencies outside these limits.
A-weighting	A filter applied to the sound recording made by a microphone to approximate the response of the human ear.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the LA90 noise level if measured as an overall level or an L90 noise level when measured in octave or third-octave bands.
Barrier (Noise)	A natural or constructed physical barrier which impedes the propagation of sound and includes fences, walls, earth mounds or berms and buildings.
Berm	Earth or overburden mound.
Buffer	An area of land between a source and a noise-sensitive receiver and may be an open space or a noise-tolerant land use.
Bund	A bund is an embankment or wall of brick, stone, concrete or other impervious material, which may form part or all of the perimeter of a compound.
BS	British Standard
CoRTN	United Kingdom Department of Environment entitled "Calculation of Road Traffic Noise (1988)"

Decibel [dB]	<p>The units of sound measurement. The following are examples of the decibel readings of every day sounds:</p> <p>0dB The faintest sound we can hear, defined as 20 micro Pascal</p> <p>30dB A quiet library or in a quiet location in the country</p> <p>45dB Typical office space. Ambience in the city at night</p> <p>60dB CBD mall at lunch time</p> <p>70dB The sound of a car passing on the street</p> <p>80dB Loud music played at home</p> <p>90dB The sound of a truck passing on the street</p> <p>100dB The sound of a rock band</p> <p>115dB Limit of sound permitted in industry</p> <p>120dB Deafening</p>
dB(A)	<p>A-weighted decibel. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter is denoted as dB(A). Practically all noise is measured using the A filter.</p>
dB(C)	<p>C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies. The dB(C) level is not widely used but has some applications.</p>
Diffraction	<p>The distortion of sound waves caused when passing tangentially around solid objects.</p>
DIN	<p>German Standard</p>
DnT,w	<p>Weighted Standardised Field Level Difference</p> <p>A measure of sound insulation performance of a building element. It is characterised by the difference in noise level on each side of a wall or floor. It is measured in-situ.</p> <p>It is a field measurement that relates to the Rw laboratory measured value but is not equal to it because an in-situ space is not of the same quality as a laboratory space.</p> <p>The value is indicative of the level of speech privacy between spaces. The higher its value the better the insulation performance.</p>
ECRTN	<p>Environmental Criteria for Road Traffic Noise, NSW, 1999</p>
EPA	<p>Environment Protection Authority</p>
Field Test	<p>A test of the sound insulation performance in-situ. See also 'Laboratory Test'</p> <p>The sound insulation performance between building spaces can be measured by conducting a field test, for example, early during the construction stage or on completion.</p> <p>A field test is conducted in a non-ideal acoustic environment. It is generally not possible to measure the performance of an individual building element accurately as the results can be affected by numerous field conditions.</p>
Fluctuating Noise	<p>Noise that varies continuously to an appreciable extent over the period of observation.</p>
Free-field	<p>An environment in which there are no acoustic reflective surfaces. Free field noise measurements are carried out outdoors at least 3.5m from any acoustic reflecting structures other than the ground.</p>
Frequency	<p>Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.</p>
Ground-borne noise	<p>Vibration propagated through the ground and then radiated as noise by vibrating building elements such as wall and floor surfaces. This noise is more noticeable in rooms that are well insulated from other airborne noise. An example would be vibration transmitted from an underground rail line radiating as sound in a bedroom of a building located above.</p>

Habitable Area	Includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom. Excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.
Heavy Vehicle	A truck, transporter or other vehicle with a gross weight above a specified level (for example: over 8 tonnes).
Impact Noise	The noise in a room, caused by impact or collision of an object onto the walls or the floor. Typical sources of impact noise are footsteps on the floor above a tenancy and the slamming of doors on cupboards mounted on the common wall between tenancies.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
INP	NSW Industrial Noise Policy, EPA 1999
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
Intrusive noise	Refers to noise that intrudes above the background level by more than 5dB(A).
ISEPP	State Environmental Planning Policy (Infrastructure), NSW, 2007
ISEPP Guideline	Development Near Rail Corridors and Busy Roads - Interim Guideline, NSW Department of Planning, December 2008
L1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L10	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L10(1hr)	The L10 level measured over a 1-hour period.
L10(18hr)	The arithmetic average of the L10(1hr) levels for the 18-hour period between 6am and 12 midnight on a normal working day.
L90	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
LAeq or Leq	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time, which would produce the same energy as a fluctuating sound level. When A-weighted, this is written as the LAeq.
LAeq(1hr)	The LAeq noise level for a one-hour period. In the context of the NSW EPA's Road Noise Policy it represents the highest tenth percentile hourly A-weighted Leq during the period 7am to 10pm, or 10pm to 7am (whichever is relevant).
LAeq(8hr)	The LAeq noise level for the period 10pm to 6am.
LAeq(9hr)	The LAeq noise level for the period 10pm to 7am.
LAeq(15hr)	The LAeq noise level for the period 7am to 10pm.
LAeq (24hr)	The LAeq noise level during a 24-hour period, usually from midnight to midnight.
Lmax	The maximum sound pressure level measured over a given period. When A-weighted, this is usually written as the L _{Amax} .
Lmin	The minimum sound pressure level measured over a given period. When A-weighted, this is usually written as the L _{Amin} .
Ln,w	Weighted Normalised Impact Sound Pressure Level A measure of the sound level transmitted from impacts on a floor to a tenancy below. It is measured in very controlled conditions in a laboratory and is characterised by how much sound reaches the receiving room from a standard tapping machine. A lower value indicates a better performing floor.

LnT,w	<p>Weighted Standardised Field Impact Sound Pressure Level</p> <p>As for Ln,w but measured in-situ and therefore subject to the inherent accuracies involved in such a measurement.</p> <p>The equivalent measurement in a laboratory is the Ln,w.</p> <p>A lower value indicates a better performing floor.</p>
Laboratory Test	<p>The performance of a building element when measured in a laboratory. The sound insulation performance of a building element installed in a building however can differ from its laboratory performance for many reasons including the quality of workmanship, the size and shape of the space in which the measurement is conducted, flanking paths and the specific characteristics of the material used which may vary from batch to batch.</p>
Loudness	<p>A rise of 10 dB in sound level corresponds approximately to a doubling of subjective loudness. That is, a sound of 85 dB is twice as loud as a sound of 75 dB which is twice as loud as a sound of 65 dB and so on. That is, the sound of 85 dB is four times or 400% the loudness of a sound of 65 dB.</p>
Microphone	<p>An electro-acoustic transducer which receives an acoustic signal and delivers a corresponding electric signal.</p>
NCA	<p>Noise Catchment Area. An area of study within which the noise environment is substantially constant.</p>
Noise	<p>Unwanted sound</p>
NRC	<p>Noise Reduction Coefficient.</p> <p>A measure of the ability of a material to absorb sound. The NRC is generally a number between 0 and 1 but in some circumstances can be slightly greater than 1 because of absorption at the edges of the material. A material with an NRC rating of 1 absorbs 100% of incoming sound, that is, no sound is reflected back from the material.</p> <p>The NRS is the average of the absorption coefficient measured in the octave bands 250Hz, 500Hz, 1kHz & 2kHz which correspond to the predominant frequencies associated with the human voice.</p>
Passive recreation	<p>Area specifically reserved for passive recreation, characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion e.g. reading, meditation</p>
Reflection	<p>Sound wave reflected from a solid object obscuring its path.</p>
Reverberation Time	<p>The time (in seconds) it takes for a noise signal within a confined space to decay by 60dB. The longer the reverberation time (usually denoted as RT60), the more echoic a room. Longer reverberation times generally result in higher noise levels within spaces.</p>
RMS	<p>Root Mean Square value representing the average value of a signal.</p>
Rw	<p>Weighted Sound Reduction Index</p> <p>A measure of the sound insulation performance of a building element. It is measured in very controlled conditions in a laboratory.</p> <p>The term supersedes the value STC which was used in older versions of the Building Code of Australia. Rw is measured and calculated using the procedure in ISO 717-1. The related field measurement is the DnT,w.</p> <p>The higher the value the better the acoustic performance of the building element.</p>
R'w	<p>Weighted Apparent Sound Reduction Index.</p> <p>As for Rw but measured in-situ and therefore subject to the inherent accuracies involved in such a measurement.</p> <p>The higher the value the better the acoustic performance of the building element.</p>
RNP	<p>Road Noise Policy, NSW, March 2011</p>
SEL	<p>Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.</p>
Sound	<p>A fluctuation of air pressure which is propagated as a wave through air.</p>

Sound absorption	The ability of a material to absorb sound energy by conversion to thermal energy.
Sound Insulation	Sound insulation refers to the ability of a construction or building element to limit noise transmission through the building element. The sound insulation of a material can be described by the R_w and the sound insulation between two rooms can be described by the $D_{nT,w}$.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power of 1 pico watt.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone referenced to 20 micro Pascal.
Spoil	Soil or materials arising from excavation activities.
Standardised	A method of adjusting the measured noise indices in-situ so that they are independent of the measuring space. The noise level in a room is affected by reverberation in the room. For example, the $L'_{n,w}$ impact sound pressure level measured in a room is dependent upon the amount of absorptive material in the receiving room. The value is adjusted to what would be measured if the reverberation time in the receiving room is set at 0.5 seconds. This enables the same value to be reported independent of whether the room contains carpet and furnishings and the like. See also 'Normalised'.
STC	Sound Transmission Class A measure of the sound insulation performance of a building element. It is measured in controlled conditions in a laboratory. The term has been superseded by R_w .
Structure-borne Noise	Audible noise generated by vibration induced in the ground and/or a structure. Vibration can be generated by impact or by solid contact with a vibrating machine. Structure-borne noise cannot be attenuated by barriers or walls but requires the isolation of the vibration source itself. This can be achieved using a resilient element placed between the vibration source and its support such as rubber, neoprene or springs or by physical separation (using an air gap for example). Examples of structure-borne noise include the noise of trains in underground tunnels heard to a listener above the ground, the sound of footsteps on the floor above a listener and the sound of a lift car passing in a shaft. See also 'Impact Noise'.
Tonal Noise	Sound containing a prominent frequency and characterised by a definite pitch.
Transmission Loss	The sound level difference between one room or area and another, usually of sound transmitted through an intervening partition or wall. Also the vibration level difference between one point and another. For example, if the sound level on one side of a wall is 100dB and 65dB on the other side, it is said that the transmission loss of the wall is 35dB. If the transmission loss is normalised or standardised, it then becomes the R_w or R'_{w} or $D_{nT,w}$.

APPENDIX B **Nearest sensitive receivers and noise management levels**



Building Type	Legend
Residential	Temporary 3m Barrier
Commercial	NCAs
	Camdenville Basin compound

Client: **WestConnex** New M5

Project: **WestConnex Stage 2 M5**

Description: **Camdenville Basin Local Roads compound Noise Catchment Areas (NCAs) and sensitive receivers Temporary noise barrier locations**



Noise Levels are approximate due to interpolation of contours and should be used for reference only. For information only and not for construction. This information is protected by copyright.

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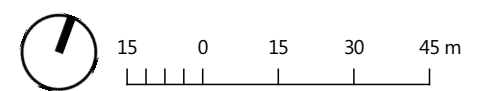


Table B1: Noise Sensitive Receivers and Construction Noise Management Levels

Local Road - Camdenville Basin Compound

NCA	Receiver Type	Reference RBL	Rating Background Levels (RBLs)			Residential Noise Management Levels (NMLs) $L_{Aeq(15\ min)}$				Sleep Dist. L_{Amax}		Comments	
			Day	Evening	Night	Day (S)	Day (O)	Evening	Night	Shoulder (6am-7am)	Screening		Max
NCA02	Residential Commercial	EISL02	50	46	39	60	55	51	44	52	54	65	Based on NCAs and NMLs presented in the EIS.
NCA03	Residential Commercial	EISL02	50	46	39	60	55	51	44	52	54	65	Based on NCAs and NMLs presented in the EIS.
NCA06A	Residential	EISL02	50	46	39	60	55	51	44	52	54	65	Based on NCAs and NMLs presented in the EIS.
NCA06B	Residential School	DD NL01	42	41	36	52	47	46	41	47	51	65	Based on Additional Noise Monitoring Report [ref: TH014-05 01F16 WXC_M5 Additional Monitoring (r1) dated 2016.07.04]
ID	Other Sensitive Receivers												
NCA02	Tom Foster Community Centre	ICNG	-	-	-	55	55	55	55	-	-	-	NML of 55dB(A) is external equivalent of 45dB(A) internal goal with windows open, when in use. Ref: ICNG p13
NCA03	Camdenville Park	ICNG	-	-	-	65	65	65	65	-	-	-	Ref: ICNG p13
NCA02	Camdenville Public School PREESCHOOL, 106 Wells Stret NEWTOWN	-	-	-	-	55	-	55	55	-	-	-	Daytime NML of 55dB(A) is external equivalent of 45dB(A) internal goal for classrooms with windows open. NML for passive recreation areas (outdoor play area) is 60dB(A)
NCA03	Simpson Park	ICNG	-	-	-	65	65	65	65	-	-	-	Ref: ICNG p13
NCA06	Rowswell Playground	ICNG	-	-	-	65	65	65	65	-	-	-	Ref: ICNG p13
NCA06	Sydney Park	ICNG	-	-	-	65	65	65	65	-	-	-	Ref: ICNG p13

APPENDIX C Construction timetable/ activities/ management

Table C1: Construction Timetable/ Activities/ Equipment

Local Road - Camdenville Basin Compound

Activity/ Work Area	Aspect	Plant/ Equipment	Net Power kW	Operating Weight kg	Day	Evening	Night	Sound Power Level (Lw re: 1pW) in Noise Model, dB(A)		Notes
					7am - 6pm	6pm - 10pm	10pm - 7am	L _{Aeq}	L _{A1}	
					General Local Roads (concurrent with all activities)	Deliveries; Lighting	Light vehicles (Utes)			
		Daymakers		900kg		1	1	93		
		Delivery truck		20t	4 per hour	-	[4 per hour]	108	118	4 movements, either in or out per hour between 6am and 7am
		Generator	100 kVA		1	1	1	89		
		Water cart		15kL	4 p.h.	-	-	108	-	

Table C2: Construction Noise Management Schedule		Local Road - Camdenville Basin Compound	
Area to be Managed	Mitigation/ Management Measure	Typical Details	Comments
1 Temporary Noise Walls/ Screens	3 m temporary noise wall along site boundary with 119 May Street, St Peters, along May Street access driveway to compound. Approx 30 m in length running north from May Street.	See Table C4 for details	Not required if access to compound for all vehicles is restricted to 7am to 6pm.
2 Work outside Standard Construction Hours	Access to compound by LIGHT VEHICLES ONLY Access to compound restricted to between 7am and 6pm for HEAVY VEHICLES Limited access to compound by HEAVY VEHICLES between 6am to 7am (morning shoulder period)	No more than 4 HV movements	Temporary noise barrier must be in place. Protect residential properties on May Street

Table C3: Noise Barrier Design Specifications					Local Road - Camdenville Basin Compound
Noise barrier reference	Location	Noise barrier height	Required Rw	Proposed Construction	Acoustic Rating of Construction*
Temporary noise barrier	Eastern site boundary with 119 May Street, 3,0m		Rw 15-20	17 mm plywood hoarding; OR	Rw 24
	St Peters, along May Street access driveway to compound. Approx 30 m in length running north from May Street.		Medium	Perspex 8mm; OR Fortress fencing A-Type RRP Soundproof Fence FlexShield, EchoBarrier or AcoustiFlex fixed to temporary fencing or scaffold	Rw 29 Rw 18 Rw 20

Notes:

Noise barrier performance: Low - Rw 10-15; Medium - Rw 15-220; Medium-High - Rw 20-25; High - Rw 25; Very High - Rw 30

* estimated by calculations and/or reference to other similar barrier type data

GENERAL

- The specified 'required rating' must be achieved by the product selected.
- By way of explanation, the Sound Insulation Rating Rw is a measure of the noise reduction property of the assembly, a higher rating implying a higher sound reduction performance.
- Note that the Rw rating of systems measured as built on site (R'w Field Test) may be up to 5 points lower than the laboratory result.
- The sealing of all gaps is critical in a sound rated construction. Use only sealer approved by the acoustic consultant.
- Check design of all junction details with acoustic consultant prior to construction.
- Check the necessity for HOLD POINTS with the acoustic consultant to ensure that all building details have been correctly interpreted and constructed.
- The information provided in this table is subject to modification and review without notice.
- The advice provided here is in respect of acoustics only. Supplementary professional advice may need to be sought in respect of fire ratings, structural design, buildability, fitness for purpose and the like.

APPENDIX D Detailed predicted noise levels

The impacts presented in the following table are identified by colour coding of the text.

For **Standard Hours**:

- XX Complies with NML
- **XX** < 10dB(A) above NML - construction noise clearly audible
- **XX** > 10dB(A) above NML - construction noise clearly moderately intrusive
- **XX** > 75dB(A) - highly noise affected

The impacts presented are as follows for **OOHW Day, Evening and Night**:

- XX Complies with NML
- **XX** < 5 dB(A) above NML - construction noise noticeable
- **XX** 5 to 15 dB(A) above NML - construction noise clearly audible
- **XX** > 15 to 25 dB(A) above NML - construction noise moderately intrusive
- **XX** > 25 dB(A) above NML - construction noise highly intrusive

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
NCA02	178 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	180 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	358 EDGEWARE ROAD NEWTOWN	60	44	51	44	52	44
NCA02	182 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	184 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	178 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	186 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	356 EDGEWARE ROAD NEWTOWN	60	44	51	44	52	44
NCA02	180 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	188 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	182 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	354 EDGEWARE ROAD NEWTOWN	60	43	51	43	52	43
NCA02	184 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	358 EDGEWARE ROAD NEWTOWN	60	43	51	43	52	43
NCA02	186 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	188 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	352 EDGEWARE ROAD NEWTOWN	60	42	51	42	52	42
NCA02	154 LORD STREET NEWTOWN	60	42	51	42	52	42
NCA02	356 EDGEWARE ROAD NEWTOWN	60	42	51	42	52	42
NCA02	354 EDGEWARE ROAD NEWTOWN	60	42	51	42	52	42
NCA02	176 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	352 EDGEWARE ROAD NEWTOWN	60	41	51	41	52	41
NCA02	150 LORD STREET NEWTOWN	60	41	51	41	52	41
NCA02	146 LORD STREET NEWTOWN	60	40	51	40	52	40
NCA02	142 LORD STREET NEWTOWN	60	39	51	39	52	39
NCA02	176 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	138 LORD STREET NEWTOWN	60	39	51	39	52	39
NCA02	350 EDGEWARE ROAD NEWTOWN	60	38	51	38	52	38
NCA02	136 LORD STREET NEWTOWN	60	38	51	38	52	38
NCA02	169 LORD STREET NEWTOWN	60	38	51	38	52	38
NCA02	134 LORD STREET NEWTOWN	60	38	51	38	52	38
NCA02	132 LORD STREET NEWTOWN	60	38	51	38	52	38
NCA02	130 LORD STREET NEWTOWN	60	37	51	37	52	37
NCA02	166 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	128 LORD STREET NEWTOWN	60	37	51	37	52	37
NCA02	350 EDGEWARE ROAD NEWTOWN	60	37	51	37	52	37
NCA02	126 LORD STREET NEWTOWN	60	37	51	37	52	37
NCA02	165 LORD STREET NEWTOWN	60	38	51	38	52	38
NCA02	360 EDGEWARE ROAD NEWTOWN	60	45	51	45	52	45
NCA02	162 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	160 LORD STREET NEWTOWN	60	44	51	44	52	44
NCA02	360 EDGEWARE ROAD NEWTOWN	60	45	51	45	52	45
NCA02	114 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	112 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	160 DARLEY STREET NEWTOWN	60	35	51	35	52	35
NCA02	124 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	360 EDGEWARE ROAD NEWTOWN	60	43	51	43	52	43
NCA02	122 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	175 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	108 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	106 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	118 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	104 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	144 LORD STREET NEWTOWN	60	40	51	40	52	40
NCA02	161 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	164 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	160A DARLEY STREET NEWTOWN	60	36	51	36	52	36
NCA02	116 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	167 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	170 DARLEY STREET NEWTOWN	60	34	51	34	52	34
NCA02	190 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	102 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	100A LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	163 LORD STREET NEWTOWN	60	37	51	37	52	37
NCA02	100 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	168 DARLEY STREET NEWTOWN	60	34	51	34	52	34

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
NCA02	111 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	143 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	153 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	165 LORD STREET NEWTOWN	60	34	51	34	52	34
NCA02	148 LORD STREET NEWTOWN	60	41	51	41	52	41
NCA02	151 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	96A LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	152 LORD STREET NEWTOWN	60	42	51	42	52	42
NCA02	190 LORD STREET NEWTOWN	60	42	51	42	52	42
NCA02	159 LORD STREET NEWTOWN	60	33	51	33	52	33
NCA02	158 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	141 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	174 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	120 DARLEY STREET NEWTOWN	60	33	51	33	52	33
NCA02	139 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	145 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	147 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	134 DARLEY STREET NEWTOWN	60	34	51	34	52	34
NCA02	150 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	102 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	135 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	344 EDGEWARE ROAD NEWTOWN	60	39	51	39	52	39
NCA02	100A LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	133 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	152 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	170 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	169 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	140 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	146 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	98 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	100 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	102 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	131 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	174 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	144 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	106 DARLEY STREET NEWTOWN	60	32	51	32	52	32
NCA02	168 LORD STREET NEWTOWN	60	45	51	45	52	45
NCA02	177 LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	120 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	132 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	110 LORD STREET NEWTOWN	60	35	51	35	52	35
NCA02	160 DARLEY STREET NEWTOWN	60	33	51	33	52	33
NCA02	157 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	130 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	63 LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	74 LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	102A LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	116 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	344 EDGEWARE ROAD NEWTOWN	60	31	51	31	52	31
NCA02	18 JOHN STREET NEWTOWN	60	31	51	31	52	31
NCA02	74 LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	102A LORD STREET NEWTOWN	60	31	51	31	52	31
NCA02	156 LORD STREET NEWTOWN	60	43	51	43	52	43
NCA02	138 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	162 DARLEY STREET NEWTOWN	60	31	51	31	52	31
NCA02	306 EDGEWARE ROAD NEWTOWN	60	31	51	31	52	31
NCA02	92 LORD STREET NEWTOWN	60	32	51	32	52	32
NCA02	334 EDGEWARE ROAD NEWTOWN	60	30	51	30	52	30
NCA02	2-10 JOHN STREET NEWTOWN	60	32	51	32	52	32
NCA02	129 LORD STREET NEWTOWN	60	30	51	30	52	30
NCA02	306 EDGEWARE ROAD NEWTOWN	60	31	51	31	52	31
NCA02	94 LORD STREET NEWTOWN	60	30	51	30	52	30
NCA02	140 LORD STREET NEWTOWN	60	39	51	39	52	39
NCA02	123 LORD STREET NEWTOWN	60	30	51	30	52	30
NCA02	108 DARLEY STREET NEWTOWN	60	30	51	30	52	30
NCA02	134 DARLEY STREET NEWTOWN	60	30	51	30	52	30

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
NCA02	310 EDGEWARE ROAD NEWTOWN	60	31	51	31	52	31
NCA02	344 EDGEWARE ROAD NEWTOWN	60	37	51	37	52	37
NCA02	344 EDGEWARE ROAD NEWTOWN	60	32	51	32	52	32
NCA02	63 LORD STREET NEWTOWN	60	30	51	30	52	30
NCA02	86 LORD STREET NEWTOWN	60	30	51	30	52	30
NCA03	11 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	9 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	13 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	15 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	17 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	3 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	5 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	7 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	1 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	19 COUNCIL STREET ST PETERS	60	34	51	34	52	34
NCA03	11 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	19 HUTCHINSON STREET ST PETERS	60	33	51	33	52	33
NCA03	5 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	9 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	3 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	7 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	13 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	15 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	1 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	17 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	19 HUTCHINSON STREET ST PETERS	60	32	51	32	52	32
NCA03	19 HUTCHINSON STREET ST PETERS	60	32	51	32	52	32
NCA03	19 COUNCIL STREET ST PETERS	60	33	51	33	52	33
NCA03	63 GOODSSELL STREET ST PETERS	60	33	51	33	52	33
NCA03	42 MAY STREET ST PETERS	60	32	51	32	52	32
NCA03	60-68 HUTCHINSON STREET ST PETERS	60	32	51	32	52	32
NCA03	104 GOODSSELL STREET ST PETERS	60	33	51	33	52	33
NCA03	104 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	108 GOODSSELL STREET ST PETERS	60	32	51	32	52	32
NCA03	49 MAY STREET ST PETERS	60	31	51	31	52	31
NCA03	102 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	86 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	42 MAY STREET ST PETERS	60	31	51	31	52	31
NCA03	60-68 HUTCHINSON STREET ST PETERS	60	31	51	31	52	31
NCA03	57 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	98 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	19 HUTCHINSON STREET ST PETERS	60	33	51	33	52	33
NCA03	87 HUTCHINSON STREET ST PETERS	60	31	51	31	52	31
NCA03	106 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	49 MAY STREET ST PETERS	60	31	51	31	52	31
NCA03	59 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	63 GOODSSELL STREET ST PETERS	60	31	51	31	52	31
NCA03	51 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	100 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	43 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	53 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	55 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	94 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	96 GOODSSELL STREET ST PETERS	60	30	51	30	52	30
NCA03	62 MAY STREET ST PETERS	60	33	51	33	52	33
NCA03	64 MAY STREET ST PETERS	60	33	51	33	52	33
NCA03	66 MAY STREET ST PETERS	60	33	51	33	52	33
NCA03	76 MAY STREET ST PETERS	60	35	51	35	52	35
NCA03	76 MAY STREET ST PETERS	60	35	51	35	52	35
NCA03	78 MAY STREET ST PETERS	60	35	51	35	52	35
NCA03	78 MAY STREET ST PETERS	60	36	51	36	52	36
NCA03	80 MAY STREET ST PETERS	60	35	51	35	52	35
NCA03	80 MAY STREET ST PETERS	60	36	51	36	52	36
NCA03	92 MAY STREET ST PETERS	60	36	51	36	52	36
NCA03	94 MAY STREET ST PETERS	60	36	51	36	52	36
NCA03	105 MAY STREET ST PETERS	60	43	51	43	52	43

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
NCA03	105 MAY STREET ST PETERS	60	44	51	44	52	44
NCA03	107 MAY STREET ST PETERS	60	44	51	44	52	44
NCA03	107 MAY STREET ST PETERS	60	45	51	45	52	45
NCA03	109 MAY STREET ST PETERS	60	44	51	44	52	44
NCA03	109 MAY STREET ST PETERS	60	46	51	46	52	46
NCA03	111 MAY STREET ST PETERS	60	45	51	45	52	45
NCA03	111 MAY STREET ST PETERS	60	47	51	47	52	47
NCA03	113 MAY STREET ST PETERS	60	46	51	46	52	46
NCA03	113 MAY STREET ST PETERS	60	48	51	48	52	48
NCA03	115 MAY STREET ST PETERS	60	48	51	48	52	48
NCA03	115 MAY STREET ST PETERS	60	49	51	49	52	49
NCA03	117 MAY STREET ST PETERS	60	48	51	48	52	48
NCA03	117 MAY STREET ST PETERS	60	50	51	50	52	50
NCA03	119 MAY STREET ST PETERS	60	49	51	49	52	49
NCA03	119 MAY STREET ST PETERS	60	52	51	52	52	52
NCA03	124 MAY STREET ST PETERS	60	48	51	48	52	48
NCA03	126 MAY STREET ST PETERS	60	47	51	47	52	47
NCA03	128 MAY STREET ST PETERS	60	47	51	47	52	47
NCA03	130 MAY STREET ST PETERS	60	46	51	46	52	46
NCA06A	3 BROWN STREET ST PETERS	60	37	51	37	52	37
NCA06A	5 BROWN STREET ST PETERS	60	35	51	35	52	35
NCA06A	6 BROWN STREET ST PETERS	60	33	51	33	52	33
NCA06A	6 BROWN STREET ST PETERS	60	35	51	35	52	35
NCA06A	7 BROWN STREET ST PETERS	60	36	51	36	52	36
NCA06A	8 BROWN STREET ST PETERS	60	33	51	33	52	33
NCA06A	8 BROWN STREET ST PETERS	60	35	51	35	52	35
NCA06A	9 BROWN STREET ST PETERS	60	35	51	35	52	35
NCA06A	10 BROWN STREET ST PETERS	60	31	51	31	52	31
NCA06A	11 BROWN STREET ST PETERS	60	34	51	34	52	34
NCA06A	12 BROWN STREET ST PETERS	60	31	51	31	52	31
NCA06A	13 BROWN STREET ST PETERS	60	33	51	33	52	33
NCA06A	7 FLORENCE STREET ST PETERS	60	33	51	33	52	33
NCA06A	9 FLORENCE STREET ST PETERS	60	31	51	31	52	31
NCA06A	4 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	4 UNWINS BRIDGE ROAD ST PETERS	60	41	51	41	52	41
NCA06A	6 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	6 UNWINS BRIDGE ROAD ST PETERS	60	41	51	41	52	41
NCA06A	8 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	8 UNWINS BRIDGE ROAD ST PETERS	60	41	51	41	52	41
NCA06A	10 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	10 UNWINS BRIDGE ROAD ST PETERS	60	41	51	41	52	41
NCA06A	12 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	12 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	14 UNWINS BRIDGE ROAD ST PETERS	60	39	51	39	52	39
NCA06A	14 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	16 UNWINS BRIDGE ROAD ST PETERS	60	39	51	39	52	39
NCA06A	16 UNWINS BRIDGE ROAD ST PETERS	60	40	51	40	52	40
NCA06A	18 UNWINS BRIDGE ROAD ST PETERS	60	39	51	39	52	39
NCA06A	18 UNWINS BRIDGE ROAD ST PETERS	60	39	51	39	52	39
NCA06A	20 UNWINS BRIDGE ROAD ST PETERS	60	38	51	38	52	38
NCA06A	22 UNWINS BRIDGE ROAD ST PETERS	60	37	51	37	52	37
NCA06A	24 UNWINS BRIDGE ROAD ST PETERS	60	36	51	36	52	36
NCA06A	26 UNWINS BRIDGE ROAD ST PETERS	60	34	51	34	52	34
NCA06A	28 UNWINS BRIDGE ROAD ST PETERS	60	35	51	35	52	35
NCA06A	34 UNWINS BRIDGE ROAD ST PETERS	60	34	51	34	52	34
NCA06A	36 UNWINS BRIDGE ROAD ST PETERS	60	34	51	34	52	34
NCA06A	38 UNWINS BRIDGE ROAD ST PETERS	60	34	51	34	52	34
NCA06A	40 UNWINS BRIDGE ROAD ST PETERS	60	33	51	33	52	33
NCA06A	42 UNWINS BRIDGE ROA ST PETERS	60	33	51	33	52	33
NCA06A	44 UNWINS BRIDGE ROAD ST PETERS	60	32	51	32	52	32
NCA06A	46 UNWINS BRIDGE ROAD ST PETERS	60	32	51	32	52	32
NCA06A	48 UNWINS BRIDGE ROAD ST PETERS	60	32	51	32	52	32
NCA06A	50 UNWINS BRIDGE ROAD ST PETERS	60	30	51	30	52	30
NCA06A	52 UNWINS BRIDGE ROAD ST PETERS	60	31	51	31	52	31
NCA06A	54 UNWINS BRIDGE ROAD ST PETERS	60	31	51	31	52	31
NCA06A	58 UNWINS BRIDGE ROAD ST PETERS	60	30	51	30	52	30

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
NCA06B	15 BROWN STREET ST PETERS	52	32	46	32	47	32
NCA06B	16 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	17 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	22 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	24 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	26 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	28 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	30 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	32 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	41 BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	42 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	44 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	46 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	48 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	63 BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	63A BROWN STREET ST PETERS	52	30	46	30	47	30
NCA06B	63A BROWN STREET ST PETERS	52	31	46	31	47	31
NCA06B	6 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	11 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	13 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	14 FLORENCE STREET ST PETERS	52	30	46	30	47	30
NCA06B	15 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	16 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	18 FLORENCE STREET ST PETERS	52	31	46	31	47	31
NCA06B	20 FLORENCE STREET ST PETERS	52	30	46	30	47	30
OSR	CAMDENVILLE PARK	65	53	65	53	65	53
OSR	91-99 HUTCHINSON STREET ST PETERS	70	44	70	44	70	44
OSR	91-99 HUTCHINSON STREET ST PETERS	70	44	70	44	70	44
OSR	51 MAY STREET ST PETERS	70	31	70	31	70	31
OSR	51 MAY STREET ST PETERS	70	32	70	32	70	32
OSR	58 MAY STREET ST PETERS	70	33	70	33	70	33
OSR	58 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	68 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	68 MAY STREET ST PETERS	70	35	70	35	70	35
OSR	70 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	70 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	70 MAY STREET ST PETERS	70	35	70	35	70	35
OSR	82 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	82 MAY STREET ST PETERS	70	36	70	36	70	36
OSR	82 MAY STREET ST PETERS	70	36	70	36	70	36
OSR	86 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	86 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	86 MAY STREET ST PETERS	70	36	70	36	70	36
OSR	90 MAY STREET ST PETERS	70	36	70	36	70	36
OSR	90 MAY STREET ST PETERS	70	37	70	37	70	37
OSR	90 MAY STREET ST PETERS	70	38	70	38	70	38
OSR	96 MAY STREET ST PETERS	70	35	70	35	70	35
OSR	100 MAY STREET ST PETERS	70	33	70	33	70	33
OSR	100 MAY STREET ST PETERS	70	34	70	34	70	34
OSR	100A MAY STREET ST PETERS	70	33	70	33	70	33
OSR	100A MAY STREET ST PETERS	70	34	70	34	70	34
OSR	104 MAY STREET ST PETERS	70	36	70	36	70	36
OSR	104 MAY STREET ST PETERS	70	37	70	37	70	37
OSR	108 MAY STREET ST PETERS	70	39	70	39	70	39
OSR	108 MAY STREET ST PETERS	70	40	70	40	70	40
OSR	112 MAY STREET ST PETERS	70	44	70	44	70	44
OSR	132A MAY STREET ST PETERS	70	34	70	34	70	34
OSR	132A MAY STREET ST PETERS	70	35	70	35	70	35
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	33	70	33	70	33
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	38	70	38	70	38
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	42	70	42	70	42
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	39	70	39	70	39
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	43	70	43	70	43
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	34	70	34	70	34
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	33	70	33	70	33
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	36	70	36	70	36

Table D1: Predicted Construction Noise Levels

SPI Local Road Works (Camdenville Basin Compound)

Receiver		Predicted Noise Levels, dB(A)					
		DAY (STANDARD)		EVENING (OOHW)		SHOULDER (OOHW 6AM - 7AM)	
NCA	Address	NML	V01	NML	V01	NML	V01
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	40	70	40	70	40
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	39	70	39	70	39
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	39	70	39	70	39
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	31	70	31	70	31
OSR	1-7 UNWINS BRIDGE ROAD ST PETERS	70	32	70	32	70	32
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	42	60	42	60	42
OSR	2 UNWINS BRIDGE ROAD ST PETERS	60	41	60	41	60	41
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS	75	32	75	32	75	32
OSR	9-25 UNWINS BRIDGE ROAD ST PETERS	75	32	75	32	75	32
OSR	1 EDINBURGH ROAD MARRICKVILLE	75	31	75	31	75	31
OSR	213-215 EDGEWARE ROAD NEWTOWN	75	30	75	30	75	30
OSR	213-215 EDGEWARE ROAD NEWTOWN	75	32	75	32	75	32
OSR	2-10 EDINBURGH ROAD MARRICKVILLE	75	31	75	31	75	31
OSR	2-10 EDINBURGH ROAD MARRICKVILLE	75	37	75	37	75	37
OSR	2-10 EDINBURGH ROAD MARRICKVILLE	75	38	75	38	75	38
OSR	50-52 MURRAY STREET MARRICKVILLE	75	32	75	32	75	32



Temporary Noise Barrier Strategy - Local Roads, Campbell Street and Campbell Road

Attachment H: LRNB07 Consultation Record

