



M12 Motorway

Appendix G
Noise and Vibration updated technical report
October 2020

Executive summary

Background

Transport for NSW (TfNSW) is seeking approval under Part 5, Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act) to construct and operate the M12 Motorway project to provide direct access between the Western Sydney International Airport at Badgerys Creek and Sydney's motorway network (the project). The project has been determined to be a controlled action under Section 75 of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) (EPBC Act) and therefore will also be subject to approval from the Commonwealth Government.

An environmental impact statement (EIS) was prepared to assess the potential impacts of the project and recommend management measures to appropriately address those impacts. The key features of the project as described in the EIS are provided in Section 1.1 of the amendment report. This EIS was placed on public exhibition from 16 October to 18 November 2019.

TfNSW proposes to amend the project as described in the EIS following further design development since the exhibition of the EIS. These amendments (the proposed changes) include design changes and construction updates. These provide functional improvements to the design and improved integration with surrounding major transport infrastructure projects and potential future development

The amended project includes an option for a direct connection between the M12 Motorway and Elizabeth Drive at the eastern extent of the project. This option would include some realignment of Wallgrove Road and widening of Elizabeth Drive at the motorway-to-motorway interchange at the M7 Motorway to facilitate the connection. Therefore, two options are being proposed for the amended project at the interchange with the M7 Motorway.

Construction noise assessment

Residential receivers

The highest impacts at residential receivers for the amended project are generally in catchments where receivers are located close to the construction footprint. This includes east of the M7 Motorway and south of Elizabeth Drive in NCA02, north of Elizabeth Drive near Salisbury Avenue in NCA06 and near Clifton Avenue in the north of the construction footprint in NCA07. With the exception of NCA02, receivers in these catchments are however generally sparsely distributed, meaning the number of receivers with the highest impacts is relatively low.

This is mostly consistent with the project as described in the EIS, however, the amended project would result in additional impacts to receivers situated in NCA02, due to works being undertaken on Elizabeth Drive, south of the intersection with the M7 Motorway. NCA01 no longer has predicted high impacts as reported in the EIS, as the closest receivers to the works now lie within the expanded ancillary facility AF9, and as such, will not be occupied during construction works.

Eleven receivers in total may be subject to construction noise levels above the 'Highly Noise Affected' threshold of 75 dBA and these receivers are located in:

- NCA02, to the east of the M7 Motorway and south of Elizabeth drive
- NCA04, to the west of Wallgrove Road
- NCA06, on Salisbury Road
- NCA07, to the north of the amended project on Clifton Avenue.

The total number of highly noise affected receivers has increased when compared to the findings presented in the EIS due works being located closer to residential receivers situated in NCA02.

'Other' sensitive receivers

The construction noise impacts at 'other' sensitive receivers (educational facilities, places of worship, childcare centres etc) are predicted to generally be minor, with moderate impacts predicted at the closest school (Irfan College) located in NCA04 when noise intensive equipment is in use. Noise levels and exceedances during the typical works, when no noise intensive equipment is being used, are significantly lower and mostly compliant with the management levels.

The closest school (Irfan College), located in NCA04, is predicted to have 'high impacts' during the worst-case scenarios when noise intensive equipment is being used for option 2, where 'moderate impacts' were predicted for option 1. Construction noise impacts at other sensitive receivers are generally consistent with the findings presented in the EIS.

Commercial receivers

The construction noise impacts at commercial receivers are predicted to be minor and limited to when noise intensive equipment is in use. Noise levels and exceedances during the typical works, when no noise intensive equipment is being used, are predicted to be compliant with the management levels.

The findings of construction noise impacts at commercial receivers is generally consistent with the findings presented in the EIS.

Construction vibration

The assessment shows that approximately 21 structures are identified as being within the minimum working distances for cosmetic damage, ie these structures have the potential to be impacted by vibration from construction of the amended project.

Due to the expanded amended project footprint and additional ancillary facilities, there are 12 additional structures identified to be within the screening criteria for cosmetic damage than presented in the EIS.

Nine heritage items are identified as being within the minimum working distances for sensitive structures, with these items to be reviewed on a case by case basis during detailed design. The findings of the vibration assessment on heritage items is generally consistent with the findings presented in the EIS.

Construction traffic

The assessment shows that the proposed construction traffic routes and forecast redistribution of traffic is unlikely to result in a noticeable increase in noise levels. This is consistent with the findings in the EIS.

Cumulative and consecutive impacts

The construction footprint for the amended project has undergone minimal change in the areas near to projects that may result in cumulative or consecutive impacts. These projects include recently completed, ongoing and proposed projects such as;

- Western Sydney International Airport
- Sydney Metro Western Sydney Airport
- The Northern Road Upgrade
- · Other existing road network upgrades
- · Major land releases.

Given the minimal change, cumulative and consecutive construction noise impacts from the amended project would be consistent with the noise impacts detailed in Section 7.7.8 of the EIS.

Operational road traffic noise assessment

Forecast traffic volume data for the amended project has been provided for the at-opening year (2026) and future design year (2036). As part of the transport and traffic updated technical report (see Appendix B of the amendment report) land use and demographics scenario has been updated to a more recent model (developed in 2016). The modelling package used for the amendment report changed to an updated model as the traffic forecasts for Western Sydney from this model are considered to be more robust than the model that was used for the EIS analysis.

The changes in forecast land use and improvements in modelling processes have resulted in a major reduction in future trips to the south west growth area in Western Sydney. Forecast traffic volumes using the amended project and the surrounding network have reduced as a result.

Predicted road traffic noise levels

The findings of the operational assessment indicate an increase in the total buildings requiring consideration of noise mitigation when compared to the EIS. This is a result of the increased operational footprint to account for works on the Elizabeth Drive, which in turn has increased the operational assessment study area. The absolute noise level for both the amended options shows that noise levels have generally decreased during the night period by 4 dB when compared to the EIS and are within 0.5 dB of the EIS assessment at the majority of receivers during the day time.

The 'Build' scenario assessment identifies a total of 212 sensitive receiver buildings (310 individual floors) that qualify for consideration of additional noise mitigation under the assessment of the amended project option one, which does not include the connection to Elizabeth Drive. The assessment identifies a total 220 (320 individual floors) for the amended option two which includes the connection to Elizabeth Drive. The majority of these receivers are predicted to have an increase of more than 2 dB due to the amended project and high levels of equivalent continuous road traffic noise 5 dBA or more above the noise criterion. Both options result in an increase in qualifying properties when compared to the EIS which identified a total of 183 buildings (262) individual floors).

Maximum noise level assessment

Changes in maximum noise levels due to the amended project are generally consistent with those presented in the EIS. In NCA04, maximum noise levels at dwellings adjacent to the realigned Wallgrove Road are predicted to be up to 7 dB higher than the EIS due to the amended project design moving closer to the dwellings.

Summary of environmental management measures

Construction noise and vibration

The construction mitigation and management measures are consistent with those proposed for the EIS. The amended project would apply all feasible and reasonable work practices to reduce the potential impacts.

Operational road traffic noise

The operational assessment has identified the potential noise benefits associated with the use of different types of noise treatment including quieter noise pavement, noise barriers and at-property treatment.

Quieter noise pavements are predicted to provide a minor benefit to triggered receivers and should be considered in conjunction with other mitigation options during detailed design, where feasible and reasonable. This is consistent with the project as described in the EIS.

Where noise barriers have been considered, the assessment has found that three barrier locations should be further evaluated during detailed design (a decrease from the four barrier locations identified as requiring further evaluation for the project as described in the EIS). This is consistent for both option 1 and option 2.

A preferred noise mitigation option (low noise pavement, noise barrier, architectural treatments, a combination or other) would be determined during detailed design taking into account whole-of-life engineering considerations and the overall social, economic and environmental benefits. The preference will be given to noise mitigation measures that reduce outdoor noise levels and the number of at-property treatments required.

Contents

Exec	utive su	mmary	ii
Glos	sary of t	erms and abbreviations	xiii
1.	Introd	uction and background	1
1.1 1.2 1.3	Overvi Amend	roundew of proposed changesded project	1 2
	1.3.1	Overview	
	1.3.2	Key features of the amended project	
1.4 1.5	Secret	se and scope of this reportary's Environmental Assessment Requirements	16
2.		ng noise and vibration environment	
2.1 2.2		catchment areasand vibration sensitive receivers	
2.3		nt noise surveys and monitoring locations	
3.		and planning setting	
4.	Asses	sment methodology	22
4.1	Constr	ruction noise and vibration assessment methodology	22
	4.1.1	Construction scenarios	22
	4.1.2	Overview of construction noise modelling	29
	4.1.3	Overview of construction road traffic	29
4.2	Operational noise and vibration assessment methodology		
	4.2.1	Key features of the amended project as related to operational noise impact	s29
	4.2.2	Noise model	32
	4.2.3	Project and non-project roads	32
	4.2.4	Road types	32
	4.2.5	Traffic data	32
	4.2.6	Noise modelling parameters	33
	4.2.7	Noise model validation	33
	4.2.8	Noise mitigation	33
	4.2.9	Maximum noise levels	33
5.	Const	ruction noise and vibration assessment	34
5.1	Construction airborne noise		
	5.1.1	Predicted worst-case noise impacts – amended project overview	34
	5.1.2	Predicted impacts	43
	5.1.3	Highly noise affected residential receivers	64
	5.1.4	'Other' sensitive receivers	68
	5.1.5	Commercial receivers	73
5.2	Sleep	disturbancedisturbance	75

5.3	Constr	ruction vibration assessment	75
	5.3.1	Cosmetic damage assessment summary	78
	5.3.2	Human comfort vibration assessment	78
	5.3.3	Heritage structures	79
	5.3.4	Gas supply pipelines	81
	5.3.5	Vibration environmental management measures	81
5.4	Constr	Construction ground-borne noise	
5.5	Construction traffic noise assessment		
5.6		lative construction noise impacts	
5.7		cutive construction impacts	
6.	Opera	tional impacts	87
6.1	Predic	ted operational road traffic noise levels without mitigation	87
	6.1.1	Operational road noise predictions without mitigation	87
	6.1.2	Receivers considered for additional noise mitigation	101
	6.1.3	Sensitivity analysis	110
	6.1.4	Maximum noise level assessment	111
7.	Revise	ed environmental management measures	114
7.1	Constr	ruction noise and vibration mitigation management measures	114
	7.1.1	Construction airborne noise	115
	7.1.2	Construction vibration	121
7.2	Operational noise mitigation management measures		124
	7.2.1	At Source Mitigation	125
	7.2.2	In-corridor mitigation – noise barriers	126
	7.2.3	At Property mitigation – architectural treatments	147
8.	Summ	nary and conclusions	148
8.1	Summ	ary of the key findings - construction noise and vibration	148
8.2	Summary of the key findings- operational road traffic noise		
۵	Poforoncos		

Annexures

Annexure A Acoustic terminology

Annexure B Existing environment

Annexure C Construction information

Annexure D Operational information

Tables

Table 1-1 SEARs (noise and vibration)	17
Table 4-1 Construction scenario descriptions	22
Table 5-1 NML exceedance bands and corresponding qualitative response to impacts	35
Table 5-2 Highest noise impact works	37
Table 5-3 Predicted construction noise exceedances morning shoulder – residential receivers	38
Table 5-4 Predicted construction noise exceedances standard daytime – residential receivers	39
Table 5-5 Predicted construction noise exceedances evening shoulder – residential receivers	40
Table 5-6 Predicted construction noise exceedances evening – residential receivers	41
Table 5-7 Predicted construction noise exceedances night-time – residential receivers	42
Table 5-8 Number of predicted highly noise affected residential receivers	65
Table 5-9 Overview of 'Other' Sensitive Receiver NML Exceedances	69
Table 5-10 Predicted construction noise exceedances – commercial receivers	74
Table 5-11 Non-Aboriginal heritage items identified in close proximity to the construction footpring	nt 80
Table 5-12 Predicted road traffic noise increase due to construction traffic	82
Table 6-1 Predicted worst-case change in road traffic noise level in each NCA without mitigation option 1 (triggered residential receivers only)	
Table 6-2 Predicted worst-case change in road traffic noise level in each NCA without mitigation option 2	
Table 6-3 Trigger receiver exceedance categories	. 101
Table 6-4 Receivers considered for additional noise mitigation	. 102
Table 6-5 Predicted change in maximum noise levels	.112
Table 7-1 CNVG additional environmental management measures	.114
Table 7-2 CNVG additional environmental management measures – airborne noise	. 116
Table 7-3 CNVG additional environmental management measures – vibration	. 121
Table 7-4 Comparison of receivers considered for additional noise mitigation – Quieter pavementypes	
Table 7-5 Noise barrier arrangement EIS and amended project design	. 129
Table 7-6 Indicative noise barriers – option 1	. 134
Table 7-7 Indicative noise barriers – option 2	. 138

Figures

Figure 1-1 Key features of the amended project	.4
Figure 1-2 Construction footprints of the amended project and the project as described in the EIS .	. 8
Figure 1-3 Operational footprints of the amended project and the project as described in the EIS	12
Figure 2-1 Site plan and noise monitoring locations2	20
Figure 4-1 Construction works locations for the amended project	25
Figure 4-2 Construction works locations for the amended project	26
Figure 4-3 Amended construction program2	28
Figure 4-4 Key operational features of the amended project	31
Figure 5-1 Example of indicative construction noise levels during rock-breaking	34
Figure 5-2 Predicted impacts 'scenario 3a, Utilities and drainage - peak impact' in all locations (daytime) for the amended project	45
Figure 5-3 Predicted impacts 'scenario 3b, Utilities and drainage, typical impact' in all locations (daytime) for the amended project	47
Figure 5-4 Predicted impacts 'scenario 8c, Road works – Tie-in works in all locations (night-time) for the amended project	
Figure 5-5 Predicted impacts 'scenario 6a, earthworks - peak impact' in all locations (daytime) for the amended project	54
Figure 5-6 Predicted impacts 'scenario 6b, earthworks - typical impact' in all locations (daytime) for the amended project	
Figure 5-7 Predicted Impacts 'Scenario 2b, Ancillary facilities (stockpiling)' in All Locations (Night-time) for the amended project	59
Figure 5-8 Predicted noise contours, 'Scenario 6a, earthworks – Peak impact – whole amended project	63
Figure 5-9 Predicted noise contours, 'Scenario 6a, earthworks – Peak impact – single location for the amended project	
Figure 5-10 Highly noise affected residential receivers (all works) for the amended project	66
Figure 5-11 Predicted impacts – 'other' sensitive receivers for the amended project	71
Figure 5-12 Construction vibration assessment for the amended project	76
Figure 5-13 Predicted road traffic noise increase due to construction traffic - AM	84
Figure 5-14 Predicted road traffic noise increase due to construction traffic – PM	85
Figure 6-1 Change in noise level between EIS and option 1	91
Figure 6-2 Predicted change in operational noise without mitigation – 2036 Daytime – option 1	93
Figure 6-3 Predicted Build operational noise levels without mitigation – LAeq(15hour) – 2036 Daytime – option 1	94

Figure 6-4 Change in noise level between EIS and option 2	. 97
Figure 6-5 Predicted change in operational noise without mitigation – 2036 Daytime – option 2	. 99
Figure 6-6 Predicted Build operational noise levels without mitigation – LAeq(15hour) – 2036 Daytime – option 21	100
igure 6-7 Receivers identified as eligible for consideration of additional mitigation – option 1 1	106
Figure 6-8 Receivers identified as eligible for consideration of additional mitigation – option 21	108
Figure 6-9 Noise model sensitivity analysis – Option 11	110
Figure 6-10 Noise model sensitivity analysis – Option 2	111
Figure 7-1 Indicative additional mitigation perception categories for all construction works – standard daytime period	117
Figure 7-2 Indicative additional mitigation perception categories for all construction works – out of nours period1	
Figure 7-3 Indicative additional vibration environmental management measures categories for all construction works1	
Figure 7-4 Noise barriers and mounds1	127
Figure 7-5 Indicative noise barriers considered for investigation – option 11	130
igure 7-6 Indicative noise barriers considered for investigation – option 21	132

Glossary of terms and abbreviations

Term	Mooning
Tellii	Meaning
Acute noise level	A level of road traffic noise of 65 dBA or more for the day period of 7 am to 10 pm or 60 dBA or more for the night period of 10 pm to 7 am and measured as an equivalent continuous noise level (LAeq) 1 metre from the building facade.
AF	Ancillary facility
Airport access road	Part of the M12 Motorway connecting the Western Sydney International Airport interchange with the Western Sydney International Airport.
Arterial	Supports major regional and inter-regional traffic movement and carry traffic directly from one region to another. For noise assessment this term also includes freeways and motorways.
amendment report	The amendment report prepared to outline the proposed changes to the project since the exhibition of the EIS and the associated environmental assessment.
At-property treatments	Includes building treatments and courtyard walls. Building treatments may include but are not limited to ventilation, glazing, window and door seals, sealing of vents and underfloor areas.
At-receiver treatments	Includes building treatments and courtyard walls. Building treatments may include but are not limited to ventilation, glazing, window and door seals, sealing of vents and underfloor areas.
CEMP	Construction Environmental Management Plan
Construction footprint	The construction footprint is the area required to build the project. This includes the area required for temporary work such as sedimentation basins, drainage lines, access roads, construction ancillary facilities.
CNVMP	Construction Noise and Vibration Management Plan
Closely spaced group of residences	Residences are generally considered closely spaced where the facades are separated by less than 20 metres.
Collector road	Connects the sub-arterial roads to the local road system in developed areas. May support sub-arterial roads during peak periods. May have been designed as local streets but can serve major traffic-generating developments or support non-local traffic. Note not all networks are large enough to have both collector and sub-arterial roads. The Road Noise Policy does not provide separate noise criteria for collector roads. TfNSW applies sub-arterial noise criteria to collector roads and still considers collector roads and sub-arterial roads to be different functional classes.
Controlling criterion	Whichever of the day or night-time LAeq criteria (Noise Criteria Guideline) is exceeded by the greatest amount.
Cumulative limit	A total noise level that is 5 dBA or more above the Noise Criteria Guideline criteria in the build year – discussed further in Section 7.7.4 of the EIS.
dBA	Decibel, A-weighted – discussed further in Annexure A
DEC	Department of Environment and Conservation (now EPA)
DECC	Department of Environment and Climate Change (now EPA)
DECCW	Department of Environment, Climate Change and Water (now EPA)
Design barrier	Barrier where two-thirds of receivers that qualify for consideration of noise mitigation and receive benefit from the noise barrier no longer need at-property treatments. In some instances, the height may be increased where the points weighting curve has a minimum value.
DP	Deposited plan
DPE	Department of Planning and Environment (now DPIE (Planning and Assessment))

Term	Meaning	
DPIE (Planning and Assessment)	Department of Planning, Industry and Environment (Planning and Assessment)	
EIS	Environmental Impact Statement	
EPA	Environment Protection Agency (previously Environment Protection Authority)	
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)	
Equitable	Receivers and communities exposed to road project noise receive consistent outcomes.	
Exclusion zones	Exclusion zones are areas of environmental importance (eg threatened vegetation or heritage items) that need to be protected. Exclusion zones are shown on figures throughout this Amendment Report where relevant. These exclusion zones are defined as no-go areas and are to be protected for the duration of construction in that particular footprint area.	
Existing road corridor	A corridor of land that is zoned for road purposes in relevant environmental planning instruments such as LEPs and contains an existing formed and dedicated public or classified road within the road reserve. Note that lots subsequently purchased and owned by TfNSW that are adjacent to the existing road reserve do not form part of the existing corridor.	
Feasibility	Relates to engineering considerations (what can be practically built). These engineering considerations may include:	
	The inherent limitations of different techniques to reduce noise emissions from road traffic noise sources	
	Safety issues such as restrictions on road vision	
	Road corridor site constraints such as space limitations	
	Floodway and stormwater flow obstruction	
	Access requirements	
	Maintenance requirements	
	The suitability of building conditions for at receiver treatments.	
Grade separated interchange	An interchange that is separated vertically (at different heights) involving bridges, underpasses and/or overpasses.	
Highly sensitive receiver	Receiver where standard annoyance and human comfort criteria do not provide sufficient guidance on the impact. Some examples include buildings with sensitive equipment, recording studios and cinemas.	
HNA	Highly Noise Affected – residential receivers where the predicted construction noise level exceeds 75 dBA LAeq(15minute)	
ICNG	Interim Construction Noise Guideline	
INP	Industrial Noise Policy	
ISCA	Infrastructure Sustainability Council of Australia	
Isolated single residences and isolated groups of closely spaced residences	Single residences or closely spaced groups of residences in numbers of three or less are considered isolated where they are separated from other residences by more than 100 metres. Where residences are separated by between 20 metres and 100 metres they may be considered isolated, but this depends on examining surrounding development more broadly. If for example the low-density development comprises regular placement of residences at 20 metres to 100 metres separation, then the residences are not considered isolated.	
LAeq	The average noise level over a measurement period, such as the daytime or night-time – discussed further in Annexure A	
LAmax	The maximum noise level – discussed further in Annexure A	
LEP	Local Environmental Plan	
LGA	Local government area	

Low noise pavement the M12 The Motorway	evide vehicular access to abutting property and surrounding streets. ey are the subdivisional roads within a particular developed area. v noise pavement is pavement that has an emission level 2 dBA lower or more than dense graded asphalt.
the M12 The Motorway	
Motorway	LAMON AND THE RESERVE AND THE
the M7 The	e proposed M12 Motorway which is the subject of this document (also known as 'the project')
	e M7 Motorway is a major connecting road on Sydney's orbital motorway network. It runs for 40 km and links the Motorway with the M4 Motorway and the M2 Motorway.
	e barrier height where there are no receivers behind the barrier that need at-property noise treatment other than se that are influenced by barrier end effects or noise from other non-project roads.
allowance con	lecibel amount added to predicted noise levels to artificially increase them. This may be used to provide is inservatism to predictions where there is uncertainty in modelling input parameters. In engineering design this is inmonly referred to as a safety factor.
	e modelling allowance should be applied to both the build and no build cases so that it does not affect the difference noise levels between them.
NATA Nat	tional Association of Testing Authorities
New road See	e Section 5.2 the Noise Criteria Guideline for clarification.
NCA Nois	se Catchment Area
NML Nois	ise Management Level
NPfl Nois	se Policy for Industry
NSW Nev	w South Wales
OOH Out	t of Hours
OOHW Out	t of Hours Work
Operational footprint Incl	ludes the M12 Motorway and additional areas required for operation and maintenance of the project.
study area road bas	e study area for the operational noise assessment extends to a distance of 600 metres on each side of the project ds (measured from the centreline of the outermost traffic lanes), as defined in the RNP and NCG. This distance is sed on the limit of accuracy of currently approved road traffic noise models. The operational study area is hard cut he project extents, as per TfNSW's application of the NCG.
for a	e Outer Sydney Orbital is a future transport corridor being investigated by the NSW Government which will provide a connection between Box Hill in the north and the Hume Motorway near Menangle in the south. The OSO will vide for a major transport link (motorway and/or freight rail line) between western Sydney's growth areas, unecting with the planned Western Sydney International Airport and future employment lands.
	ecting reasonable measures from those that are feasible involves judging whether the overall noise benefits vide significant social, economic or environmental benefits. The factors to be considered are:
	The noise reduction provided and the overall number of people that benefit from the mitigation.
	Existing and future noise levels, including changes in noise levels in the build and design year and the extent of any exceedance of the noise criteria.
•	Potential for a mitigation measure to reduce noise during construction as well as from road traffic after the project is complete.
	The cost of mitigation, including the cost of noise mitigation measures as a percentage of the total project cost and the ongoing maintenance and operational costs.
	Community views and preferences (typically gathered during the community consultation process following the noise assessment).

Term	Meaning	
	 Visual impacts for the community surrounding the road project and for road users. These are typically identified in the Environmental Assessment. The wider community benefits arising from noise mitigation of the proposed road or road redevelopment. Relative weighting of treatments with respect to protection of outdoor areas or only internal living spaces. 	
RBL	Rating Background Level – discussed further in Annexure A	
Receiver	A noise sensitive receiver includes the following: residences, schools, childcare centres, places of worship, health care institutions.	
Redeveloped road	Please see Section 5.3 of Noise Criteria Guideline for clarification.	
RNP	Road Noise Policy	
Roads and Maritime	Roads and Maritime Services, now known as Transport for New South Wales	
ROL	Road Occupancy Licence	
SEARs	Secretary's Environmental Assessment Requirements	
SEPP	State environmental planning policy	
Site law	The site specific vibration attenuation with distance. This is determined by measuring vibration at numerous distances from a source to determine the rate of attenuation with distance for that specific location.	
Study area	The area around the project has been summarised using ten Noise Catchment Areas (NCAs) which collectively make up the study area – discussed further in Chapter 2 .	
Sub-arterial road	Connects arterials to regions of development and carry traffic from one part of a region to another. Provide connection between arterial roads and local roads. May support arterial roads during peak periods. A road that collects local traffic leaving a locality and connects to another local road, sub-arterial or arterial. Note not all networks are large enough to have both sub-arterial and collector roads.	
TfNSW	Transport for New South Wales	
The project	M12 Motorway	
The amended project	The project with all proposed changes	
Transition zone	The 'transition zone' is the area either side of the physical transition point between road functional classes (eg arterial versus local) or road development types (eg new versus redeveloped road project). See Section 5.4 of the Noise Criteria Guideline.	
Triggered receiver	A noise sensitive receiver which is predicted to exceed any of the operational road traffic noise triggers for consideration of noise mitigation.	
VC	Vibration Criterion	
VDV	Vibration Dose Value	
VMS	Variable Messaging Signs	
Western Sydney Aerotropolis	As defined in the Western Sydney Aerotropolis Stage 1 Plan, the Aerotropolis surrounds the Western Sydney International Airport site at Badgerys Creek and will comprise industrial, commercial and residential development.	
WSIA	The future Western Sydney International Airport	

Introduction and background

1.1 Background

Transport for New South Wales (TfNSW; formerly Roads and Maritime Services) proposes to build the M12 Motorway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham (the project), over a distance of about 16 kilometres. It is expected to be opened to traffic prior to opening of the Western Sydney International Airport.

TfNSW is seeking approval under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to construct and operate the project. An environmental impact statement (EIS) was prepared to assess the potential impacts of the project and recommend management measures to appropriately address those impacts. The key features of the project as described in the EIS is provided in Section 1.1 of the amendment report. This EIS was placed on public exhibition from 16 October to 18 November 2019.

TfNSW proposes to amend the project as described in the EIS following further design development since the exhibition of the EIS. These amendments (the proposed changes) include design changes and construction updates. These provide functional improvements to the design and improved integration with surrounding major transport infrastructure projects and potential future development. They also respond to issues raised in community and stakeholder submissions, and, in some instances, further reduce the potential impacts of the project as described in the EIS.

The proposed changes are described in **Section 1.2**.

1.2 Overview of proposed changes

The proposed changes to the project as described in the EIS are summarised below and are described in detail in Chapter 3 (proposed design changes) and Chapter 4 (proposed construction updates) of the amendment report:

- Amendments to the Motorway-to-Motorway interchange at the M7 Motorway, including:
 - Changes to Elizabeth Drive and Cecil Road intersections, proposed exit ramps, the
 Wallgrove Road connection to Elizabeth Drive and proposed shared user path realignments
 - The widening of Elizabeth Drive under the M7 Motorway and approaches
- An option to provide a new connection between the M12 Motorway and Elizabeth Drive near the M7 Motorway interchange
- Two new signalised intersections into the Western Sydney International Airport, with provisions for future connection to potential developments north of the Western Sydney International Airport
- Additional ancillary facilities (AF) to support the delivery of the amended project.

Refinements to the project as described in the EIS have also been made as part of the ongoing development of the project since the EIS was exhibited. Refinements are changes that are consistent with the parameters of the project description as described in the EIS. For completeness, however, these refinements have been factored into the amended construction and operational footprint and included in the impact assessment shown in this updated technical report. The refinements are described in Section 3.3 and Section 4.2 of the amendment report.

These refinements include:

- Lowering the height of the M12 Motorway in and around the Western Sydney International Airport interchange
- Reduction in the scope of work associated with the M12 Motorway and The Northern Road intersection
 - This intersection would still be constructed, but the main infrastructure work would be delivered as part of The Northern Road upgrade project
- · Relocation of utilities
- Changes to property access and acquisition
- · Changes to drainage
- Adjustments to construction access, hours, haulage, timing and material quantities.

The project with all proposed changes and refinements is referred to as the amended project.

1.3 Amended project

1.3.1 Overview

The amended project would continue to provide the main access from the Western Sydney International Airport at Badgerys Creek to Sydney's motorway network and be located between The Northern Road in the west and the M7 Motorway in the east. The amended project includes an option for a direct connection between the M12 Motorway and Elizabeth Drive at the eastern extent of the project. This option would include some realignment of Wallgrove Road and widening of Elizabeth Drive at the motorway-to-motorway interchange at the M7 Motorway to facilitate the connection. Therefore, two options are being proposed for the amended project at the interchange with the M7 Motorway.

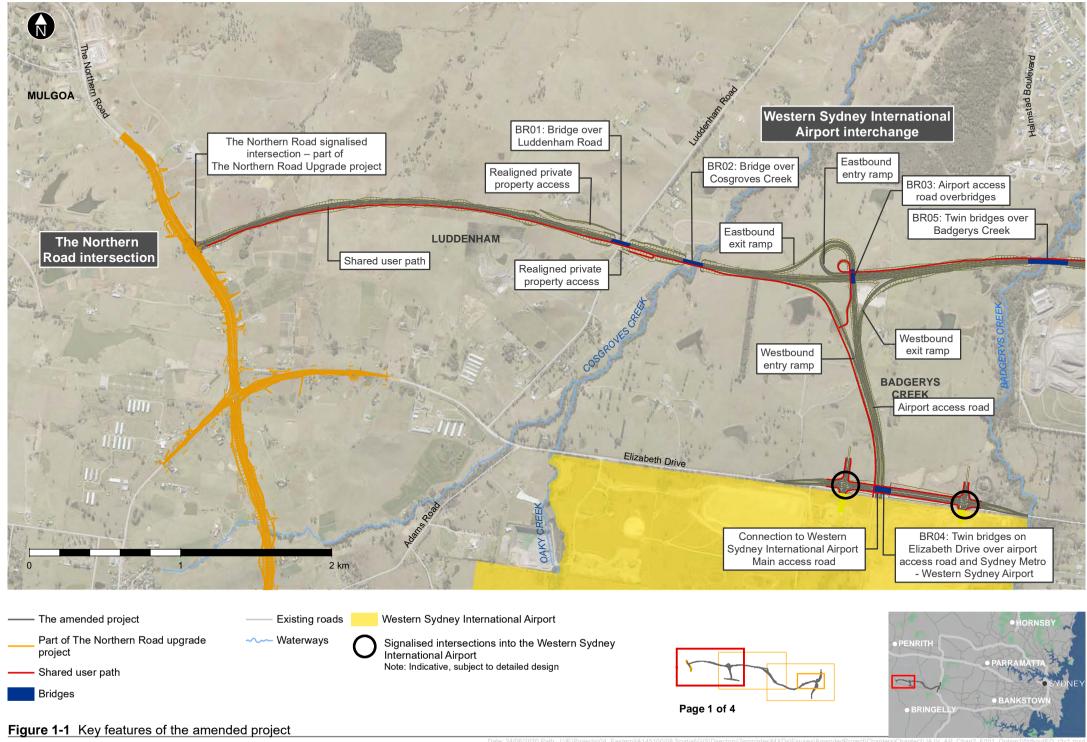
The two options for the amended project would be consistent from The Northern Road in the west until Duff Road in the east. At the motorway-to-motorway interchange with the M7 Motorway, the amended project is proposed to be either:

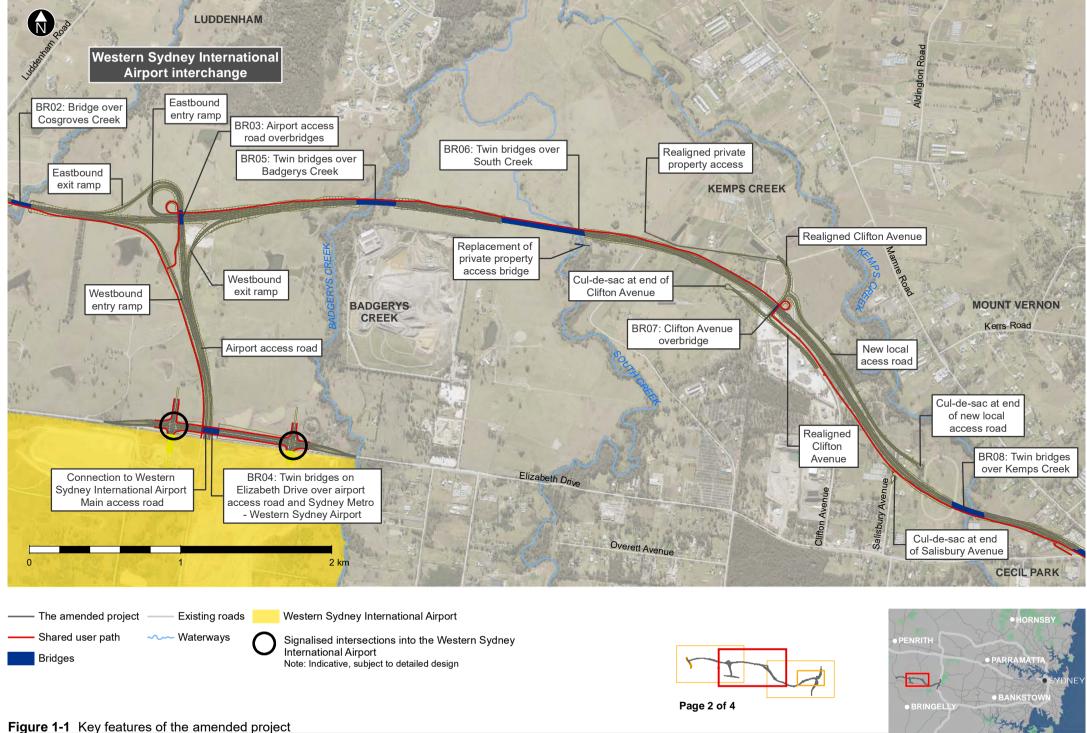
- Option 1 Without Elizabeth Drive connection
 - Interchange provides entry and exit ramps between the M12 Motorway and the M7 Motorway; in addition, it would maintain the existing connection of the M7 Motorway to Elizabeth Drive with new entry and exit ramps
- Option 2 With Elizabeth Drive connection
 - Interchange as per option 1 and also provides entry and exit ramps between the M12
 Motorway and Elizabeth Drive, Cecil Road and Wallgrove Road.

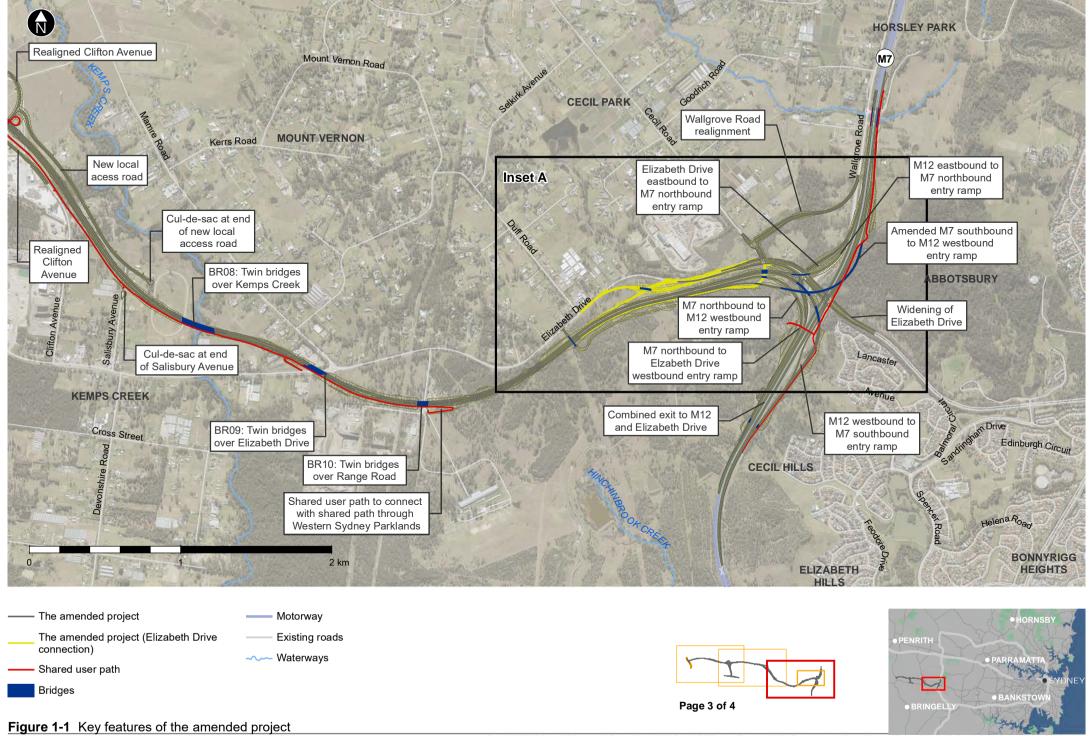
This section of the amended project is shown in **Figure 1-1**, with the Elizabeth Drive connection associated with option 2 shown in a different colour and detailed in inset A. The decision on which option would be built is dependent on funding being available to include the Elizabeth Drive connection. This will be determined during the detailed design and construction phase of the amended project. The key features of each option are shown in the following sections.

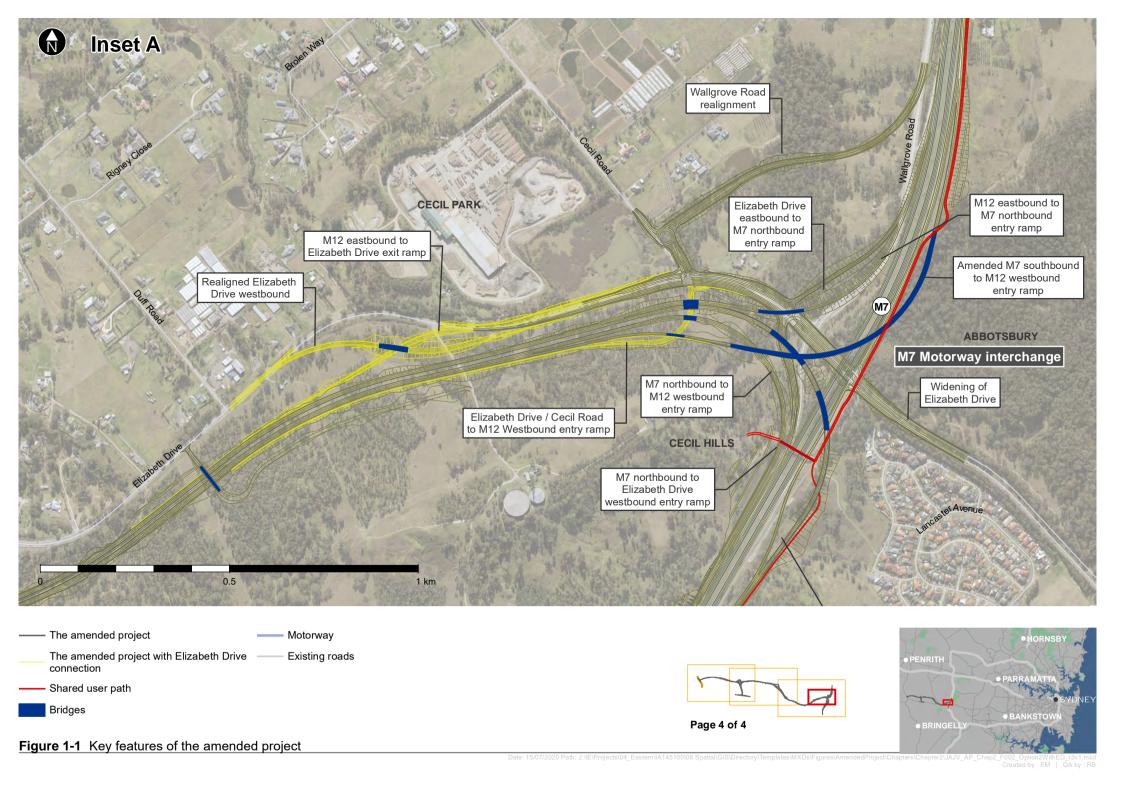
The proposed changes (see **Section 1.2**) would result in an amended construction footprint (**Figure 1-2**), which is used to assess the construction impacts of the amended project. The proposed changes would also result in an amended operational footprint (**Figure 1-3**), which is used to assess the operational impacts of the amended project. Both the construction and operational footprints of the amended project would be unchanged regardless of which option is built, as the footprints assume the worst case scenario (option 2). As such, the assessment of potential impacts relates to the worst case scenario and covers both options, unless stated otherwise.

The key features of the amended project are listed in **Section 1.3.2** and include both options.









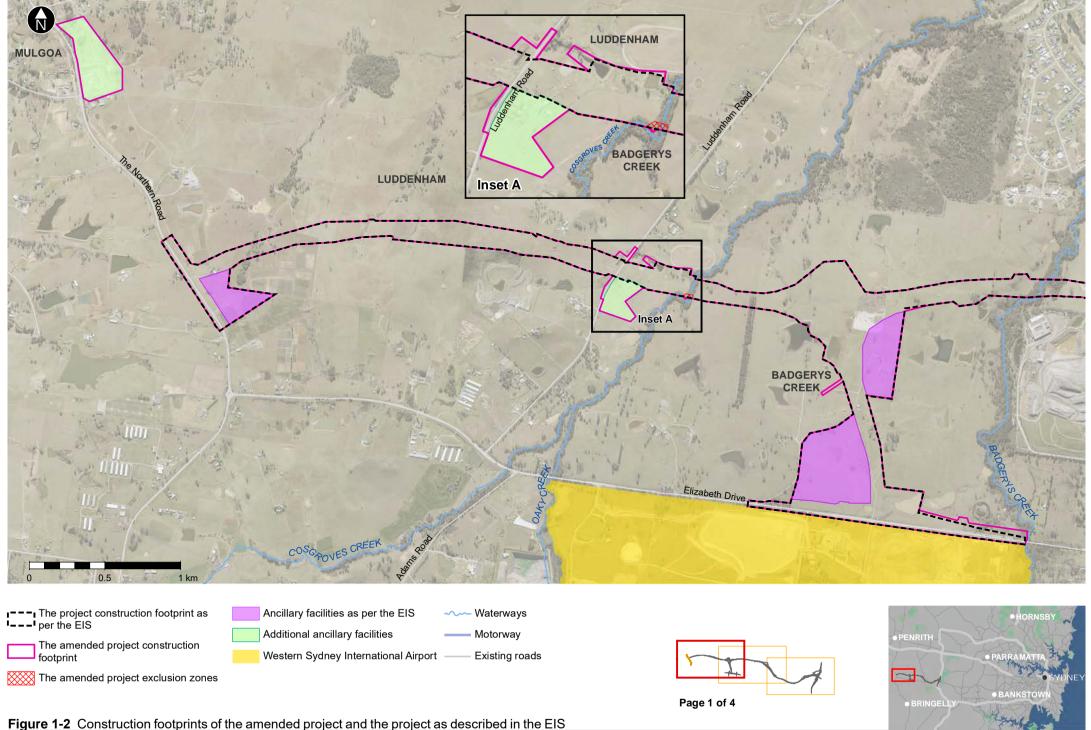


Figure 1-2 Construction footprints of the amended project and the project as described in the EIS

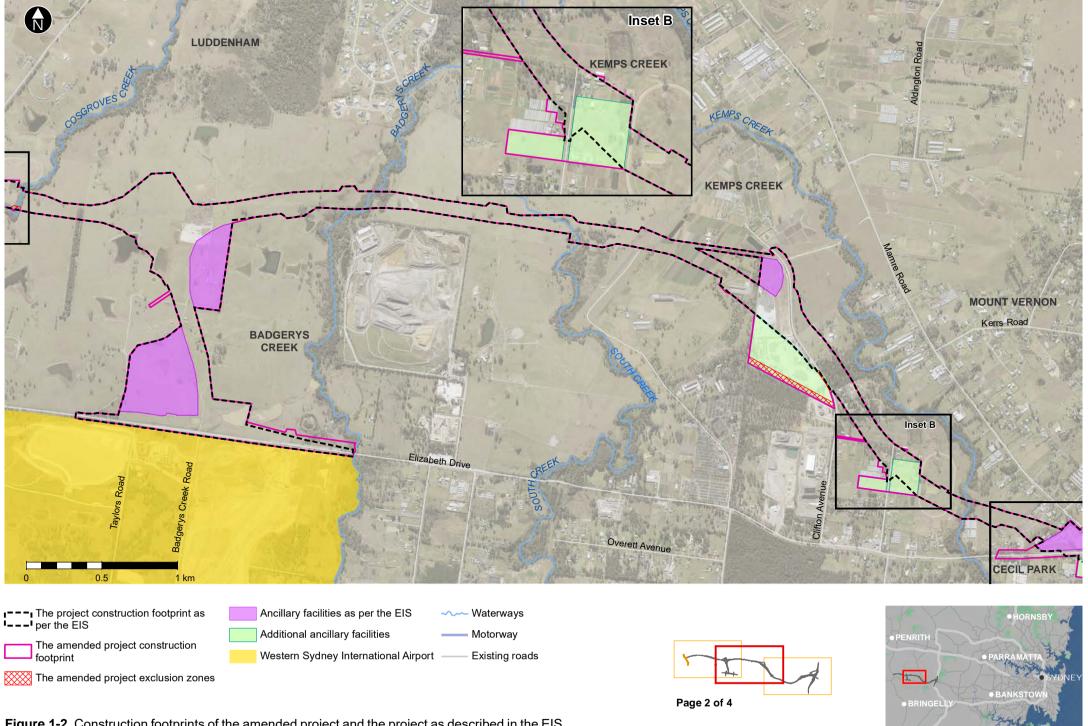


Figure 1-2 Construction footprints of the amended project and the project as described in the EIS

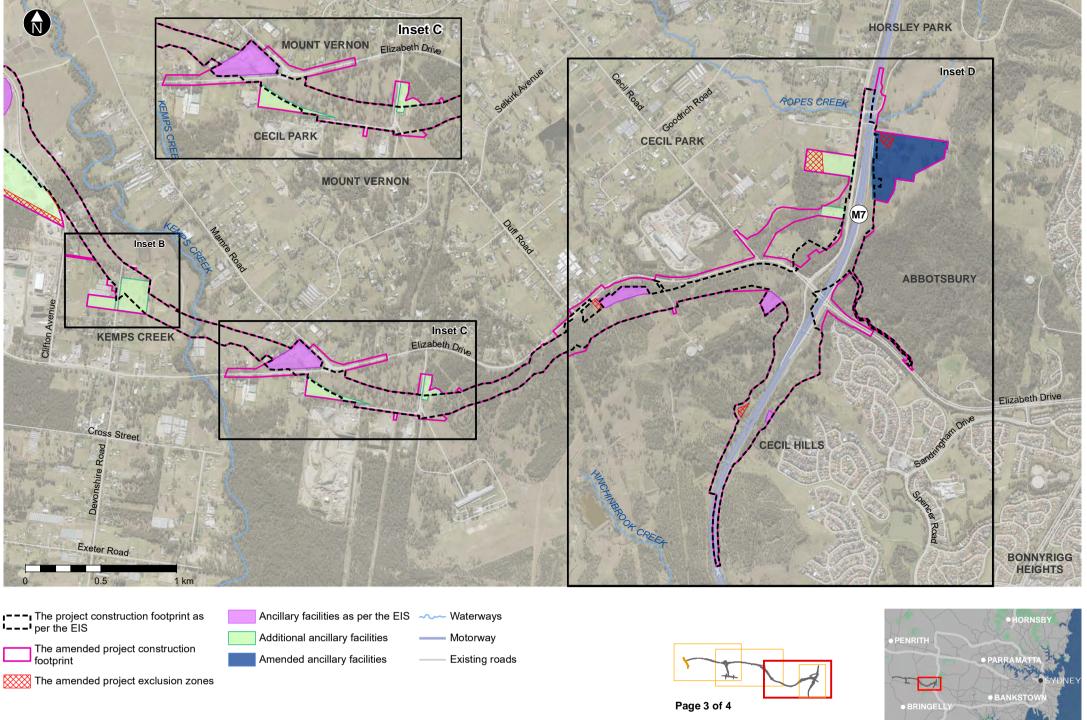


Figure 1-2 Construction footprints of the amended project and the project as described in the EIS

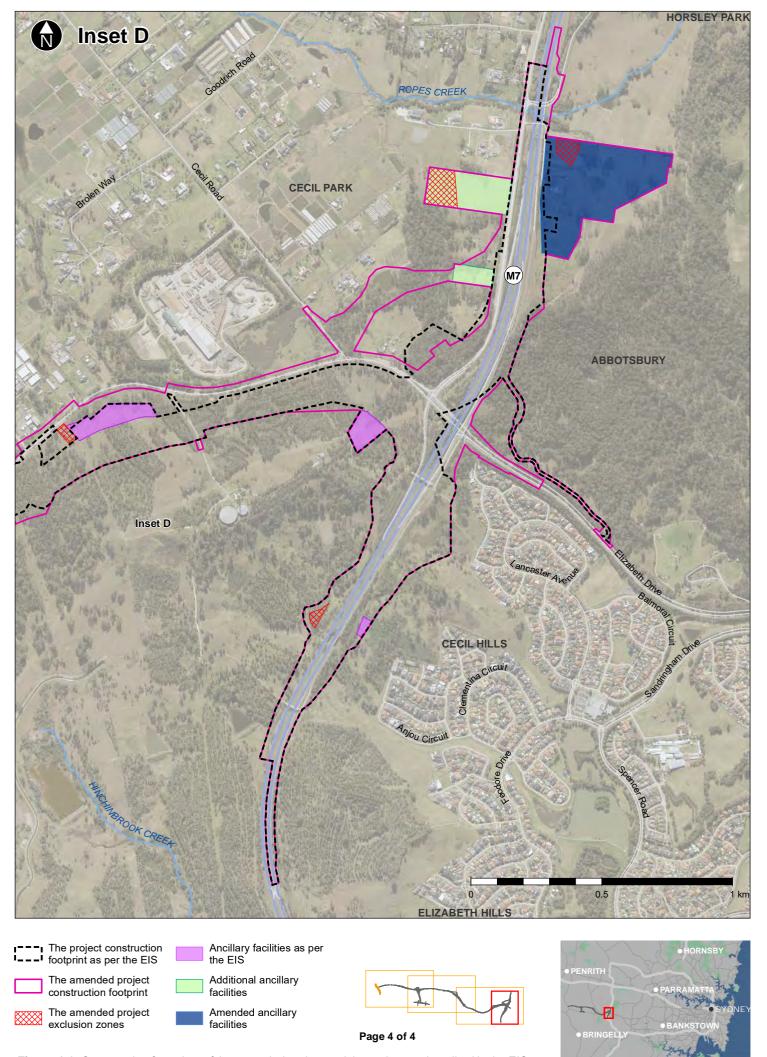


Figure 1-2 Construction footprints of the amended project and the project as described in the EIS

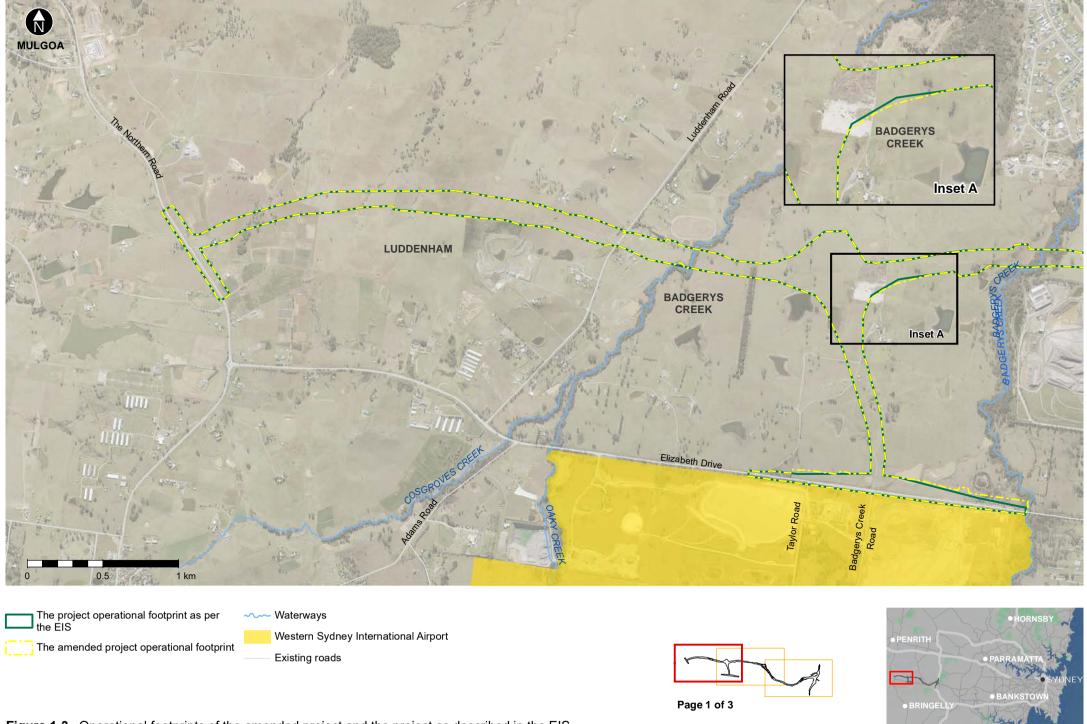


Figure 1-3 Operational footprints of the amended project and the project as described in the EIS

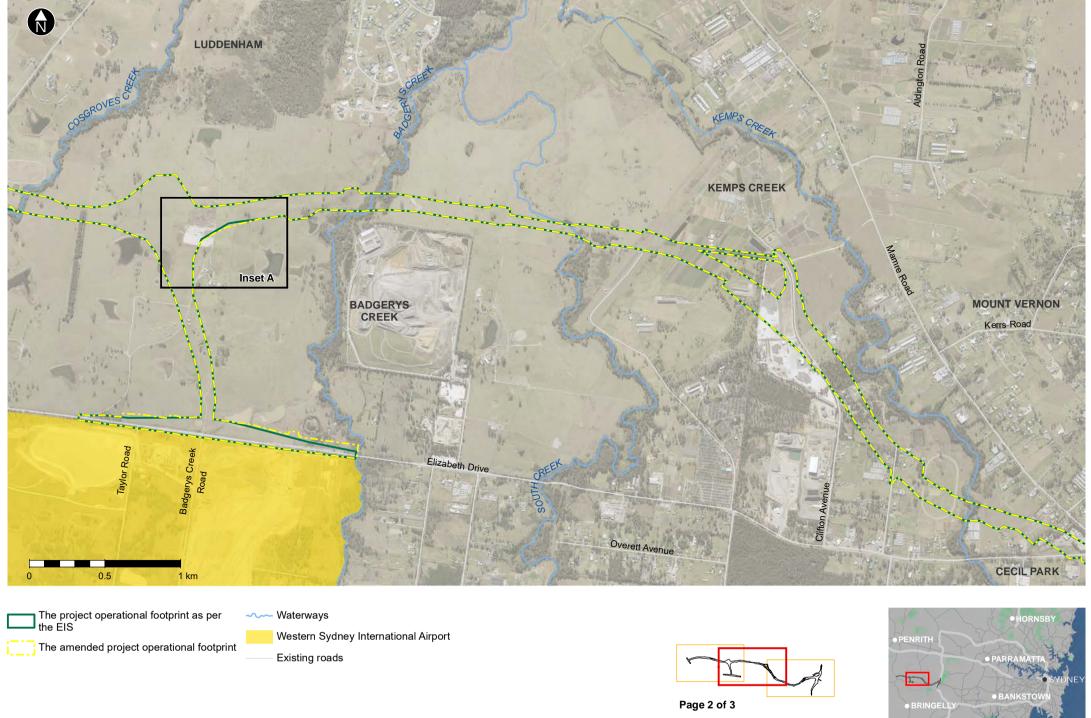


Figure 1-3 Operational footprints of the amended project and the project as described in the EIS

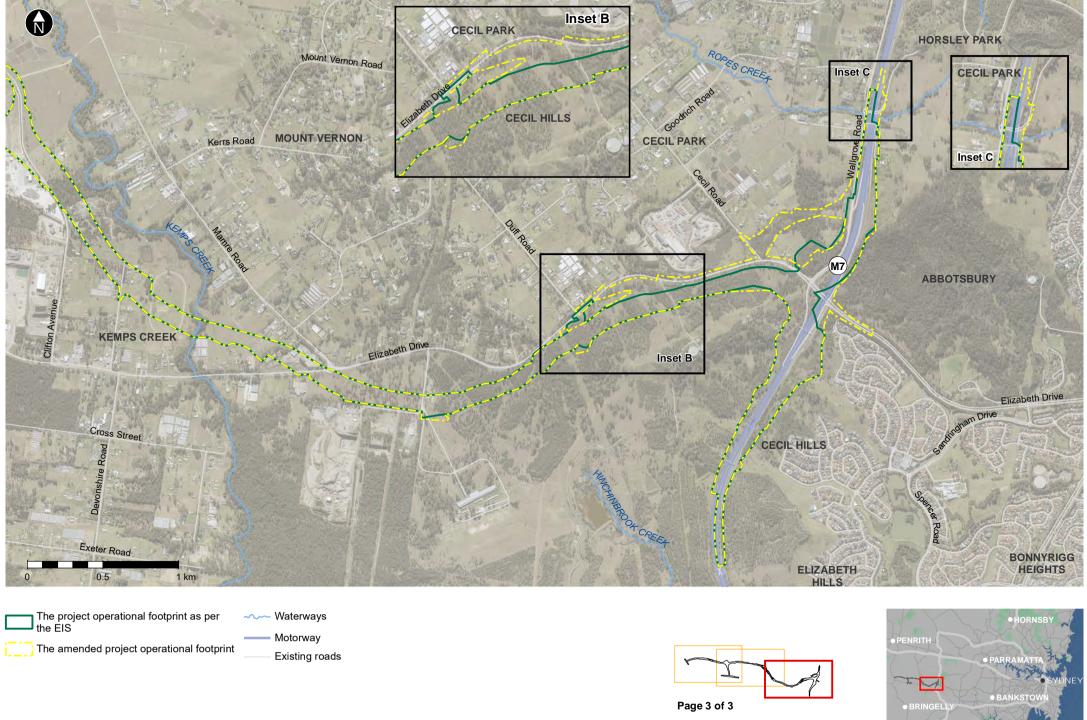


Figure 1-3 Operational footprints of the amended project and the project as described in the EIS

1.3.2 Key features of the amended project

The key features of the amended project are listed below. Where the description of the amended project differs from the description listed in the EIS (see Section 1.1 of the EIS), those changes are shown in **bold** text:

- A new dual-carriageway motorway between the M7 Motorway and The Northern Road with two lanes in each direction with a central median allowing future expansion to six lanes
- Motorway access via three interchanges/intersections:
 - A motorway-to-motorway interchange at the M7 Motorway and associated works (extending about four kilometres within the existing M7 Motorway corridor) with the following options:
 - Option 1 without connection between the M12 Motorway and Elizabeth Drive
 - Option 2 with connection between the M12 Motorway and Elizabeth Drive
 - A grade-separated interchange referred to as the Western Sydney International Airport interchange, including a dual-carriageway four-lane airport access road (two lanes in each direction for about 1.5 kilometres) connecting with the Western Sydney International Airport Main Access Road
 - A signalised intersection at The Northern Road with provision for grade separation in the future
- Bridge structures across Ropes Creek, Kemps Creek, South Creek, Badgerys Creek and Cosgroves Creek
- A bridge structure across the M12 Motorway into the Western Sydney Parklands to maintain
 access to utilities, including the existing water tower and mobile telephone/other service towers
 on the ridgeline in the vicinity of Cecil Hills, to the west of the M7 Motorway
- Bridge structures at interchanges and at Clifton Avenue, Elizabeth Drive, Luddenham Road and other local roads to maintain local access and connectivity
- Inclusion of active transport (pedestrian and cyclist) facilities through provision of pedestrian bridges and an off-road shared user path including connections to existing and future shared user path networks
- Modifications to the local road network, as required, to facilitate connections across and around the M12 Motorway including:
 - Realignment of Elizabeth Drive at the Western Sydney International Airport, with Elizabeth
 Drive overpassing the airport access road and rail infrastructure
 - Two new signalised intersections from Elizabeth Drive into the Western Sydney International Airport, with provisions for future connection to potential developments to the north
 - Widening of Elizabeth Drive under the M7 Motorway and approaches
 - Realignment of Clifton Avenue over the M12 Motorway, with associated adjustments to nearby property access
 - Relocation of Salisbury Avenue cul-de-sac, on the southern side of the M12 Motorway
 - Realignment of Wallgrove Road to connect to Cecil Road, including a connection between Elizabeth Drive and Wallgrove Road via Cecil Road with a signalised intersection with Elizabeth Drive
- · Adjustment, protection or relocation of existing utilities
- Ancillary facilities to support motorway operations, smart motorways operation in the future and the existing M7 Motorway operation, including gantries, electronic signage and ramp metering

- · Other roadside furniture including safety barriers, signage and street lighting
- Adjustments of waterways, where required, including Kemps Creek, South Creek and Badgerys Creek
- Permanent water quality management measures including swales and basins
- Establishment and use of temporary ancillary facilities, temporary construction sedimentation basins, access tracks and haul roads during construction
- Permanent and temporary property adjustments and property access refinements as required.

An overview of this option is provided in Figure 1-1.

1.4 Purpose and scope of this report

This Noise and Vibration Updated Technical Report has been prepared to support the Amendment Report. The purpose of this technical report is to present an assessment of the construction and operational activities for the amended project that have the potential to impact noise and vibration. To achieve this, the scope of the report is therefore to provide:

- A review of existing noise and vibration environment
- Identification of potential noise and vibration receivers
- · Assessment of potential construction operational noise and vibration impacts
- Assessment of cumulative impacts as a result of noise and vibration
- Identification of environmental management measures required to address these impacts.

This updated technical report should be read in conjunction with the EIS.

1.5 Secretary's Environmental Assessment Requirements

The Secretary of the NSW Department of Planning, Industry and Environment (Planning and Assessment; DPIE) issued the Secretary's environmental assessment requirements (SEARs) for the M12 Motorway EIS to inform TfNSW's assessment of the project. The project was determined to be a controlled action under the *Environment Protection and Biodiversity Act (Commonwealth)* (EPBC Act) As such, the SEARs included the Commonwealth assessment requirements under the Act. An amendment application was submitted to DPIE on May 2020. DPIE confirmed that the proposed amendments would not require the SEARs to be updated.

Table 1-1 lists the SEARs requirements relating specifically to the assessment of the project's potential impacts on noise and vibration, with a reference to the chapter or section of this report where each requirement is addressed.

Table 1-1 SEARs (noise and vibration)

Secretary's requirement	Where addressed		
6. Noise and vibration – Amenity			
The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must cover typical and realistic construction and operation activities. The assessment must include consideration of:	Construction and operational noise and vibration criteria – see Chapter 3. Construction and operational noise and vibration assessment methodology – see Chapter 4. Construction noise and vibration assessment - see Chapter 5. Operational road traffic noise assessment - see Chapter 6 Construction and operational noise and vibration environmental management measures – see Chapter 7		
Impacts to sensitive receivers including small businesses;	Where small businesses have been identified within the study area they have been included as commercial receivers. Sensitive receiver uses have been identified in Chapter 2 .		
Noise impacts of out-of-hours works including proposed activities including utility works, justification for these activities, estimation of the number of out-of-hours activities required and timeframes for these activities;	Identification and justification of out-of-hours works are provided in Section 4.1.1.1 Assessment of out-of-hours works impacts – see Chapter 5.		
Sleep disturbance;	Sleep disturbance impacts are discussed in Section 5.1.6		
The characteristics of noise and vibration, as relevant (for example, low-frequency noise); and	Characteristics of noise and vibration are typically brought into consideration for fixed operational facilities which may require modifying factors to be applied to account for low frequency or impulsiveness. This amended project does not have any fixed facilities. Construction noise impacts include penalties in the source in the source noise levels for equipment with annoying characteristics – see Annexure C – Construction equipment.		
How noise and vibration mitigation measures act to mitigate the effects of consecutive and cumulative construction impacts.	Construction and operational noise and vibration environmental management measures are discussed in Chapter 7 .		
The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	Blasting is not proposed to be undertaken as part of the amended project.		
7. Noise and vibration – Structura	al		
The Proponent must assess construction and operation noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include	Construction and operational noise and vibration criteria – see Chapter 3 Construction and operational noise and vibration assessment methodology – see Chapter 4 .		

Secretary's requirement	Where addressed
consideration of impacts to the structural integrity and heritage	Construction noise and vibration assessment - see Chapter 5.
significance of items (including Aboriginal places and items of environmental heritage).	Operational road traffic noise assessment - see Chapter 6.
3 /	Construction and operational noise and vibration environmental management measures – see Chapter 7 .
	Assessment of vibration impacts on heritage items - see Section 5.7.3.
The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	Blasting is not proposed to be undertaken as part of the amended project.

2. Existing noise and vibration environment

Section 7.7.5 of the EIS describes the existing noise and vibration environment including noise catchment areas, noise and vibration sensitive receivers and previously conducted noise surveys.

2.1 Noise catchment areas

Noise catchment areas (NCAs) for the amended project are the same as those described in Section 7.7.5 of the EIS. The NCAs are shown in **Figure 2-1** and **Annexure B**.

2.2 Noise and vibration sensitive receivers

Receivers potentially sensitive to construction noise and vibration for the amended project are generally the same as those described in Section 7.7.5 of the EIS. The exception is around ancillary facility 10 (AF10) which is located adjacent to The Northern Road, within the northern portion of NCA10. The construction assessment area has been extended to include receivers to the north of AF10 who were previously over 2000 metres from the project as described in the EIS. The sensitive receivers are shown in **Annexure B** including the extended area.

The study area for the operational noise assessment is defined by the classification of project and non-project roads. A project road is a road which is includes physical construction works which form part of the project. The operational study area is based on a distance of 600 metres either side of the project roads (measured from the centreline of the outermost traffic lanes), as defined in the RNP and Noise Criteria Guideline (NCG). As the amended project includes works on Elizabeth Drive and Wallgrove Road, the operational study area has been extended to account for this change. The operational study area is shown in **Figure 4-4**.

2.3 Ambient noise surveys and monitoring locations

No additional ambient noise surveys were undertaken for the amended project. Monitoring locations and ambient noise survey results are detailed in Section 7.7.5 of the EIS. The amended project would not require additional noise monitoring as the amended operational footprint is largely consistent with the operational footprint as per the EIS.

An ancillary facility (AF10) is located within NCA10 which includes receivers who are situated near The Northern Road. The existing noise environment is not likely to vary across NCA10 as the background noise levels are largely controlled by vehicle movements on The Northern Road. The background noise monitoring used for NCA10 would be expected to be representative of receivers who are situated near to AF10, given its locality to The Northern Road and as such, no further monitoring is required as part of the amended project. The monitoring locations are shown in **Figure 2-1**.

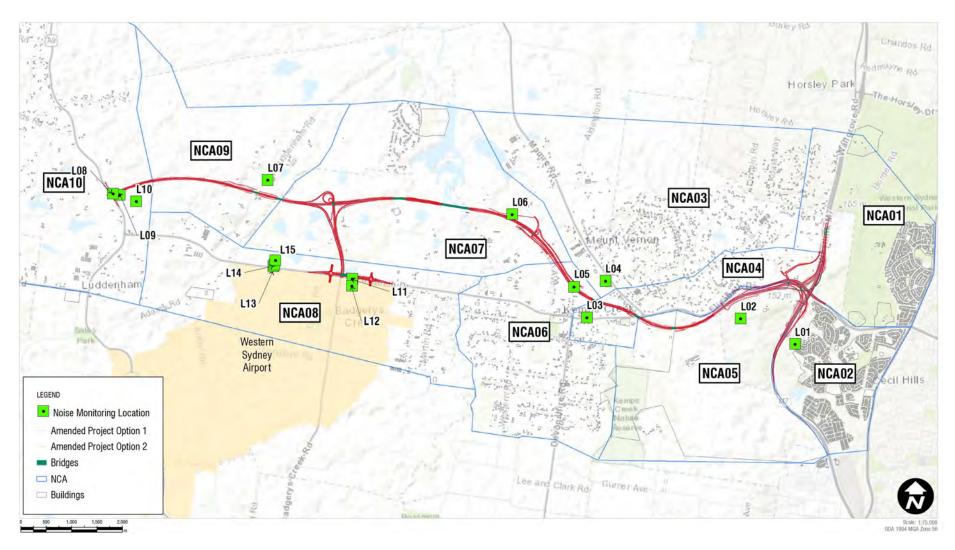


Figure 2-1 Site plan and noise monitoring locations

3. Policy and planning setting

Section 7.7.1 of the EIS describes the policy and planning setting of the project, including relevant guidelines. It has not changed since the exhibition of the EIS and remains relevant to the amended project.

4. Assessment methodology

The methodology for the noise and vibration assessment for the amended project is consistent with the methodology outlined in Sections 7.7.2 to 7.7.4 of the EIS. This assessment should be read in conjunction with the methodology documented in the EIS which contains detailed descriptions and explanations on the assessment guidelines and methodologies used.

4.1 Construction noise and vibration assessment methodology

4.1.1 Construction scenarios

Representative scenarios have been developed to assess the likely impacts of the main construction phases of the amended project. These scenarios are described in **Table 4-1** together with a high-level description of each works activity. The location of the various work scenarios is shown in **Figure 4-1** and **Figure 4-2**. The changes to the construction scenarios as described in the EIS due to the amended project are presented in **bold** text.

Table 4-1 Construction scenario descriptions

ID	Scenario	Description	
1a	Ancillary facility establishment/ decommissioning – Peak impact	Before construction commences, the ancillary facilities would need to be prepared to allow construction works to occur. The works would vary depending on location and the existing conditions but could include: - Minor clearing	
1b	Ancillary facility establishment/ decommissioning – Typical impact	 Minor earthworks Installation of office accommodation Utilities Amenities Secure perimeter fencing, including visual screening of construction ancillary facilities where necessary High noise impact works would be required at certain times and would include the use of excavators and frontend loaders. Nine additional ancillary facility sites are proposed for the amended project to those described in the EIS (see Section 4.1 of the amendment report). 	
2a	Ancillary facilities – Operation	The ancillary facilities would generally comprise: - Temporary buildings (generally prefabricated) including offices and	
2b	Ancillary facilities – Stockpiling	meeting rooms, amenities and first aid facilities (the size and number of office facilities at the main ancillary facilities would be greater than at the secondary ancillary facilities)	
2c	Ancillary facilities – Batching plant	 Hardstand parking areas with sufficient space to accommodate the numbers of construction workers expected at any site Materials laydown, storage and handling areas, including purpose-bu temporary structures as required Batching plants are currently proposed to be located at AF2, AF3, AF and AF10. The location of the batching plant has been assumed to be 	

ID	Scenario	Description
2d	Ancillary facilities – Crushing activities	of AF10 and in the centre of AF2 and AF3. Crushing, grinding and screening operations are currently proposed to be located at AF1, AF2 and AF10. The site layout of all ancillary facilities is considered indicative and would be confirmed as the project progresses. - Bridge construction support areas - Workshops with appropriate safety and environmental controls for servicing plant and equipment. The operation of all ancillary sites has been assessed for 24/7 operation. It should be noted that the assessment does not include any source mitigation or localised screening which would be investigated following confirmation of the site layout. Nine additional ancillary facility sites are proposed for the amended project to those described in the EIS (see Section 4.1 of the amendment report).
3a	Utilities and drainage – including relocation of existing – Peak impact	The amended project would require the construction of new drainage infrastructure and alterations to existing drainage. Construction of drainage works would involve localised excavation, compaction and installation of drainage pipes and pits, and construction of table drains
3b	Utilities and drainage – including relocation of existing – Typical impact	and temporary construction sediment basins. High noise impact works would occur when rock-breakers are used.
4a	Demolition – bridges and buildings (including rock-breaker)	Certain buildings and structures within the construction footprint would require demolition and removal where they are not proposed to be used as ancillary facilities during construction. This includes:
4b	Demolition – bridges and buildings (no rock-breaker)	- Buildings, sheds or farm infrastructure that fall within the permanent operational footprint (buildings within only the construction footprint would generally be reinstated to their previous use following completion of construction). - A bridge crossing South Creek on private property. Peak noise impact works would occur when rock-breakers are used.
5a	Clearing – Peak impact	Prior to earthworks being undertaken, vegetation and topsoil would be
5b	Clearing – Typical impact	stripped. This is likely to involve: - Removal of vegetation - Topsoil stripping Peak noise impact works would occur when chainsaws and chippers are used.
6a	Earthworks – Peak impact	Earthworks would be required along the entire length of the amended
6b	Earthworks – Typical impact	project for: - Areas of new cut and fill along the construction footprint, including at all interchanges - Construction of retaining walls - Cut and fill or preparation of site for construction of all bridges Peak noise impact works would occur when dozers or graders are used.
6c	Earthworks – onsite truck haulage	Onsite haulage would be required to move spoil between areas of the site.
7a	Bridge works – Peak impact (including piling)	Construction of the bridges would generally involve: - Construction of foundations (piling)

ID	Scenario	Description
7b	Bridge works – Typical impact	- Construction of bridge piers - Construction of bridge abutments and spill-throughs where required
7c	Bridge works – concrete works	- Installation of pre-cast concrete planks/girders and barriers - Installation of the deck - Installation of throw screens where required.
7d	Bridge works – girder lifts over existing roads	For the proposed bridge lifts occurring over existing roads, it is likely that these activities would be required to occur outside of standard hours to minimise traffic disruption.
8a	Road works – concrete works	Road works would generally include the concrete/asphalt works associated with the construction of the road surface.
8b	Road works – Typical impact	Road works involving the tie-in to existing roads at M7 Interchange, Elizabeth Drive at Airport Road and Wallgrove Road would likely be required to occur outside of standard hours. Additionally, works around
8c	Road works – tie-in works to existing roads	the shared user path connection into Elizabeth Drive near Mamre Road and utility access road would likely be required to occur outside of standard hours. Peak noise impact would occur when concrete saws are used.
9a	Signage, lighting and landscaping – installation & finishing works	Installation and finishing works would include activities such as line marking, installing signs, etc. Installation and finishing works generally have do not equipment that would require a peak noise impact assessment.

Note 1: Equipment lists for each scenario and sound power level data are provided in **Annexure C**.

The assessment uses 'realistic worst-case' scenarios to determine the impacts from the noisiest 15-minute period that is likely to occur for each work scenario, as required by the Interim Construction Noise Guideline (ICNG).

To provide realistic assessment scenarios which represent both the worst-case noise impact and the noise impacts which may occur during the use of less noise intensive equipment, construction scenarios have been categorised into 'Peak impact' and 'Typical impact' works. Both 'Peak impact' and 'Typical impact' works are assessed over the same 15 minute period, with the difference being the equipment being within the scenario. An example of 'Peak impact' work includes the use of noise intensive equipment like rock-breakers or concrete saws. While 'Peak impact' works would be required at certain times, the noisiest works would only last for relatively short periods throughout the overall works duration. The 'Typical impact' works represent typical noise emissions from the amended project when noise intensive equipment is not in use. 'Peak impact' and 'Typical impact' works are discussed further in **Section 5.1**. Only scenarios which include the use of noise intensive equipment have been split into peak and typical scenarios. This approach is consistent with the assessment approach used for the EIS.

Construction works would not occur continuously at each site and it is expected that there would be relatively long periods where construction noise levels are much lower than the reasonable worst-case levels presented in this assessment. There would also be many periods when no noisy works are occurring.

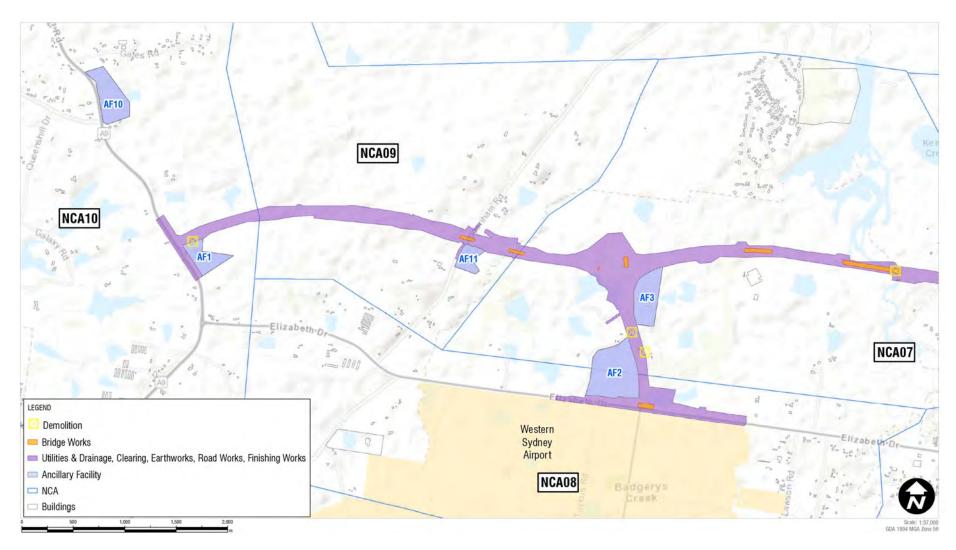


Figure 4-1 Construction works locations for the amended project

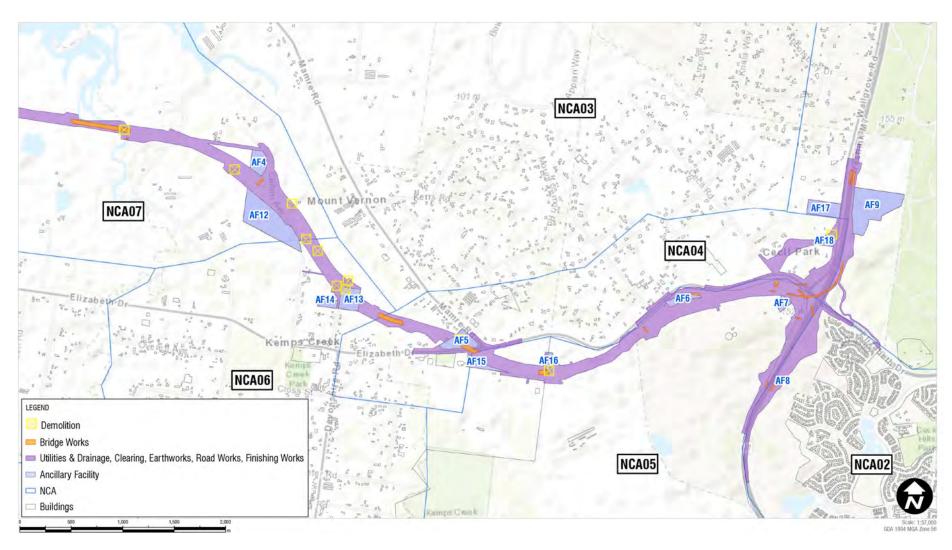


Figure 4-2 Construction works locations for the amended project

4.1.1.1 Working hours

Extended construction hours are proposed for the amended project, consistent with the working hours described in Section 7.7.3 of the EIS. These hours are listed below:

- Standard Day construction hours 7 am to 6 pm Monday to Friday; 8 am to 1 pm Saturday
- Day out of hours (including extended construction hours 1 pm to 5 pm Saturday) 7 am to 8 am and 1 pm to 6 pm Saturday; 8 am to 6 pm Sunday and Public Holidays
- Morning shoulder 6 am to 7 am Monday to Friday
- Evening shoulder 6 pm to 7 pm Monday to Friday
- Evening 7 pm to 10 pm Monday to Friday; 6 pm to 10 pm Saturday, Sunday and Public Holidays
- Night 10 pm to 6 am Monday to Friday; 10 pm to 7 am Saturday; 10 pm to 8 am Sunday and Public Holidays.

The nature of the works means evening and night-time work (out-of-hours work) would also be required at certain times to:

- Minimise unacceptable traffic impacts on and disruptions to the road network
- Minimise disturbance to surrounding landowners and commercial properties
- Ensure the safety of the construction workers, motorists and the general public

Activities that are required to be completed out-of-hours for the amended project are consistent with those described in Section 7.7.3 of the EIS. In addition, the amended project would also include the following Out of hours work activities:

- Stockpiling of soil within ancillary facilities
- Deliveries of concrete to the ancillary facilities
- Deliveries of large prefabricated material (eg bridge girders).

Night-time construction activities would be supported by out-of-hours operation of temporary ancillary facilities. The exact timing of out-of-hours work would depend on construction activities, construction techniques and working with the affected communities or authorities such as utility authorities or North West Roads (M7 Motorway).

4.1.1.2 Works schedule

Construction of the amended project would start in the first quarter of 2022, with completion expected by end of the first quarter of 2026. As a result of the change in construction contracts, an amended indicative construction program is proposed which allows certain construction activities to begin earlier. This is shown in **Figure 4-3**, with amendments shown in grey.

It is noted that the proposed construction schedule would be subject to change, and that the construction program is anticipated to apply to both option 1 and option 2.

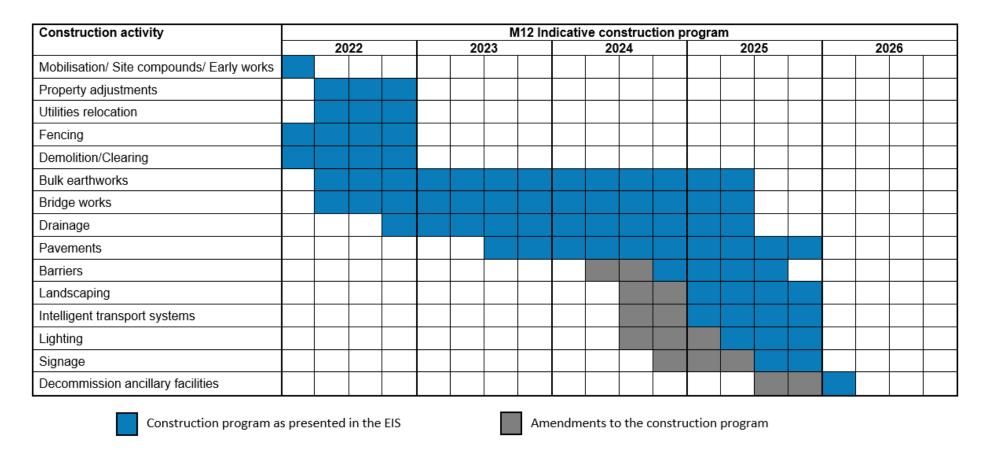


Figure 4-3 Amended construction program

4.1.2 Overview of construction noise modelling

A noise model of the study area prepared for the EIS has been updated for the amended project where required and used to predict noise levels from the construction works to all surrounding receivers. Modelling methodologies for the amended project are consistent with those described in Section 7.7.3 of the EIS.

4.1.3 Overview of construction road traffic

Construction traffic volumes during the peak construction period (around 2024) have been compared to the forecast traffic volumes during the same period.

The construction road traffic noise calculations were carried out using Calculation of Road Traffic Noise (CoRTN) (UK Department of Transport, 1988) calculations to predict the change in road traffic noise levels due to construction traffic. Where the predicted increase is greater than 2 dB, the predicted noise level is compared to the Road Noise Policy (RNP) road traffic noise criteria.

Construction access would be from the existing road network, including The Northern Road, Luddenham Road, Elizabeth Drive west of the airport access road, Clifton Avenue, Mamre Road via Elizabeth Drive, Range Road via Elizabeth Drive, the utility access road at Elizabeth Drive near Duff Road, Wallgrove Road and via the existing M7 Motorway underpass opposite Kosovich Place, Cecil Park.

Construction traffic to ancillary is likely to follow the following routes to the site locations:

- AF1, AF2/3, AF4, AF5, AF10, AF11, AF12, AF13, AF14, AF15 and AF16 would be accessed primarily via The Northern Road and Elizabeth Drive
- AF6, AF7 and AF8 would be accessed primarily via the M7 Motorway and Elizabeth Drive
- AF9, AF17 and AF18 would be accessed primarily via Wallgrove Road.

The baseline traffic volumes for the construction period and proposed construction traffic volumes are detailed in **Annexure C**.

4.2 Operational noise and vibration assessment methodology

4.2.1 Key features of the amended project as related to operational noise impacts

The amended project would change operational road traffic noise impacts from those described in the EIS. The key operational features of the amended project that may result in impacts are listed below, with changes from the EIS presented in **bold** text.

- A new dual-carriageway motorway with two lanes in each direction
- Motorway access via interchanges/intersections at The Northern Road, the Western Sydney International Airport and the M7 Motorway
- An option to provide a new connection between the M12 Motorway and Elizabeth Drive at the M7 Motorway interchange (option 2)
- The widening of Elizabeth Drive under the M7 Motorway and approaches

- A motorway-to-motorway interchange at the M7 Motorway and associated works
 - The amended interchange would include lowering of the high point of two interchange ramps
- Bridge structures across a number of creeks and existing roads
- Realignment of Elizabeth Drive at the Western Sydney International Airport, with Elizabeth Drive bridging over the WSIA access road
- Realignment of Wallgrove Road to connect to Cecil Road, including a connection between Elizabeth Drive and Wallgrove Road via Cecil Road with a signalised intersection with Elizabeth Drive
- In general, the amended project results in lower interchange ramps than the interchange ramps
 as described in the EIS. The high point of the amended M7 Motorway southbound to M12
 Motorway westbound ramp would be lowered by approximately seven metres as compared to
 the EIS, and the high point of the amended M12 Motorway Eastbound to M7 Motorway
 southbound ramp would be lowered by approximately four metres as compared to the project as
 described in the EIS.

The study area as shown in **Figure 4-4** for the operational noise assessment extends to a distance of 600 metres on each side of the project roads (measured from the centreline of the outermost traffic lanes), as defined in the RNP and Noise Criteria Guideline (NCG). This distance is based on the limit of accuracy of currently approved road traffic noise models. The operational study area is hard cut at the amended project extents, as per TfNSW's application of the NCG. This results in a study area which does not extend past the limit of works and extends either side of the design. The extents of the operational study area are shown in **Figure 4-4**.

As the amended project includes works on Elizabeth Drive and Wallgrove Road, the operational study area has been extended when compared to that assessed in the EIS to account for this change. The change in operational footprint is primarily within NCA03 and NCA04 and includes additional receivers to the north of the amended project.

The key features of the amended project are shown in Figure 4-4.

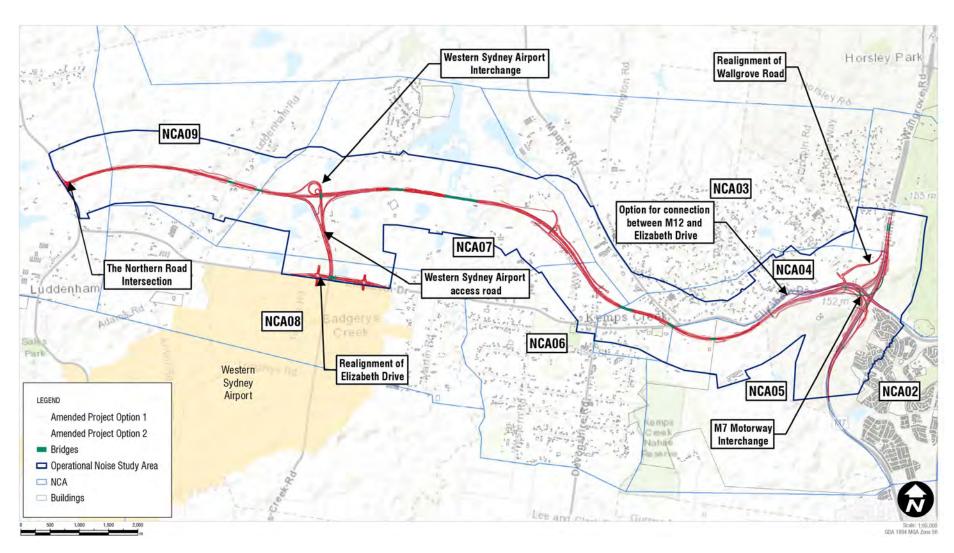


Figure 4-4 Key operational features of the amended project

4.2.2 Noise model

A noise model of the study area prepared for the EIS has been updated for the amended project and used to predict noise levels from the operation of the amended project to all surrounding receivers. Modelling methodologies for the amended project are consistent with those described in Section 7.7.4 of the EIS.

4.2.3 Project and non-project roads

Roads where design or engineering changes are proposed as part of the project are considered as 'project' roads. Roads with no works are considered 'non-project'.

All major roads in the study area have been modelled together with major roads on the surrounding road network to determine the contributions from 'project' and 'non-project' existing roads at individual sensitive receivers, as required by the NCG. This approach is consistent with the assessment carried out for the project as described in the EIS.

'Project' and 'non-project' roads for the amended project are consistent with the project as described in the EIS and are shown in **Annexure D**.

4.2.4 Road types

The NCG classifies project roads as either 'new' or 'redeveloped'. The road classifications used in the assessment of the amended project are consistent with the project as described in the EIS and are shown in **Annexure D**. This approach is consistent with the assessment carried out for the project as described in the EIS.

4.2.5 Traffic data

Forecast traffic volume data for the amended project has been provided for the at-opening year (2026) and future design year (2036). As part of the transport and traffic updated technical report (see Appendix B of the amendment report), land use and demographics scenario has been updated from LU14 version 4 (developed in 2014 and adjusted for specific developments) to a more recent LU16 (developed in 2016). The modelling package used for the amendment report changed to an updated model as the traffic forecasts for Western Sydney from this model are considered to be more robust than the model that was used for the EIS analysis.

The changes in forecast land use and improvements in modelling processes with SMPM have resulted in a major reduction in future trips to the south west growth area in Western Sydney. Forecast traffic volumes using the amended project and the surrounding network have reduced as a result.

This data includes traffic from other projects which would influence traffic volumes in the operational study area during each time period. The projects which have been included in the various assessment scenarios are the same as those shown in Table 4-7 of the noise and vibration assessment report prepared for the EIS (Appendix D of the EIS). The only change to this is that the land use is updated to reflect LU16. This data has been provided for the following scenarios:

• **No Build** (ie without the amended project) – this scenario represents the existing road network in the operational study area in the absence of the amended project

• **Build** (ie with the amended project) – this scenario assumes that the amended project goes ahead and data provided for both options 1 and option 2.

The forecast traffic volumes for the amended project are detailed in **Annexure D**. This approach is consistent with the assessment carried out for the project as described in the EIS.

4.2.6 Noise modelling parameters

Noise modelling parameters for the amended project are consistent with those described in Section 7.7.4 of the EIS.

4.2.7 Noise model validation

The operational noise model validation compares the predicted and measured road traffic noise levels at select locations. The predictions incorporate traffic counts (which form the key input into the model) along with concurrent noise monitoring. The process and the findings are presented in the EIS and would not change as part of the amended project. The assessment of the amended project makes use of the validated noise model developed for the EIS. As such, no further noise model validation is required for the amended project.

4.2.8 Noise mitigation

The methodology for determination of operational noise triggers and consideration of mitigation for the amended project is consistent with that described in Section 7.7.4 of the EIS.

4.2.9 Maximum noise levels

Assessment of maximum noise levels from the operation of the amended project is consistent with that described in Section 7.7.4 of the EIS.

5. Construction noise and vibration assessment

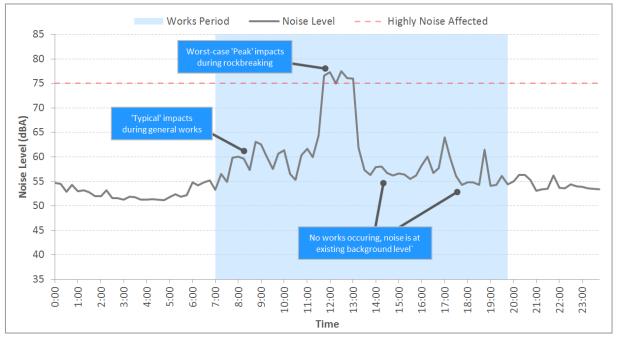
This chapter provides an assessment of the potential noise and vibration impacts of construction of the amended project and addresses the following issues:

- Predicted amended worst-case noise impacts
- Highly noise-affected residential, commercial and other sensitive receivers
- Construction-related sleep disturbance
- · Construction-related vibration impacts
- Construction-related ground-borne noise
- · Construction-related traffic noise
- · Construction noise impacts
- Cumulative construction noise impacts
- Consecutive construction noise impacts.

5.1 Construction airborne noise

5.1.1 Predicted worst-case noise impacts – amended project overview

The following summary is based on the predicted noise impacts at the most affected receivers in each NCA and is representative of the reasonable worst-case situation where construction equipment is at the closest point to each receiver. For the majority of the time, the construction noise impacts would be lower than predicted, as the worst-case situation is typically only apparent for a relatively short period. This concept is illustrated in **Figure 5-1**, which shows noise levels measured next to major construction works during a period of 'peak impact' rock-breaking and how construction noise levels vary over the works period.



Note 1: The measurement location was about 40 metres away from the works.

Figure 5-1 Example of indicative construction noise levels during rock-breaking

In the above example, while the worst-case noise levels result in *highly noise affected* impacts, they only last for part of the works period and the noise levels during 'Typical Impacts' are much lower. There are also periods when no works are occurring, and noise levels are at the existing background level (eg road traffic and general urban hum).

Table 5-1 shows the likely subjective response of people affected by different levels of exceedance above an NML. Predicted construction noise impacts are presented in the following sections for the most affected receivers in each NCA. Receivers which are further away from the works and/or shielded from view would have substantially lower noise impacts. The number of exceedances predicted in each NCA are detailed in **Annexure C**.

Table 5-1 NML exceedance bands and corresponding qualitative response to impacts

Exceedance of NML	Symbol	Likely subjective response
No exceedance	•	n/a
1 dB to 10 dB	•	Marginal to minor
11 dB to 20 dB	*	Moderate
>20 dB	•	High

5.1.1.3 Option 1

A summary of the predicted amended project option 1 construction noise impacts in each NCA for the most affected residential receivers is shown in **Table 5-3** to **Table 5-7** for each assessment period. The tables show the impacts for the project as described in the EIS alongside it in the grey columns.

In summary, the assessment for residential receivers shows that for option 1:

- The highest impacts for the amended project option 1 are generally seen in the 'Peak Impact' scenarios, which is due to the use of noise intensive equipment such as rock-breakers or concrete saws. For most scenarios, the 'Peak Impact' works would however only be required for relatively short periods. Noise levels and impacts during the 'Typical Impact' works are lower and affect fewer receivers.
 - This is consistent with the project as described in the EIS
- The highest impacts at residential receivers for the amended project option 1 are generally in catchments where receivers are located close to the construction footprint. This includes east of the M7 Motorway and south of Elizabeth Drive in NCA02, north of Elizabeth Drive near Salisbury Avenue in NCA06 and near Clifton Avenue in the north of the construction footprint in NCA07. With the exception of NCA02, receivers in these catchments are however generally sparsely distributed, meaning the number of receivers with the highest impacts is relatively low. This is mostly consistent with the project as described in the EIS, however, the amended project would result in additional impacts to receivers situated in NCA02, due to works being undertaken on Elizabeth Drive, south of the intersection with the M7 Motorway. NCA01 no longer has predicted high impacts as reported in the EIS, as the closest receivers to the works now lie within the expanded ancillary facility AF9, and as such, will not be occupied during construction works.
- During the standard daytime period, 'High' impacts are predicted in NCA02, NCA06 and NCA07, however these are typically limited to receivers immediately adjacent to the works areas, with 'moderate' impacts extending a row or two of properties further away. A relatively small number of receivers are predicted to have 'moderate' impacts in the remaining areas where receivers are

in close proximity to the construction footprint, such as east of the M7 Motorway and South of Elizabeth Drive in NCA02.

This is mostly consistent with the project as described in the EIS however the amended project would have a higher impact on receivers in NCA02 which are adjacent to works on Elizabeth Drive

- During the night-time, construction works are predicted to have 'high' impacts at some receivers near areas where out of hours works would be required.
 - The receivers with 'high' or 'moderate' impacts are generally consistent with the EIS, with the exception of a few discrete areas around the Wallgrove Road realignment in NCA04, the Elizabeth Drive works to the east of the M7 in NCA02 and adjacent to the ancillary facility AF10 in NCA10. Receivers in these areas typically have 'high' impacts at the first row or two of receivers, with 'moderate' impacts extending a few rows further away.
- Additional batching plants have been assessed for the amended project. Batching plants have been assessed at AF10 to the north of the project on The Northern Road, in the centre of AF2 and AF3 which are both located adjacent the Western Sydney International Airport access road, and in the centre of AF4 adjacent to Clifton Avenue. Noise levels from AF10 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime and evening periods, and 'high' impacts during the night-time period. Noise levels from AF2 and AF3 are predicted to result in 'moderate' impacts at the nearest residential receivers during all periods. Noise levels from AF4 are predicted to result in 'moderate' impacts at the nearest receivers during the daytime, evening and night-time periods, primarily at the receivers to the north of the site, and the closest receiver to the south. The site arrangements of the batching plants are considered indicative and would be further assessed as part of detailed design.

Impacts from AF2 and AF3 are consistent with the project as described in the EIS. The amended project added batching plants at AF4 and AF10.

- Crushing, grinding and screening at AF1, AF2 and AF10 has been assessed for the amended project. Noise levels from AF1 and AF10 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime and evening periods, and 'high' impacts during the night-time period. Noise levels from AF2 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime period, and 'high' impacts during the evening and night-time periods. During the night-time period at all three facilities 'moderate' impacts are predicted at receivers up to around 1 km from the sites, depending on the surrounding topography.
- Stockpiling activities are predicted to have higher impacts than the batching plants, as the
 assessment assumes the works may occur across the entire ancillary facility and therefore
 maybe closer to the nearest receivers.

This is consistent with the project as described in the EIS for AF1 to AF8. The amended project has expanded the size of AF9 and added AF10 to AF18.

- The worst-case impacts are typically in the following scenarios:
 - Scenario 1a, Ancillary facility establishment peak impact
 - Scenario 2d, Ancillary facility operations crushing activities
 - Scenario 3a, Utilities and drainage peak impact
 - Scenario 4a, Demolition peak impact
 - Scenario 5a, Clearing peak impact
 - Scenario 6a, Earthworks peak impact
 - Scenario 8a, Road works concrete works

- Scenario 8c, Road works tie-in to existing roads.
- The highest impact scenarios for the amended report would be mostly consistent with the project as described in the EIS, however the following scenarios are applicable for the amended project only:
 - Scenario 1a, Ancillary facility establishment peak impact due to the proximity of some of the new ancillary facilities to receivers, particularly AF10 and AF14.
 - Scenario 2d, Ancillary facility operations crushing activities due to the high noise level of these works paired with the potential of out of hours operation.
- Works that do not require highly intensive noise generating equipment generally result in considerably lower impacts.
- Given the location of the nearest receivers to the amended project, it is likely that there are several areas of the amended project where construction can occur with little or no impact to residential receivers due to the separation distances between the works and receiver.

Detailed noise level predictions and summaries of the number of receivers predicted to have 'minor', 'moderate' and 'high' impacts in each NCA are provided in **Annexure C**. Where impacts are predicted, the methods for managing them are discussed in more detail in **Section 7**. Comments regarding the use of highly noise intensive equipment in the construction scenarios with the highest impacts are provided in **Table 5-2**.

Table 5-2 Highest noise impact works

ID	Scenario	Activity	Indicative duration	Comments on Peak noise activities
1a	Ancillary facility establishment	Peak impact	13 weeks	Excavators, front end loaders and vibratory rollers have the potential to be used adjacent to sensitive receivers for establishment of ancillary facilities AF10 and AF14.
2d	Ancillary facility operations	Crushing activities	Up to 195 weeks	Crushing, grinding and screening equipment would be used 24 hours at ancillary facilities AF1, AF2 and AF10 to support out of hours works.
3a	Utilities and drainage	Peak impact (inc breaker)	35 weeks	Rock-breakers and/or concrete saws would be used during extended working hours where required, for relatively short durations.
4a	Demolition	Peak impact (inc breaker)	36 weeks	Rock-breakers would be used during extended working hours only as required at specific locations identified in Figure 4-1 for relatively short durations.
5a	Clearing	Peak impact	20 weeks	Chainsaws and chippers would be used during extended working hours only as required for relatively short durations.
6a	Earthworks	Peak impact	80 weeks	Peak noise generating equipment such as dozers would be required to move spoil during extended working hours only as required.
8a	Road works	Concrete works	30 weeks	Concrete truck and concrete pump will be used for any concrete works required for the road and may be carried out during the night-time period as required.
8c	Road Works	Tie in works	48 weeks	Concrete saws would be used at night-time only when works cannot take place during the daytime, eg during closure of surrounding roads. Concrete saws would be used for relatively short durations at a time.

Table 5-3 Predicted construction noise exceedances morning shoulder – residential receivers

	ID	Scenario	Activity	Projec	ct as de	scribed	in the E	IS						Amen	ded pro	ject							
Period				NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary	Peak impact	\rightarrow				•			•	•	\rightarrow	*	•	•	•	•			•	*	
	1b	facility establishment	Typical impact	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
	2a	Ancillary	Operation		•	•	•	•	•		•	•		•	•	•	•	•		•	•	•	•
	2b	facility	Stockpiling			•		•	•		•	•		•	•	•		•		•	•	•	*
	2c	operations	Batching plant	•	•	•	•	•	•	\rightarrow	•	•	•	•	•	•	•	•	•	*	•	•	*
	2d		Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	•	•	•	•	•	•		•	•	\rightarrow
	3a	Utilities and	Peak impact		\rightarrow	\rightarrow	\rightarrow	•			\rightarrow		\rightarrow		•	*		•	•	•	•		•
	3b	drainage	Typical impact	\rightarrow		•		•						•	•	•	•	•			•	•	•
	4a	Demolition	Peak impact	•	•	\rightarrow	\rightarrow	•					\rightarrow	•	•	•	•	•		•	•	•	•
	4b		Typical impact	•	•			•	\rightarrow		•	•					•	•	\rightarrow	•	•	•	•
der	5a	Clearing	Peak impact		\rightarrow	\rightarrow	\rightarrow	•			\rightarrow	\rightarrow	\rightarrow	•	-	•		•		•	•	•	•
oulc	5b	g	Typical impact	\rightarrow				•						•	•	•	•	•		•	•	•	•
s sh	6a	Earthworks	Peak impact		\rightarrow	\rightarrow	\rightarrow	•			\rightarrow	\rightarrow	\rightarrow	•	-	•		•		•	•	•	•
nin	6b		Typical impact	\rightarrow		•		•						•	•	•	•	•		•	•	•	•
Morning shoulder	6c		Onsite truck haulage	•	•	•	•	•	•	•	•	•	•		•	•				•		•	•
	7a	Bridge works	Peak impact	•		•	•	•		\rightarrow	•		•	•	•	•	•	•	•	*	•	•	
	7b		Typical impact	•		•	•	•	•		•	•	•		•	•	•	•	•	•	•	•	•
	7c		Concrete works	•	•	•	•	•		•	•	•	•	•	•	•			•	•		•	•
	7d		Girder lifts	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	8a	Road works	Concrete works	\rightarrow	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
	8b		Typical works	\		•	•	•			•	•	•	•	•	•	•	•		•	•	•	•
	8c		Tie-in works		\Q	•	\Q	•		\Q	\Q	\Q	•	•		•		•			\	•	•
	9a	Signage, lighting landscaping	g and	\	•	•	•	•	•	•	•	♦	•	•	•	•	•	•	•	•	•	•	•
Key	to imp	acts: No exceeda	nce • Marginal	to minor	(1 dB to	10 dB)	♦ Mod	derate (1	1 dB to 2	20 dB)	High (>20 dB)											

Table 5-4 Predicted construction noise exceedances standard daytime – residential receivers

	ID	Scenario	Activity	Projec	ct as des	scribed	in the E	IS						Amen	ded pro	ject							
Period				NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary	Peak impact		•	•	•	•	•		•	•	•	•	•	•	•	•	•	-	•	*	*
	1b	facility establishment	Typical impact	•						•			•	•					•	•		•	•
	2a	Ancillary	Operation	•	•	•	•	•	•	\rightarrow	•	•	•		•	•	•	•	*	*	•	•	•
	2b	facility	Stockpiling		•	•	•	•	•		•	•		•	•	•	•	•			•	•	•
	2c	operations	Batching plant	•	•	•	•	•	•	\rightarrow	•	•	•		•	•	•	•	•	*	•	•	•
	2d	0,000.000.000	Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	•	•	•	•	•	•	\rightarrow	•	•	•
	3a	Utilities and	Peak impact		\rightarrow		\rightarrow	•			\rightarrow	\rightarrow	\rightarrow	•		•	•	•			•	•	•
	3b	drainage	Typical impact		•	•	•	•	\rightarrow		•	•	•	•	•	•	•	•	*	-	•		
	4a	Demolition	Peak impact	•	•			•			•	•	\rightarrow	•	•	•	•	•			•	•	•
	4b		Typical impact	•	•	•	•	•		\rightarrow	•	•	•		•	•	•	•	•	*	•	•	•
ne	5a	Clearing	Peak impact		\rightarrow		\rightarrow	•				\rightarrow		•		•	*	•			•	*	•
¥	5b]	Typical impact		•	•	•	•	\rightarrow		•		•	•	•	•	•	•	•		•	•	•
Z Da	6a	Earthworks	Peak impact	\rightarrow	\rightarrow			•				\rightarrow		•		•	•	•		_	•	*	•
darc	6b		Typical impact		•	•	•	•	\rightarrow		•		•	•	•	•	•	•	•	_	•	•	•
Standard Daytime	6c		Onsite truck haulage	•	•	•	•	•	•	•	•	•	•			٠	٠	٠	•			•	•
	7a	Bridge works	Peak impact	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•
	7b		Typical impact	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	7c		Concrete works	•	•	•	•	•	•	•	•	•	•	•		•				•	•		•
	7d		Girder lifts	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	8a	Road works	Concrete works	•	•	•	•	•	\	•	•		•	•	•	•	•	•	*	•	•	•	
	8b		Typical works			•	•	•	\rightarrow		•		•	·	•	•	•	•	*	•	•	•	•
	8c		Tie-in works	\Q		•	\	•	•		•		•	\		•	\			\rightarrow	\rightarrow	•	•
	9a	Signage, lighting landscaping	g and	,	•		•		\	•		•		•	•		•		•	•	•	•	
Key	to imp	acts: No exceeda	ince • Marginal	to minor	(1 dB to	10 dB)	♦ Mod	lerate (1	1 dB to 2	.0 dB)	High (>20 dB)											

Table 5-5 Predicted construction noise exceedances evening shoulder – residential receivers

	ID	Scenario	Activity	Projec	ct as des	scribed	in the E	IS						Amen	ded pro	ject							
Period				NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary	Peak impact	\rightarrow	\rightarrow	•	\rightarrow	•					\rightarrow	•	\rightarrow	•	*	•	•	•	*		*
	1b	facility establishment	Typical impact	•	•	•	•			•	•		•	•	•	•	•		•	•	•	•	•
	2a	Ancillary	Operation	•	•	•		•	•		•	•	•	•	•		•	•	*	*	•	•	
	2b	facility	Stockpiling			•	•	•	•		•	•	•	•	•		•	•	-	•	•	*	*
	2c	operations	Batching plant	•	•	•	•	•	•	\rightarrow	•	•	•		•	•	•	•	•	•	•	•	•
	2d	Ороганого	Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		•	•	•	•	•		*	•	*
	За	Utilities and	Peak impact			\rightarrow		•		•	\rightarrow		\rightarrow	•	•	*		•					•
	3b	drainage	Typical impact	\rightarrow		•		•	•	•		\rightarrow		•	•		*	•	•		•	*	
	4a	Demolition	Peak impact	•	•	\rightarrow	\rightarrow	•					\rightarrow	•	•	•	•		•	•	•		•
	4b	20	Typical impact	•	•	•	•	•	\rightarrow		•	•					•		*	•	•		•
er	5a	Clearing	Peak impact		\rightarrow	\rightarrow		•			\rightarrow		\rightarrow	•	-	•	_		•	•	•		•
pIn	5b		Typical impact	\rightarrow		•	•	•				\rightarrow		•	*		*		*	•	*	*	•
shc	6a	Earthworks	Peak impact		\rightarrow	\rightarrow		•			\rightarrow		\rightarrow	•	-	•			•	•	•		•
ing	6b		Typical impact	\rightarrow		•		•				\rightarrow		•	*		•		•	•	•	*	· '
Evening shoulder	6c		Onsite truck haulage	•	•	•	•	•	•	•	•	•	•		•	•	•	٠	٠	•	٠	•	•
	7a	Bridge works	Peak impact	•	\rightarrow	•	•	•	•	\rightarrow	•	\rightarrow	•	•	•	•	•	•	•	•	•	*	•
	7b		Typical impact	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•	•	•	•
	7c		Concrete works	•	•	•		•	•	•	•	•	•	•	•		•		•	•	•	•	•
	7d		Girder lifts	•		•	•	•	•	•	•		•	•	•		•	•	•	•	•	•	•
	8a	Road works	Concrete works	*	•		•	•	•	•	•	\	•	•	•		•		•	•	•	*	
	8b		Typical works	\Q		•		•			•	\Q		·	•	•	•	•	•	•	•	•	•
	8c		Tie-in works		\Q	•		•	•	\Q	\Q	\Q	•	\		•		•			\rightarrow	•	•
	9a	Signage, lighting landscaping	g and	,	•	\	•	,		•	•	•	,	•	•	•	•		•	•	•	•	•
Key	to imp	acts: No exceeda	nce • Marginal t	to minor	(1 dB to	10 dB)	♦ Mod	lerate (1	1 dB to 2	0 dB)	High (>20 dB)											

Table 5-6 Predicted construction noise exceedances evening – residential receivers

	ID	Scenario	Activity	Proje	ct as de	scribed	in the E	IS						Amer	nded pro	ject							
Period				NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary	Peak impact	•	•	•	•	•	•	•	•	•	•	•		•	•				•	•	•
	1b	facility establishment	Typical impact	•	•	•	•	•	•	•	•	•	•	•	•		•		-	-	•	•	•
	2a	Ancillary	Operation		•	•	•	•	•	•	•	•	•	•		•	•	•	•	*	•	•	•
	2b	facility	Stockpiling			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	*	*
	2c	operations	Batching plant	•	•	•	•	•	•	\rightarrow	•	•	•		•	•	•	•	•	•	•	•	•
	2d	opo.u.io.iio	Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	•	•	•	•	•	•		\rightarrow	•	•
	За	Utilities and	Peak impact	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	3b	drainage	Typical impact	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•		•	•
	4a	Demolition	Peak impact	•	•	•	•	•	•	•	•	•	•				•		•	•			
	4b		Typical impact	•	•	•	•	•	•	•	•	•	•				•		•	•			
	5a	Clearing	Peak impact	•	•	•	•	•	•	•	•	•	•				•		•	•			
ממ	5b	· · · · · · · · · · · · · · · ·	Typical impact	•	•	•	•	•	•	•	•	•	•				•		•	•			•
Evening	6a	Earthworks	Peak impact	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Eve	6b		Typical impact	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•
	6c		Onsite truck haulage	•	•	•	•	•	•	•	•	•	•				•		•	•		•	•
	7a	Bridge works	Peak impact	•	\rightarrow	•	•	•		\rightarrow	•	\rightarrow	•	•	•	•	•	•	•	•		*	•
	7b	Ü	Typical impact	•		•	•	•	•		•		•	•	•		•			•		•	•
	7с		Concrete works	•	•		•	•	•	•		•	•	•	•		•			•		•	
	7d		Girder lifts	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	8a	Road works	Concrete works	\rightarrow	•	•	•	•	•	•	•	\rightarrow	•	•	•	•	•		•	•	•	*	•
	8b		Typical works	•		•	•	•	•	•	•	•	•	· .	•	•	•	•	•	•	_ ·		
	8c		Tie-in works		\Q			•		\Q	\Q	\Q	•	\		•	\	•		\rightarrow	•	•	•
	9a	Signage, lightir	ng and		•	•	•	•	•	•	•	•			•		•		•	•		•	•
Key t	o impa	landscaping acts: No exceeda	ance • Marginal	to mino	r (1 dB t	o 10 dB)	• Mo	derate (11 dB to	20 dB)	■ High	n (>20 dE	3)										

Table 5-7 Predicted construction noise exceedances night-time – residential receivers

	ID	Scenario	Activity	Proje	ct as de	scribed	in the E	EIS						Amen	ded proj	ect							
Period				NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary	Peak impact	•	•	•		•	•	•	•	•	•										
	1b	facility establishment	Typical impact	•	•	•	•			•			•	•	•	•	•		•	•	•	•	•
	2a	Ancillary	Operation		•	•	\rightarrow	•	•		•	•		•	•		*		-		•	*	*
	2b	facility	Stockpiling	\rightarrow			\rightarrow	•	•		•	•	\rightarrow	•	•	•	*	•			*	*	•
	2c	operations	Batching plant	•	•	•	•	•	•	\rightarrow			•		•	•	•	•	•	*	*	•	\
	2d	- operanone	Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		•	•	•	•	•			•	•
	3a	Utilities and	Peak impact	•	•	•	•	•	•	•	•	•	•	٠	٠	•	٠	٠	٠	٠	•	٠	٠
	3b	drainage	Typical impact	٠	•		٠	٠	٠	٠	٠	٠	•		٠	•	٠	•	٠	٠	•	٠	
	4a	Demolition	Peak impact	•	•	•	•	•	•	•	•	•	•	•	•	٠	٠	٠	٠	٠	•	•	
	4b		Typical impact	•	•	•	•	•	•	•	•	•	•	•	٠	٠							
	5a	Clearing	Peak impact	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	٠	٠	•	•	•
Night-time	5b		Typical impact	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•		•		
ht-t	6a	Earthworks	Peak impact	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Nig	6b		Typical impact	•	•	•	•	•	•	•	•	•	•					•					
	6c		Onsite truck haulage	•	•	•	•	•	•	•	•	•	•			•	•	•	•				•
	7a	Bridge works	Peak impact	•	\rightarrow		*	•	\rightarrow	\Q		\rightarrow	•	•	\rightarrow	•	•	•	•	*	•	*	•
	7b		Typical impact	•	•	•	•	•	•	•		•	•	•	•		•		•	•		•	
	7c		Concrete works		•	•	\	•	•	•	•	•	•	•	•	•	•		•	•		•	
	7d	1	Girder lifts	•		•		•	•		•		•	•	•	•	•	•	•	•	*	•	•
	8a	Road works	Concrete works	\	\rightarrow	•	\				•	\rightarrow	•	•	•	•	•		-	-	•	•	•
	8b		Typical works	•	•	•	•	•	•	•	•	•	•		•		•		•	•	•	•	
	8c		Tie-in works		\Q	\Q		•	•	\rightarrow			•	\		•	\(\)		•	\	*		
	9a	Signage, lightir	ng and	•	•	•	•	•	•	•	•	•											•

5.1.1.4 Option 2

The design changes between the amended project option 1 and option 2 are limited to the area adjacent to Elizabeth Drive between Wallgrove Road and Duff Road, in NCA04. Therefore, construction airborne noise impacts in all other NCAs for the option 2 would be consistent with the impacts for option 1 detailed in **Table 5-3** to **Table 5-7**.

Due to the Elizabeth Drive connection extending the required works further north towards NCA04 (note that the overall construction footprint does not change, only the location of works within the footprint), there are some minor increases to the predicted noise impacts for the immediately surrounding area.

The closest residential receivers to the additional works for option 2 are predicted to have 'moderate impacts' for option 2, where 'minor impacts' are predicted for option 1 during all periods for the 'tie in works' scenario of the *Road Works*. A maximum increase of 5 dB is predicted at these most affected receivers for option 2 compared to option 1.

An additional three receivers adjacent to these works on Elizabeth Drive are predicted to be potential highly noise affected during the worst-case impacts from the option 2 construction.

The closest school (Irfan College), located in NCA04, is predicted to have 'high impacts' during the worst-case scenarios when noise intensive equipment is being used for option 2, where 'moderate impacts' were predicted for option 1.

5.1.2 Predicted impacts

The predicted construction noise impacts from work scenarios in each NCA are provided in the assessment tables and maps in **Annexure C**. The following section provides further detail on the scenarios which either result in impacts to the greatest number of receivers or are representative of the works with the longest duration. The scenarios are:

- Utilities and drainage, which is the scenario with the predicted worst-case impacts during standard daytime hours (ie the highest predicted NML exceedances and the greatest number of receivers affected)
- Road works Tie in works which is the scenario with the predicted worst-case impacts during the night-time period (ie the highest predicted NML exceedances and the greatest number of receivers affected)
- Earthworks and ancillary facility operations (stockpiling) which are the two longest duration scenarios.

5.1.2.5 Worst-case scenarios

Utilities and drainage – all locations

The worst-case construction impacts during Utilities and drainage are predicted when noise intensive equipment like concrete saws or rock-breakers are in use. The predicted daytime impacts during Utilities and drainage are show in:

- **Figure 5-2** Scenario 3a, Utilities and drainage Peak impact, when noise intensive equipment is being used as part of these works
- **Figure 5-3** Scenario 3b, Utilities and drainage Typical impact. For works when typical activities are being completed that do not require noise intensive equipment.

Utilities and drainage works are anticipated to last for 132 weeks, however within that, the 'peak impact' works are indicatively scheduled to take 35 weeks.

Noise intensive equipment would be required for the 'peak impact' works with rock-breakers and concrete saws being used as required.

This is consistent for option 1 and option 2.

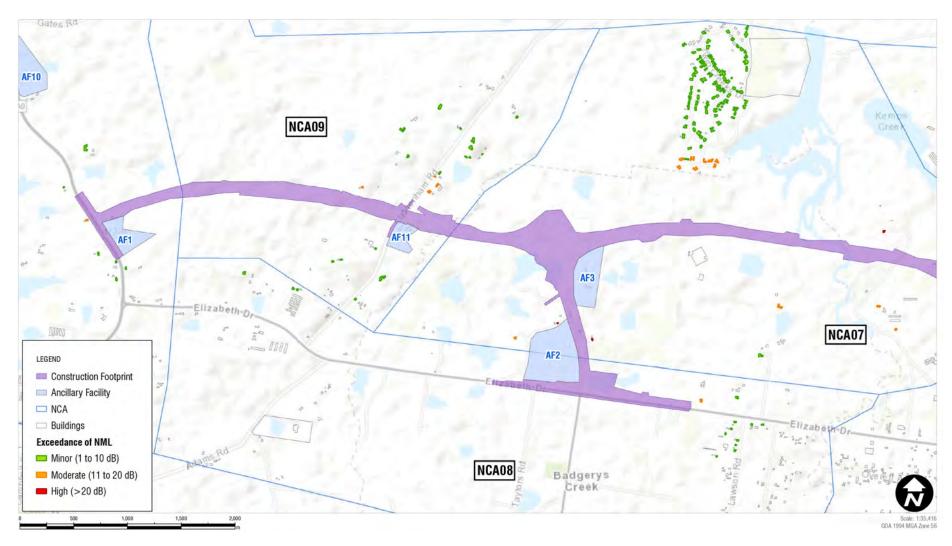


Figure 5-2 Predicted impacts 'scenario 3a, Utilities and drainage - peak impact' in all locations (daytime) for the amended project

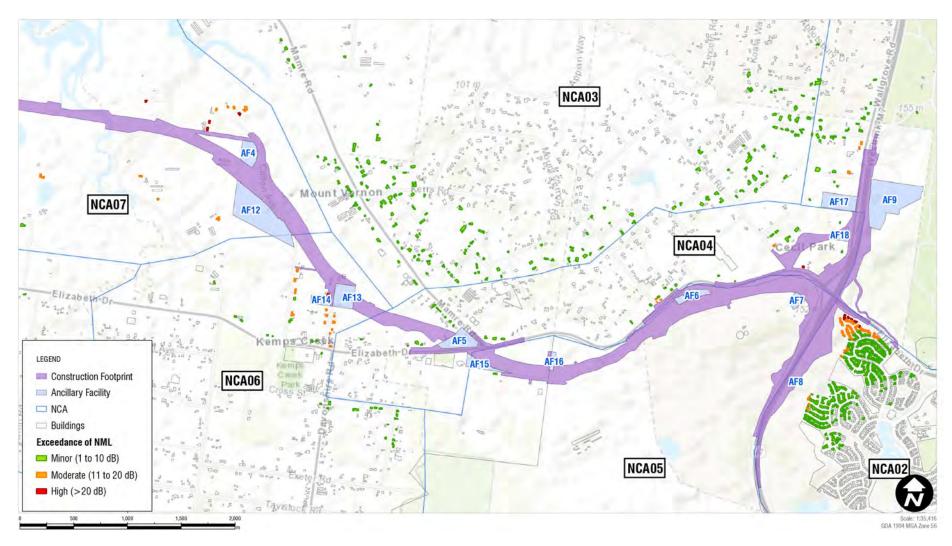


Figure 5-2 Predicted impacts 'scenario 3a, Utilities and drainage - peak impact' in all locations (daytime) for the amended project

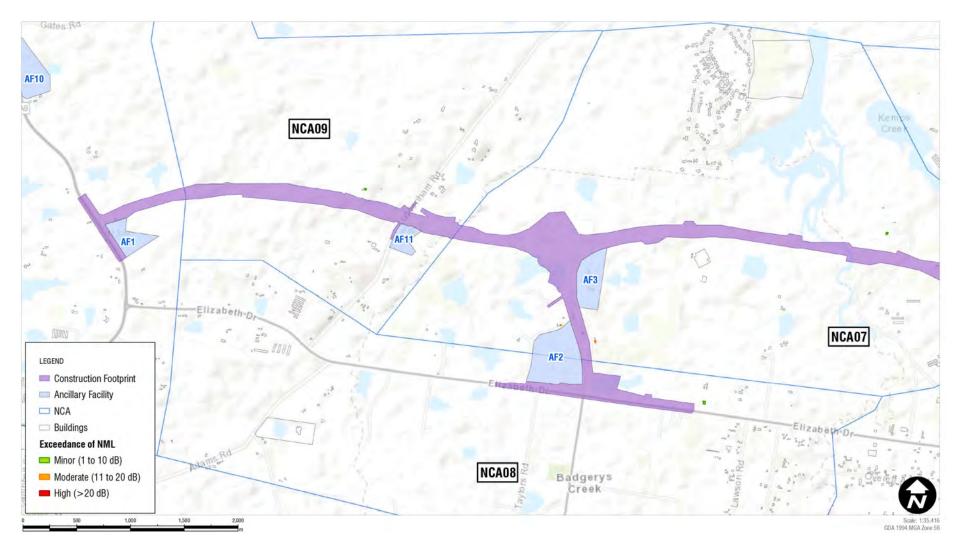


Figure 5-3 Predicted impacts 'scenario 3b, Utilities and drainage, typical impact' in all locations (daytime) for the amended project

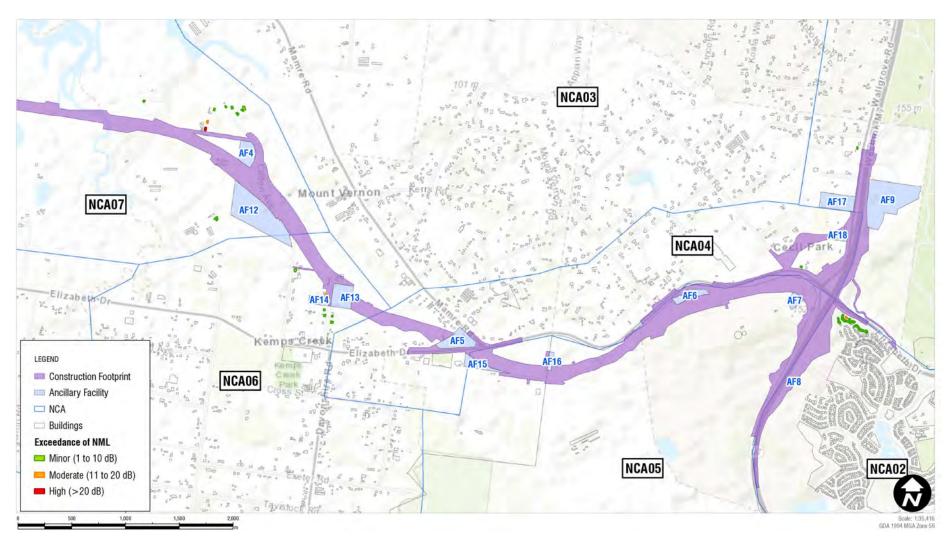


Figure 5-3 Predicted impacts 'scenario 3b, Utilities and drainage, typical impact' in all locations (daytime) for the amended project

The above assessment shows that for 'Peak impact' works, certain receivers are predicted to have 'high' impacts during standard daytime hours, which is due to noise intensive equipment such as rock-breakers or concrete saws being required during various stages of the works. The most affected locations are:

- Densely clustered receivers to the south of Elizabeth Drive in NCA02, where 'high' worst-case
 impacts are predicted at seven receivers and more distant receivers having 'moderate' and
 'minor' impacts. This is an increase in impact when compared to the project as described in the
 EIS, which predicted 'moderate' worst-case impacts due to the greater separation distance to
 works on Elizabeth Drive.
- Receivers to the south of the construction footprint in NCA06, around Salisbury Avenue located between the amended project and Elizabeth Drive, where one receiver is predicted to have 'high' impacts with several more having 'moderate' impacts. This is a decrease of one receiver predicted to have 'high' impacts when compared to the project as described in the EIS due to one receiver now lying within the footprint of the expanded construction footprint including AF13 and AF14 in this NCA, and as such, will not be occupied during construction works.
- Receivers to the north of the construction footprint in NCA07 and around AF2 where six receivers have 'high' impacts, with more distant receivers having 'moderate' and 'minor' impacts. This is consistent with the project as described in the EIS.

This is consistent for option 1 and option 2.

During 'Typical impact' works, when noise intensive equipment is not being used, the noise levels would be substantially lower resulting in fewer affected receivers. The worst-case impacts are generally reduced from 'high' to 'moderate' at the most affected front row receivers. Many receivers where impacts are predicted during 'peak impact' works do not exceed the criteria during 'typical impact' works due to the reduced noise levels. This is consistent with the impacts as described in the EIS.

The impacts presented above are based on all equipment working in each assessed scenario. There would frequently be periods when construction noise levels are much lower than worst-case and there would be times when no equipment is in use and there are no impacts, consistent with the EIS.

Road Works - Tie-in works

Option 1

The worst-case construction impacts during Road works – Tie in works are predicted when noise intensive equipment like concrete saws are in use. The predicted night-time impacts during Road works – Tie in works are shown in **Figure 5-5**. These works maybe required outside of standard construction hours to minimise impacts to local traffic and to ensure the safety of the workers and nearby pedestrians.

Road works – Tie in works are anticipated to last for 48 weeks however would occur in discrete locations. These areas include works around the Elizabeth Drive - M7 Motorway interchange, Elizabeth Drive at the Airport Access Road, and Wallgrove Road. Works around the shared user path connection to Elizabeth Drive near Mamre Road, and the utility access road off Elizabeth Drive opposite Duff Road may need to occur outside standard hours.

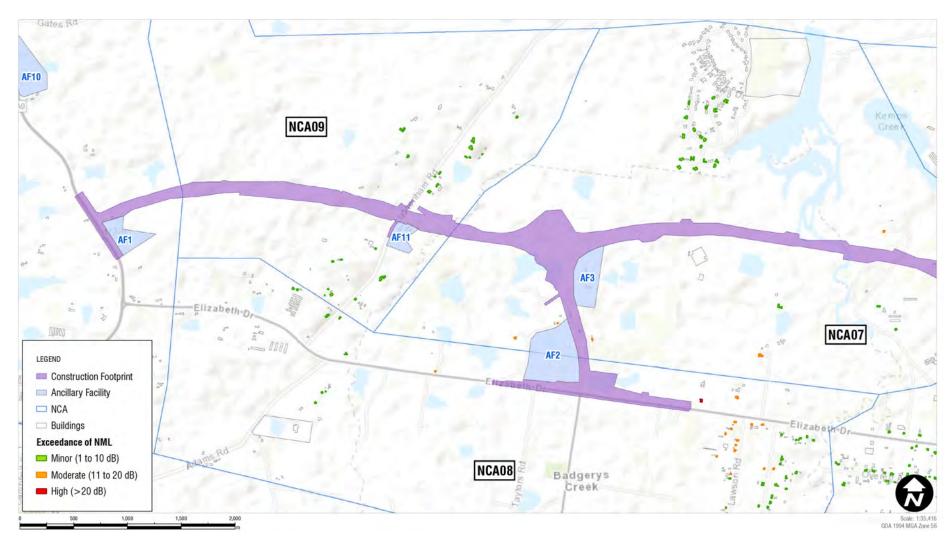


Figure 5-4 Predicted impacts 'scenario 8c, Road works – Tie-in works in all locations (night-time) for the amended project

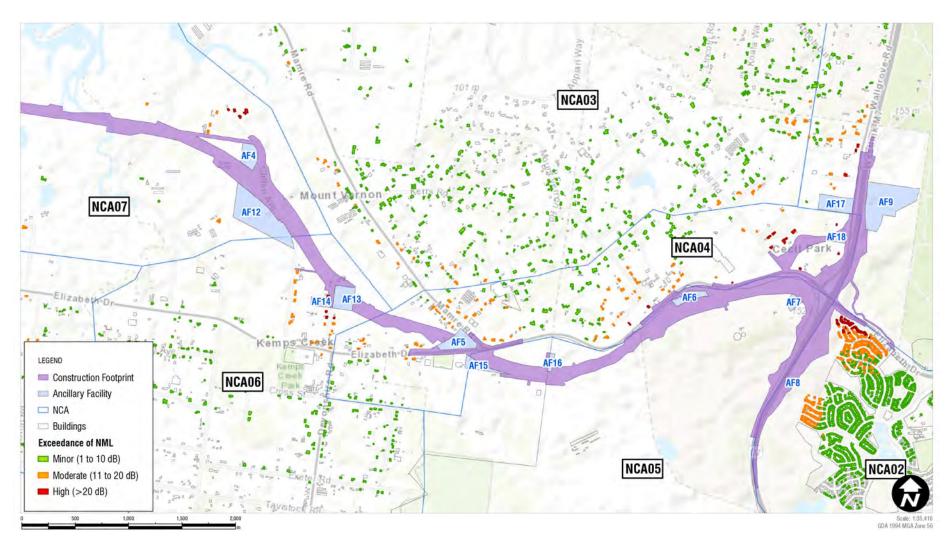


Figure 5-4 Predicted impacts 'scenario 8c, Road works – Tie-in works in all locations (night-time) for the amended project

The results show that for Road works – Tie in works, some receivers are predicted to have 'high' impacts during the night-time period, which is due to noise intensive equipment such as a concrete saw being required during stages of the works. The most affected locations are:

- 11 receivers to the north of Elizabeth Drive around the M7 Motorway and Wallgrove Road in NCA01 and NCA04, are predicted to have 'high' worst-case impacts, due to tie in works along Elizabeth Drive (east of Duff Rd), on Cecil Rd, on Wallgrove Road and on the M7 Motorway. Two additional receivers are predicted to have 'high' impacts when compared to the project as described in the EIS due to the expanded construction footprint around the realigned Wallgrove Road
- 26 receivers to the south of Elizabeth Drive in NCA02, adjacent to works on Elizabeth Drive, are
 predicted to have 'high' worst-case impacts due to the tie in works on Elizabeth Drive. A further
 185 receivers have 'moderate' impacts, due to the tie in works on Elizabeth Drive and the M7
 southbound on ramps. This is an increase from the 68 'moderate' receivers described in the EIS
 due to additional works on Elizabeth Drive associated with the amended project.
- Four receivers to the north of the construction footprint adjacent to the utility access road in NCA04 are predicted to have 'high' worst-case impacts with more distant receivers having 'moderate' and 'minor' impacts depending on the distance from the tie-in works. Two additional receivers are affected when compared to the project as described in the EIS due to the adjustment of the works location to accommodate the expanded works on Elizabeth Drive.
- Four receivers to the south of the amended construction footprint, adjacent to the relocated Salisbury Avenue cul-de-sac in NCA06, and five receivers to the north of the construction footprint, adjacent to the realignment of Clifton Avenue in NCA07, are predicted to have 'high' worst-case impacts with more distant receivers having 'moderate' and 'minor' impacts (including around the Mamre Road intersection with Elizabeth Drive). These impacts are generally additional to what was described in the EIS due to the more extensive tie in works associated with the establishment of the additional ancillary facilities in this area.
- One receiver in NCA08 adjacent to the Elizabeth Drive works over the Airport Access Road is
 predicted to have 'high' worst-case impacts with several more receivers to the north and east
 having 'moderate' impacts. This is consistent with the project as described in the EIS.

The impacts presented above are based on all equipment working simultaneously. When the concrete saw is not being used, the noise levels would generally be 10 dB lower and thus have a much lower impact. Due to the variable nature of the works, there would frequently be periods when construction noise levels are much lower along with periods when no equipment is in use and there are no impacts.

Option 2

The impacts presented above are mostly consistent for option 1 and option 2. However, in NCA04 adjacent to the option 2 tie into Elizabeth Drive, the closest residential receivers to the additional works are predicted to have 'moderate impacts'. In this same area for option 1, 'minor impacts' are predicted during all periods for the 'tie in works' scenario of the *Road Works*. A maximum increase of 5 dB is predicted at these most affected receivers for option 2 when compared to option 1.

Longest duration scenario

The longest duration works scenario is earthworks and ancillary facility operations (stockpiling). Earthworks are generally required along the entire construction footprint including importing and exporting of spoil. Peak noise impact works would be required at certain times and would include the use of dozers and other noise intensive equipment. Stockpiling would generally be required at

each of the ancillary facilities identified in **Figure 4-1** and **Figure 4-2** and would occur for the full duration of the amended project.

Earthworks

The predicted daytime impacts are shown in **Figure 5-5** – Scenario 6a Earthworks - peak impact, where noise intensive equipment is being used as part of these works and **Figure 5-6** – Scenario 6b Earthworks, typical impact when general works are being completed.

Earthworks works are anticipated to last for 144 weeks, however within that the 'peak impact' works are scheduled to indicatively take 80 weeks across the whole amended project.

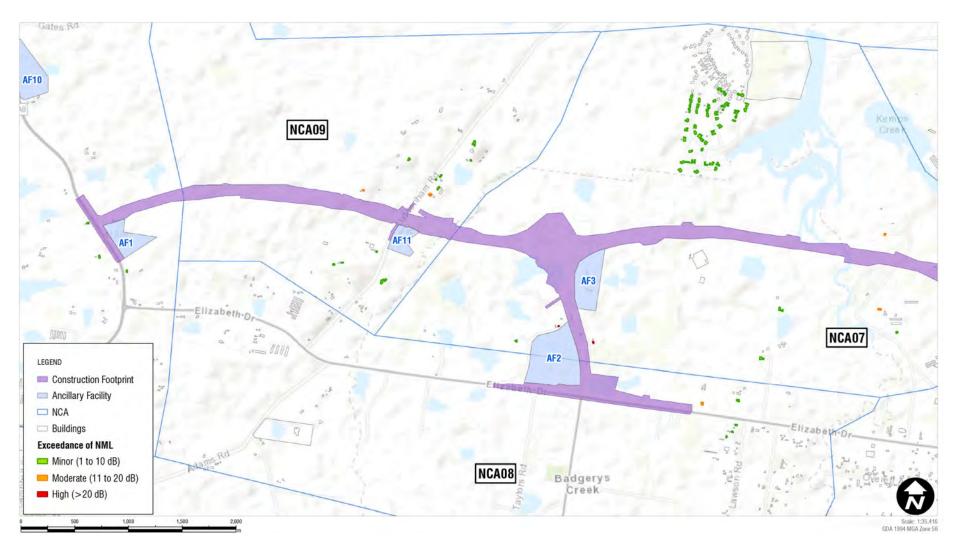


Figure 5-5 Predicted impacts 'scenario 6a, earthworks - peak impact' in all locations (daytime) for the amended project

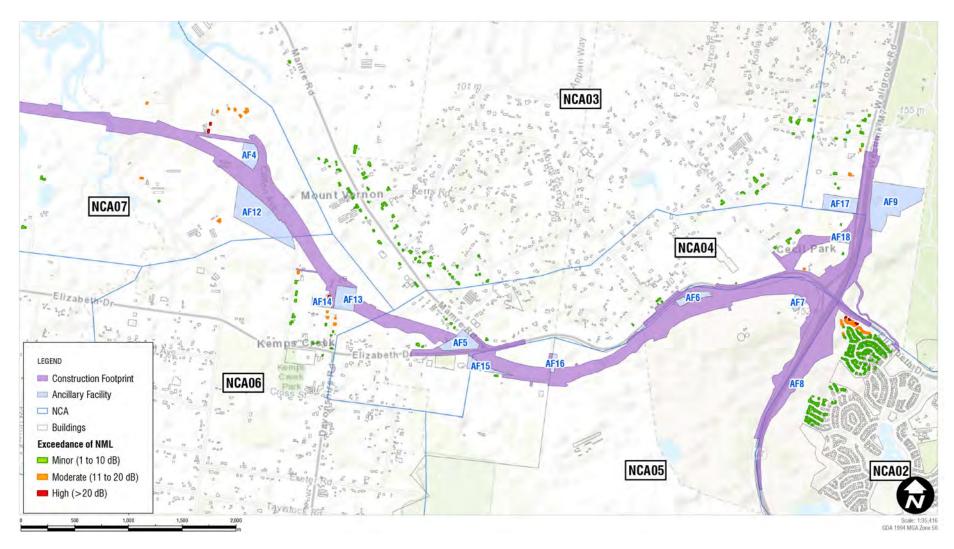


Figure 5-5 Predicted impacts 'scenario 6a, earthworks - peak impact' in all locations (daytime) for the amended project

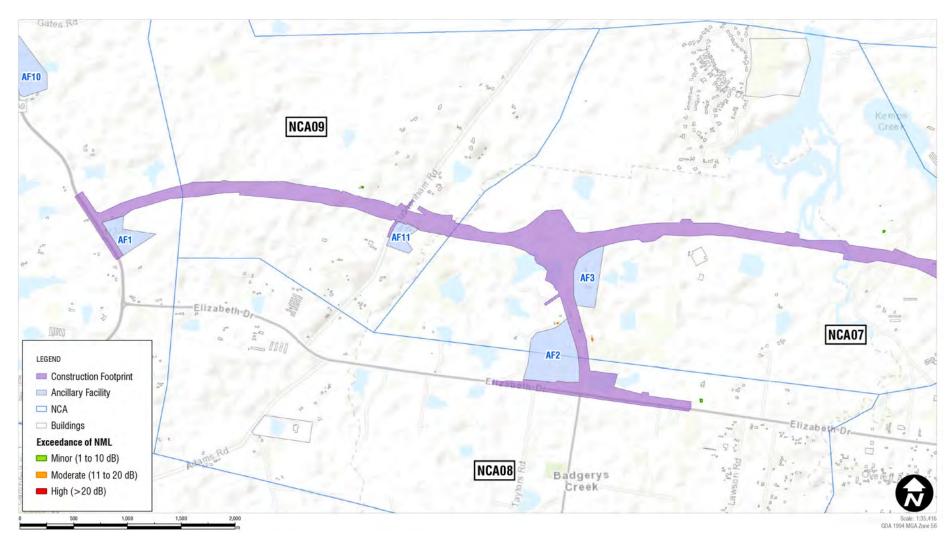


Figure 5-6 Predicted impacts 'scenario 6b, earthworks - typical impact' in all locations (daytime) for the amended project



Figure 5-6 Predicted impacts 'scenario 6b, earthworks - typical impact' in all locations (daytime) for the amended project

The above shows that for 'Peak impact' works, receivers are predicted to have 'high' impacts due to noise intensive plant and equipment such as dozers being required during stages of these works. The most affected locations are:

- To the south of Elizabeth Drive in NCA02, where receivers are densely clustered 'high' worstcase impacts are predicted at three receivers, with several more having 'moderate' impacts.
 These impacts are additional to those described in the EIS due to works on Elizabeth Drive to the east of the M7 Motorway associated with the amended project.
- To the south of the construction footprint in NCA06, around Salisbury Avenue and between the amended project and Elizabeth Drive, where one receiver is predicted to have 'high' impacts and several more having 'moderate' impacts. This is a minor decrease (one receiver) of receivers predicted to have 'high' impacts when compared to the project as described in the EIS as the closest receiver to the works now lies within the expanded ancillary facility AF13, and as such, will not be occupied during construction works.
- In NCA07 near AF4 and adjacent to AF2, where four receivers have 'high' impacts, with more distant receivers having 'moderate' and 'minor' impacts, depending on their distance from the works. This is consistent with the project as described in the EIS.

The above impacts are consistent between option 1 and option 2.

During 'typical impact' works, when noise intensive equipment is not being used, the noise levels would be substantially lower with much fewer receivers affected. The worst-case impacts are reduced to 'moderate' and 'minor' at the most affected front row receivers except for one receiver near AF4 in NCA07 which is predicted to have 'high' impacts due to the proximity to the works. This is consistent with the project as described in the EIS.

The impacts presented above are based on all equipment working in each assessed scenario. There would frequently be periods when construction noise levels are much lower than worst-case levels and there would be times when no equipment is in use and the impacts are much lower.

Ancillary facility operations (stockpiling)

The predicted night-time impacts during ancillary facility operations (stockpiling) are shown in **Figure 5-7**. 24-hour operation of a number of the ancillary facilities is anticipated to occur for the duration of the amended project. Consistent with the project as described in the EIS, 24-hour operations have conservatively been modelled at all ancillary facilities.

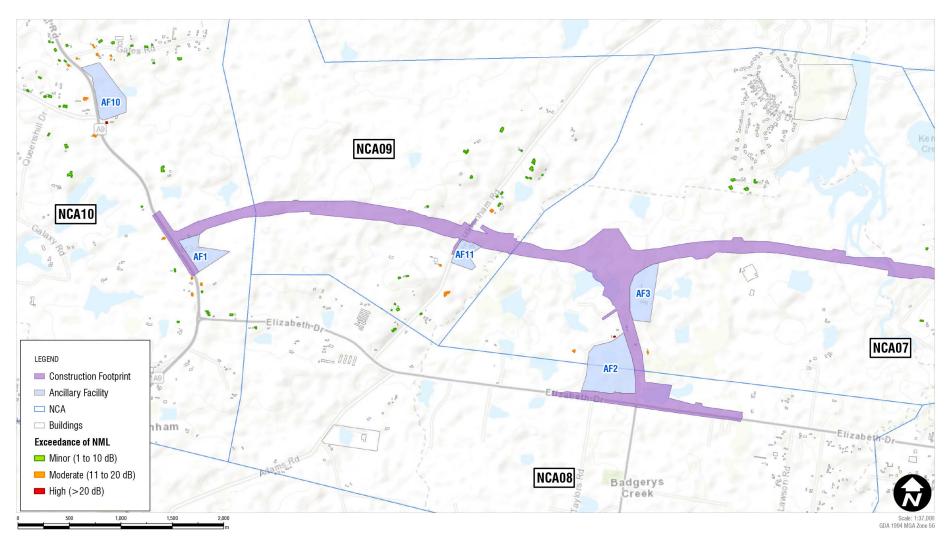


Figure 5-7 Predicted Impacts 'Scenario 2b, Ancillary facilities (stockpiling)' in All Locations (Night-time) for the amended project

Note: Construction works contributing to the impacts shown in this figure are located within the ancillary facilities (refer to **Figure 4-1**).

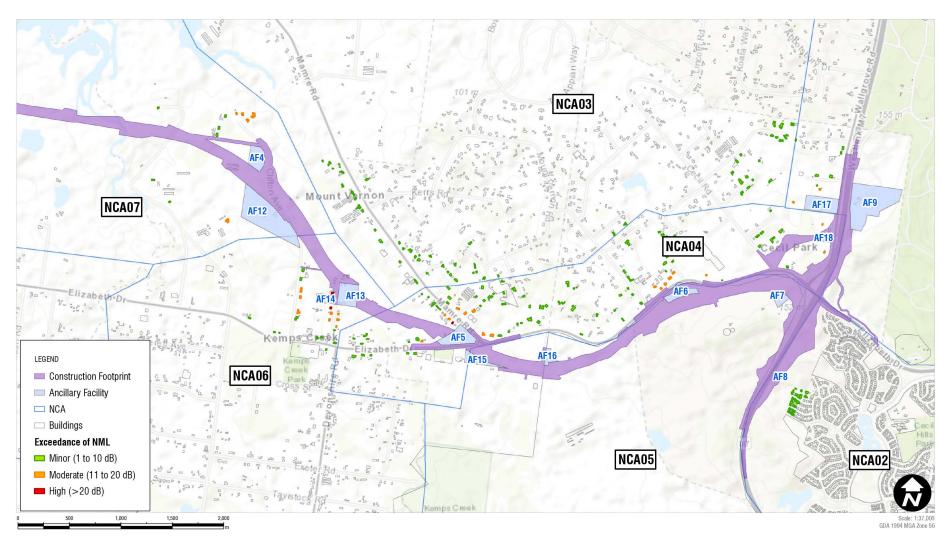


Figure 5-7 Predicted Impacts 'Scenario 2b, Ancillary facilities (stockpiling)' in All Locations (Night-time) for the amended project

Note: Construction works contributing to the impacts shown in this figure are located within the ancillary facilities (refer to **Figure 4-1**).

The above shows that during stockpiling works at each ancillary facility, 'high impacts' are predicted during the night-time periods at the closest receivers to several of the ancillary facility locations due to their immediate proximity to the works. This is consistent for option 1 and option 2. The impacts are summarised below:

- Near AF7, AF9, AF17 and AF18 in NCA01 and NCA04 four receivers are predicted to have 'moderate' impacts with receivers further from the sites having 'minor' impacts.
- Near AF8 in NCA02 the nearby receivers are predicted to have 'minor' impacts.
- Near AF6 in NCA04 five receivers are predicted to have 'moderate' impacts with receivers further from the site having 'minor' impacts.
- Near AF5, AF15 and AF16 in NCA04 eight receivers are predicted to have 'moderate' impacts with receivers further from the sites (including in NCA03) having 'minor' impacts.
- Near AF13 and AF14 in NCA06 two receivers are predicted to have 'high' impacts with a further seven receivers with 'moderate' impacts. Receivers further from the sites (including in NCA03 and NCA04) generally have 'minor' impacts.
- Near AF4 and AF12 in NCA07 five receivers are predicted to have 'moderate' impacts with receivers further from the sites having 'minor' impacts.
- Near AF2 and AF3 in NCA07 three receivers are predicted to have 'moderate' impacts with receivers further from the sites (north of the M12 Motorway) having 'minor' impacts.
- Near AF11 in NCA09 three receivers are predicted to have 'moderate' impacts with receivers further from the site (including in NCA08) having 'minor' impacts.
- Near AF1 in NCA10 three receivers are predicted to have 'moderate' impacts with receivers further from the site having 'minor' impacts.
- Near AF10 in NCA10 one receiver is predicted to have 'high' impacts with a further nine receivers with 'moderate' impacts. Receivers further from the site generally have 'minor' impacts.

The above impacts are generally an increase in impacts when compared to the project as described in the EIS due to the additional ancillary facilities impacting a greater number of receivers.

The impacts presented for the amended project are based on all equipment working in each assessed scenario. There would frequently be periods when construction noise levels are much lower than worst-case levels and there would be times when no equipment is in use resulting in no impacts. Additionally, as works are confined to within the facility, site hoarding can be used effectively to mitigate noise impacts.

5.1.2.6 Works in one location

The above assessments present the impacts from the various construction scenarios assuming works are occurring at the closest location to each receiver. In reality, works would occur at discrete locations and move around the construction footprint, which would limit the potential impacts to receivers which are near to each individual work site. This shows that individual receivers may be affected by varying levels of noise over the duration of the amended project, not the worst-case predicted noise levels for the whole duration of the amended project.

The potential impacts when works are distant from the nearest receivers have been simulated by modelling the 'Earthworks -peak impact' scenario occurring in one location. The works have been modelled at a single location to the north of Elizabeth Drive and west of Mamre Road on the border of NCA06 and NCA07. This location has been selected as an example of works occurring in one location. Impacts at other single locations within the construction footprint would generally be consistent relative to this location. This is consistent with the project as described in the EIS.

Figure 5-8 shows the predicted noise levels over the study area for works occurring over the whole construction footprint, while Figure 5-9 shows the predicted noise levels over the study area for works occurring in a single location.

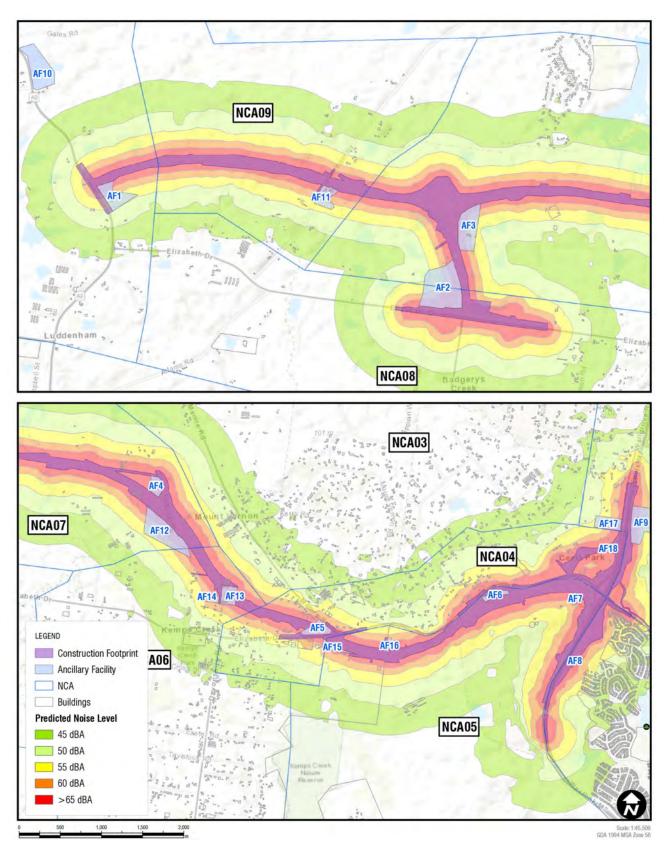


Figure 5-8 Predicted noise contours, 'Scenario 6a, earthworks – Peak impact – whole amended project

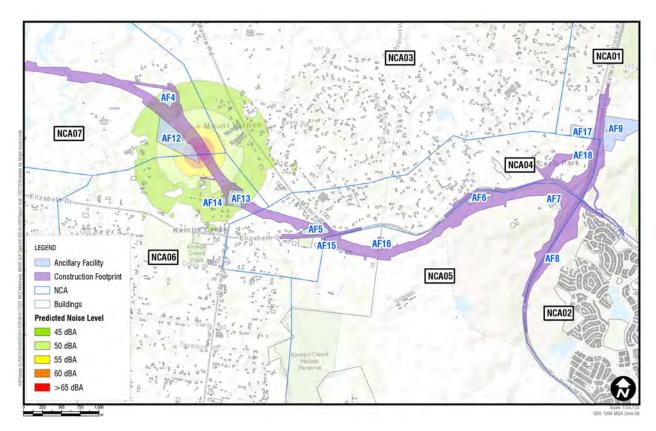


Figure 5-9 Predicted noise contours, 'Scenario 6a, earthworks – Peak impact – single location for the amended project

Figure 5-8 and **Figure 5-9** show that when highly noise intensive works are occurring in a single location, the impacts are limited to receivers within 800 metres of the works. Receivers in the rest of the study area are predicted to be compliant with the noise management levels. This is consistent for option 1 and option 2.

The potential impacts during 'Earthworks -Typical impact', which generates much lower noise levels, would be less than the example shown above.

5.1.3 Highly noise affected residential receivers

5.1.3.7 Option 1

Residential receivers that are subject to noise levels of 75 dBA or greater are considered highly noise affected. Receivers can be highly noise affected when noise intensive equipment is being used close to residents.

The receivers which have potential to be highly noise affected during the worst-case impacts from the amended project option 1 are shown in **Table 5-8** and shown in **Figure 5-10**.

The predictions assume the worst-case scenarios are occurring at the closet location to each receiver and therefore present all highly noise affected receivers in one assessment. In reality, works would occur in isolated locations and the number of highly noise affected receivers during any single works period would be less than shown.

Table 5-8 Number of predicted highly noise affected residential receivers

			Proje	ect as de	escribed	in the	EIS						Ame	nded pr	oject							
ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
1a	Ancillary facility	Peak impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
1b	establishment	Typical impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2a	Ancillary facilities	Operation	-	-	•	-	-	-	-	-	-	-		1	-	1	-	-	-	-	-	-
2b	lacilities	Stockpiling	-	-	•	-	-	-	-	-	-	-		1	-	1	-	-	-	-	-	-
2c		Batching plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2d		Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	-
3a	Utilities and drainage	Peak impact	2	-	-	2	-	2	1	-	-	-	-	7	-	2	-	1	1	-	-	-
3b		Typical impact	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
4b		Typical impact	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
5a	Clearing	Peak impact	1	-	•	1	1	1	1	-	•	1	1	4	-	1	1	1	1	1	-	-
5b		Typical impact	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
6a	Earthworks	Peak impact	1	-	•	•	1	1	1	-	•	1	1	3	-	1	1	1	1	1	-	-
6b		Typical impact	-	-	•	•	•	•	1	-	•	1	•	ı	-	ı	ı	-	-	•	-	-
6c		Onsite truck haulage	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
7a	Bridge works	Peak impact	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
7b		Typical impact	-	-	•	•	1	1	1	-	•	1	1	1	-	1	1	-	-	1	-	-
7c		Concrete works	-	-			-	-	-	-		-		1		1	-	-	-	-	-	-
7d		Girder lifts	-			-	-	-	-	-		-	-	-		-	-	-	-	-	-	-
8a	Road works	Concrete works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8b		Typical works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8c	_ ,		1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
9a	Signage, lightin	g and landscaping	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

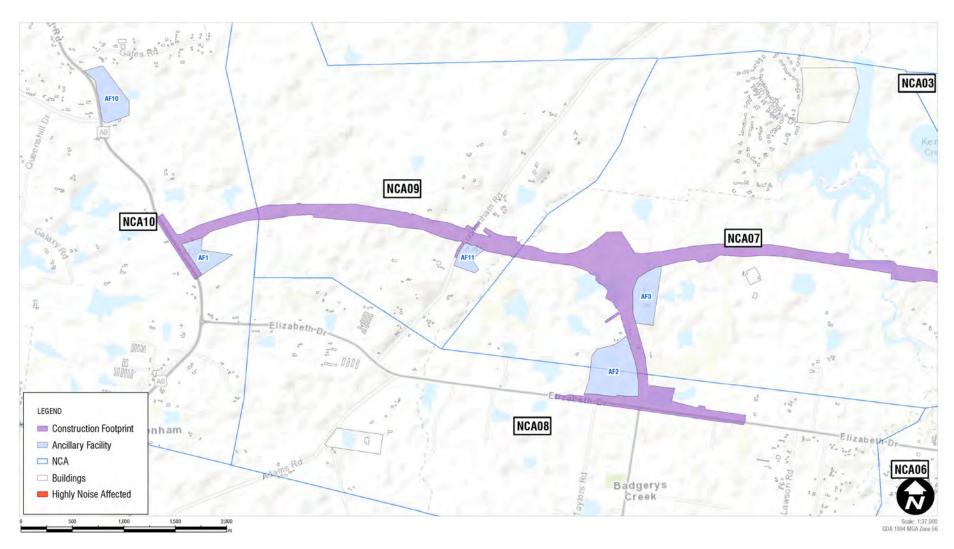


Figure 5-10 Highly noise affected residential receivers (all works) for the amended project

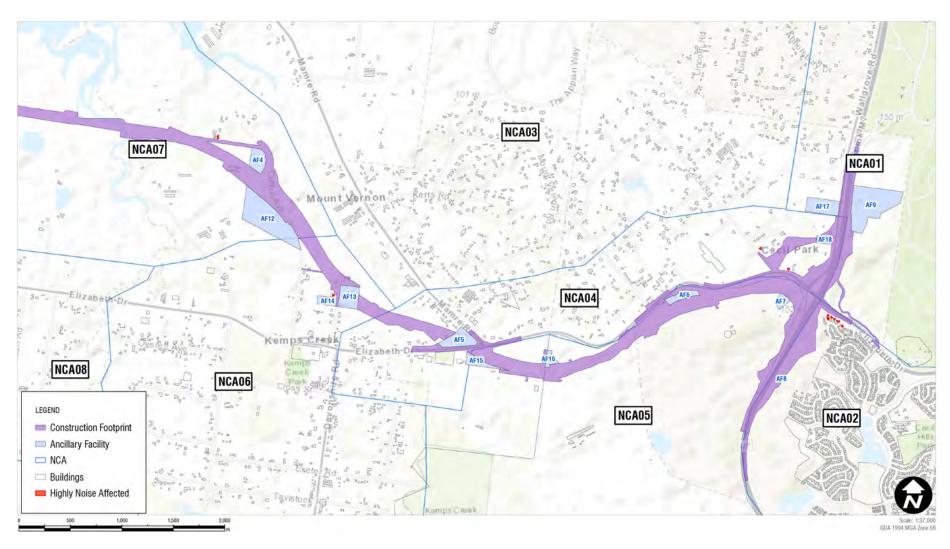


Figure 5-10 Highly noise affected residential receivers (all works) for the amended project

Eleven receivers in total may be subject to construction noise levels above the highly noise affected threshold due to the amended project and these receivers are located in:

- NCA02, to the east of the M7 Motorway and south of Elizabeth Drive
- NCA04, to the north of Elizabeth Drive
- · NCA06, on Salisbury Road
- NCA07, to the north of the amended project on Clifton Avenue.

This is an increase of four residential receivers when compared to the project as described in the EIS. This increase occurs primarily in NCA02 due to the amended project works on Elizabeth Drive. It is noted that two receivers in NCA01 are no longer highly noise affected as the closest receivers to the works now lie within the expanded ancillary facility AF9, and as such, will not be occupied during construction works.

Highly noise affected impacts may occur during works associated with Utilities and drainage, Clearing, Earthworks and Road works.

Highly noise affected receivers are typically dwellings which are close to the amended project and have direct line-of-sight to the nearest works. While certain receivers are predicted to be highly noise affected, this would only occur when high noise generating works are being carried out near to a particular residential receiver, and would only be apparent for relatively short periods.

5.1.3.8 Option 2

Highly noise affected receivers are mostly consistent for option 1 and option 2. An additional three receivers on in NCA04 adjacent to the additional works on Elizabeth Drive for option 2 are predicted to potentially be highly noise affected during the worst-case impacts from the option 2 construction.

5.1.4 'Other' sensitive receivers

There are several categories of 'other' sensitive receivers in the study area, including educational facilities, places of worship and outdoor areas.

5.1.4.9 Option 1

The predicted NML exceedances for 'other' sensitive receivers are summarised in **Table 5-9**. The summary is for all NCAs and shows the impacts in bands of 10 dB above the corresponding NML, separately by receiver type. The predicted worst-case impacts at 'other' sensitive receivers in the study area is shown in **Figure 5-11**.

Table 5-9 Overview of 'Other' Sensitive Receiver NML Exceedances

							Project	as de	scribed	l in EIS	;								A	mende	d proje	ct				
				lucation NCA04			lcare c NCA02			e of wo			mainir .04, N0			ducatio			lcare c NCA02			e of wo NCA01			emainir .04, NC	
			Ξ	Daytim	е		Daytime	W		Daytime	0		Daytim	е	[Daytim ₍	Ф	[Daytime	е		Daytime	W.	[Daytim	е
			1-10 dB	11-20 dB	>20 dB	1-10 dB	1-10 dB	11-20 dB	>20 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	1-10 dB	11-20 dB	>20 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
ID	Scenario	Activity	← .	+	Α -	T .	—	1	, A	+	Α -	—	-	Λ -		←	, X -			+	, X -	<u></u>	Λ -		+	X -
1 a	Ancillary facility	Peak impact	5	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-
1b	establishment	Typical impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2a		Operation	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-
2b	Ancillary	Stockpiling	-	-	•	-	-	ı	•	-	-	-	ı	-	-	-	-	-	-	-	-	ı	1	-	-	-
2c	facilities	Batching plant	-	-	•	-	-	ı	•	-	-	-	ı	-	-	-	-	-	-	-	-	ı	1	-	-	-
2d		Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a												
3a	Utilities and	Peak impact	-	5	ı	1	-	ı	1	-	ı	2	1	-	1	4	-	1	-	-	1	ı	ı	2	-	-
3b	drainage	Typical impact	2	-	-	-	-	ı	-	-	-	-	ı	-	-	-	-	-	-	-	-	ı	ı	-	-	-
4a	Demolition	Peak impact	-	1	ı	-	-	ı	ı	-	ı	-	1	-	-	-	-	•	-	-	-	ı	ı	-	-	-
4b	Demontion	Typical impact	-	-	•	-	-	ı	•	-	-	-	ı	-	-	-	-	-	-	-	-	ı	1	-	-	-
5a	Clearing	Peak impact	1	4	-	-	-	-	-	-	-	1	•	-	5	-	-	-	-	-	-	-	-	1	-	-
5b	Clearing	Typical impact	2	-	•	-	-	ı	•	-	-	-	ı	-	-	-	-	-	-	-	-	ı	1	-	-	-
6a		Peak impact	3	2	-	-	-	-	-	-	-	1	-	-	5	-	-	-	-	-	-	-	-	1	-	-
6b	Earthworks	Typical impact	2	-	-	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	-	-	-	-	-	-	-
6c		Onsite truck haulage		,	,	1	1	1	,	1	,	1	,	1	-	-	-	ı	-	ı	1	1	ı	-	-	-
7a		Peak impact	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
7b		Typical impact	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
7c	Bridge works	Concrete works	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
7d		Girder lifts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

							Project	as de	scribed	in EIS	;								A	mende	d proje	ect				
				ducatio		7	lcare c NCA02			of wo			mainir .04, NC			lucatior NCA04			care c NCA02			e of wo			mainin .04, NC	
				Daytim ₍	е	[Daytime		e Daytir		,		Daytim	е		Daytime		Г	Daytime	е	[Daytime	(i)	[Daytime	þ
			1-10 dB	1-20 dB	•20 dB	1-10 dB	1-10 dB	1-20 dB	>20 dB	1-20 dB	>20 dB	1-10 dB	1-20 dB	>20 dB	-10 dB	1-20 dB	>20 dB	1-10 dB	1-10 dB	1-20 dB	>20 dB	1-20 dB	>20 dB	-10 dB	1-20 dB	>20 dB
ID	Scenario	Activity	1	1,	٨٠	1	1	1.	ζ)) . [()) . [(1,	Λ Ο	1) 	1,	٨٠	1.	ζ)) 	1.	Λ 3
8a		Concrete works	1	-	-	-				-	-	-	-	-	-	-	-		-	-	-	-	1	-		-
8b	Road works	Typical works	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8c		Tie-in works	1	4	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
9a	9a Signage, lighting and landscaping		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note 1: Remaining refers to outdoor active recreational areas and outdoor passive recreational areas.

Note 2: Cell shading indicates highest predicted exceedance of NML for worst-case proposed operating period; green = minor (less than 10 dB), orange = moderate (11-20 dB), red = high (greater than 20 dB)

Note 3: The number of exceedances refers to individual buildings.

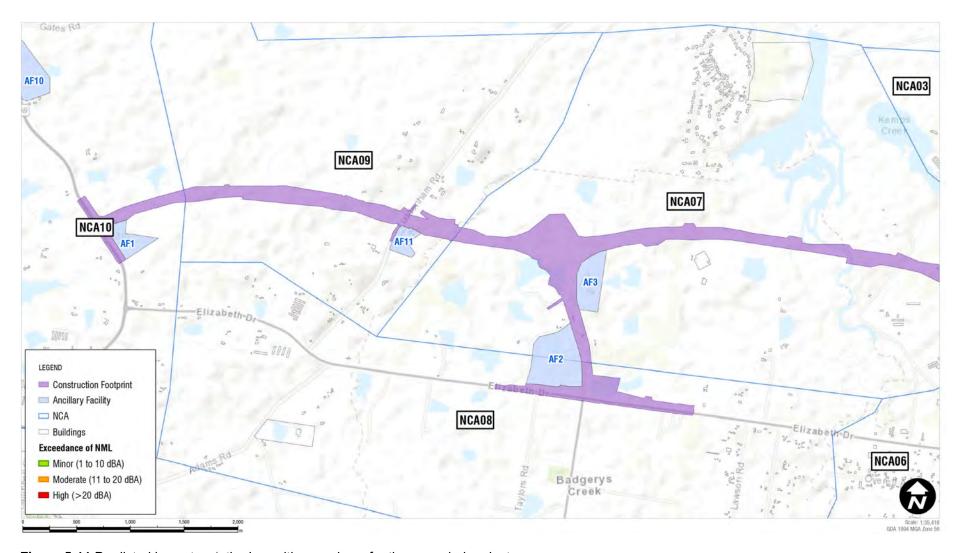


Figure 5-11 Predicted impacts – 'other' sensitive receivers for the amended project

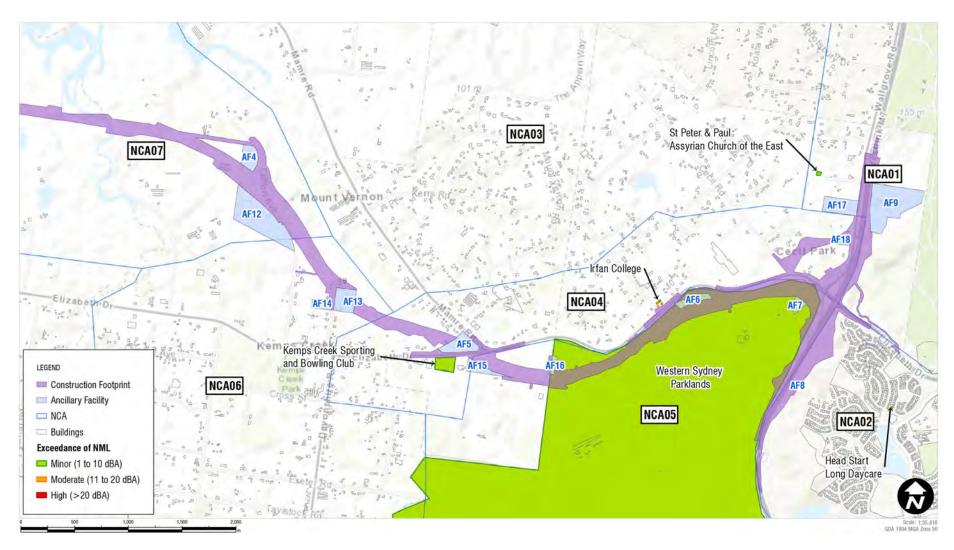


Figure 5-11 Predicted impacts – 'other' sensitive receivers for the amended project

These results show the following:

- Exceedances at 'other' sensitive receivers are limited to receivers in NCA01, NCA02, NCA04 and NCA05
- The closest School (Irfan College) located in NCA04 is likely to be subject to 'moderate' impacts during worst-case scenarios when noise intensive equipment is being used
- A minor 1 dB exceedance is predicted at Saints Peter and Paul Assyrian Church of the East located in NCA01 and at the Head Start Long Day Care Centre in Cecil Hills, located in NCA02
- Minor exceedances of up to 7 dB (previously 6 dB for the project as described in the EIS) are
 predicted at two out-door sensitive receiver areas (Kemps Creek Sporting and Bowling Club and
 Western Sydney Parklands) adjacent to the amended project in NCA04 and NCA05
- 'Other' sensitive receivers in the study area are not expected to be impacted by construction of the amended project
- The worst-case noise levels and the impacts on 'other' sensitive receivers would only be apparent for relatively short durations of the works
- The above impacts are generally consistent with the impacts as described in the EIS. Where
 minor increases compared to the EIS are predicted (such as NCA04 and NCA05) this is due to
 expansion of the construction footprint for the amended project including the new ancillary
 facilities.

5.1.4.10 Option 2

This is mostly consistent for option 1 and 2 however, the closest school (Irfan College), located in NCA04, is predicted to have 'high impacts' during the worst-case scenarios when noise intensive equipment is being used for option 2, where 'moderate impacts' were predicted for option 1. This is due to the additional works on Elizabeth Drive associated with option 2. Other sensitive receivers such as schools would be consulted with prior to and throughout the construction of the amended project to appropriately manage predicted impacts.

5.1.5 Commercial receivers

A summary of the predicted construction noise impacts in each NCA for commercial receivers (including small businesses) is presented in **Table 5-10**. These are consistent for both option 1 and option 2. The results show that for commercial receivers:

- Minor impacts are seen in NCA04 during the 'Peak impact' scenario for Ancillary facility
 establishment and the 'Stockpiling' scenario for Ancillary facility operations' due to proximity to
 AF15.
- Minor impacts are seen in NCA05 during the 'Peak impact' scenarios for Ancillary facility establishment, Utilities and drainage, Clearing and Earthworks.
- The worst-case impacts are seen in the 'Peak impact' scenarios, which is due to the use of noise intensive equipment. Noise levels and exceedances during the 'Typical impact' works do not exceed the noise management levels.
- Other NCAs either have no commercial receivers or they are sufficiently distant from the construction footprint to be compliant with the noise goals.
- No commercial receivers are predicted to have moderate or high impacts.
- This is generally consistent with the project as described in the EIS, with the exception of additional minor impacts in NCA04 due to the addition of ancillary facility AF15 adjacent to commercial receivers.

Table 5-10 Predicted construction noise exceedances – commercial receivers

							Project	as desc	ribed in	the EIS							An	nended	d projed	ct			
Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary facility	Peak impact	٠	٠	٠	٠	•	٠	٠	٠	٠	٠		٠		•	•	٠	٠	٠	٠	
	1b	establishment	Typical impact	•					•		•	•											•
	2a	Ancillary facility	Operation	٠	٠	٠	٠		•	٠	٠	•	٠		•			•		٠	٠		•
	2b	operations	Stockpiling	٠	٠	٠	٠		•	٠	٠	•	٠		•		•	•		٠	٠	•	•
	2c		Batching plant	•			•				•	•			•				•				•
	2d		Crushing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a										
	3a	Utilities and	Peak impact	•	•	•	•	•	•	•	٠	•	•		•	•	•	•		٠	٠		•
	3b	drainage	Typical impact	٠	٠	٠	٠		•	٠	٠	•	٠		•			•		٠	٠		•
	4a	Demolition	Peak impact	•	•	•	•	•	•	•	٠	•	•		•	•	•			٠	٠		•
	4b		Typical impact	•			•				•	•			•				•				•
	5a	Clearing	Peak impact	٠	٠	٠	٠	•	•	•	٠	•	٠		•			•		٠	٠		
nse	5b		Typical impact	٠	٠	٠	٠		•	٠	٠	•	٠		•			•		٠	٠		•
n in	6a	Earthworks	Peak impact	•				•				•						•		٠	٠		•
When in use	6b		Typical impact	•								•								٠	٠	· -	•
۸	6c		Onsite truck haulage	•	•	•			•	•	•	•	•					•					
	7a	Bridge works	Peak impact	•	•	•	•	•	•	•	٠	•	•	•	•	•	•			٠	٠		•
	7b		Typical impact	•	•	•	•	•	•	•	٠	•	•	•	•	•	•			٠	٠		•
	7c		Concrete works												•								
	7d		Girder lifts	•								•			•				•				•
	8a	Road works	Concrete works																				
	8b		Typical works			•	•	•	•			•	•						•	•	•	•	•
	8c		Tie-in works	•		•	•	•				•							•				•
	9a	Signage, lighting an	d landscaping	•			•	•				•							•				
Key to	impacts:	No exceedance	Marginal to mino	or (1 dB t	o 10 dB)	♦ Mo	derate (1	.1 dB to 2	0 dB)	High (>20 dB)												

5.2 Sleep disturbance

A sleep disturbance screening assessment has been carried out for the construction works and a summary is provided in the assessment tables in **Annexure C**. Review of the predictions shows that the sleep disturbance screening criterion is likely to be exceeded when night works are occurring near to residential receivers. This is consistent for both option 1 and option 2.

The need for night-time works on consecutive nights is not fully understood at this stage of the project. Where night-time work is located close to residential receivers, a detailed assessment of the potential noise impacts would be carried out prior to the works commencing and site-specific environmental management measures to control the impacts would be developed and implemented.

The requirements for night-time works would be determined as the project progresses. Sleep disturbance impacts are dependent on a number of factors including the existing facade performance of affected residential receiver buildings. The likelihood of sleep disturbance impacts would be reviewed during detailed design. Construction environmental management measures are discussed further in **Section 7**.

5.3 Construction vibration assessment

The construction vibration assessment is based on the amended construction footprint. As the amended construction footprint is identical for both option 1 and option 2, this assessment is applicable to both options.

The main sources of vibration from construction works within the study area are vibratory rollers and rock-breakers.

- Vibratory rolling maybe required in discrete locations during the following scenarios:
 - Scenario 1a, Ancillary facility and establishment Peak impact
 - Scenario 1b, Ancillary facility and establishment Typical impact
 - Scenario 3a, Utilities and drainage Peak impact
 - Scenario 6a, Earthworks Peak impact
 - Scenario 8a, Road works tie-in to existing roads
- Rock-breaking may be required in discrete locations during the following scenarios:
 - Scenario 3a, Utilities and drainage Peak impact
 - Scenario 4a, Demolition bridges and buildings (including rock-breaker).

A large vibratory roller produces a significant amount of vibration and is likely to be used throughout the construction of the amended project. Vibration offset distances are based on the recommended minimum working distances for cosmetic damage and human response (see Section 7.7.3 of the EIS). The assessment assumes that a vibratory roller is required across the construction footprint and the assessment is summarised in **Figure 5-12**.

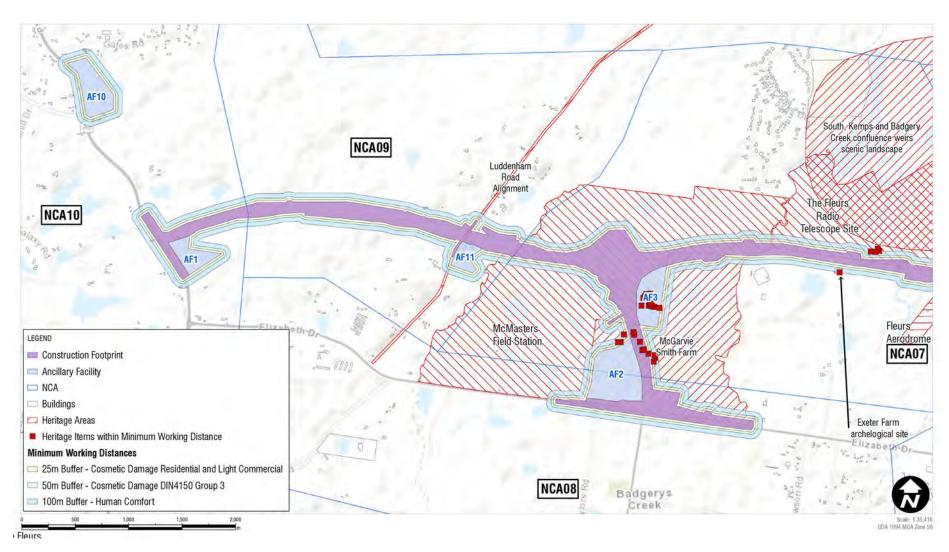


Figure 5-12 Construction vibration assessment for the amended project

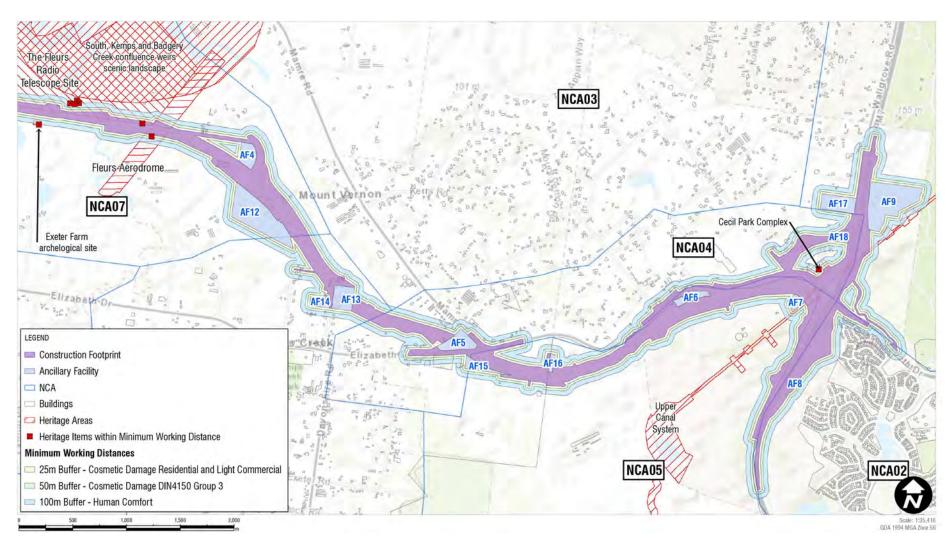


Figure 5-12 Construction vibration assessment for the amended project

5.3.1 Cosmetic damage assessment summary

Figure 5-12 shows that the distance between the construction works and the nearest sensitive receivers is generally sufficient for most buildings to be unlikely to suffer cosmetic damage. In total, about 21 structures (an increase from 19 structures as described in the EIS) are now located within the recommended minimum working distance spread across NCA02, NCA04, NCA05, NCA06, NCA07 and NCA10 where receivers are located close to the work.

In some locations additional structures are now located within the recommended minimum working distance and in other locations are no longer included due to changes in the amended construction footprint. Additional structures located within the minimum working distance when compared to the project as described in the EIS are detailed below:

- Three additional structures in NCA02 adjacent to the works on Elizabeth Drive
- Six additional structures in NCA04 adjacent to the expanded construction footprint associated with works on Elizabeth Drive around AF6 and Cecil Road
- Two additional structures in NCA04 and NCA05 adjacent to the expanded construction footprint around AF5 and AF15
- One additional structure in NCA06 adjacent to the expanded construction footprint around AF13 and AF14.

However, there are also a few structures that are now either inside the amended project construction footprint (and therefore no longer receivers to be impacted by the project), or are outside the cosmetic damage minimum working distance due to a change to the construction footprint. These comprise:

- One in NCA01 (now inside AF9)
- Six in NCA04
 - Four now inside construction footprint
 - Two now outside the cosmetic damage minimum working distance
- Three in NCA06 and NCA07
 - Two now inside construction footprint
 - One now outside the cosmetic damage minimum working distance.

Where works are within the minimum working distances, construction works would not proceed unless:

- · A different construction method with lower source vibration levels is used, where feasible
- Attended vibration measurements are carried out at the start of the works to determine the risk of exceeding of the vibration objectives.

Where buildings are potentially affected by vibration, building condition surveys would be completed before and after works.

5.3.2 Human comfort vibration assessment

Certain receivers which are near to the construction areas are within the human comfort minimum working distance and occupants of affected buildings may be able to perceive vibration impacts at times when vibration generating equipment is in use. Where impacts are perceptible, they would likely only be apparent for relatively short durations when equipment such as rock-breakers or vibratory rollers are in use nearby.

The requirement for vibration intensive works and associated potential for impacts on human comfort would be reviewed during detailed design once finalised details of the works are available.

5.3.3 Heritage structures

The non-Aboriginal heritage assessment report for the project as described in the EIS (presented in Appendix J of the EIS) and the non-Aboriginal heritage supplementary technical memorandum (presented in Appendix F of the amendment report) has identified a number of non-Aboriginal heritage items that are located in the study area. Items that have been deemed to be of heritage significance in the heritage report and are near to the amended project construction footprint are shown in **Figure 5-12** and listed in **Table 5-11**.

The Aboriginal cultural heritage assessment report for the project as described in the EIS (presented in Appendix I of the EIS) the Aboriginal cultural heritage supplementary technical memorandum (presented in Appendix E of the amendment report) has found that there are artefacts throughout the landscape within the study area. However, that assessment did not identify any Aboriginal heritage structures or items near the amended project construction footprint that would be susceptible to vibration impacts.

Table 5-11 Non-Aboriginal heritage items identified in close proximity to the construction footprint

Heritage item ¹	NCA	Item	Location
Item 1	NCA07	McGarvie Smith farm	Badgerys Creek, Lot 62/DP1087838, Lot 63/DP1087838
Item 2	NCA07	Fleurs radio telescope site	Kemps Creek, Lot 21/DP258414, Lot 1/DP74574, Lot 1/DP88836, Lot 2/DP88836
Item 3	NCA09	Luddenham Road Alignment	Luddenham Road, Luddenham
Item 4	NCA05	Upper Canal System (Pheasants Nest Weir to Prospect Reservoir)	Elizabeth Drive, Cecil Hills
Item 6	NCA07	McMasters field station	Kemps Creek, Lot 101/DP848215
Item 7	NCA07	Fleurs aerodrome	Kemps Creek, Lot 2/DP88836
Item 8	NCA04	Cecil Park school, post office and church site	Cecil Park, Lot 1/DP724970
Item 10	NCA07	Exeter farm archaeological site	Kemps Creek, Lot 1 DP74574
Item 12	NCA07	South, Kemps and Badgerys Creek confluence weirs scenic landscape	Lot 21/DP258414

Note 1: Heritage item number specified in the non-Aboriginal heritage supplementary technical memorandum (presented in Appendix F of the amendment report).

BS 7385 states that "a building of historical value should not (unless it is structurally unsound) be assumed to be more sensitive" and therefore buildings or structures should not be assumed to be sensitive to vibration on the basis of being classed a heritage item.

Heritage buildings are to be considered on a case by case basis and further investigation would be carried out during detailed design for all potentially affected structures. Where buildings or structures are considered sensitive to vibration, appropriate vibration criteria would be determined after detailed inspections have been completed.

Item 1: McGarvie Smith farm

Impacts on McGarvie Smith farm are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

Item 2: The Fleurs radio telescope site

Impacts on the Fluers radio telescope site are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

Item 3: Luddenham Road alignment

No physical structures are located within the vibration offset distances.

Item 4: Upper Canal System

Refer to **Section 5.3.3.11** for details regarding the vibration impacts.

Item 6: McMasters field station

Impacts on McMasters field station are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

Item 7: Fleurs aerodrome

Impacts on Fleurs aerodrome are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

Item 8: Cecil Park school, post office and school church

While the amended project expands the construction footprint in the vicinity of this item, no physical structures have been identified within the vibration offset distances. Further investigation will be required during detailed design.

Item 10: Exeter farm archaeological site

Impacts on Exeter farm archaeological site are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

Item 12: South, Kemps and Badgerys Creek confluence weirs scenic landscape

Impacts on South, Kemps and Badgerys Creek confluence weirs scenic landscape are consistent with those described in the EIS as the construction footprint has not changed significantly for the amended project in the vicinity of these structures.

5.3.3.11 Water NSW – Upper Canal System (Pheasants Nest Weir to Prospect Reservoir)

While the construction footprint for the amended project expands in the vicinity of the Upper Canal System compared to the EIS, impacts on this underground structure would be consistent with that described in the EIS. As detailed in the EIS, potential vibration impacts on this buried structure will be considered during the detailed design stage of the amended project.

5.3.4 Gas supply pipelines

While the construction footprint for the amended project expands in the vicinity of the Eastern Gas Pipeline and the Wilton to Horsley trunk main, compared to the EIS, impacts on these underground structures would be consistent with that described in the EIS. As detailed in the EIS, potential vibration impacts on these buried structures will be considered during the detailed design stage of the amended project.

5.3.5 Vibration environmental management measures

The requirement for works which use vibration intensive equipment near to vibration sensitive buildings, structures and assets would be reviewed during detailed design. It is expected that vibration impacts would be able to be controlled to avoid cosmetic damage to all structures.

Where works are within the minimum working distances, detailed review of the required construction methods would be completed and attended vibration measurements would be required at the start of the works to determine the risk of exceeding of the vibration objectives.

Construction environmental management measures are discussed in more detail in Section 7.

5.4 Construction ground-borne noise

Construction works can cause ground-borne noise impacts in nearby buildings when vibration generating equipment is in use. Ground-borne noise impacts should be considered where the ground-borne noise levels are higher than noise transmitted through the air, such as where buildings near to construction works have high performing facades which attenuate the airborne component.

The majority of receivers are sufficiently distant from the works for ground-borne noise impacts to be minimal. Where residential receivers are located near to construction works, airborne noise levels would typically be dominant over the ground-borne component.

5.5 Construction traffic noise assessment

Construction related traffic has the potential to temporarily increase road traffic noise levels at receivers which are located near to the construction routes.

A comparison of the proposed construction traffic volumes to the forecast traffic volumes during the construction period has been used to determine where increases in road traffic noise (ie a greater than 2.0 dB increase over the existing noise level) may be likely to occur.

The baseline traffic volumes for the construction period and proposed construction traffic volumes are detailed in **Annexure C**.

The predicted increase in traffic noise due to additional construction traffic is outlined in **Table 5-12**, with comparison to the levels previously predicted for the EIS design.

Table 5-12 Predicted road traffic noise increase due to construction traffic

Road	Section	Amendment Predicted Co Traffic Noise (dB)	nstruction	EIS Predicted Construction Traffic Noise Increase (dB)			
		Day	Night	Day	Night		
M7 Motorway	South of M7 Interchange	<0.5	<0.5	<0.5	<0.5		
	Btwn On/Off Ramps to Elizabeth Dr & Wallgrove Rd	<0.5	<0.5	<0.5	<0.5		
	North of M7 Interchange	<0.5	<0.5	<0.5	<0.5		
M7 Motorway –	NB Off Ramp to Elizabeth Dr	0.6	0.8	0.5	0.5		
Elizabeth Drive Interchange	NB On Ramp from Wallgrove Rd	0.8	0.7	1.0	0.6		
interenange	SB Off Ramp to Elizabeth Dr	0.6	<0.5	0.8	1.2		
	SB On Ramp from Elizabeth Dr	1.0	0.5	1.3	0.8		
Elizabeth Drive	East of M7 Interchange	<0.5	<0.5	<0.5	<0.5		
	Btwn M7 Interchange & Wallgrove Rd	<0.5	<0.5	<0.5	<0.5		
	Btwn M7 Interchange Rd & Cecil Rd	<0.5	0.5	<0.5	<0.5		
	Btwn Cecil Rd & Duff Rd	<0.5	0.5	<0.5	<0.5		
	Btwn Duff Rd & Mamre Rd	0.6	0.6	0.5	<0.5		
	Btwn Mamre Rd & Devonshire Rd	0.6	0.5	<0.5	<0.5		

Road	Section	Amendment Predicted Co Traffic Noise (dB)	nstruction	EIS Predicted Construction Traffic Noise Increase (dB)			
		Day	Night	Day	Night		
	Btwn Devonshire Rd & Clifton Ave	0.7	0.7	<0.5	<0.5		
	Btwn Clifton Ave & Western Rd	0.8	0.8	0.5	<0.5		
	Btwn Western Rd & Martin Rd	0.8	0.8	0.7	0.5		
	Btwn Martin Rd & WSIA Business Park East Access	0.9	0.9	0.6	0.5		
	Btwn WSIA Business Park East Access & WSIA Business Park West Access	0.8	0.8	0.7	0.7		
	Btwn WSIA Business Park West Access & Adams Rd	0.8	0.8	0.7	0.6		
	Btwn Adams Rd & Luddenham Rd	0.7	0.6	0.9	0.8		
	Btwn Luddenham Rd & The Northern Road	0.9	0.7	1.0	0.9		
Wallgrove Road	Btwn Elizabeth Dr & M7 NB On Ramp	<0.5	<0.5	1.1	1.0		
	North of M7 NB On Ramp	<0.5	<0.5	0.6	<0.5		
Clifton Avenue	North of Elizabeth Dr	<0.5	<0.5	<0.5	<0.5		
Luddenham Road	North of Elizabeth Dr	<0.5	0.5	-	-		
The Northern	South of Elizabeth Dr	0.5	<0.5	1.3	1.0		
Road	Btwn Elizabeth Dr & M12	<0.5	<0.5	0.5	0.5		
	North of M12	<0.5	<0.5	0.5	<0.5		

The assessment is summarised for the daytime period in **Figure 5-13** and for the night-time period in **Figure 5-14**.

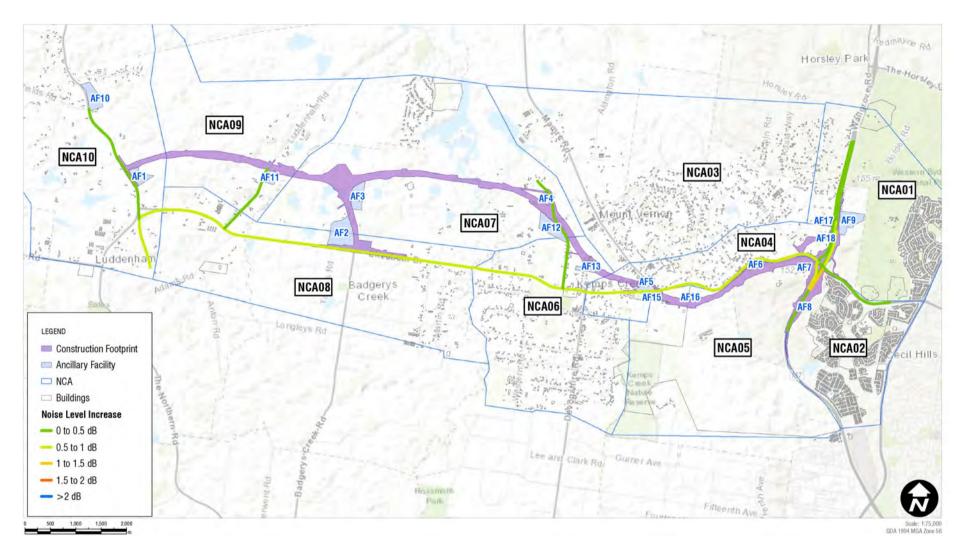


Figure 5-13 Predicted road traffic noise increase due to construction traffic - AM

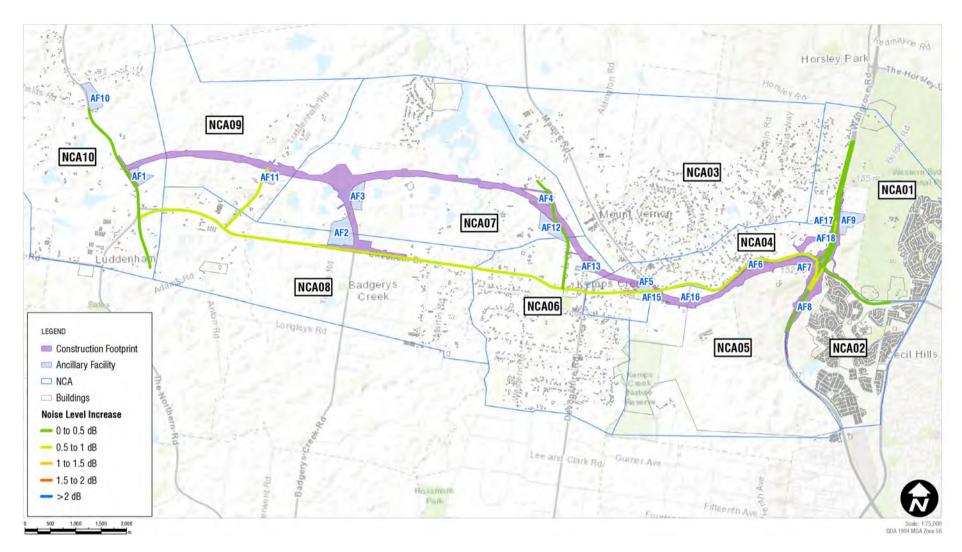


Figure 5-14 Predicted road traffic noise increase due to construction traffic – PM

The above shows that construction traffic is unlikely to result in a noticeable increase in noise levels where vehicles use major roads. This is because of the high volumes of traffic that already use these routes.

Based on the proposed construction traffic routes and the forecast redistribution of traffic during construction, no noticeable increases in road traffic noise are predicted. The results are generally consistent with the findings of the EIS.

5.6 Cumulative construction noise impacts

Cumulative construction noise impacts may arise from the interaction of construction activities of the amended project and other approved or proposed projects in the area. As such, the construction noise impacts associated with the project as described in the EIS were assessed in consideration of the following recently completed, ongoing and proposed projects:

- Western Sydney International Airport
- Sydney Metro Western Sydney Airport
- The Northern Road Upgrade
- Other existing road network upgrades and potential road projects
- Major land releases.

The construction footprint for the amended project has undergone minimal change in the areas near to these projects, compared to the EIS design. As such, cumulative construction noise impacts from the amended project would be consistent with the cumulative construction noise impacts detailed in Section 7.7.8 of the EIS.

5.7 Consecutive construction impacts

Environmental management measures aimed at short-term construction works may be less effective where receivers are affected by longer term impacts. If several projects occur in the same area consecutively, there may be a combined effect due to the increased duration of impacts on nearby receivers. This effect is termed 'construction fatigue'.

The potential consecutive impacts from the amended project and other major projects in the area would be consistent with the consecutive impacts detailed in Section 7.7.8 of the EIS. These would be investigated further as the amended project progresses when detailed construction planning is developed. Specific additional management measures would then be designed to address potential consecutive impacts and used to minimise the impacts as far as practicable, in consultation with the affected community.

6. Operational impacts

This chapter provides an assessment of the potential noise impacts of the operation of the amended project and addresses the following issues:

- Predicted amended operational road traffic noise levels without mitigation
- Sensitivity analysis of amended operational road traffic noise levels
- · Amended change in maximum noise levels
- Comparison of the difference in impacts between the EIS and each option of the amended project.

Operational noise impacts have been predicted to all sensitive receivers in the operational study area. The operational impacts are discussed in the following sections.

As discussed in **Section 4.2.5**, the forecast traffic data used in the operational noise assessment takes into account numerous current and future road projects and land use changes. This has therefore allowed for consideration of cumulative operational road traffic noise impacts from the amended project along with other sources of road traffic in the area.

The land use and demographics scenario has been updated from LU14 version 4 (developed in 2014 and adjusted for specific developments) to a more recent LU16 (developed in 2016 and adjusted to include Western Sydney International Airport forecast data), which has in turn resulted in a major reduction in future trips to the south west growth area in Western Sydney. Forecast traffic volumes using the amended project and the surrounding network have reduced as a result.

6.1 Predicted operational road traffic noise levels without mitigation

6.1.1 Operational road noise predictions without mitigation

6.1.1.12 Option 1

Operational noise impacts in the operational study area have been predicted 'without mitigation' for the amended project option 1 and compared to the NCG criteria (see **Section 3**). The predicted operational road noise levels at residential receivers are summarised in **Table 6-1** for the 2026 atopening and 2036 future design scenarios. The table summarises the receiver who is predicted have the greatest change in noise level within each NCA, which is typically receivers which are nearest to the amended project. This is shown alongside the noise levels for the project as described in the EIS for comparison. Predicted noise levels for the assessed scenarios are included in **Annexure D**.

The 'without mitigation' noise predictions are used to identify receivers which qualify for consideration of additional noise mitigation, noting that receivers which are above the NCG criteria do not necessarily qualify for additional noise mitigation (see **Section 6.1.1.13**). The number of triggered buildings is summarised for each NCA in **Table 6-4**.

Table 6-1 Predicted worst-case change in road traffic noise level in each NCA without mitigation – option 1 (triggered residential receivers only)

NCA				F	Project a	s per E	IS				Amended project – option 1										
	Predic	ted noi	se level	(dBA) ¹					Chang		Predic	ted nois	e level	(dBA) ¹					Chan		
	At-Op	ening 2	026		Future	Design	2036		noise (dBA)²		At-Ope	ening 20)26		Future	e Desigr	2036		noise (dBA)		
	No Bu (witho projec	ut	Build (with project	t)	No Bui (withou project	ut	No Bui (withou project	ıt			No Bu (without project	ut	Build (with project	t)	No Bu (witho project	ut	No Bu (witho	ut			
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	
NCA01	62	58	67	63	63	59	69	64	5	5	61	56	64	59	62	57	66	60	4	3	
NCA02	52	47	53	50	53	49	55	52	2	2	_3	_3	_3	_3	_3	_3	_3	_3	_3	_3	
NCA03	49	44	59	55	49	45	60	56	11	11	49	39	59	51	48	37	60	50	12	13	
NCA04	54	53	66	65	53	51	66	64	12	12	52	42	65	58	52	42	68	60	16	17	
NCA05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NCA06	51	47	67	63	53	49	67	63	16	16	52	42	66	60	52	43	66	58	15	18	
NCA07	33	28	53	48	36	31	55	51	20	20	45	37	63	57	46	35	66	58	20	23	
NCA08	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	-	-	-	-	-	
NCA09	44	40	57	53	45	41	59	55	14	15	43	42	58	57	44	37	59	55	15	17	
NCA10	53	49	55	51	54	50	57	53	3	3	54	49	56	51	56	49	57	51	2	2	

Note 1: Daytime and night-time are LAeq(15hour) and LAeq(9hour) noise levels, respectively.

Note 2: The change in noise level is based on the worst-case noise level

Note 3: No triggered receivers within NCA02 in the amended project

These results show that, consistent with the project as described in the EIS, increases in road traffic noise levels are predicted at receivers within most NCAs across the operational study area for the amended project option 1. The reasons for the increases in the different NCAs are consistent with the project as described in the EIS. As such, increases at the different NCAs would result from:

- The alignment of the amended project being relatively close to receivers with the amended project impacting facades of houses which were previously not affected by road traffic noise for NCA01, NCA03, NCA04 and NCA06
- the amended project is being constructed in an area which has low existing road traffic noise levels and affects receivers which were previously not affected for NCA07, NCA09
- The amended project is being constructed in an area where receivers are in close proximity to existing roads for NCA10.

Noting that, like for the project as described in the EIS, there are no residential receivers within the operational study area in NCA05 and NCA08 that trigger consideration of operational mitigation. Differing to the EIS, the amended project does not have receivers within NCA02 which qualify for consideration of mitigation. This is primarily due to a reduction in night-time noise levels (generally around 1 dB to 2 dB) across the NCA. The EIS identified two buildings which qualified for consideration of mitigation, with both buildings being marginally over the night-time NCG criteria. With the predicted reduction in night-time noise levels for the amended design, these receivers do not trigger consideration of mitigation as part of the amended project.

The following provides a summary of the changes in noise level within each NCA when compared with the EIS. The summary is based on the 2036 timeframe, as this timeframe is predicted to have the highest number of impacted receivers.

- NCA01 Receivers within NCA01 are located along Wallgrove road and to the east of the M7 Motorway. This NCA does not include the main section of the realigned Wallgrove Road, with those receivers located within NCA04. Operational noise levels within this NCA are generally controlled by vehicle movements on the M7 Motorway and as such, the amended project does not result in a noticeable change in operational road traffic noise levels. These findings are consistent with that presented in the EIS. The operational noise levels in the 'no-build' scenario are generally within 0 and -1 dB of those presented in the EIS. Operational noise levels for the 'build' case are generally within 0.5 dB of the EIS predicted noise levels. There are two receivers where the amended project results in an increase of between 4 and 5 dB during the daytime 'build" scenario when compared to the EIS. These receivers are located to the east of the M7 Motorway, near the realigned ramps of the southbound M7 to M12 and Elizabeth Drive exit. Both identified buildings qualify for consideration of operational mitigation.
- NCA02 This NCA is located to the south of Elizabeth Drive and to the east of the M7 Motorway and includes the residential development of Cecil Hills. The 'build' daytime and night-time noise levels in the amended option 1 are predicted to decrease by between 1 dB and 4 dB when compared to the EIS. The 'no-build: daytime and night-time noise levels are generally predicted to decrease by 1 dB at the majority of receivers. This is due to the vehicle volumes across the amended project decreasing along with a change in the percentage of heavy vehicles when compared to the EIS (see Chapter 4 of the amendment report). As noted above, the amended project does not result in any receivers qualifying for consideration of operational noise mitigation. This is due to the reduction in noise level, particularly during the night-time period.
- NCA03 This NCA is located to the north of Elizabeth Drive and west of the M7 Motorway, extending to the west of Mamre Road. The night-time 'build' noise levels in the amended option 1 are predicted to decrease by between 4 dB and 5 dB when compared to the EIS. Daytime 'build noise levels are generally within +/- 0.5 dB of the noise levels presented in the EIS. These

changes are similar to the 'no-build' scenario, where the night-time noise levels decrease by 4 dB and daytime noise level are generally within 0.5 dB of those reported in the EIS. The difference in predicted night-time noise levels is due to changes in operational traffic as noted above. The receivers which are predicted to trigger consideration of operational noise mitigation are generally located to the west of Mamre Road, where the M12 Motorway impacts facades which did not previously have traffic noise impacts. This is consistent with the findings presented in the EIS.

- NCA04 This NCA is located to the north of Elizabeth Drive and west of the M7 Motorway and extends west to the intersection of Devonshire Road and Cross Street. It represents receivers along the eastern section of Elizabeth Drive and the realigned portion of Wallgrove Road. Consistent with the findings across other NCAs, the night-time noise levels for both the 'build' and 'no build' scenarios are predicted to generally reduce by between 2 dB and 3 dB in the 'build' scenario and by up to 6 dB in the 'no-build' scenario. The daytime noise levels are generally within +/- 0.5 dB of those predicted in the EIS for the 'build scenario' and are predicted to decrease by between 1 dB and 2 dB in the 'no build' scenario. There are areas where noise levels are predicted to increase in the amended project, with receivers located near to the realigned portion of Wallgrove Road and Duff Road predicted to have higher day and night-time noise levels when compared to those presented in the EIS. Operational noise impacts extended further north within the NCA when compared to the EIS due to the extended operational boundary within this NCA. As discussed in Section 4.2.1.
- NCA05 and NCA06 NCA05 includes the Western Sydney Parklands. NCA06 is located to the west of Kemps Creek and east of South Creek and extends to the north and south of Elizabeth Drive. Residential receivers located near Salisbury Avenue are predicted to have higher (2 dB to 4 dB) 'build' daytime noise levels when compared to the levels presented in the EIS. These changes are likely due to the future (2036) traffic volumes taking into account changes to the interconnectivity of the local road network surround these receivers. The night-time noise levels for both the 'build' and 'no build' scenarios are predicted to generally reduce by between 2 dB and 4 dB in the 'build' scenario and by up to 7 dB in the 'no-build' scenario when compared to the predicted levels in the EIS. The receivers which are predicted to trigger consideration of operational noise mitigation are generally located to the north of Elizabeth Drive, where the M12 Motorway impacts facades which did not previously have traffic noise impacts. This is consistent with the findings presented in the EIS.
- NCA07, NCA08, NCA09 and NCA10 These NCA have been grouped together as they represent the western portion of the amended project, which consist of sparsely populated receivers. Consistent with the findings across other NCAs, the night-time noise levels for both the 'build' and 'no build' scenarios are predicted to generally reduce by between 2 dB and 4 dB in the 'build' scenario and by up to 6 dB in the 'no-build' scenario when compared to the predicted levels in the EIS. The daytime noise levels are generally within +/- 0.5 dB of those predicted in the EIS for both the 'no build' and 'build' scenarios.

As discussed above, the amended project generally results in a reduction in the predicted night-time noise levels when compared to the corresponding period in the EIS. It should be noted that whilst the 'build' scenario is generally predicted to reduce by up to 4 dB across all NCAs, the 'no build' scenario is also predicted to reduce by up to 6 dB to that compared in the EIS. This results in a neutral change when compared with the EIS, as the comparable difference between the 'no build' and 'build' scenarios for the both the amended project and the project as described in the EIS are similar, albeit with lower overall noise levels in the amended project.

Whilst the overall noise levels in the amended project are lower, there are pockets where the realignment or changes to localised traffic volumes (Wallgrove Road, Salisbury Avenue and Duff Road) result in increased levels to those presented in the EIS.

To further illustrate the summary provided above, **Figure 6-1** shows the change in noise level between the EIS and the amended option 1 design. The grey and blue dots represent the difference between the EIS and amended option design for day and night-time noise levels respectively. A positive change indicates that the amended option 1 design results in an increase at a receiver. Likewise, a negative change shows that the amended option 1 design results in a decrease when compared to the corresponding EIS period. The chainage is presented from east to west.

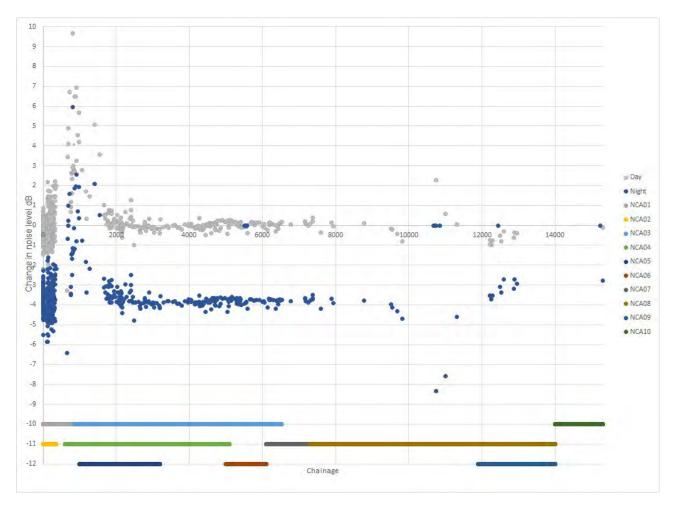
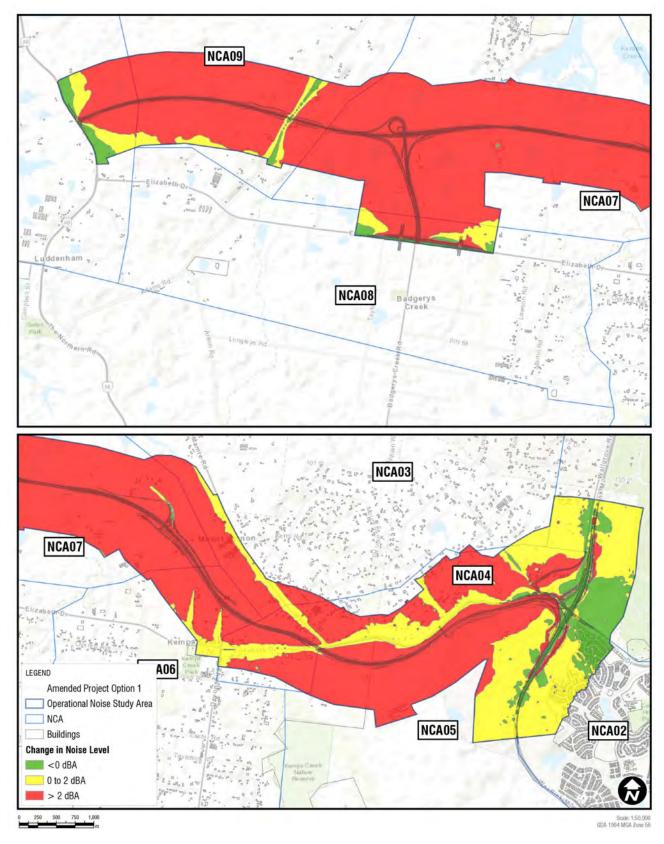


Figure 6-1 Change in noise level between EIS and option 1

As shown in **Figure 6-1**, the night-time noise levels decreased by 3 to 4 dB when compared to the EIS. This is due to the night-time vehicle volumes across the amended project decreasing along with a change in the percentage of heavy vehicles when compared to the EIS (see Chapter 4 of the amendment report). Daytime noise levels are consistent (within 0 to 0.5 dB) with the EIS predictions for option 1, apart from receivers in NCA04 where an increase is predicted.

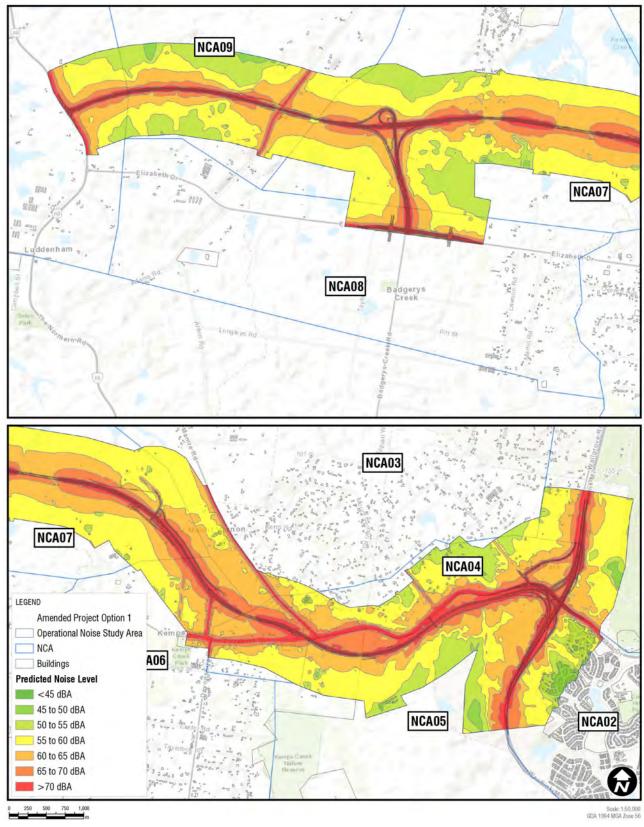
The time period in which the amended project is predicted to have the highest number of impacted receivers is the 2036 daytime scenario. This is different from the project as described in the EIS where it was the 2036 night-time scenario. The following maps present the impacts for the controlling 2036 daytime scenario, while maps for the other time periods are included in **Annexure D**.





Note 1: Predicted change in noise levels (Build minus No Build) are for 2036 daytime scenario at a height of 1.5 metres above local ground (ground floor level).

Figure 6-2 Predicted change in operational noise without mitigation – 2036 Daytime – option 1



Note 1: Predicted free field noise levels are for Build 2036 daytime scenario at a height of 1.5 metres above local ground (ground floor level).

Figure 6-3 Predicted Build operational noise levels without mitigation – LAeq(15hour) – 2036 Daytime – option 1

6.1.1.13 Option 2

The predicted 'without mitigation' operational road noise levels at residential receivers for the amended project option 2 are summarised in **Table 6-2** for the 2026 at-opening and 2036 future design scenarios. Like for option 1, the table summarises the worst-case change in noise levels in each NCA, which is typically receivers which are nearest to the project amended. Predicted noise levels for the assessed scenarios are included in **Annexure D**.

These results show that, consistent with the project as described in the EIS and option 1, increases in road traffic noise levels are predicted at receivers within most NCAs across the operational study area for the amended project option 2. The reasons for the increases in the different NCAs are mostly consistent with the project as described in the EIS and option 1 (see **Section 6.1.1.12**).

Table 6-2 Predicted worst-case change in road traffic noise level in each NCA without mitigation – option 2

NCA				Proje	ct as d	escribed	in EIS	3			Amended project – option 2									
	Predi	icted noi	ise leve	el (dBA)	1					Change in		Predicted noise level (dBA)¹							Change in	
	At-Opening 2026				Futur	Future Design 2036				noise levels (dBA)² At-Opening 2 No Build (without project)		At-Opening 2026			Future	e Design	2036		noise levels (dBA) ²	
	No Build (without project)		Build (with project)		No Build (without project)		No Build (without project)		ut			Build (with project)		No Build (without project)		No Build (without project)				
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
NCA01	62	58	67	63	63	59	69	64	5	5	61	56	64	59	62	57	66	60	4	3
NCA02	52	47	53	50	53	49	55	52	2	2	_3	_3	_3	_3	_3	_3	_3	_3	_3	_3
NCA03	49	44	59	55	49	45	60	56	11	11	49	39	60	51	48	37	61	50	12	13
NCA04	54	53	66	65	53	51	66	64	12	12	52	42	66	58	52	42	68	60	17	18
NCA05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NCA06	51	47	67	63	53	49	67	63	16	16	52	42	68	60	52	43	67	59	16	19
NCA07	33	28	53	48	36	31	55	51	20	20	45	32	65	52	46	35	67	59	21	23
NCA08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NCA09	44	40	57	53	45	41	59	55	14	15	43	42	58	58	44	37	59	55	15	17
NCA10	53	49	55	51	54	50	57	53	3	3	54	49	56	51	56	49	57	52	2	3

Note 1: Daytime and night-time are LAeq(15hour) and LAeq(9hour) noise levels, respectively.

Note 2: The change in noise level is based on the worst-case noise level

Note 3: No triggered receivers within NCA02 in the amended project

These results show that, consistent with the project as described in the EIS and option 1, with increases in road traffic noise levels predicted at receivers within most NCAs across the operational study area for the amended project option 2. The reasons for the increases in the different NCAs are consistent with the project as described in the EIS and detailed above for option 1.

Similar to option 1, the amended option 2 design does not have receivers within NCA02 which qualify for consideration of mitigation. This is primarily due to a reduction in night-time noise levels (generally around 1 dB to 2 dB) across the NCA. The EIS identified two buildings which qualified for consideration of mitigation, with both buildings being marginally over the night-time NCG criteria. With the predicted reduction in night-time noise levels for the amended design, these receivers do not trigger consideration of mitigation as part of the amended project.

The difference between the amended option 2 design and EIS is consistent with the detailed summary provided for option 1. This is illustrated in **Figure 6-4** which shows the change in noise level between the EIS and the amended option 2 design.

The grey and blue dots represent the difference between the EIS and amended option design for day and night-time noise levels respectively. A positive change indicates that the amended option 1 design results in an increase at a receiver. Likewise, a negative change shows that the amended design results in a decrease when compared to the corresponding EIS period. The chainage in noise levels is presented from east to west.

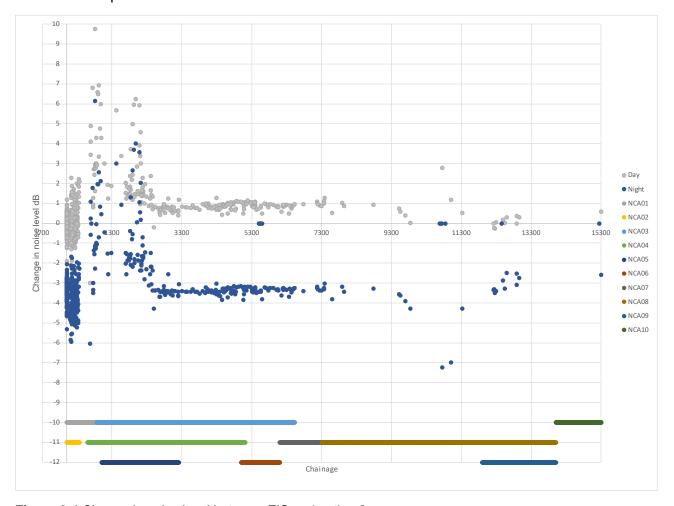


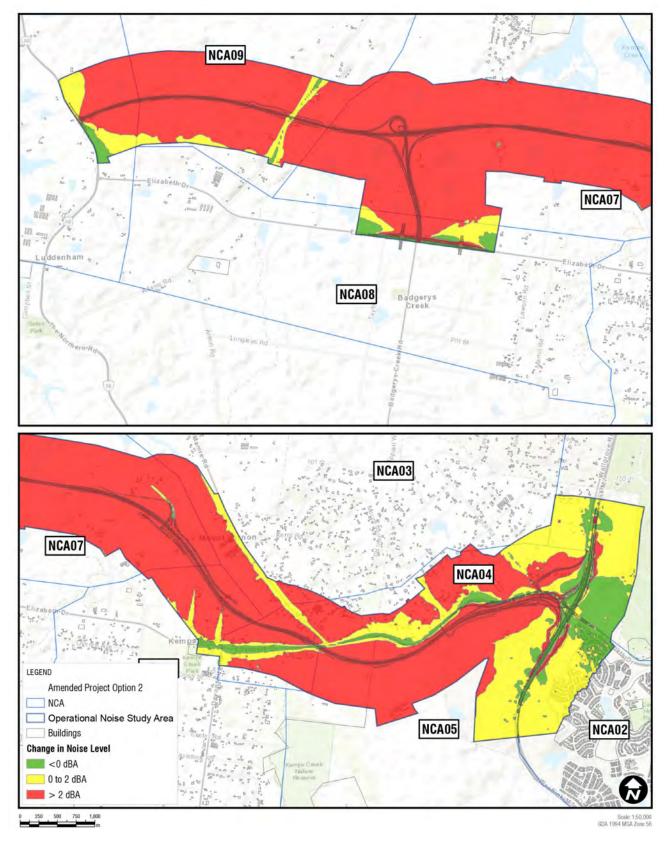
Figure 6-4 Change in noise level between EIS and option 2

As shown in **Figure 6-4** and similar to findings shown in **Figure 6-1**, the night-time noise levels are predicted to generally decreased by between 3 dB and 4 dB when compared to the EIS. This is due

to the night-time vehicle volumes across the amended option 2 design decreasing along with a change in the percentage of heavy vehicles when compared to the EIS (see Chapter 4 of the amendment report). Daytime noise levels are consistent (within 0 to 0.5 dB) with the EIS predictions for option 1, apart from receivers in NCA04 where an increase is predicted.

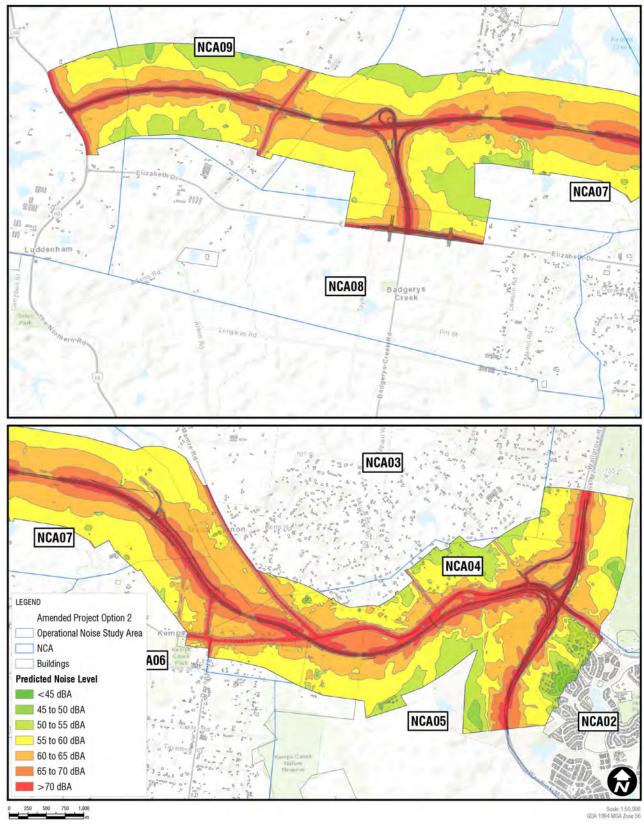
The time period in which the amended option 2 design is predicted to have the highest number of impacted receivers is the 2036 daytime scenario. This is different from the project as described in the EIS where it was the 2036 night-time scenario. The following maps present the impacts for the controlling 2036 daytime scenario, while maps for the other time periods are included in **Annexure D**.

Figure 6-5 and **Figure 6-6** illustrate the predicted change in noise levels (ie the Build minus No Build) and the predicted Build noise levels for the 2036 daytime timeframe for the amended project option 1.



Note 1: Predicted change in noise levels (Build minus No Build) are for 2036 daytime scenario at a height of 1.5 metres above local ground (ground floor level).

Figure 6-5 Predicted change in operational noise without mitigation – 2036 Daytime – option 2



Note 1: Predicted free field noise levels are for Build 2036 daytime scenario at a height of 1.5 metres above local ground (ground floor level).

Figure 6-6 Predicted Build operational noise levels without mitigation – LAeq(15hour) – 2036 Daytime – option 2

6.1.2 Receivers considered for additional noise mitigation

Where road traffic noise levels at receivers are predicted to be above the NCG criteria, the requirement for additional noise mitigation is determined using guidance from the NMG (Roads and Maritime 2015b) (see **Section 4.2.8**). The NMG recognises that the NCG criteria are not always practicable and that it is not always feasible or reasonable to expect that they are achieved.

When evaluating if a receiver qualifies for consideration of additional noise mitigation the NMG considers how far above the criterion the noise level is and by how much the noise level has increased. These considerations provide a feasible and reasonable approach to identifying qualifying receivers. These exceedances fall into the categories shown in **Table 6-3**.

The receivers which have been identified as eligible for consideration of additional noise mitigation for the amended project are detailed in **Table 6-4**.

Table 6-3 Trigger receiver exceedance categories

Trigger category	Project as de	escribed in	Amended proption 1	roject –	Amended project – option 2 Number of triggers		
	Number of to	riggers	Number of t	riggers			
	Floors	Building	Floors	Building	Floors	Building	
Trigger 1 (greater than 2 dB increase)	218	151	306	210	312	215	
Trigger 2 (exceeds cumulative limit)	228	162	218	147	239	164	
Trigger 3 (acute)	50	36	47	34	69	47	
TOTAL	262	183	310	212	320	220	

Note 1: The Relative Increase Criteria is included in the assessment of Trigger 1 and Trigger 2 as it adjusts the RNP base criteria for each receiver where existing road traffic noise levels are more than 12 dB below the RNP criteria.

Note 2: The total number of triggers may be lower than the sum of each type of trigger as individual receivers can trigger multiple types.

Table 6-4 Receivers considered for additional noise mitigation

NCA	Project as de		Amended project – option 1			Am	ended proje	ect – option 2	Comments	
	Receiver type	Triggered buildings (floors)	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS		
NCA01	Residential	2 (3)	Residential	2 (3)	0 (0)	Residential	2 (3)	0 (0)	Triggers are limited to two residential buildings situated east of the M7	
	Other	0 (0)	Other	1 (2)	+1 (+2)	Other	1 (2)	+1 (+2)	Motorway. Receivers are triggered due to road traffic noise increases as a result of the new M7 southbound off ramp to the M12 westbound.	
NCA02	Residential	2 (3)	Residential	0 (0)	-2 (-3)	Residential	0 (0)	-2 (-3)	There are no predicted triggers	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	receivers within NCA02 due to a reduction in night time noise levels in the 'build' scenario.	
NCA03	Residential	28 (39)	Residential	32 (44)	+4 (+5)	Residential	32 (44)	+4 (+5)	A minor increase in the number of	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	triggered receivers who are situated along Mamre Road. The increase in the number of triggered buildings for NCA03 is as a result of the adjustment of the operational study area.	

NCA	Project as described in EIS		Amended project – option 1			Am	ended proje	ect – option 2	Comments	
	Receiver type	Triggered buildings (floors)	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS		
NCA04	Residential	96 (139)	Residential	119 (180)	+23 (+41)	Residential	127 (190)	+23 (+41)	An increase in the number of triggered	
	Other	7 (7)	Other	7 (7)	0 (0)	Other	7 (7)	0 (0)	buildings for NCA04 is as a result of the changed operational assessment boundary (project roads + 600 m). This is due works being undertaken on Elizabeth Drive which extends the 600 m boundary further north than that assessed in the EIS	
NCA05	Residential	0 (0)	Residential	0 (0)	0 (0)	Residential	0 (0)	0 (0)	Triggers are limited to the passive	
	Other	1(4)	Other	1 (4)	0 (0)	Other	1 (4)	0 (0)	recreation area (Western Sydney Parklands). Note the number of floors represents descript areas of the parklands.	
NCA06	Residential	idential 18 (27) Re	tial 18 (27) Residential	19 (28)	+1 (+1)	Residential	19 (28)	+1 (+1)	Triggered receivers are situated in the north eastern portion of the NCA. The increased number of the triggered	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	receivers when compared to the EIS is due to traffic volume changes on roads such as Salisbury Avenue.	

NCA	Project as described in EIS		Amende	ed project –	option 1	Am	ended proje	ect – option 2	Comments	
	Receiver type	Triggered buildings (floors)	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS	Receiver type	Triggered buildings (floors)	Change (+/-) when compared to project as described in EIS		
NCA07	Residential	18 (25)	Residential	20 (27)	+2 (+2)	Residential	20 (27)	+2 (+2)	Triggered receivers are generally	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	located in three groups - around the northern end of Clifton Avenue, around the Airport access road, and in the Twin Creeks development area.	
NCA08	Residential	0 (0)	Residential	0 (0)	0 (0)	Residential	0 (0)	0 (0)	No sensitive receivers are located	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	within the operational study area in this NCA.	
NCA09	Residential	10 (14)	Residential	10 (14)	0 (0)	Residential	10 (14)	0 (0)	Triggered receivers are situated across	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	the NCA. Receivers are triggered due to road traffic noise increases as a result of the amended project.	
NCA10	Residential	1 (1)	Residential	1 (1)	0 (0)	Residential	1 (1)	0 (0)	Triggered receiver is situated adjacent	
	Other	0 (0)	Other	0 (0)	0 (0)	Other	0 (0)	0 (0)	to The Northern Rd. Receiver is triggered due to road traffic noise increases as a result of the amended project.	
ALL	Residential	175 (251)	Residential	203 (297)	+28 (+46)	Residential	211 (307)	+28 (+46)		
	Other	8 (11)	Other	9 (13)	+1 (+2)	Other	9 (13)	+1 (+2)		
	TOTAL	183 (262)	ALL	212 (310)	+29 (+48)	ALL	220 (320)	+29 (+48)		

6.1.2.14 Option 1

In summary, a total of 310 floors (212 individual buildings) are predicted to have exceedances of the operational road traffic noise criteria for the amended project option 1. This is an increase of 48 floors (29 individual buildings) from the project as described in the EIS. These floors are considered eligible for consideration of additional noise mitigation. The increase in the number of qualifying receivers is largely controlled by the increase to the operational assessment boundary in NCA04.

These exceedances fall into the categories shown in **Table 6-3**.

The receivers which have been identified as eligible for consideration of additional noise mitigation for the amended project option 1 are shown in **Figure 6-7**

6.1.2.15 Option 2

In summary, the above table shows that a total of 320 floors (220 individual buildings) are predicted to have exceedances of the operational road traffic noise criteria for the amended project option 2. This is an increase of 48 floors (29 individual buildings) from the project as described in the EIS. It is also an increase from option 1 by 10 floors (8 individual buildings). These floors are considered eligible for consideration of additional noise mitigation. The increase in the number of qualifying receivers is largely controlled by the increase to the operational assessment boundary.

These exceedances fall into the categories shown in **Table 6-3**.

The receivers which have been identified as eligible for consideration of additional noise mitigation for the amended project option 2 are shown in **Figure 6-8**

Operational noise mitigation measures for both options are discussed in **Section 7**.

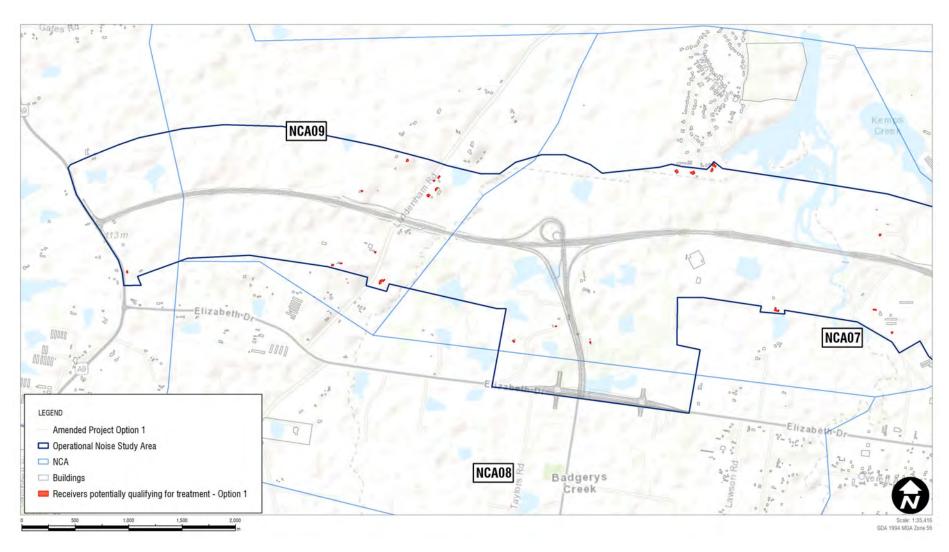


Figure 6-7 Receivers identified as eligible for consideration of additional mitigation – option 1

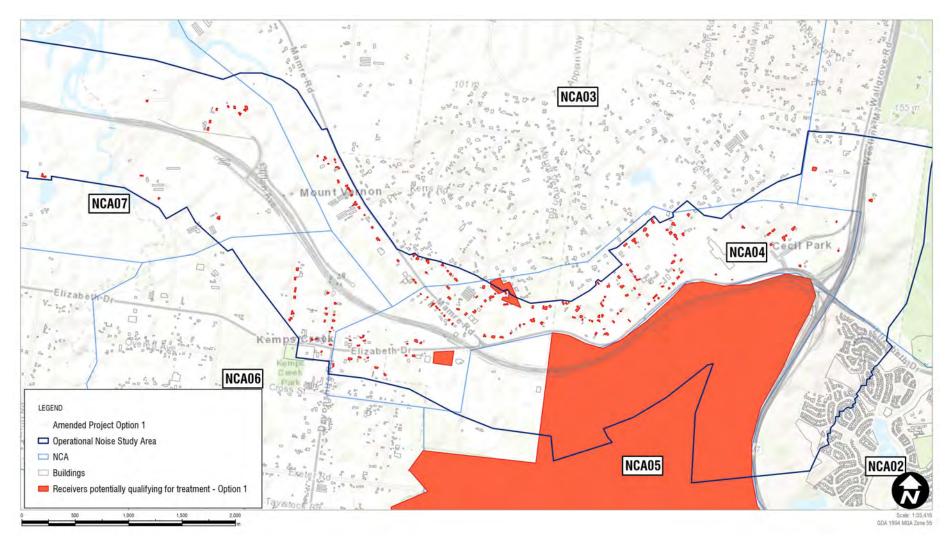


Figure 6-7 Receivers identified as eligible for consideration of additional mitigation – option 1

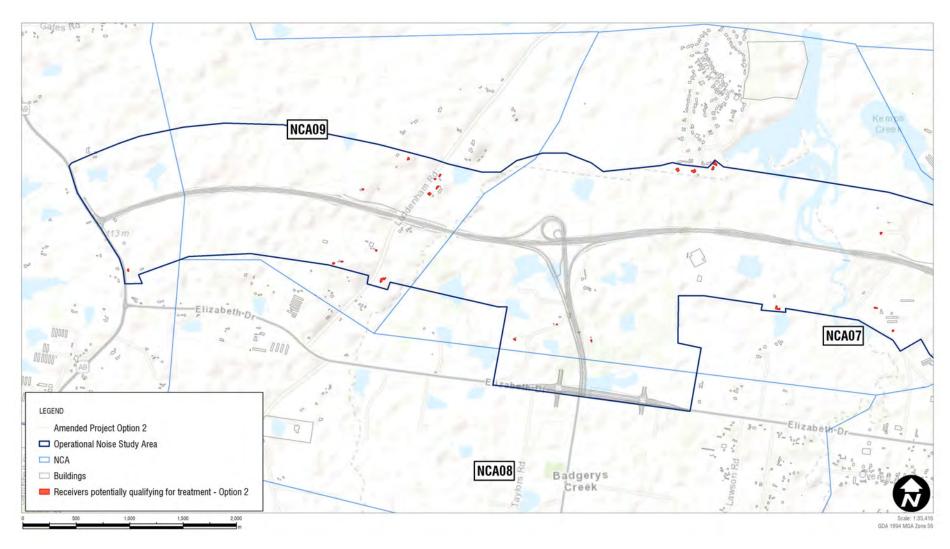


Figure 6-8 Receivers identified as eligible for consideration of additional mitigation – option 2

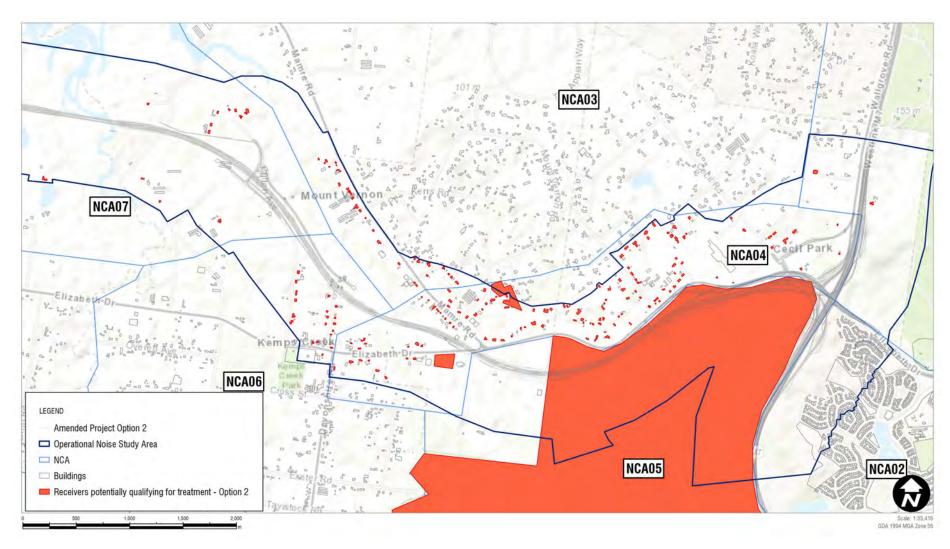


Figure 6-8 Receivers identified as eligible for consideration of additional mitigation – option 2

6.1.3 Sensitivity analysis

6.1.3.16 Option 1

A sensitivity analysis of the operational road traffic noise assessment and noise modelling methodology for the amended project option 1 has been carried out. This indicates how sensitive the mitigation requirements for option 1 are to a change in predicted noise levels.

The likely change in the predicted number of receivers that are considered eligible for consideration of property treatment has been determined by applying a correction factor to the noise model predictions in 1 dBA increments. The sensitivity of the total number of at-property treatments to the modelling predictions is shown in **Figure 6-9**.

Figure 6-9 indicates that an additional 12 receivers would be eligible for consideration of property treatment if a +1 dBA correction were to be added to the noise model predictions. A reduction of 9 receivers would be apparent if 1 dBA was subtracted from the noise model predictions. This is similar to the sensitivity analysis for the EIS (+15 and -9 receivers).

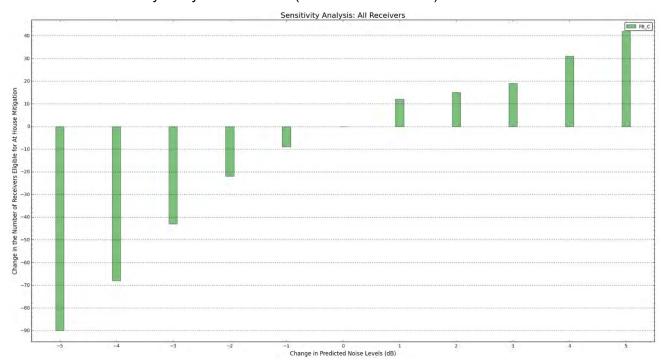


Figure 6-9 Noise model sensitivity analysis - Option 1

6.1.3.17 Option 2

The sensitivity of the total number of at-property treatments to the modelling predictions for the amended project option 2 is shown in **Figure 6-10**.

Figure 6-10 indicates that an additional 10 receivers would be eligible for consideration of property treatment if a +1 dBA correction were to be added to the noise model predictions. A reduction of 9 receivers would be apparent if 1 dBA was subtracted from the noise model predictions. This is similar to the sensitivity analysis for the EIS (+15 and -9 receivers).

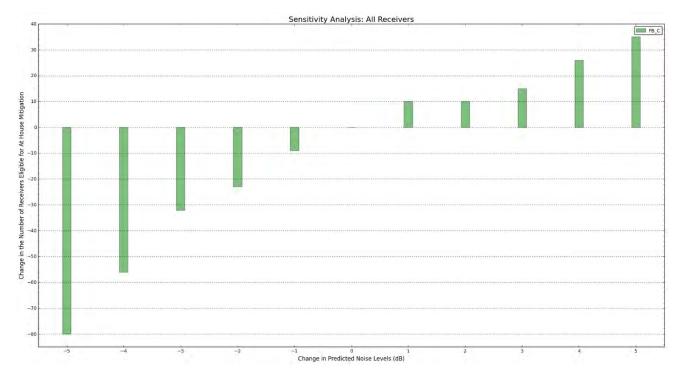


Figure 6-10 Noise model sensitivity analysis - Option 2

6.1.4 Maximum noise level assessment

The representative results of the maximum noise level monitoring are provided in the *EIS noise and vibration technical report* (Appendix K of the EIS) which includes the maximum noise level range for the pass-by events in the existing situation during the period of monitoring (2017).

Indicative increases in maximum noise levels due to the amended project have been predicted in the noise model using a source height corresponding to the approximate height of a truck exhaust. A summary of the predicted change in road traffic maximum noise levels due to the amended project is presented in **Table 6-5**.

Table 6-5 Predicted change in maximum noise levels

NCA		dicted change i (dB) – most affe		Discussion
	EIS	Amended project – option 1	Amended project – option 2	
NCA01	6	6	6	Maximum noise levels at two receivers in this NCA which are adjacent to the M7 southbound off ramp are predicted to increase by up to 6 dB due to the increased line of sight to the motorway and new ramp due to a change in the cutting in this area, consistent with the EIS. Negligible change in maximum noise levels is predicted at other receivers in this NCA.
NCA02	16	17	17	Maximum noise levels are predicted to increase by up to 16 dB due to increased line of sight to the M7 southbound on ramp from the M12, up to 1 dB higher than the EIS. Negligible change in maximum noise level is predicted at receivers closer to Elizabeth Drive or the M7 Motorway south of the new on ramp.
NCA03	2	2	2	Maximum noise levels at receivers in this NCA on the west of Mamre Road are predicted to increase by up to 2 dB, consistent with the EIS. This is due to the amended project affecting the opposite side of the dwelling to existing maximum noise levels from Mamre Road. Negligible change in maximum noise levels is predicted at other receivers in this NCA.
NCA04	10	15	15	Maximum noise levels at receivers adjacent to the realigned Wallgrove Road are predicted to increase by up to 15 dB, up to 7 dB higher than the EIS. This is due to the amended project design moving Wallgrove Road closer to these dwellings. Maximum noise levels at receivers to the west of Mamre Road are predicted to increase by up to 11 dB, up to 1 dB higher than the EIS. Negligible change in maximum noise levels is predicted at other receivers in this NCA.
NCA05	-	-	-	No residential receivers are located within the operational study area in this NCA.
NCA06	5	5	5	Maximum noise levels are predicted to increase by up to 5 dB, consistent with the EIS. This is generally due to the amended project affecting facades of houses that are not affected by existing road traffic noise from Elizabeth Drive. Negligible change in maximum noise levels is predicted at other receivers in this NCA.

NCA		licted change i dB) – most affe		Discussion
	EIS Amended Amended project – option 1 option 2			
NCA07	16	16	16	Maximum noise levels are predicted to increase by up to 16 dB, consistent with the EIS. This is due to the amended project being located closer to existing dwellings when compared to the existing road network.
NCA08	-	-	-	No residential receivers are located within the operational study area in this NCA.
NCA09	9	10	10	Maximum noise levels are predicted to increase by up to 10 dB, up to 1 dB higher than the EIS. This is generally due to the amended project affecting facades of houses that are not affected by existing road traffic from Luddenham Road.
NCA10	0	0	0	Negligible change in maximum noise levels is predicted at receivers in this NCA due to their proximity to The Northern Road, consistent with the EIS.

Changes in maximum noise levels due to the amended project are generally consistent with those presented in Section 7.7.7 of the EIS. In NCA04, maximum noise levels are predicted to increase by up to 15 dB at dwellings adjacent to the realigned Wallgrove Road, compared to up to 8 dB at these receivers in the EIS. This is due to the realigned Wallgrove Road moving closer to the dwellings in the amended project than the project as described in the EIS.

Some of the receivers identified above may be eligible for consideration of additional noise mitigation based on the predicted L_{Aeq} road traffic noise levels (see **Section 6.1.2**). Operational noise management measures are discussed in **Section 7**.

While receivers are not triggered for consideration of additional noise mitigation by maximum noise levels alone, selection of feasible and reasonable mitigation measures during the detailed design stage would take the change in maximum noise levels into consideration where a receiver qualifies for consideration of additional mitigation.

7. Revised environmental management measures

This section provides a summary of the environmental management measures that would be required to minimise, avoid or mitigate the noise and vibration impacts of the amended project in the study area. Due to the nature of the amended project, the majority of operational impacts associated with design constraints, maintaining access and integration with the existing transport network have been addressed in the design.

The project specific environmental management measures that will be implemented to minimise the noise and vibration impacts of the amended project, along with the responsibility and timing for those measures, were described in Section 7.7.9 of the EIS.

7.1 Construction noise and vibration mitigation management measures

The Construction Noise and Vibration Guideline (CNVG) (Roads and Maritime 2015a) contains standard measures for mitigating and managing construction impacts on infrastructure projects. The standard measures will be applied where feasible and reasonable to minimise the impacts from the works.

Where noise or vibration impacts still exist after the use of the standard environmental management measures, the CNVG requires additional mitigation measures to be applied where feasible and reasonable. The additional environmental management measures are shown in **Table 7-1**. These are consistent with the project as described in the EIS and no changes have been made as a result of the amended project.

Table 7-1 CNVG additional environmental management measures

Additional mitigation measure	Description
Notification (letterbox drop or equivalent)	Advanced warning of works and potential disruptions can assist in reducing the impact on the community. The notification may consist of a letterbox drop (or equivalent) detailing work activities, time periods over which these will occur, impacts and mitigation measures. Notification should be a minimum of five working days prior to the start of works.
Specific notifications (SN)	Specific notifications are letterbox dropped (or equivalent) to identified stakeholders no later than seven calendar days ahead of construction activities that are likely to exceed the noise objectives. The specific notification provides additional information when relevant and informative to more highly affected receivers than covered in general letterbox drops.
Phone calls (PC)	Phone calls detailing relevant information made to affected stakeholders within seven calendar days of proposed work. Phone calls provide affected stakeholders with personalised contact and tailored advice, with the opportunity to provide comments on the proposed work and specific needs.
Individual briefings (IB)	Individual briefings are used to inform stakeholders about the impacts of high noise activities and mitigation measures that will be implemented. Project representatives will visit identified stakeholders at least 48 hours ahead of potentially disturbing construction activities. Individual briefings provide affected stakeholders with personalised contact and tailored advice, with the opportunity to comment on the project.

Additional mitigation measure	Description					
Respite offers (RO)	Respite offers will be considered where there are high noise and vibration generating activities near receivers. As a guide, work will be carried out in continuous blocks that do not exceed three hours each, with a minimum respite period of one hour between each block. The actual duration of each block of work and respite will be flexible to accommodate the usage of and amenity at nearby receivers.					
	The purpose of such an offer is to provide residents with respite from an ongoing impact. This measure is evaluated on a project-by-project basis and may not be applicable to all projects.					
Respite period 1 (R1)	Out of hours construction noise in 'out of hours period 1' will be limited to no more than three consecutive evenings per week except where there is a duration respite. For night work these periods of work will be separated by not less than one week and no more than six evenings per month.					
Respite period 2 (R2)	Night time construction noise in 'out of hours period 2' will be limited to two consecutive nights except for where there is a duration respite. For night work these periods of work will be separated by not less than one week and six nights per month. Where possible, high noise generating works shall be completed before 11 pm.					
Duration respite (DR)	Respite offers and respite periods 1 and 2 may be counterproductive in reducing the impact on the community for longer duration projects. In this instance and where it can be strongly justified it may be beneficial to increase the work duration, number of evenings or nights worked through duration respite so that the project can be completed more quickly. The project team will engage with the community where noise levels are expected to exceed					
Alternative accommodatio n (AA)	the NML to demonstrate support for duration respite. Alternative accommodation may be offered to residents living in close proximity to construction works that are likely to experience highly intrusive noise levels. The specifics of the offer will be identified on a project-by-project basis. Additional aspects for consideration shall include whether the highly intrusive activities occur throughout the night or before midnight.					
Verification (V)	Verification of construction noise and vibration levels will occur to ensure the actual impacts are consistent with the predicted levels. Appendix F of the CNVG contains further details about verification of Noise and Vibration levels as part of routine checks of noise levels or following reasonable complaints.					

7.1.1 Construction airborne noise

The process for determining how additional environmental management measures are applied to airborne noise impacts is summarised in **Table 7-2**.

Table 7-2 specifies the different categories of perception for construction noise impacts, ie noticeable, clearly audible, moderately intrusive, or highly intrusive. **Table 7-2** identifies specific additional mitigation measures applicable for each perception category during each construction period, ie standard hours, OOHW Period 1 and OOHW Period 2, along with measures for highly noise affected receivers which are applicable during all periods. **Table 7-2** also specifies the noise levels at which the additional mitigation measures for each perception category are applicable.

Table 7-2 CNVG additional environmental management measures – airborne noise

Predicted LAeq(15min receiver	ute) airborne no	ise level at	Additional mitigation measures type	Noise level at which additional mitigation							
Perception	dBA above RBL	dBA above NML		measures are applicable							
All hours											
75 dBA or greater (highly noise affected)			N, V, PC, RO	HNA							
Standard hours: Mor	Standard hours: Mon – Fri (7 am – 6 pm), Sat (8 am – 1 pm), Sun/Public Holiday (Nil)										
Noticeable	5 to 10	0	-	NML							
Clearly Audible	10 to 20	<10	-	NML							
Moderately Intrusive	20 to 30	10 to 20	N, V	NML+10							
Highly Intrusive	>30	>20	N, V	NML+20							
OOHW Period 1: Mor – 6 pm)	n – Fri (6 pm – 1	10 pm), Sat (7 a	m – 8 am & 1 pm – 10 pm),	Sun/Public Holiday (8 am							
Noticeable	5 to 10	<5	-	NML							
Clearly Audible	10 to 20	5 to 15	N, R1, DR	NML+5							
Moderately Intrusive	20 to 30	15 to 25	V, N, R1, DR	NML+15							
Highly Intrusive	>30	>25	V, IB, N, R1, DR, PC, SN	NML+25							
OOHW Period 2: Mor	n – Fri (10 pm –	7 am), Sat (10	pm – 8 am), Sun/Public Hol	iday (6 pm – 7 am)							
Noticeable	5 to 10	<5	N	NML							
Clearly Audible	10 to 20	5 to 15	V, N, R2, DR	NML+5							
Moderately Intrusive	20 to 30	15 to 25	V, IB, N, PC, SN, R2, DR	NML+15							
Highly Intrusive	>30	>25	AA, V, IB, N, PC, SN, R2, DR	NML+25							

Note 1: N = Notification, SN = Specific Notification, PC = Phone Calls, IB = Individual Briefings, R1 = Respite Period 1, R2 = Respite Period 2, DR = Duration Respite, AA = Alternative Accommodation, V = Verification.

The requirement for additional environmental management measures for airborne noise impacts will be determined during later stages of the amended project when specific information regarding the construction works is known.

The potential impacts from construction works, particularly where evening or night-time works are required, will be assessed in Construction Noise and Vibration Impact Statements (CNVIS) before any works begin. These CNVIS's provide a detailed assessment of the potential impacts and define the site-specific environmental management measures to be used to control the impacts.

The indicative additional mitigation perception categories for the proposed construction works are shown in **Figure 7-1** for works during standard construction hours, and in **Figure 7-2** for out of hours works. These figures identify where the additional environmental management measures outlined in **Table 7-2** would be applicable.

Note 2: NML = Noise Management Level, HNA = Highly Noise Affected (ie 75 dBA or greater for residential receivers).

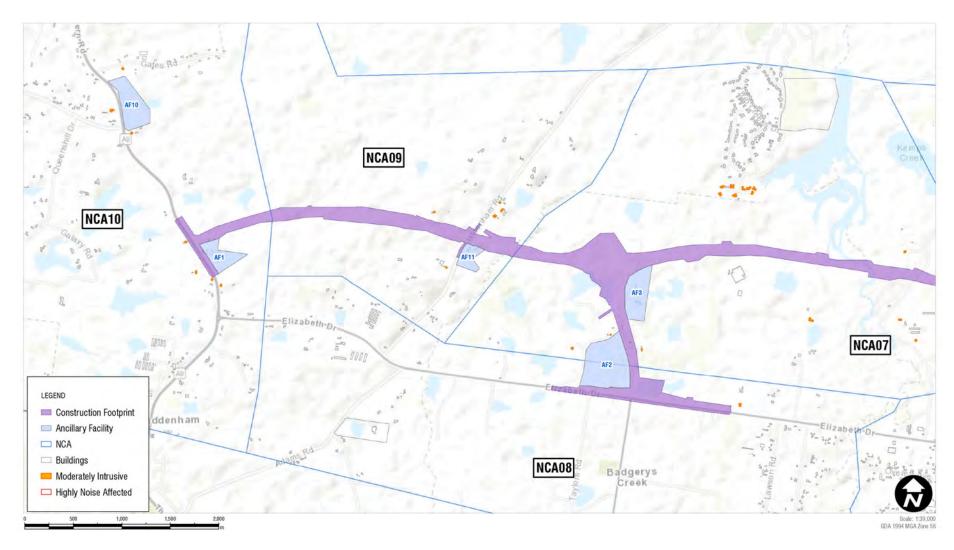


Figure 7-1 Indicative additional mitigation perception categories for all construction works – standard daytime period

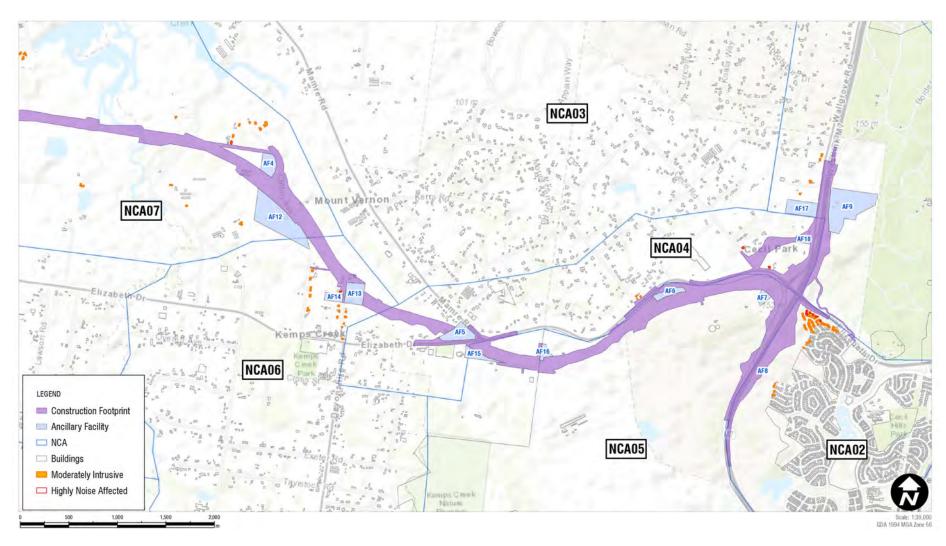


Figure 7-1 Indicative additional mitigation perception categories for all construction works – standard daytime period

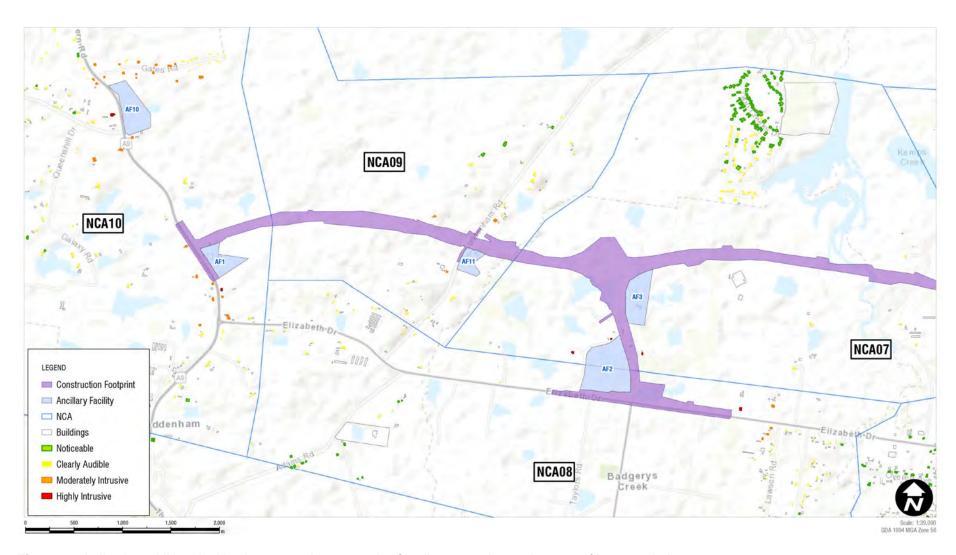


Figure 7-2 Indicative additional mitigation perception categories for all construction works – out of hours period

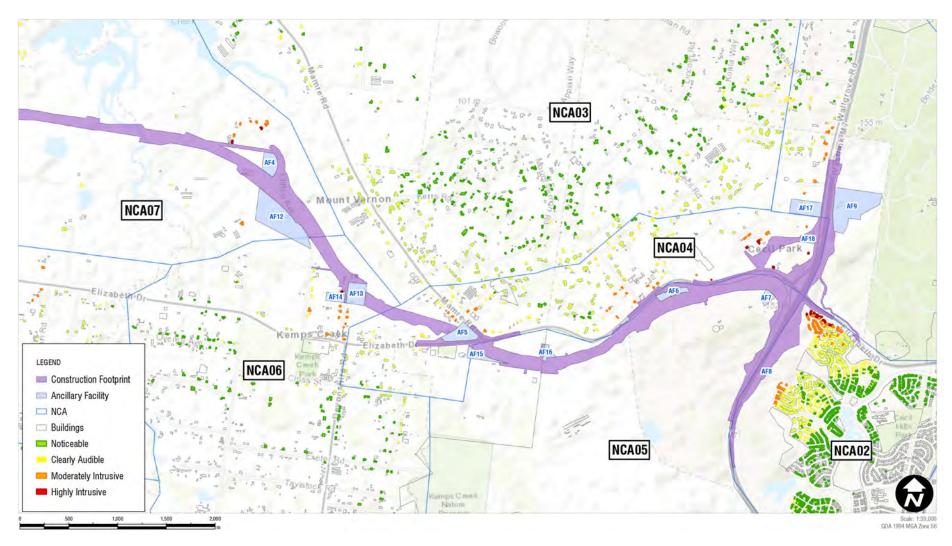


Figure 7-2 Indicative additional mitigation perception categories for all construction works – out of hours period

7.1.2 Construction vibration

The process for determining how additional environmental management measures are applied to vibration impacts is summarised in **Table 7-3**.

Table 7-3 CNVG additional environmental management measures – vibration

Predicted vibration level at receiver	Additional mitigation measures								
Predicted vibration level at receiver	Type ^{1:}	Apply to ² :							
Standard hours: Mon - Fri (7 am – 6 pm), Sat (8 am – 1 pm), Sun/Pub Hol (Nil)									
Predicted vibration exceeds maximum human comfort levels	V, N, RP	All							
OOHW period 1: Mon - Fri (6 pm - 10 pm), Sat (7 am - 8 am & 1 pm - 10 pm), Sun/Pub Hol (8 am - 6 pm)									
Predicted vibration exceeds maximum human comfort levels	V, IB, N, RO, PC, RP, SN	All							
OOHW period 2: Mon - Fri (10 pm - 7 am), Sat (10 pm - 8 am), Sun/Pub Hol (6 pm - 7 am)									
Predicted vibration exceeds maximum human comfort levels	AA, V, IB, N, PC, RP, SN	All							

Note 1: The following abbreviations are used: Alternative Accommodation (AA), Validation of predicted vibration levels (V), Individual Briefings (IB), Notification drops (N), Project specific respite offer (RO), Phone Calls (PC), Specific Notifications (SN).

Figure 7-3 below identifies receivers that fall within the vibration offset distances as per the recommended minimum working distances (see Section 7.7.3 of the EIS). The buildings that fall within these offset distances are likely to require additional environmental management measures as per the above table based on the time of day the vibration intensive activity is occurring.

In addition to this, **Figure 7-3** also identifies only the heritage structures which have the potential to be within the minimum working distances, and/or are close to the construction footprint (eg Fleurs Dish). Further investigation is required to confirm its sensitivity as noted in the non-Aboriginal heritage report.

Note 2: All affected receivers.

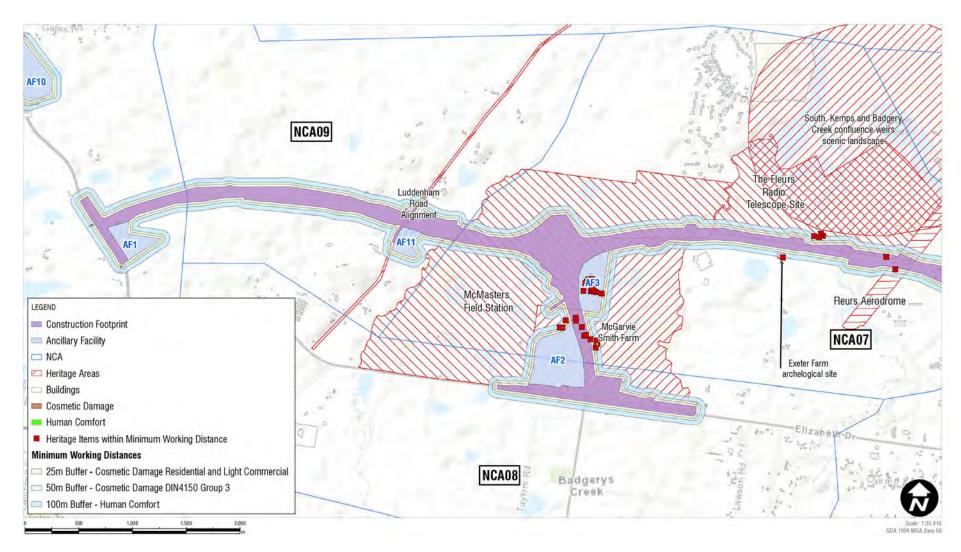


Figure 7-3 Indicative additional vibration environmental management measures categories for all construction works

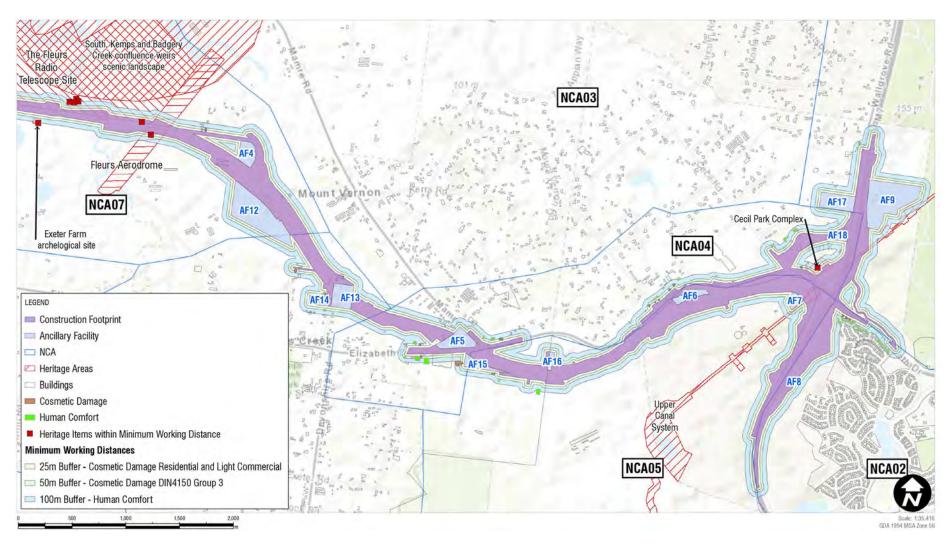


Figure 7-3 Indicative additional vibration environmental management measures categories for all construction works

7.2 Operational noise mitigation management measures

For receivers that qualify for consideration of additional noise mitigation (see **Section 6.1.2.14** and **6.1.2.15**), potential noise mitigation measures include (in order of preference outlined in the RNP):

- Quieter road pavement surfaces
- Noise mounds
- Noise barriers
- At-property treatments.

The selection and specification of noise mitigation also requires the consideration of a range of safety, engineering, cost, social, and environmental factors. These factors are considered in determining whether a mitigation option is feasible and reasonable to implement.

The terms 'feasible' and 'reasonable', with respect to noise mitigation, are outlined in the NMG as follows.

Feasibility – Relates to engineering considerations (what can practically be built). These engineering considerations include:

- The inherent limitations of different techniques to reduce noise emissions from road traffic noise sources
- Safety issues such as restrictions on road vision
- Road corridor site constraints such as space limitations
- Floodway and stormwater flow obstruction
- Access requirements
- Maintenance requirements
- The suitability of building conditions for at receiver treatments.

Reasonable – Selecting reasonable measures from those that are feasible involves judging whether the overall noise benefits provide significant social, economic or environmental benefits. The factors to be considered are:

- The noise reduction provided and the overall number of people that benefit from the mitigation
- Existing and future noise levels, including changes in noise levels, and the extent of any
 exceedance of the noise criteria
- Potential for a mitigation measure to reduce noise during construction as well as from road traffic after the amended project is complete
- The cost of mitigation, including the cost of noise mitigation measures as a percentage of the total amended project cost and the ongoing maintenance and operational costs
- Community views and preferences (typically gathered during the community consultation process following the noise assessment)
- Visual impacts for the community surrounding the amended project and for road users (identified in Appendix G of the EIS)
- The wider community benefits arising from noise mitigation of the road
- Relative weighting of treatments with respect to protection of outdoor areas or only internal living spaces.

The following assessment of operational mitigation measures forms a preliminary feasible and reasonable assessment to inform the detailed design stage of the amended project.

7.2.1 At Source Mitigation

The type of road surface can affect road traffic noise levels at receivers. Concrete pavements tend to be the noisiest with low noise pavements such as open graded asphalt (OGA) being the quietest.

In accordance with the hierarchy of mitigation (outlined in Section 7.7.4 of the EIS), at source controls are the first form of operational noise mitigation considered. Low noise pavements are therefore the first form of noise mitigation as they reduce source noise levels and provide protection to both outside areas and internal spaces at affected properties. Low noise pavements have no associated visual impact and are also likely to provide noise benefits to receivers at greater distances than noise barriers.

The choice of road pavement surfaces and textures must meet a number of criteria besides noise performance including structural integrity, skid resistance, water shedding, maintenance requirements and design life.

Low noise pavements should be considered where there is a group of four or more receivers that exceed the NCG criteria.

As noted in the operational road traffic noise assessment, the main carriageway is proposed to be constructed with a concrete surface (+3 dB surface correction), with dense graded asphalt (DGA) on the bridges and ramps (+0 dB surface correction).

To investigate the potential benefit that quieter road surfaces could provide to the amended project the following scenarios have been assessed:

- DGA on the main carriageway and bridges/ramps (with a +0 dB surface correction)
- Open graded asphalt (OGA) on the main carriageway (with a -2 dB surface correction) and DGA on the bridges/ramps.

A comparison of the number of receivers which are triggered in the two options with the original concrete surface is shown in **Table 7-4** for option 1 and option 2.

In summary, the above shows that quieter pavements are predicted to reduce the number of triggered buildings by the following:

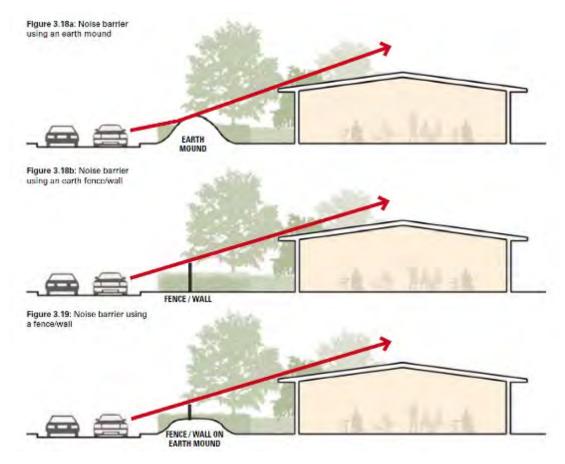
- DGA results in nine less buildings (from 212 to 203) for option 1
- DGA results in eight less buildings (from 220 to 212) for option 2
- OGA results in 24 les buildings (212 to 188) for option 1
- OGA results in 19 less buildings (220 to 201) for option 2
- It is noted that if the amended project were to use a next generation diamond ground concrete surface. The reduction in triggered receivers would be comparable to the performance of DGA
- The total reduction in triggered receivers when compared to the EIS is greater for both amended options, although for reasons discussed in **Section 6**, both amended options include a greater number of triggered receivers than that presented in the EIS.

Table 7-4 Comparison of receivers considered for additional noise mitigation – Quieter pavement types

NCA	Option 1			Option 2					
	Number of trigg (floors)	ered receivers – I	Buildings	Number of triggered receivers – Buildings (floors)					
	Concrete surface	DGA surface	OGA surface	Concrete surface	DGA surface	OGA			
NCA01	3 (5)	3 (5)	3 (5)	3 (5)	3 (5)	3 (5)			
NCA02	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
NCA03	32 (44)	31 (43)	25 (36)	32 (44)	32 (44)	29 (40)			
NCA04	126 (187)	119 (177)	116 (170)	134 (197)	127 (187)	124 (180)			
NCA05	1 (4)	1 (4)	1 (4)	1 (4)	1 (4)	1 (4)			
NCA06	19 (28)	19 (28)	19 (28)	19 (28)	19 (28)	19 (28)			
NCA07	20 (27)	19 (24)	14 (19)	20 (27)	20 (26)	15 (20)			
NCA08	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
NCA09	10 (14)	10 (14)	10 (14)	10 (14)	10 (14)	10 (14)			
NCA10	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)			
Total	212 (310)	203 (296)	188 (276)	220 (320)	212 (308)	201 (291)			
EIS Total	183 (262)	182 (257)	178 (252)	183 (262)	182 (257)	178 (252)			

7.2.2 In-corridor mitigation – noise barriers

Noise barriers (in the form of walls or mounds) can provide noise reductions and also reduce both external and internal noise levels. Where space allows, raised earth mounds can be used as noise barriers and can be enhanced by placing a low wall on top. Noise walls are often more feasible than a mound as the footprint is much smaller. These methods are shown below in **Figure 7-4.**



Note 1: Taken from DP&I Development near Rail Corridors and Busy Roads – Interim Guideline. Figure 7-4 Noise barriers and mounds

Noise barriers can however introduce a number of potential negative aspects, including changes to property access, aesthetic impacts, overshadowing, drainage, increased opportunities for graffiti, restriction of line-of-sight and views, maintenance access and safety concerns.

Noise barriers are typically most efficient when receivers are located at ground floor level. As the height of a receiver increases, the noise reduction from barriers is seen to reduce due to line-of-sight over the top of the barrier. It is therefore not uncommon for upper floors of multi-storey buildings to see little to no reduction in noise levels from nearby barriers because of their elevation.

As a result, the process of determining reasonable barrier heights would generally be less likely to result in noise barriers being considered a reasonable option if upper floors formed part of the analysis. With consideration of this, the assessment and optimisation of noise barriers for the amended project makes use of noise predictions at ground and first floor only, with architectural treatments to be investigated for higher floors.

7.2.2.18 Assessment of noise barriers

The process for considering the use of noise barriers is described in the NMG (Roads and Maritime 2015b). Noise barriers are to be considered where there are four or more closely spaced triggered receivers. The locations of the exceeding receivers are shown for the Build scenario exceedance maps in **Section 6.1.2**.

The NMG approach involves identifying the number of receivers that would be considered for atproperty treatment versus barrier height (noting that a two storey residence is counted as two receivers) to establish an initial design height and then conducts a weighted analysis to find the optimal mix of barrier height and at-property treatments. This prioritises at-road mitigation and minimises the use of at-property treatments, as per the intent of the RNP.

The NMG approach first identifies the maximum barrier height (up to eight metres) where no receivers require at-property treatment. The initial design height is then established by identifying the height where, of the receivers that benefit from the noise barrier, two thirds no longer require at-property treatment. A value of two thirds is defined in the NMG as further increases in barrier height have been shown to have diminishing benefits.

The approach then applies weightings which consider the cost and the overall noise benefits the barrier provides to the wider community. A low point in the weighting curve between the initial design height and the maximum barrier height corresponds to the most reasonable barrier height in terms of community benefit and weighted cost. The practicability of the design and maximum barrier heights are then reviewed taking into account engineering considerations as well as social, economic and environmental benefits.

As a guide, noise barriers are considered to be a reasonable noise mitigation option where they are capable of providing a noise attenuation benefit (referred to as an insertion loss) of:

- 5 dBA at representative receivers for barrier heights of up to 5 metres
- 10 dBA at representative receivers for barrier heights above 5 metres high and up to 8 metres high.

In certain situations the requirements for the barrier cannot always be met. In this case further feasible and reasonable considerations are undertaken.

At this early stage in the amended project, the barrier analysis has used the predicted noise levels from the concrete road surface scenario, as this results in the highest road traffic noise levels and represents a worst-case assessment.

During the assessment of the EIS, several barrier arrangements were investigated throughout the alignment. **Table 7-5** identifies the barriers and their associated length along with the corresponding barrier which is being investigated as part of the amended design. There are two additional barriers which were not investigated as part of the EIS that have been included in the amended design assessment. These two barrier locations (NW.07 and NW.08) have been considered due to either additional triggered receivers being identified as part of the amended assessment (NW.08) or, design changes as part the amended assessment which allows barriers in new locations to be considered (NW.07).

Table 7-5 Noise barrier arrangement EIS and amended project design

EIS Barrier ID	Length (m)	Findings	Corresponding amended project barrier (length m)		Location
			Option 1	Option 2	
NW.01	2019	Not found to be reasonable	NW.01 (2018)	NW.01 (2018)	Along the northern boundary of the amended project west of Luddenham Road to the Western Sydney International Airport interchange
NW.02	923	Referred to detail design at a height of 5 m	NW.02 (914)	NW.02 (914)	Along the northern boundary of the amended project, east of South Creek to Clifton Avenue overbridge
NW.03	1978	Referred to detail design at a height of 5 m	NW.03 (1978)	NW.03 (1978)	Along the northern boundary of the amended project, from Clifton Avenue overbridge to Kemps Creek
NW.04	1907	Referred to detail design at a height of 7 m	NW.04 (2170)	NW.04 (2170)	Along the northern boundary of the amended project, from Kemps Creek to Western Sydney Parklands
NW.05	809	Not found to be reasonable	NW.05 (961)	NW.05 (1331)	Along the northern boundary of the amended project, within the Western Sydney Parklands
NW.06	2552	Referred to detail design at a height of 5 m	NW.06 (2552)	NW.06 (2552)	Along the southern boundary of the amended project, between Clifton Avenue overbridge and Elizabeth Drive
			NW.07 (365)	NW.07 (365)	Along the northern boundary of the realigned Wallgrove Road, extending 360 m from Cecil Road
			NW.08 (1466)	NW.08 (1466)	Along the northern boundary of the amended project, east of the interchange with the future Western Sydney International Airport

The detailed noise barrier optimisation results are provided in **Annexure D**. The locations of the assessed barriers are shown in **Figure 7-5** for option 1 and **Figure 7-6** for option 2 and summarised in **Table 7-6** and **Table 7-7** for option 1 and option 2 respectively. The barriers should be regarded as indicative and will be finalised during detailed design.

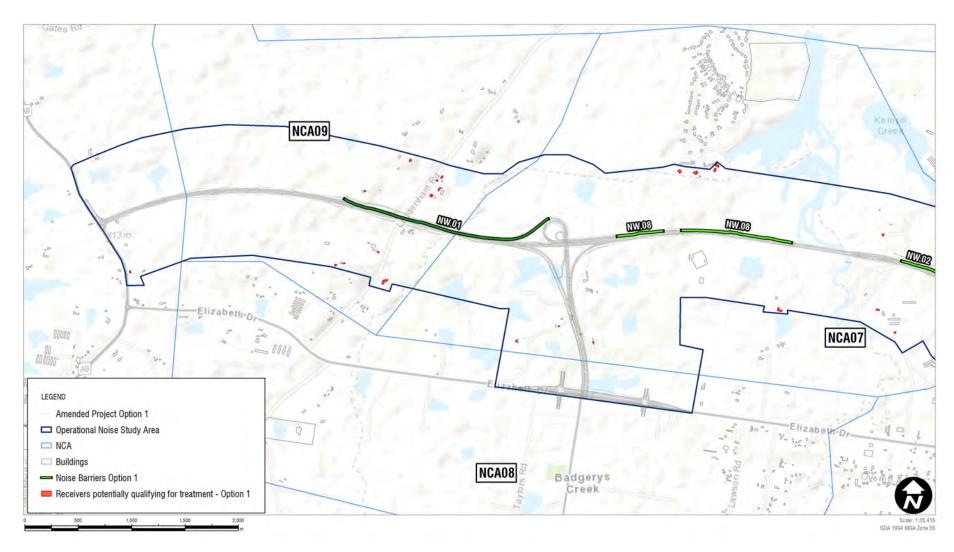


Figure 7-5 Indicative noise barriers considered for investigation – option 1

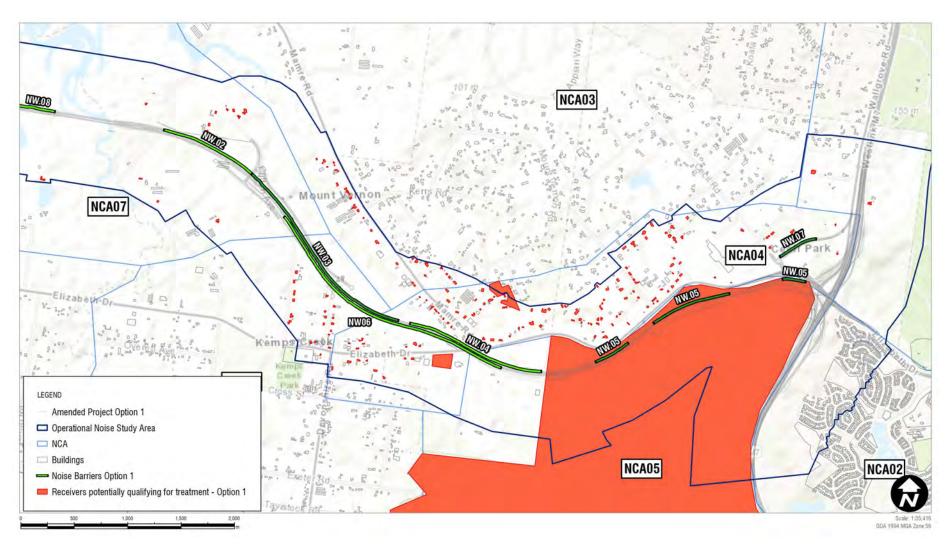


Figure 7-5 Indicative noise barriers considered for investigation – option 1

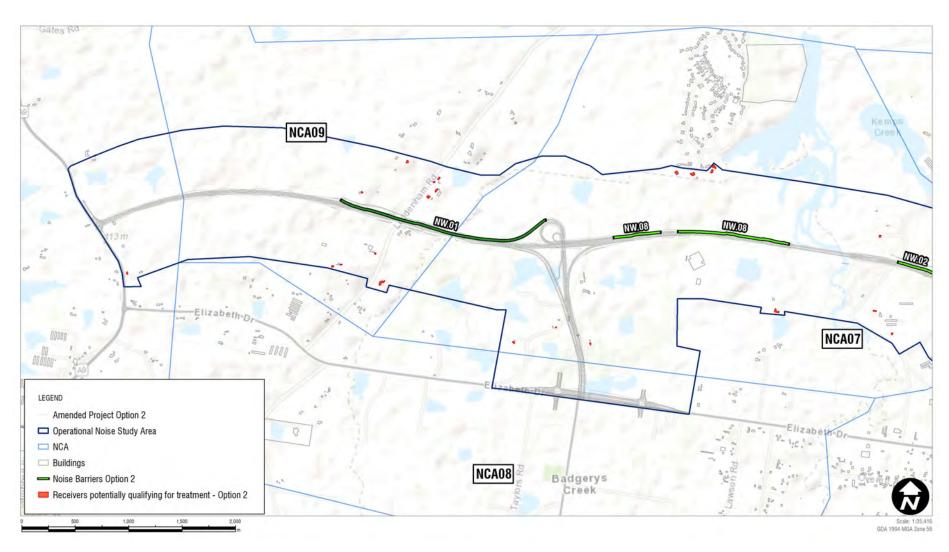


Figure 7-6 Indicative noise barriers considered for investigation – option 2

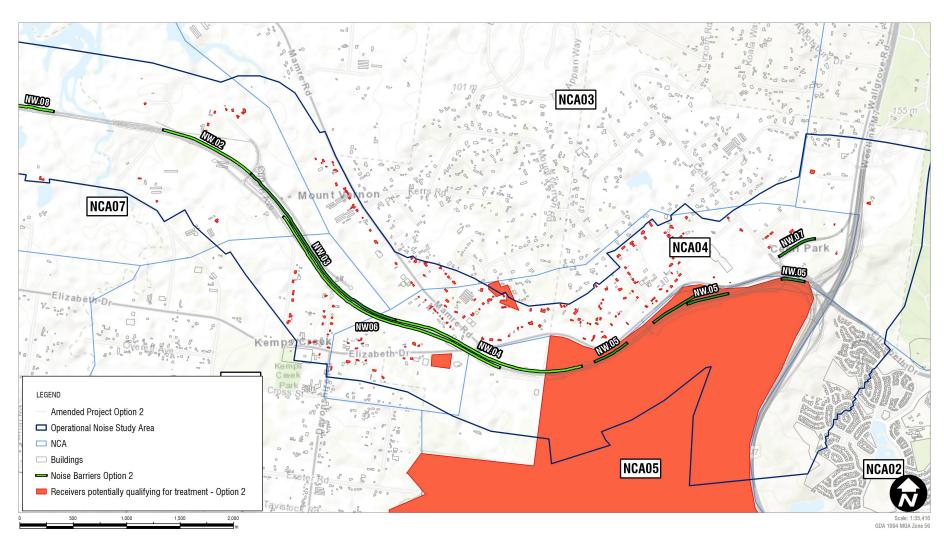


Figure 7-6 Indicative noise barriers considered for investigation – option 2

Table 7-6 Indicative noise barriers – option 1

Barrier			Noise	e barrier details	6		Comments						
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?							
				No barrier	With barrier								
NW.01	New	2,018	0 – optimised height not reached	9	9	No	 The barrier does not remove any triggered receivers at any height up to 8 m 6 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 1 receiver achieves at least a 5 dB noise reduction at a height of 5.5 m 9 receivers require at-property treatment without the barrier 9 receivers require at-property treatment at a maximum design height of 8 m Barrier has not been considered further as it does not achieve the principles of the NMG. 						
NW.02	New	914	5.0	12	6	Subject to feasible and reasonable considerations.	 The barrier provides the required insertion loss to at least one triggered receiver at the initial design height of 5.0 m. 12 receivers achieve at least a 2 dB noise reduction at a height of 5.0 m. 3 receivers achieve at least a 5 dB noise reduction at a height of 5.0 m. 12 receivers require at-property treatment without the barrier. 6 receivers require at-property treatment at an optimised height of 5.0 m. Barrier subject to feasible and reasonable considerations. 						

Barrier			Noise	e barrier details	S		Comments					
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?						
				No barrier	With barrier							
NW.03	New	1978	5.0	36	27	Subject to feasible and reasonable considerations	 The barrier provides the required insertion loss to at least one triggered receiver at the initial design height of 5.0 m. 17 receivers achieve at least a 2 dB noise reduction at a height of 5.0 m. 2 receivers achieve at least a 5 dB noise reduction at a height of 5.0 m. 36 receivers require at-property treatment without the barrier. 27 receivers require at-property treatment at an optimised height of 5.0 m. Barrier subject to feasible and reasonable considerations. 					
NW.04	New	2107	8.0	88	87	Subject to feasible and reasonable considerations	 The barrier provides the required insertion loss to at least one triggered receiver at the initial design height of 8.0 m. 48 receivers achieve at least a 2 dB noise reduction at a height of 8.0 m 7 receivers achieve at least a 5 dB noise reduction at a height of 8.0 m 37 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 2 receivers achieve at least a 5 dB noise reduction at a height of 4.0 m 88 receivers require at-property treatment without the barrier 87 receivers require at-property treatment at a maximum design height of 8 m Barrier subject to feasible and reasonable considerations. Consideration should be given to a lower height barrier. 					

Barrier			Noise	e barrier details	S		Comments					
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?						
				No barrier	With barrier							
NW.05	New	961	3.5	66	57	No	 The barrier does not provide the required insertion loss at any barrier height up to 8 m No receivers achieve at least a 2 dB noise reduction at a height of 3.5 m No receivers achieve at least a 5 dB noise reduction at any height 66 receivers require at-property treatment without the barrier 57 receivers require at-property treatment at a height of 3.5 m Barrier has not been considered further as the optimised design height based on the 2/3 point does not achieve the principles of the NMG. 					
NW.06	New	2552	0 – optimised height not reached	52	52	No	 The barrier does not remove any triggered receivers at any height up to 8 m 5 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 2 receiver achieves at least a 5 dB noise reduction at a height of 4.5 m 52 receivers require at-property treatment without the barrier 52 receivers require at-property treatment at a maximum design height of 8 m Barrier has not been considered further as it does not achieve the principles of the NMG. 					

Barrier			Noise	e barrier details	Comments					
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?				
				No barrier	With barrier					
NW.07	New	365	0 – optimised height not reached	nised ht not		No	 The barrier does not remove any triggered receivers at any height up to 8 m 2 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m No receivers achieve at least a 5 dB noise reduction at any height 12 receivers require at-property treatment without the barrier 12 receivers require at-property treatment at a maximum design height of 8 m 			
							Barrier has not been considered further as it does not achieve the principles of the NMG.			
NW.08	New	1466	0 – optimised height not reached	4	4	No	 The barrier does not remove any triggered receivers at any height up to 8 m 3 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 2 receiver achieves at least a 5 dB noise reduction at a height of 7.0 m 4 receivers require at-property treatment without the barrier 4 receivers require at-property treatment at a maximum design height of 8 m Barrier has not been considered further as it does not achieve the principles of the NMG. 			

Table 7-7 Indicative noise barriers – option 2

Barrier			Noise	barrier details			Comments
ID	Туре	Length (m)	Height (m)	Triggered	d receivers	Reasonable?	
				No barrier	With barrier		
NW.01	New	2,018	0 – optimised height not	9			The barrier does not remove any triggered receivers at any height up to 8 m
			reached				6 receivers achieve at least a 2 dB noise reduction at a height of 3.5 m
							1 receiver achieves at least a 5 dB noise reduction at a height of 5.5 m
							9 receivers require at-property treatment without the barrier
							9 receivers require at-property treatment at a maximum design height of 8 m
							Barrier has not been considered further as it does not achieve the principles of the NMG.

Barrier			Noise	barrier details	Comments						
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?					
				No barrier	With barrier						
NW.02	New	914	5.5	12	6	Barrier subject to feasible and reasonable considerations at a lower height.	 The barrier does not provide the required insertion loss to at least one triggered receiver at the initial design height of 5.5 m The barrier does provide a 5 dB insertion loss to at least one receiver at a height of 5.0 m 12 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 2 receivers achieve at least a 5 dB noise reduction at a height of 4.0 m 12 receivers require at-property treatment without the barrier 8 receivers require at-property treatment at an optimised height of 5.0 m 11 receivers require treatment at a height of 4.0 m Barrier subject to feasible and reasonable considerations at a lower height than the stated 5.5 m optimised height. 				

Barrier			Noise	barrier details			Comments							
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?								
				No barrier	With barrier									
NW.03	New	1978	6.0	36	31	Subject to feasible and reasonable considerations	 The barrier does not provide the required insertion loss to at least one triggered receiver at the initial design height of 6.0 m The barrier does provide a 5 dB insertion loss to at least one receiver at a height of 5.0 m 12 receivers achieve at least a 2 dB noise reduction at a height of 5.0 m 3 receivers achieve at least a 5 dB noise reduction at a height of 5.0 m 12 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 36 receivers require at-property treatment without the barrier 31 receivers require at-property treatment at an optimised height of 5.0 m Barrier subject to feasible and reasonable considerations. 							

Barrier			Noise	barrier details	i e		Comments
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?	
				No barrier	With barrier		
NW.04	New	2170	8.0	94	93	Subject to feasible and reasonable considerations	 The barrier provides the required insertion loss to at least one triggered receiver at the initial design height of 8.0 m. 59 receivers achieve at least a 2 dB noise reduction at a height of 8.0 m. 14 receivers achieve at least a 5 dB noise reduction at a height of 8.0 m. 39 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m. 2 receivers achieve at least a 5 dB noise reduction at a height of 4.0 m. 94 receivers require at-property treatment without the barrier. 93 receivers require at-property treatment at a maximum design height of 8 m. Barrier subject to feasible and reasonable considerations. Consideration should be given to a lower height barrier.
NW.05	New	1331	4.0	70	59	No	 The barrier does not provide the required insertion loss at any barrier height up to 8 m No receivers achieve at least a 2 dB noise reduction at a height of 4.0 m No receivers achieve at least a 5 dB noise reduction at any height 70 receivers require at-property treatment without the barrier 59 receivers require at-property treatment at a height of 4.0 m Barrier has not been considered further as the optimised design height based on the 2/3 point does not achieve the principles of the NMG.

Barrier			Noise	barrier details		Comments						
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?						
				No barrier	With barrier							
NW.06	New	2552	0 – optimised height not reached	d 52 52 I		No	 The barrier does not remove any triggered receivers at any height up to 8 m 13 receivers achieve at least a 2 dB noise reduction at a height of 4.0 m 4 receiver achieves at least a 5 dB noise reduction at a height of 4.5 m 52 receivers require at-property treatment without the barrier 52 receivers require at-property treatment at a maximum design height of 8 m 					
							Barrier has not been considered further as it does not achieve the principles of the NMG.					
NW.07	New	365	0 – optimised height not reached	12	12	No	 The barrier does not remove any triggered receivers at any height up to 8 m 1 receiver achieves at least a 2 dB noise reduction at a height of 4.0 m No receivers achieve a 5 dB noise reduction at any barrier height 12 receivers require at-property treatment without the barrier 12 receivers require at-property treatment at a maximum design height of 8 m Barrier has not been considered further as it does not achieve the principles of the NMG. 					

Barrier			Noise	barrier details			Comments									
ID	Туре	Length (m)	Height (m)	Triggere	d receivers	Reasonable?										
				No barrier	With barrier											
NW.08	New	1466	0 – optimised height not	4	4	No	The barrier does not remove any triggered receivers at any height up to 8 m									
			reached				1 receiver achieve at least a 2 dB noise reduction at a height of 4.0 m									
							no receiver achieves at least a 5 dB noise reduction at any height									
							4 receivers require at-property treatment without the barrier									
							4 receivers require at-property treatment at a maximum design height of 8 m									
							Barrier has not been considered further as it does not achieve the principles of the NMG.									

Where a barrier has been identified as requiring further consideration in **Table 7-6** and **Table 7-7**, the next step is to confirm the feasible and reasonableness of the proposed noise barrier. Whilst the table above evaluates the barriers noise performance against the principals outlined in the NMG, it does not detail the wider considerations which inform the final determination.

In accordance with the NMG, a barriers feasibility can include engineering considerations such as:

- Safety issues such as restrictions on road vision
- · Road corridor site constraints such as space limitations
- Floodway and stormwater flow obstruction
- · Access requirements for maintenance
- Maintenance requirements including ongoing costs
- Wind loading and ground conditions
- Shadowing
- Driveway access from residences to the noisy road.

The final feasibility of a barrier cannot be generally confirmed until detailed design of the amended project, as several of the engineering factors listed above cannot be evaluated until the final arrangement of the amended project is determined.

The consideration of what is considered reasonable in the NMG typically means looking at cost and equity considerations. There is no set monetary limit for noise mitigation provided for a road project however, there are some guiding principles to gauge whether costs are reasonable and equitable, and the following points should be considered:

- · Cost of mitigation measure
- Total cost of noise mitigation for the amended project
- Cost of mitigation measure and total cost of noise mitigation measures as percentages of total amended project cost
- Whether comparable noise mitigation measures have been provided at other locations in the amended project or for other similar projects and surrounding network.

In addition to the feasible and reasonable points noted above, the community perspective and opinion must be considered. Generally, the preferences of the local community are identified during community consultation sessions held at various stages of the amended project. Community opinion can be useful in informing:

- The general aesthetics and visual appearance of the barrier
- Potential community safety/crime prevention considerations such as isolated walkways
- The type and construction of the noise barrier
- Final height (a lower height barrier maybe the community preference).

Wider consideration should also be given to the future surrounding land use and development for the area as outlined in the Western Sydney Land Use and Infrastructure implementation Plan (DPIE, 2019). These considerations include

- Potential visual or urban design impacts and the integration with future amended project easements
- Form of future development in the area.

Whilst a number of the points listed above cannot be evaluated at this stage of the amended project, the following outlines some key areas which should be further evaluated where a barrier has been identified as requiring further consideration in **Table 7-6** and **Table 7-7**.

• Barrier NW.02 – The findings for barrier NW.02 are generally consistent for both the amended options along with the findings presented in the EIS for the same barrier. The noise barrier does remove triggered receivers at various heights and provides a 5 dB insertion loss to at least one receiver. Receivers behind NW.02 are setback from the barrier between 100 m and 400 m, and form two clusters of rural properties. The length of the barrier assessed is 914 m. There are a total of 12 triggered receivers situated behind the noise barrier.

The cost of building a noise barrier at the selected height and length of 914 m must be evaluated with the overall performance of the barrier. A barrier at lower height of 3.5 m still provides a 5 dB insertion loss to at least one receiver and provides a 2 dB insertion loss at the majority of receivers. Depending on which amended design option, a lower height noise barrier still requires between 8 and 11 of the 12 triggered receivers to be considered for at property treatments, although the benefit of a noise barrier is that external amenity is provided.

Given the two distinct clusters of residential receivers, a shorter in length noise barrier which provides at least 5 dB insertion loss to the receivers located within 100 m of the barrier and a 2 dB benefit to the second cluster of receivers situated approximately 400 m from the barrier should be further investigated during detailed design. Other factors which may influence the barrier design such as future development and interconnectivity with other projects should also be further evaluated during detailed design.

- Barrier NW.03 The findings for barrier NW.03 are generally consistent for both the amended options along with the findings presented in the EIS for the same barrier. The noise barrier does remove triggered receivers at various heights and provides a 5 dB insertion loss to at least one receiver. Receivers behind NW.03 are setback from the barrier approximately 450 m, with most receivers adjoining Mamre Road. The length of the barrier assessed is 1978 m. There are a total of 36 triggered receivers situated behind the noise barrier.
 - The cost of building a noise barrier at the optimised height of 5 m and at a length of 1978 m must be evaluated with the overall performance of the barrier. Depending on the amended design option, a 5 m noise barrier still requires between 27 and 31 of the 36 triggered receivers to be considered for at property treatments. Other factors which may influence the barrier design such as future development and interconnectivity with other projects should also be further evaluated during detailed design.
- Barrier NW.04 The findings for barrier NW.04 are generally consistent for both amended options along with the findings presented in the EIS for the same barrier. The noise barrier only removes one triggered receiver at a height of 8.0 m. Whilst the barrier does provide the required insertion loss for a barrier which is greater than 5.0 m in height, the wider noise reduction provided to the community for each incremental height after 4.0 m becomes less. This means that a lower height barrier would still provide an acceptable noise reduction (benefit) to the wider community.
- The cost of building a noise barrier at the selected height and length of 2170 m must be
 evaluated with the overall performance of the barrier. A barrier at lower height of 4.0 m still
 provides a 5 dB insertion loss to at least one receiver and provides a 2 dB insertion loss at the
 majority of receivers. Additionally, the constructability of the noise must be considered when
 evaluating the feasibility of the noise barriers length.

The noise barriers identified as potentially reasonable should be considered in conjunction with other mitigation measures for their feasibility and reasonability during the detailed design stage of the amended project.

7.2.3 At Property mitigation – architectural treatments

Where residual impacts remain after the use of at-source and in-corridor mitigation, the final approach is to use at-property mitigation. This typically involves using architectural treatments such as thicker glazing and doors or upgraded facade constructions to achieve appropriate internal noise levels.

At-property mitigation can potentially be used in place of at-source and in-corridor mitigation, such as where receivers are not grouped together or based on community preference. These treatments are generally limited to architectural treatment of building elements and the installation of acoustic screen walls (generally located within the property boundary) close to the receiver where they also protect outdoor living spaces.

Architectural treatments are more effective when they are applied to masonry buildings than lightly clad timber frames structures, and caution should be taken before providing treatments to buildings in a poor state as they may not be effective.

Selection of feasible and reasonable at-property mitigation will be made in accordance with the *At-Receiver Noise Treatment Guideline* (Roads and Maritime 2017).

The architectural treatments provided by TfNSW are typically limited to:

- Fresh air ventilation systems that meet the Building Code of Australia requirements with the windows and doors shut
- Upgraded windows and glazing and solid core doors on the exposed facades of the substantial structures only (eg masonry or insulated weather board cladding with sealed underfloor)
- Upgrading window or door seals and appropriately treating sub-floor ventilation
- The sealing of wall vents
- The sealing of the underfloor below the bearers and appropriately treating sub-floors ventilation
- Roof insulation
- The sealing of eaves.

Alternative at-property mitigation can include:

• The installation of acoustic screen walls that break line-of-sight between the affected facade window and the road where they are feasible and reasonable and are preferred by the owner.

The operational noise mitigation strategy selected will be determined as the amended project progresses and may use a combination of the approaches discussed in this report (ie low noise pavements, noise barriers and at-property architectural treatment).

Identification of residual noise impacts and receivers eligible for consideration of at-receiver noise treatments will be carried out during the detailed design stage after consideration of any at-source and in-corridor mitigation measures.

Selection of feasible and reasonable at-property mitigation will be made in accordance with the *At-Receiver Noise Treatment Guideline* (Roads and Maritime 2017).

8. Summary and conclusions

8.1 Summary of the key findings - construction noise and vibration

- The worst-case construction noise impacts at residential receivers are limited to catchments where receivers are close to the amended construction footprint. This includes east of the M7 Motorway and south of Elizabeth Drive in NCA02, north of Elizabeth Drive near Salisbury Avenue in NCA06 and near Clifton Avenue in the north of the construction footprint in NCA07. Receivers in these catchments are however generally sparsely distributed, meaning the number of receivers with the highest impacts is relatively low.
- The amended project is mostly consistent with the project as described in the EIS, however, the amended project would result in additional impacts to receivers situated in NCA02, due to works being undertaken on Elizabeth Drive, south of the intersection with the M7 Motorway. NCA01 no longer has predicted high impacts as reported in the EIS, as the closest receivers to the works now lie within the expanded ancillary facility AF9, and as such, will not be occupied during construction works.
- While impacts across the amended project as a whole are relatively low, 'high' impacts are likely at the nearest receivers to the amended project when noise intensive equipment such as rock-breakers or concrete saws are in use. Noise intensive equipment would however generally only be required for relatively short periods and noise levels and impacts during typical works generally result in either compliant noise levels or 'minor' impacts.
- Additional batching plants have been assessed for the amended project. Batching plants have been assessed at AF10 to the north of the amended project, AF2 and AF3 which are both located adjacent the Western Sydney International Airport access road, and at AF4 adjacent to Clifton Avenue.
 - Noise levels from AF10 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime and evening periods, and 'high' impacts during the night-time period.
 - Noise levels from AF2 and AF3 are predicted to result in 'moderate' impacts at the nearest residential receivers during all periods. Noise levels from AF4 are predicted to result in 'moderate' impacts at the nearest receivers during the daytime, evening and night-time periods, primarily at the receivers to the north of the site, and the closest receiver to the south.
 - Impacts from AF2 and AF3 are consistent with the project as described in the EIS. The amended project added batching plants at AF4 and AF10.
- Crushing, grinding and screening at AF1, AF2 and AF10 has been assessed for the amended project. Noise levels from AF1 and AF10 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime and evening periods, and 'high' impacts during the night-time period. Noise levels from AF2 are predicted to result in 'moderate' impacts at the nearest residential receivers during the daytime period, and 'high' impacts during the evening and night-time periods. During the night-time period at all three facilities 'moderate' impacts are predicted at receivers up to around 1 km from the sites, depending on the surrounding topography.
- Eleven receivers located in NCA02, NCA04, NCA06 and NCA07 are predicted to be Highly Noise Affected during the noisiest works scenarios nearby and when rock-breakers and concrete saws

- are in use. For option 2, an additional three receivers on Elizabeth Drive are predicted to be potential highly noise affected during the worst-case impacts from the option 2 construction.
- The construction noise impacts at other sensitive receivers are generally predicted to be minor, with moderate impacts predicted at the closest school (Irfan College) located in NCA04 when noise intensive equipment is in use. For option 2, 'high impacts' are predicted at Irfan College, during the worst-case scenarios when noise intensive equipment is being used.
- 'Minor' worst-case impacts are predicted at the nearest commercial receivers when noise intensive equipment is in use.
- The distance between the construction works and the nearest sensitive receivers is generally sufficient for most buildings to be unlikely to suffer cosmetic damage from construction vibration. Approximately 21 buildings are identified as being within the minimum working distance for cosmetic damage (ie these structures have the potential to be impacted by vibration during construction).
- A number of heritage items are identified as potentially being within the minimum working distances for sensitive structures.
- The Upper Canal System tunnel (listed on the State Heritage Register) and gas supply pipelines are identified as being within the amended construction footprint and potentially sensitive to vibration impacts. A detailed assessment in consultation with the relevant asset owners will be required during detailed design when more information is known.

8.2 Summary of the key findings- operational road traffic noise

- The amended project generally results in a reduction in the predicted night-time noise levels when compared to the corresponding period in the EIS. It should be noted that whilst the 'build' scenario is generally predicted to reduce by up to 4 dB across all NCAs, the 'no build' scenario is also predicted to reduce by up to 6 dB to that compared in the EIS. This results in a neutral change when compared with the EIS, as the comparable difference between the 'no build' and 'build' scenarios for the both the amended project and EIS are similar, albeit with lower overall noise levels. in the amended project.
- Whilst the overall noise levels in the amended project are lower, there are pockets where the realignment or changes to localised traffic volumes (Wallgrove Road, Salisbury Avenue and Duff Road) result in increased levels to those presented in the EIS.
- The change in road traffic noise levels due to the amended project is generally predicted to be less than 2 dBA in areas adjacent to existing major roads such as the M7 Motorway, Elizabeth Drive and The Northern Road.
- In other areas road traffic noise levels are predicted to increase by over 5 dBA at the receivers
 nearest to the amended project. This is generally due to the amended project affecting facades
 of these houses that are not currently affected by existing road traffic noise. Mitigation measures
 would be required to be considered to mitigate operational road traffic noise impacts.
- The change in maximum noise levels is predicted to be negligible at residential receivers closest to existing major roads such as Elizabeth Drive and The Northern Road. An increase in maximum noise levels of over 10 dBA is predicted at residential receivers in NCA02 adjacent to the proposed M7 southbound on ramp from the M12, in NCA04 adjacent to the proposed Wallgrove Road realignment, and in NCA07 and NCA09 where receivers are close to the M12 alignment which are not exposed to existing traffic noise.

- Quieter noise pavements are predicted to provide a minor benefit to triggered receivers and should be considered in conjunction with other mitigation options during detailed design, subject to feasible and reasonable considerations.
- Where noise barriers have been considered, the assessment has found that three barrier locations may be potentially reasonable based on the predicted noise benefit.
- Other design factors such as cost to benefit ratio, constructability, and overhead power line
 clearance may result in these barriers being considered unfeasible and/or unreasonable. The
 noise barriers identified as potentially reasonable should be considered in conjunction with other
 mitigation measures for their feasibility and reasonability during the detailed design stage of the
 amended project.
- A preferred noise mitigation option (low noise pavement, noise barriers, architectural treatments, or a combination of these) will be determined during detailed design taking into account whole-oflife engineering considerations and the overall social, economic and environmental benefits. The preference will be given to noise mitigation measures that reduce outdoor noise levels and the number of at-property treatments.

9. References

British Standards Institution (BSI), 1993. BS 7385 Part 2-1993 Evaluation and measurement for vibration in buildings Part 2

Deutsches Institut für Normung (DIN), 1999. DIN 4150: Part 3-1999 Structural vibration - Effects of vibration on structures

Environment Protection Authority (EPA), 2000. NSW Industrial Noise Policy (INP)

Environment Protection Authority (EPA), 2006a. Assessing Vibration: A Technical Guideline

Environment Protection Authority (EPA), 2006b. NSW Environmental Criteria for Road Traffic Noise (ECRTN)

Environment Protection Authority (EPA), 2009. Interim Construction Noise Guideline (ICNG)

Environment Protection Authority (EPA), 2010. NSW Industrial Noise Policy Application Notes

Environment Protection Authority (EPA), 2011. NSW Road Noise Policy (RNP)

Environment Protection Authority (EPA), 2017. NSW Noise Policy for Industry (NPfI)

Roads and Maritime Services, 2015a. Noise Criteria Guideline (NCG)

Roads and Maritime Services, 2015b. Noise Mitigation Guideline (NMG)

Roads and Maritime Services, 2015c. Preparing an Operational Noise and Vibration Assessment

Roads and Maritime Services, 2016a. Construction Noise and Vibration Guideline (CNVG)

Roads and Maritime Services, 2016b. Noise Criteria Guideline Application Notes

Roads and Maritime Services, 2017. At-Receiver Noise Treatment Guideline

Roads and Maritime Services, 2018. Model Validation Guideline

Roads and Traffic Authority, 2001. Environmental Noise Management Manual (ENMM)

Standards Australia, 2004. Australian Standard AS IEC 61672.1—2004 – Electroacoustics—Sound level meters, Part 1: Specifications

Standards Australia, 2016. Australian Standard AS 2107 Acoustics – Recommended design sound levels and reverberation times for building interiors

The Northern Road Upgrade EIS – Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park, 2017. *Appendix H – Technical Working Paper: Noise and Vibration*

UK Department of Transport, 1988. Calculation of Road Traffic Noise (CORTN)

Western Sydney Airport EIS, 2016. Appendix E1 – Aircraft Overflight and Operational Noise

Western Sydney Airport EIS, 2016. Appendix E2 – Airport Ground-Based Noise and Vibration

Annexure A Acoustic Terminology

1. Sound Level or Noise Level

The terms 'sound' and 'noise' are almost interchangeable, except that 'noise' often refers to unwanted sound.

Sound (or noise) consists of minute fluctuations in atmospheric pressure. The human ear responds to changes in sound pressure over a very wide range with the loudest sound pressure to which the human ear can respond being ten million times greater than the softest. The decibel (abbreviated as dB) scale reduces this ratio to a more manageable size by the use of logarithms.

The symbols SPL, L or LP are commonly used to represent Sound Pressure Level. The symbol LA represents A-weighted Sound Pressure Level. The standard reference unit for Sound Pressure Levels expressed in decibels is 2 x 10⁻⁵ Pa.

2. 'A' Weighted Sound Pressure Level

The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an 'A-weighting' filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

People's hearing is most sensitive to sounds at mid frequencies (500 Hz to 4,000 Hz), and less sensitive at lower and higher frequencies. Different sources having the same dBA level generally sound about equally loud.

A change of 1 dB or 2 dB in the level of a sound is difficult for most people to detect, whilst a 3 dB to 5 dB change corresponds to a small but noticeable change in loudness. A 10 dB change corresponds to an approximate doubling or halving in loudness. The table below lists examples of typical noise levels.

Sound Pressure Level (dBA)	Typical Source	Subjective Evaluation
130	Threshold of pain	Intolerable
120	Heavy rock concert	Extremely
110	Grinding on steel	noisy
100	Loud car horn at 3 m	Very noisy
90	Construction site with pneumatic hammering	
80	Kerbside of busy street	Loud
70	Loud radio or television	
60	Department store	Moderate to
50	General Office	quiet
40	Inside private office	Quiet to
30	Inside bedroom	very quiet
20	Recording studio	Almost silent

Other weightings (eg B, C and D) are less commonly used than A-weighting. Sound Levels measured without any weighting are referred to as 'linear', and the units are expressed as dB(lin) or dB.

3. Sound Power Level

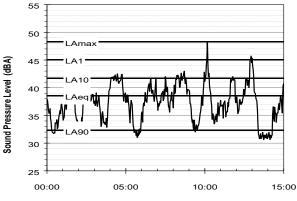
The Sound Power of a source is the rate at which it emits acoustic energy. As with Sound Pressure Levels, Sound Power Levels are expressed in decibel units (dB or dBA), but may be identified by the symbols SWL or LW, or by the reference unit 10^{-12} W.

The relationship between Sound Power and Sound Pressure is similar to the effect of an electric radiator, which is characterised by a power rating but has an effect on the surrounding environment that can be measured in terms of a different parameter, temperature.

4. Statistical Noise Levels

Sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels LAN, where LAN is the Aweighted sound pressure level exceeded for N% of a given measurement period. For example, the LA1 is the noise level exceeded for 1% of the time, LA10 the noise exceeded for 10% of the time, and so on.

The following figure presents a hypothetical 15 minute noise survey, illustrating various common statistical indices of interest.



Monitoring or Survey Period (minutes)

Of particular relevance, are:

LA1 The noise level exceeded for 1% of the 15 minute interval.

LA10 The noise level exceeded for 10% of the 15 minute interval. This is commonly referred to as the average maximum noise level.

LA90 The noise level exceeded for 90% of the sample period. This noise level is described as the average minimum background sound level (in the absence of the source under consideration), or simply the background level.

LAeq The A-weighted equivalent noise level (basically, the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.

5. Frequency Analysis

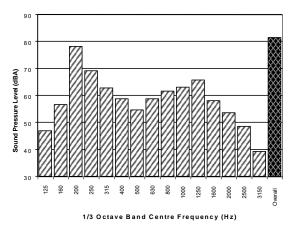
Frequency analysis is the process used to examine the tones (or frequency components) which make up the overall noise or vibration signal.

The units for frequency are Hertz (Hz), which represent the number of cycles per second.

Frequency analysis can be in:

- Octave bands (where the centre frequency and width of each band is double the previous band)
- 1/3 octave bands (three bands in each octave band)
- Narrow band (where the spectrum is divided into 400 or more bands of equal width)

The following figure shows a 1/3 octave band frequency analysis where the noise is dominated by the 200 Hz band. Note that the indicated level of each individual band is less than the overall level, which is the logarithmic sum of the bands.



6. Annoying Noise (Special Audible Characteristics)

A louder noise will generally be more annoying to nearby receivers than a quieter one. However, noise is often also found to be more annoying and result in larger impacts where the following characteristics are apparent:

- Tonality tonal noise contains one or more prominent tones (ie differences in distinct frequency components between adjoining octave or 1/3 octave bands), and is normally regarded as more annoying than 'broad band' noise.
- Impulsiveness an impulsive noise is characterised by one or more short sharp peaks in the time domain, such as occurs during hammering.
- Intermittency intermittent noise varies in level with the change in level being clearly audible. An example would include mechanical plant cycling on and off.
- Low Frequency Noise low frequency noise contains significant energy in the lower frequency bands, which are typically taken to be in the 10 to 160 Hz region.

7. Vibration

Vibration may be defined as cyclic or transient motion. This motion can be measured in terms of its displacement, velocity or acceleration. Most assessments of human response to vibration or the risk of damage to buildings use measurements of vibration velocity. These may be expressed in terms of 'peak' velocity or 'rms' velocity.

The former is the maximum instantaneous velocity, without any averaging, and is sometimes referred to as 'peak particle velocity', or PPV. The latter incorporates 'root mean squared' averaging over some defined time period.

Vibration measurements may be carried out in a single axis or alternatively as triaxial measurements (ie vertical, longitudinal and transverse).

The common units for velocity are millimetres per second (mm/s). As with noise, decibel units can also be used, in which case the reference level should always be stated. A vibration level V, expressed in mm/s can be converted to decibels by the formula $20 \log (V/Vo)$, where Vo is the reference level (10^{-9} m/s) . Care is required in this regard, as other reference levels may be used.

8. Human Perception of Vibration

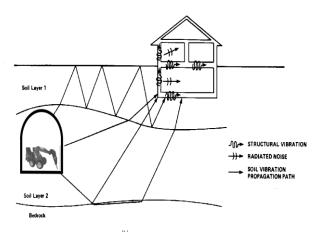
People are able to 'feel' vibration at levels lower than those required to cause even superficial damage to the most susceptible classes of building (even though they may not be disturbed by the motion). An individual's perception of motion or response to vibration depends very strongly on previous experience and expectations, and on other connotations associated with the perceived source of the vibration. For example, the vibration that a person responds to as 'normal' in a car, bus or train is considerably higher than what is perceived as 'normal' in a shop, office or dwelling.

9. Ground-borne Noise, Structure-borne Noise and Regenerated Noise

Noise that propagates through a structure as vibration and is radiated by vibrating wall and floor surfaces is termed 'structure-borne noise', 'ground-borne noise' or 'regenerated noise'. This noise originates as vibration and propagates between the source and receiver through the ground and/or building structural elements, rather than through the air.

Typical sources of ground-borne or structure-borne noise include tunnelling works, underground railways, excavation plant (eg rockbreakers), and building services plant (eg fans, compressors and generators).

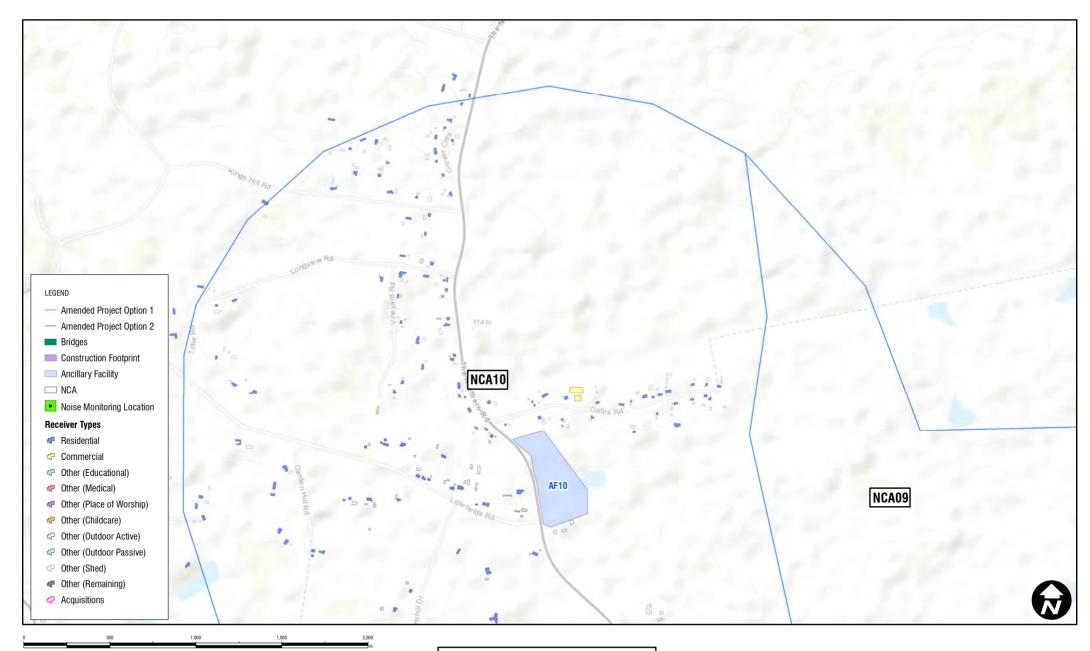
The following figure presents an example of the various paths by which vibration and ground-borne noise may be transmitted between a source and receiver for construction activities occurring within a tunnel.

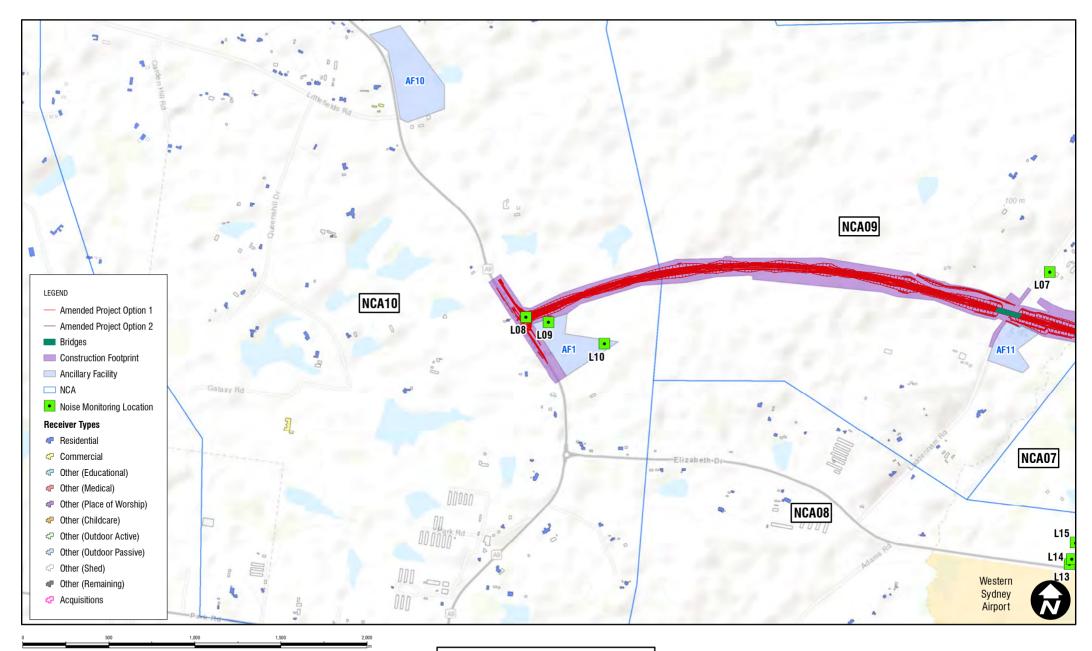


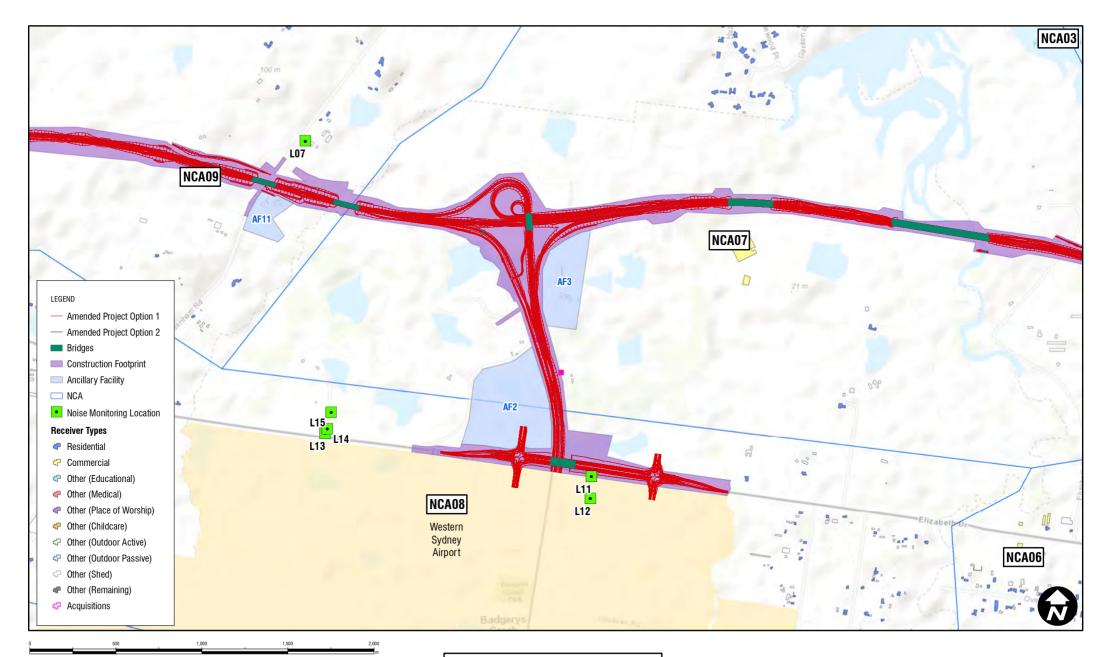
The term 'regenerated noise' is also used in other instances where energy is converted to noise away from the primary source. One example would be a fan blowing air through a discharge grill. The fan is the energy source and primary noise source. Additional noise may be created by the aerodynamic effect of the discharge grill in the airstream. This secondary noise is referred to as regenerated noise.

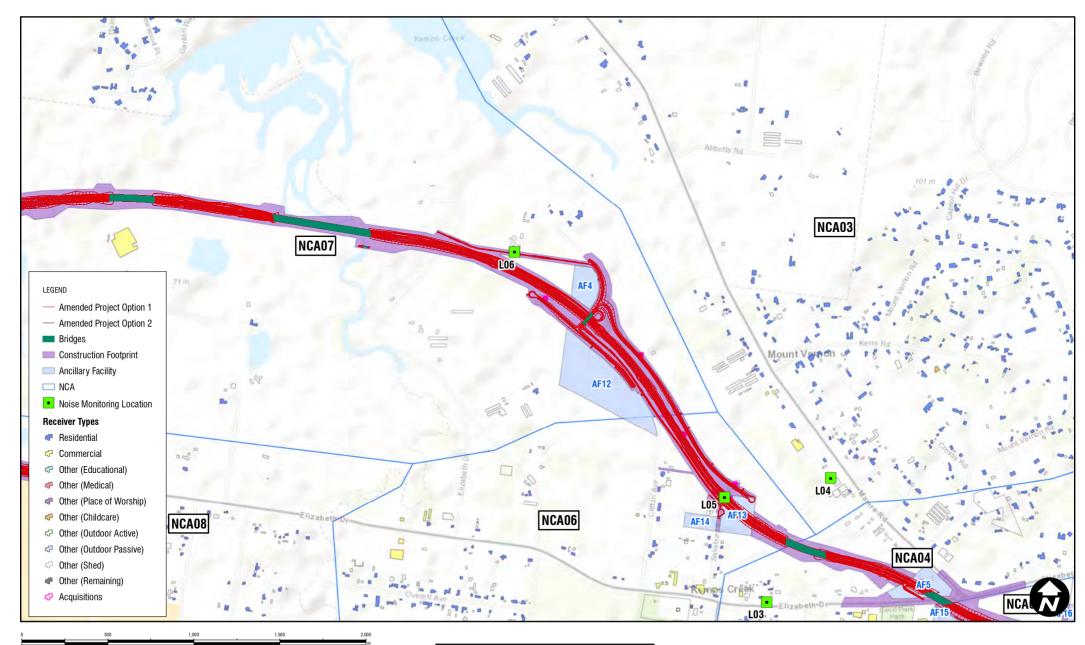
Annexure B Existing Environment

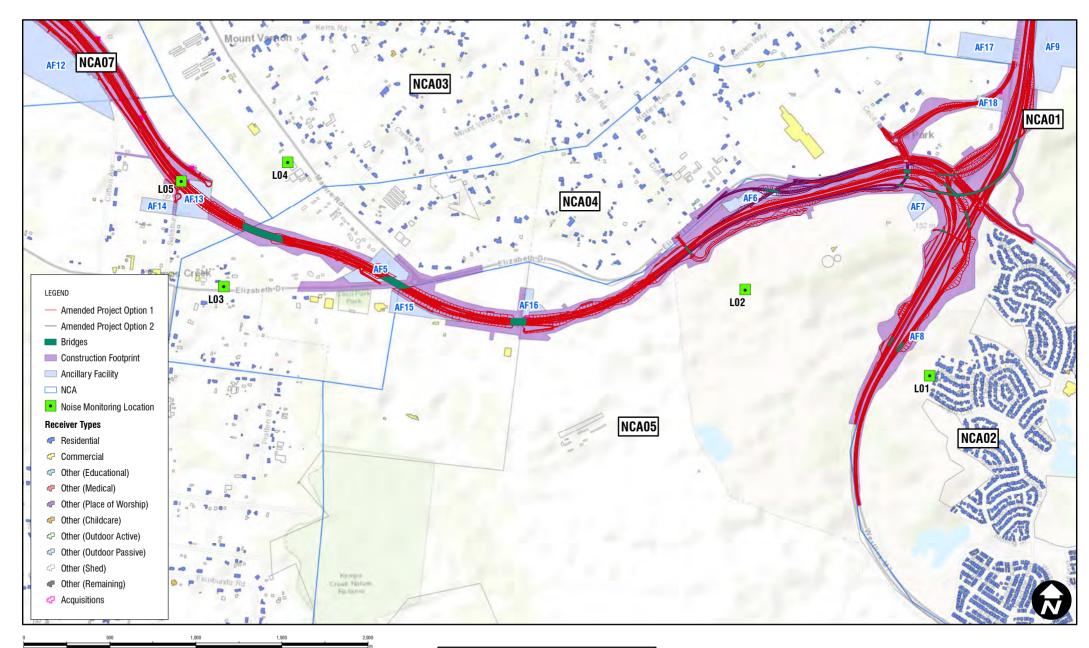
Site plan and sensitive receivers

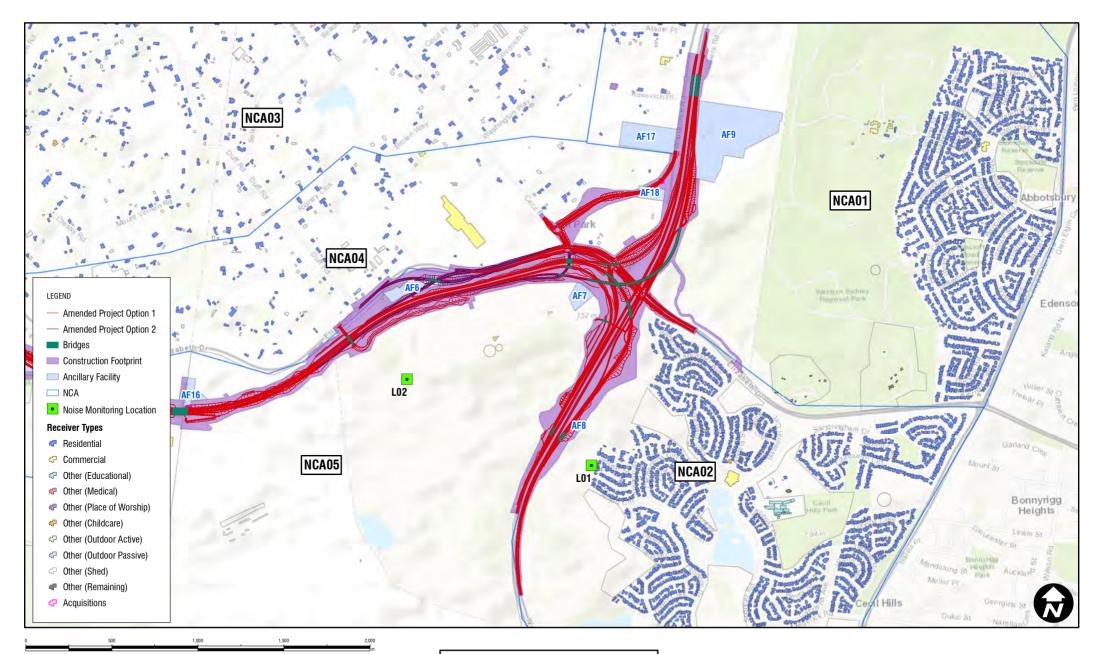












Annexure C Construction Information

Construction equipment

Table 1 Construction equipment

Table	e i Construction equipment	Equipment Item																							- <u>(e</u>				
			Bobcat	Chainsaw¹	Chipper	Compactor	Concrete mixer truck	Concrete pump	Concrete saw¹	Dozer	Dump truck (approx. 15 tonne)	Excavator - breaker¹	Excavator (35 tonne)	Flatbed truck	Front end loader	Grader	Hand tools (electric)	Line marking plant	Mobile crane - franna	Mobile crane (100 tonne)	Mobile crane (35 tonne)	Mobile Jaw Crusher¹	Paving machine	Piling - bored	Roller - vibratory (12 tonne)¹	Tub Grinder	Vehicle (light commercial e.g. 4WD)	Water tanker (8000 litre)	Batching plant
		SWL LAeq(15min)	104	114	116	106	103	108	124	116	107	121	109	103	108	114	96	108	98	100	98	120	105	111	109	116	103	107	118
Ref	Scenario	Activity																											
1a	Ancillary facility establishment	Peak impact									Х		Х		Х		Х								Х		Х		
1b	/ decommissioning	Typical impact	Х											Х			Х				Х				Х		Х		
2a	Ancillary facility	Operation												Х			Х		Х								Х	Х	
2b		Stockpiling									Х		Х		Х												Х	Х	
2c		Batching plant					Х							Х	Х		Х										Х		Х
2d		Crushing													Х							Х				Х	Х		
3a	Utilities and drainage -	Peak impact					Х					Х	Х	Х			Х			Х				Х	Х				
3b	including relocation of existing	Typical impact											Х	Х			Х			Х									
4a	Demolition	Bridges and buildings (inc breaker)									Х	Х	Х		Х		х										Х		
4b		Bridges and buildings (no breaker)									Х		Х		Х		Х			Х							Х		
5a	Clearing	Peak impact		Х	X					Х	Х		Х				Х										Х		
5b		Typical impact									Χ		Х				Х										Х		
6a	Earthworks	Peak impact				Х				Х	Х		Х		Х	Х									Х		Х	Х	
6b		Typical impact									Х		Х														Х	Х	
6c		Onsite truck haulage									Х																		
7a	Bridge works	Peak impact											Х	Х			Х			Х				Х			Х		
7b		Typical impact												Х			Х			Х							Х		
7c		Concrete works					Х	Х									Х		Х										
7d		Girder lifts over existing roads												Х			х		Х	Х							Х		
8a	Road works	Concrete works					Х	Χ									Х		Х										
8b		Typical impact												Х			Х		Х				Х				Х	, J	
8c		Tie-in works to existing roads							Х					Х			Х						Х		Х		Х		
9a	Signage, lighting and landscaping	Installation & finishing works	Х											Х			Х	Х		Х							Х		

Note 1: The ICNG requires that activities identified as particularly annoying (such as jackhammering, rockbreaking and power saw operation) have a 5 dB 'penalty' added to predicted noise levels when using the quantitative method.

Predicted construction noise levels

Table 1 Predicted construction noise levels morning shoulder – LAeq(15minute) – residential receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
Morning Shoulder	1a	Ancillary facility establishment	Peak impact	66	60	52	69	-	79	73	58	62	71
	1b		Typical impact	58	52	44	61	-	71	65	50	54	63
	2a	Ancillary facilities	Operation	53	47	39	56	-	66	60	45	49	58
	2b		Stockpiling	59	53	45	62	-	72	66	51	55	64
	2c		Batching plant	<30	<30	50	38	-	42	55	53	41	60
	2d		Crushing works	<30	<30	34	32	-	41	63	61	47	68
	За	Utilities and drainage	Peak impact	71	80	59	84	-	81	85	71	68	66
	3b		Typical impact	56	65	44	69	-	66	70	56	53	51
	4a	Demolition	Peak impact	57	52	57	73	-	71	74	55	46	65
	4b		Typical impact	44	39	44	60	-	58	61	42	33	52
	5a	Clearing	Peak impact	68	77	56	81	-	78	82	68	65	63
	5b		Typical impact	56	65	44	69	-	66	70	56	53	51
	6a	Earthworks	Peak impact	67	76	55	80	-	77	81	67	64	62
	6b		Typical impact	56	65	44	69	-	66	70	56	53	51
	6c		Onsite truck haulage	42	51	<30	55	-	44	42	35	36	37
	7a	Bridge works	Peak impact	59	59	49	61	-	51	50	38	52	31
	7b		Typical impact	50	50	40	52	-	42	41	<30	43	<30
	7c		Concrete works	53	53	43	55	-	45	44	32	46	<30
	7d		Girder lifts	52	52	38	51	-	33	39	52	45	<30
	8a	Road works	Concrete works	52	55	43	61	-	65	69	54	52	50
	8b		Typical works	43	55	43	58	-	65	69	48	52	50
	8c		Tie-in works	68	77	54	81	-	78	61	67	43	45
	9a	Signage, lighting and landscaping			68	47	72	-	69	73	59	56	54

Table 2 Predicted construction noise levels standard daytime – LAeq(15minute) – residential receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary facility	Peak impact	66	60	52	69	-	79	73	58	62	71
	1b	establishment	Typical impact	58	52	44	61	-	71	65	50	54	63
	2a	Ancillary facilities	Operation	53	47	39	56	-	66	60	45	49	58
	2b		Stockpiling	59	53	45	62	-	72	66	51	55	64
	2c		Batching plant	<30	<30	50	38	-	42	55	53	41	60
	2d		Crushing works	<30	<30	34	32	-	41	63	61	47	68
	За	Utilities and	Peak impact	71	80	59	84	-	81	85	71	68	66
	3b	drainage	Typical impact	56	65	44	69	-	66	70	56	53	51
	4a	Demolition	Peak impact	57	52	57	73	-	71	74	55	46	65
шe	4b		Typical impact	44	39	44	60	-	58	61	42	33	52
Standard Daytime	5a	Clearing	Peak impact	68	77	56	81	-	78	82	68	65	63
<u>5</u>	5b		Typical impact	56	65	44	69	-	66	70	56	53	51
anda	6a	Earthworks	Peak impact	67	76	55	80	-	77	81	67	64	62
Sta	6b		Typical impact	56	65	44	69	-	66	70	56	53	51
	6c		Onsite truck haulage	42	51	<30	55	-	44	42	35	36	37
	7a	Bridge works	Peak impact	59	59	49	61	-	51	50	38	52	31
	7b		Typical impact	50	50	40	52	-	42	41	<30	43	<30
	7c		Concrete works	53	53	43	55	-	45	44	32	46	<30
	7d		Girder lifts	52	52	38	51	-	33	39	52	45	<30
	8a	Road works	Concrete works	52	55	43	61	-	65	69	54	52	50
	8b		Typical works	43	55	43	58	-	65	69	48	52	50
	8c		Tie-in works	68	77	54	81	-	78	61	67	43	45
	9a	Signage, lighting a	nd landscaping	59	68	47	72	-	69	73	59	56	54

Table 3 Predicted construction noise levels evening shoulder – LAeq(15minute) – residential receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	4	A : !! !! it .	Peak impact	66	60	52	69		79	73	58	62	71
	1a	Ancillary facility establishment	'					-					
	1b		Typical impact	58	52	44	61	-	71	65	50	54	63
	2a	Ancillary	Operation	53	47	39	56	-	66	60	45	49	58
	2b	facilities	Stockpiling	59	53	45	62	-	72	66	51	55	64
	2c		Batching plant	<30	<30	50	38	-	42	55	53	41	60
	2d		Crushing works	<30	<30	34	32	-	41	63	61	47	68
	3a	Utilities and	Peak impact	71	80	59	84	-	81	85	71	68	66
	3b	drainage	Typical impact	56	65	44	69	-	66	70	56	53	51
	4a	Demolition	Peak impact	57	52	57	73	-	71	74	55	46	65
der	4b		Typical impact	44	39	44	60	-	58	61	42	33	52
hon	5a	Clearing	Peak impact	68	77	56	81	-	78	82	68	65	63
S g	5b		Typical impact	56	65	44	69	-	66	70	56	53	51
Evening Shoulder	6a	Earthworks	Peak impact	67	76	55	80	-	77	81	67	64	62
ш	6b		Typical impact	56	65	44	69	-	66	70	56	53	51
	6c		Onsite truck	42	51	<30	55	_	44	42	35	36	37
	7a	Bridge works	Peak impact	59	59	49	61	-	51	50	38	52	31
	7b		Typical impact	50	50	40	52	-	42	41	<30	43	<30
	7c		Concrete works	53	53	43	55	-	45	44	32	46	<30
	7d		Girder lifts	52	52	38	51	-	33	39	52	45	<30
	8a	Road works	Concrete works	52	55	43	61	-	65	69	54	52	50
	8b		Typical works	43	55	43	58	-	65	69	48	52	50
	8c		Tie-in works	68	77	54	81	-	78	61	67	43	45
	9a	Signage, lighting	and landscaping	59	68	47	72	-	69	73	59	56	54

Table 4 Predicted construction noise levels evening – LAeq(15minute) – residential receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	4-	A : !! :	Peak impact										
	1a	Ancillary facility establishment	Typical impact	-	-	-	- 04	-	- 74	- 65	-	-	-
	1b		· .	58	52	44	61	-	71		50	54	63
	_2a	Ancillary facilities	Operation	53	47	39	56	-	66	60	45	49	58
	2b		Stockpiling	59	53	45	62	-	72	66	51	55	64
	2c		Batching plant	<30	<30	50	38	-	42	55	53	41	60
	2d		Crushing works	<30	<30	34	32	-	41	63	61	47	68
	3a	Utilities and	Peak impact	-	-	-	-	-	-	-	-	-	-
	3b	drainage	Typical impact	-	-	-	-	-	-	-	-	-	_
	4a	Demolition	Peak impact	-	-	-	-	-	-	-	-	-	-
	4b		Typical impact	_	-	-	-	-	-	-	-	-	-
ing	5a	Clearing	Peak impact	-	-	-	-	-	-	-	-	-	-
Evening	5b		Typical impact	-	-	-	-	-	-	-	-	-	-
Ш	6a	Earthworks	Peak impact	-	-	-	-	-	-	-	-	-	-
	6b		Typical impact	-	-	-	-	-	-	-	-	-	-
	6c		Onsite truck haulage	_	_	_	_	_	_	_	_	_	_
	7a	Bridge works	Peak impact	59	59	49	61	-	51	50	38	52	31
	7b		Typical impact	50	50	40	52	-	42	41	<30	43	<30
	7c		Concrete works	53	53	43	55	-	45	44	32	46	<30
	7d		Girder lifts	52	52	38	51	-	33	39	52	45	<30
	8a	Road works	Concrete works	52	55	43	61	-	65	69	54	52	50
	8b		Typical works	-	-	-	-	-	_	-	-	_	-
	8c		Tie-in works	68	77	54	81	-	78	61	67	43	45
	9a	Signage, lighting a	nd landscaping	-	-	-	-	-	-	-	-	-	-

Table 5 Predicted construction noise levels night-time – LAeq(15minute) – residential receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
<u> </u>				Z	Z	Z	Z	Z	Z	Z	Z	Z	Z
	1a	Ancillary facility	Peak impact	-	-	-	-	-	-	-	-	-	-
	1b	establishment	Typical impact	58	52	44	61	-	71	65	50	54	63
	2a	Ancillary facilities	Operation	53	47	39	56	-	66	60	45	49	58
	2b		Stockpiling	59	53	45	62	-	72	66	51	55	64
	2c		Batching plant	<30	<30	50	38	-	42	55	53	41	60
	2d		Crushing works	<30	<30	34	32	-	41	63	61	47	68
	За	Utilities and	Peak impact	-	-	-	-	-	-	-	-	-	-
	3b	drainage	Typical impact	-	-	-	-	-	-	-	-	-	-
	4a	Demolition	Peak impact	-	-	_	-	-	_	-	-	-	-
	4b		Typical impact	-	-	-	-	-	-	-	-	-	-
ine ine	5a	Clearing	Peak impact	-	-	-	-	-	-	-	-	-	-
Night-time	5b	_	Typical impact	-	-	-	-	-	-	-	-	-	-
Ë	6a	Earthworks	Peak impact	-	-	-	-	-	-	-	-	-	-
	6b		Typical impact	-	-	-	-	-	-	-	-	-	-
	6c		Onsite truck haulage	-	-	-	-	-	-	-	-	-	-
	7a	Bridge works	Peak impact	59	59	49	61	-	51	50	38	52	31
	7b		Typical impact	50	50	40	52	-	42	41	<30	43	<30
	7c		Concrete works	53	53	43	55	-	45	44	32	46	<30
	7d		Girder lifts	52	52	38	51	-	33	39	52	45	<30
	8a	Road works	Concrete works	52	55	43	61	-	65	69	54	52	50
	8b		Typical works	-	-	-	-	-	-	-	-	-	-
	8c		Tie-in works	68	77	54	81	-	78	61	67	43	45
	9a	Signage, lighting a	nd landscaping	-	-	-	-	-	-	-	-	-	-

Table 6 Predicted construction noise levels – LAeq(15minute) – commercial receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary facility	Peak impact	56	42	52	78	76	58	47	38	48	65
	1b	establishment	Typical impact	48	34	44	70	68	50	39	<30	40	57
	2a	Ancillary facilities	Operation	43	<30	39	65	63	45	34	<30	35	52
	2b		Stockpiling	49	35	45	71	69	51	40	31	41	58
	2c		Batching plant	<30	<30	41	36	31	39	46	35	33	57
	2d		Crushing works	<30	<30	<30	31	<30	38	47	45	44	65
	За	Utilities and	Peak impact	68	52	58	69	77	59	67	42	59	44
	3b	drainage	Typical impact	53	37	43	54	62	44	52	<30	44	<30
	4a	Demolition	Peak impact	54	42	57	65	65	58	51	42	41	43
45	4b		Typical impact	41	<30	44	52	52	45	38	<30	<30	30
Use	5a	Clearing	Peak impact	65	49	55	66	74	56	64	39	56	41
n E	5b		Typical impact	53	37	43	54	62	44	52	<30	44	<30
When in Use	6a	Earthworks	Peak impact	64	48	54	65	73	55	63	38	55	40
	6b		Typical impact	53	37	43	54	62	44	52	<30	44	<30
	6c		Onsite truck haulage	39	<30	<30	40	48	<30	38	<30	<30	<30
	7a	Bridge works	Peak impact	58	41	45	59	59	48	57	32	43	<30
	7b		Typical impact	49	32	36	50	50	39	48	<30	34	<30
	7c		Concrete works	52	35	39	53	53	42	51	<30	37	<30
	7d		Girder lifts	51	34	33	52	50	31	<30	<30	36	<30
	8a	Road works	Concrete works	50	36	42	53	61	43	51	<30	43	<30
	8b		Typical works	42	36	42	53	61	43	51	<30	43	<30
	8c		Tie-in works	65	49	51	66	58	56	43	40	36	<30
	9a	Signage, lighting a	nd landscaping	56	40	46	57	65	47	55	31	47	32

Table 7 Predicted construction noise levels – LAeq(15minute) – other sensitive receivers

Period	ID	Scenario	Activity	NCA01	NCA02	NCA03	NCA04	NCA05	NCA06	NCA07	NCA08	NCA09	NCA10
	1a	Ancillary facility	Peak impact	57	47	41	63	56	50	33	44	-	35
	1b	establishment	Typical impact	49	39	33	55	48	42	<30	36	-	<30
	2a	Ancillary facilities	Operation	44	34	<30	50	43	37	<30	31	-	<30
	2b		Stockpiling	50	40	34	56	49	43	<30	37	-	<30
	2c		Batching plant	<30	<30	37	32	<30	37	33	43	-	<30
	2d		Crushing works	<30	<30	<30	<30	<30	34	37	51	-	43
	За	Utilities and	Peak impact	57	58	48	67	67	54	44	54	-	39
	3b	drainage	Typical impact	42	43	33	52	52	39	<30	39	-	<30
	4a	Demolition	Peak impact	54	45	47	63	55	53	42	46	-	40
	4b		Typical impact	41	32	34	50	42	40	<30	33	-	<30
Use	5a	Clearing	Peak impact	54	55	45	64	64	51	41	51	-	36
. <u>.</u>	5b		Typical impact	42	43	33	52	52	39	<30	39	-	<30
When in Use	6a	Earthworks	Peak impact	53	54	44	63	63	50	40	50	-	35
	6b		Typical impact	42	43	33	52	52	39	<30	39	-	<30
	6c		Onsite truck haulage	<30	<30	<30	38	37	<30	<30	<30	-	<30
	7a	Bridge works	Peak impact	47	45	38	54	53	44	34	30	-	<30
	7b		Typical impact	38	36	<30	45	44	35	<30	<30	-	<30
	7c		Concrete works	41	39	32	48	47	38	<30	<30	-	<30
	7d		Girder lifts	40	38	<30	46	38	<30	<30	34	-	<30
	8a	Road works	Concrete works	41	42	32	51	51	38	<30	35	-	<30
	8b		Typical works	37	42	32	51	51	38	<30	34	-	<30
	8c		Tie-in works	54	53	43	63	59	51	33	48	-	<30
	9a	Signage, lighting a	nd landscaping	45	46	36	55	55	42	32	42	_	<30

Predicted construction NML exceedances

Table 1 Predicted NML exceedances – all receiver types – NCA01

ID	Scenario	Activity	No.	Number	of receiv	ers																				
			weeks1	Total	HNA ²				With	NML	excee	dance ³														
						Stan	dard		Out	of hou	rs wo	rks ⁴														
						dayt	ime		Mor	ning sl	noulde	Daytii	ne OO	Н	Even shou			Even	ing		Night-	-time		Sleep distu	rbanc	e
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	1372	-	5	1	-	11	3	-	11	3	-	17	3	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	1372	-	2	-	-	3	-	-	3	-	-	4	-	-	4	-	-	4	2	-	4	1	- 1
2a	Ancillary	Operation	192	1372	-	-	-	-	2	-	-	2	-	-	2	-	-	2	-	-	3	-	-	3	-	-
2b	facilities	Stockpiling	144	1372	-	2	-	-	4	-	-	4	-	-	4	-	-	4	-	-	5	2	-	4	1	- 1
2c		Batching plant	120	1372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2d		Crushing works	120	1372		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3a	Utilities and	Peak impact	35	1372	-	24	3	-	23	13	1	23	13	1	25	12	2	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	1372	-	1	-	-	3	-	-	3	-	-	4	-	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	1372	-	3	-	-	13	-	-	13	-	-	15	-	-	-	-	-	-	_	-	-	_	_
4b		Typical impact	36	1372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	_
5a	Clearing	Peak impact	20	1372	-	14	3	-	23	7	-	23	7	-	23	9	-	-	-	-	-	_	-	-	_	_
5b		Typical impact	36	1372	-	1	-	-	3	-	-	3	-	-	4	-	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	1372	-	12	2	-	22	4	-	22	4	-	23	7	-	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	1372	-	1	-	-	3	-	-	3	-	-	4	-	-	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	1372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7a	Bridge works	Peak impact	48	1372	-	2	-	-	9	-	-	9	-	-	11	1	-	11	1	-	18	2	-	9	-	-
7b		Typical impact	144	1372	-	-	-	-	1	-	-	1	-	-	1	-	-	1	-	-	3		-	2	-	-
7c		Concrete works	48	1372	-	-	-	-	2	-	-	2	-	-	2	-	-	2	-	-	7		-	2	-	-
7d		Girder lifts	50	1372	-	-	-	-	2	-	-	2	-	-	2	-	-	2	-	-	4	-	-	2	-	-
8a	Road works	Concrete works	30	1372	-	-	-	-	2	-	-	2	-	-	3	-	-	3	-	-	10	-	-	2	-	
8b		Typical works	144	1372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	
8c		Tie-in works	48	1372	-	13	3	-	23	7	-	23	7	-	23	9	-	23	9	-	29	13	3	21	14	-
9a	Signage, lighting	and landscaping	36	1372	-	3	-	-	9	-	-	9	-	-	14	-	-	-	-	-	-	_	-	-	-	

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 2 Predicted NML exceedances – all receiver types – NCA02

ID	Scenario	Activity	No.	Numbe	r of rec	eivers																				
			weeks1	Total	HNA ²				With	NML ex	ceeda	nce³														
						Stand	ard		Out o	f hours	works	; ⁴														
						daytin	ne		Morn	ing sho	ulder	Dayti	me OOI	1	Eveni	ng shou	ılder	Eveni	ng		Night-t	ime		Sleep distur	bance	
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 di	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary	Peak impact	6	2832	-	11	-	-	37	-	-	37	-	-	53	2	-	-	-	-	-	-	-	-	-	-
1b	facility	Typical impact	12	2832	-	-	-	-	2	-	-	2	_	_	6	-	-	6	_	-	22	-	-	11	-	_
2a	Ancillary	Operation	192	2832	-	-	-	_	-	-	-	_	_	_	_	-	-	-	-	-	2	-	-	-	-	
2b	facilities	Stockpiling	144	2832	-	-	-	-	6	-	-	6	_	-	8	-	-	8	_	-	25	-	-	11	-	-
2c		Batching plant	120	2832	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2d		Crushing works	120	2832	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3a	Utilities and	Peak impact	35	2832	7	345	50	7	692	171	22	692	171	22	804	201	25	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	2832	-	21	1	-	50	7	-	50	7		56	10	-	_	-	-	-	-	-	-	-	
4a	Demolition	Peak impact	36	2832	-		-	-	1	-		1		-	3	-	-	-	-	-	-	-	-	-	-	
4b		Typical impact	36	2832	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>
5a	Clearing	Peak impact	20	2832	4	232	27	4	457	79	14	457	79	14	521	105	18	-	-	-	-	-	-	-	-	<u> </u>
5b		Typical impact	36	2832	-	21	1	-	50	7	-	50	7	-	56	10	-	-	-	-	-	-	-	-	-	<u> </u>
6a	Earthworks	Peak impact	80	2832	3	201	22	3	405	56	10	405	56	10	457	79	14	-	-	-	-	-	-	-	-	<u> </u>
6b		Typical impact	144	2832	-	21	1	-	50	7	-	50	7	-	56	10	-	-	-	-	-	-	-	-	-	<u> </u>
6c		Onsite haulage	144	2832	-	-	-	-	3	-	-	3	-	-	4	-	-	-	-	-	-	-	-	-	-	<u> </u>
7a	Bridge	Peak impact	48	2832	-	7	-	-	52	-	-	52	-	-	67	1	-	67	1	-	201	7	-	52	-	<u> </u>
7b	works	Typical impact	144	2832	-	-	-	-	1	-	-	1	-	-	1	-	-	1	-	-	10	-	-	3	-	<u> </u>
7c		Concrete works	48	2832	-	-	-	-	6	-	-	6	-	-	7	-	-	7	-	-	39	-	-	6	-	<u> </u>
7d		Girder lifts	50	2832	-	-	-	-	3	-	-	3	-	-	6	-	-	6	-	-	22	-	-	3	-	
8a	Road works	Concrete works	30	2832	-		-	-	14	-	-	14	-	-	21	-	-	21	-	-	102	-	-	14	-	<u> - </u>
8b		Typical works	144	2832	-	-	-	-	13	-	-	13	-	-	20	-	-	-	-	-	-	-	-	-	-	-
8c		Tie-in works	48	2832	4	190	26	4	458	63	14	458	63	14	511	85	17	511	85	17	967	190	30	587	108	19
9a	Signage, lighting	g and landscaping	36	2832	-	37	4	-	111	18	-	111	18	-	144	20	-	-	-	-	-	-	-	-	-	

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 3 Predicted NML exceedances – all receiver types – NCA03

ID	Scenario	Activity	No.	Number	of rece	eivers																				
			weeks1	Total	HNA ²				With	NML e	xceed	ance³														
						Stand	ard		Out o	f hour	s worl	ks ⁴														
						daytir	ne		Morn	ing sh	ouldei	Dayti	me OC	Н	Evenii should			Eveni	ng		Night	-time		Sleep distur		
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	537	-	23	-	-	132	-	-	132	-	-	63	-	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	537	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-	37	-	-	11	-	-
2a	Ancillary	Operation	192	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2b	facilities	Stockpiling	144	537	-	-	-	-	4	-	-	4	-	-	-	-	-	-	-	-	63	-	-	11	-	-
2c		Batching plant	120	537	-	3	-	-	22	-	-	22	-	-	6	-	-	6	-	-	72	-	-	44	-	-
2d		Crushing works	120	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3a	Utilities and	Peak impact	35	537	-	175	-	-	356	47	-	356	47	-	254	9	-	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	537	-	102	-	-	252	25	-	252	25	-	159	2	-	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	537	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5a	Clearing	Peak impact	20	537	-	91	-	-	254	9	-	254	9	-	134	-	-	-	-	-	-	-	-	-	-	-
5b		Typical impact	36	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	537	-	68	-	-	210	6	-	210	6	-	111	-	-	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	537	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	537	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-
7a	Bridge works	Peak impact	48	537	-	-	-	-	16	-	-	16	-	-	2	-	-	2	-	-	93	-	-	11	-	-
7b		Typical impact	144	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7c		Concrete works	48	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
7d		Girder lifts	50	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8a	Road works	Concrete works	30	537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-
8b		Typical works	144	537	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	-	-	-	-	-
8c		Tie-in works	48	537	-	57	-	-	224	-	_	224	-	-	108	-	-	108	-	-	396	27	-	276	2	-
9a	Signage, lighting	and landscaping	36	537	-	-	-	-	20	-	_	20	_	-	-	-	-	-	-	_	-	-	_	-	-	_

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 4 Predicted NML exceedances – all receiver types – NCA04

ID	Scenario	Activity	No.	Number	of rece	ivers																				
			weeks1	Total	HNA ²				With	NML	excee	dance	3													
						Stan	dard		Out	of hou	ırs wo	rks ⁴														
						dayt	ime		Mor	ning s	houlde	Day	time O	ОН	Eveni should			Eveni	ng		Night	-time		Sleep distur	bance	
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	184	-	12	-	-	23	1	-	23	1	-	46	6	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	184	-	-	-	-	1	-	-	1	-	-	12	-	-	12	-	-	66	13	-	51	9	-
2a	Ancillary	Operation	192	184	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	27	3	-	18	1	-
2b	facilities	Stockpiling	144	184	-	1	-	-	3	-	-	3	-	-	13	-	-	13	-	-	84	16	1	51	9	-
2c		Batching plant	120	184	-	-	_	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2d		Crushing works	120	184	-	-	_	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3a	Utilities and	Peak impact	35	184	2	31	5	1	54	16	1	54	16	1	103	34	4	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	184	-	1	-	-	1	1	-	1	1	-	14	1	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	184	-	8	-	-	15	3	-	15	3	-	61	11	-	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	184	_	_	_	-	2	-	-	2	_	-	4	-	_	_	-	-	-	-	-	_	-	_
5a	Clearing	Peak impact	20	184	1	20	1	-	43	6	1	43	6	1	79	19	2		-	-	-	-	-	_	-	_
5b		Typical impact	36	184	-	1	-	-	1	1	-	1	1	-	14	1	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	184	1	19	1	-	39	3	1	39	3	1	69	15	1	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	184	-	1	-	-	1	1	-	1	1	-	14	1	-	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	184	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
7a	Bridge works	Peak impact	48	184	-	-	-	-	1	-	-	1	-	-	11	-	-	11	-	-	72	15	-	44	3	-
7b		Typical impact	144	184	_	_	_	-	_	-	-	-	_	-	-	-	_	_	-	-	18	1	-	8	-	_
7c		Concrete works	48	184	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	38	1	-	11	-	-
7d		Girder lifts	50	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	5	-	
8a	Road works	Concrete works	30	184	-	-	-	-	2	-	-	2	-	-	13	-	-	13	-	-	60	15	-	34	4	-
8b		Typical works	144	184	-	-	-	-	-	-	-	-	-	-	8	_	-	-	-	-	-	-	-	-	-	
8c		Tie-in works	48	184	1	14	1	-	22	4	1	22	4	1	49	10	2	49	10	2	92	62	14	126	33	7
9a	Signage, lighting	and landscaping	36	184	-	2	-	-	7	1	-	7	1	-	24	3	-	-	-	-	-	-	-	_	-	-

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 5 Predicted NML exceedances – all Receiver types – NCA05

ID	Scenario	Activity	No.	Number	of rece	ivers																				
			weeks1	Total	HNA ²				With	NML	exceed	lance³														
						Stan	dard		Out	of hou	rs wor	ks ⁴														
						dayti	ime		Mor	ning sl	oulde	Dayt	time O	ОН	Even shou			Even	ing		Nigh	t-time		Slee distu	p ırbanc	e
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	15	-	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2a	Ancillary	Operation	192	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2b	facilities	Stockpiling	144	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2c		Batching plant	120	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2d		Crushing works	120	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3a	Utilities and	Peak impact	35	15	-	2	-	-	2	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	
3b	drainage	Typical impact	132	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4a	Demolition	Peak impact	36	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4b		Typical impact	36	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5a	Clearing	Peak impact	20	15	-	2	-	-	2	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	
5b		Typical impact	36	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	15	-	2	-	-	2	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7a	Bridge works	Peak impact	48	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7b		Typical impact	144	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7c		Concrete works	48	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7d		Girder lifts	50	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8a	Road works	Concrete works	30	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-
8b		Typical works	144	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8c		Tie-in works	48	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9a	Signage, lighting	and landscaping	36	15	-	-	-	-				-	-	-				-	-	-	-	-	-	-	-	

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 6 Predicted NML exceedances – all receiver types – NCA06

ID	Scenario	Activity	No.	Number	of rece	ivers																				
			weeks1	Total	HNA ²				With	NML	ехсеес	lance³														
						Stand			Out	of hou	rs wor	ks ⁴														
						dayti	me		Mor	ning sh	oulde	Dayt	ime O	ОН	Ever shou			Even	ing		Night-	-time		Slee _l distu	o irbanc	e
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	347	1	10	7	2	22	11	4	22	11	4	11	8	2	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	347	-	8	1	1	13	3	1	13	3	1	11	1	1	11	1	1	12	7	2	13	3	2
2a	Ancillary	Operation	192	347	-	3	1	-	8	1	1	8	1	1	3	2	-	3	2	-	12	3	1	10	1	1
2b	facilities	Stockpiling	144	347	-	10	1	1	13	3	2	13	3	2	11	3	1	11	3	1	11	8	2	13	3	2
2c		Batching plant	120	347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-
2d		Crushing works	120	347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
3a	Utilities and	Peak impact	35	347	1	27	12	1	99	12	6	99	12	6	58	12	3	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	347	-	5	1	-	12	-	1	12	-	1	7	1	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	347	-	23	9	1	82	17	1	82	17	1	45	12	1	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	347	-	4	-	-	12	1	-	12	1	-	4	1	-	-	_	-	-	-	-	_	-	_
5a	Clearing	Peak impact	20	347	1	13	7	1	58	12	3	58	12	3	19	9	1	-	-	-	-	-	-	-	-	-
5b		Typical impact	36	347	-	5	1	-	12	-	1	12	-	1	7	1	-	-	_	-	-	-	-	_	-	-
6a	Earthworks	Peak impact	80	347	1	12	5	1	35	14	1	35	14	1	14	8	1	-	_	-	-	-	-	_	-	-
6b		Typical impact	144	347	-	5	1	-	12	-	1	12	-	1	7	1	-	-	_	-	-	-	-	_	-	-
6c		Onsite haulage	144	347	-	-	-	-	1	-	-	1	-	-	-	-	-	-	_	-	-	-	-	_	-	-
7a	Bridge works	Peak impact	48	347	-	3	-	-	11	-	-	11	-	-	8	-	-	8		-	24	1	-	9	-	-
7b		Typical impact	144	347	-	-	-	-	_	-	-	-	-	-	-	-	-	-	_	-	3	-	-	_	-	-
7c		Concrete works	48	347	-	-	-	-	1	-	-	1	-	-	-	-	-	-	_	-	9	-	-	1	-	-
7d		Girder lifts	50	347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
8a	Road works	Concrete works	30	347	-	2	1	-	9	-	1	9	-	1	5	1	-	5	1	-	14	2	1	8	-	1
8b		Typical works	144	347	-	2	1	-	9	-	1	9	-	1	5	1	-	-	-	-	-	-	-	_	-	
8c		Tie-in works	48	347	1	13	5	1	44	10	3	44	10	3	19	6	1	19	6	1	115	14	4	54	14	3
9a	Signage, lighting	and landscaping	36	347	_	8	-	1	14	2	1	14	2	1	12	-	1	-	_	-	-	-	-	_	-	-

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 7 Predicted NML exceedances – all receiver types – NCA07

ID	Scenario	Activity	No.	Number of receivers																						
			weeks1	Total	HNA ²				With	NML e	xceed	ance³														
						Stan	dard		Out o	f hour	s work	is ⁴														
						dayt	ime		Morn						Evening shoulder			Evening			Night-	-time		Slee distu	e	
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	128	-	7	7	1	37	9	3	37	9	3	23	9	3	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	128	-	8	2	1	7	4	1	7	4	1	8	3	1	8	3	1	7	7	1	7	5	1
2a	Ancillary	Operation	192	128	-	4	1	-	8	2	1	8	2	1	8	1	-	8	1	-	9	2	1	8	2	1
2b	facilities	Stockpiling	144	128	-	9	2	1	7	5	1	7	5	1	7	4	1	7	4	1	10	8	1	7	5	1
2c		Batching plant	120	128	-	9	4		22	12	-	22	12	-	17	12	-	17	12	-	65	12	-	36	12	-
2d		Crushing works	120	128	-	6	3	_	68	-	3	68	-	3	61	-	3	61	-	3	111	-	3	6	3	-
3a	Utilities and	Peak impact	35	128	1	87	18	6	69	44	12	69	44	12	83	31	11	-	-	-	-	-	-	-	-	_
3b	drainage	Typical impact	132	128	-	8	3	1	18	5	1	18	5	1	17	5	1	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	128	-	32	12	2	107	12	4	107	12	4	100	13	3	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	128	-	7	2	-	14	1	1	14	1	1	14	1	1	-	-	-	-	-	-	-	-	-
5a	Clearing	Peak impact	20	128	1	60	11	4	95	20	9	95	20	9	95	20	7	-	-	-	-	-	-	-	-	-
5b		Typical impact	36	128	-	8	3	1	18	5	1	18	5	1	17	5	1	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	128	1	51	9	4	95	20	7	95	20	7	87	18	6	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	128	-	8	3	1	18	5	1	18	5	1	17	5	1	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	128	-	-	-	-	3	-	-	3	-	-	3	-	-	-	-	-	-	-	-	-	-	
7a	Bridge works	Peak impact	48	128	-	15	-	-	48	1	-	48	1	-	38	-	-	38	-	-	71	8	-	29	-	-
7b		Typical impact	144	128	-	-	-	-	2	-	-	2	-	-	1	-	-	1	-	-	11	-	-	2	-	-
7c		Concrete works	48	128	-	-	-	-	11	-	-	11	-	-	8	-	-	8	-	-	26	-	-	3	-	-
7d		Girder lifts	50	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	
8a	Road works	Concrete works	30	128	-	7	3	1	18	5	1	18	5	1	14	4	1	14	4	1	20	8	1	11	3	1
8b		Typical works	144	128	-	7	3	1	18	5	1	18	5	1	14	4	1	-	-	-	-	-	-	-	-	
8c		Tie-in works	48	128	-	9	7	-	6	10	2	6	10	2	5	10	2	5	10	2	21	9	5	6	10	2
9a	Signage, lighting	and landscaping	36	128	-	14	4	1	24	10	1	24	10	1	20	8	1	_	-	_	_	_	_	_	_	_

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 8 Predicted NML exceedances – all receiver types – NCA08

ID	Scenario	Activity	No.	Number of receivers																						
			weeks1	Total	HNA ²	With NML exceedance ³																				
						Stand	dard		Out of hours works ⁴																	
						dayti	me								Evening shoulder			Evening			Night-time			Sleep disturbance		
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	102	-	2	-	-	1	1	-	1	1	-	6	2	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	102	-	-	-	-	2	-	-	2	-	-	2	-	-	2	-	-	2	1	-	2	-	-
2a	Ancillary	Operation	192	102	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	2	-	-	2	-	-
2b	facilities	Stockpiling	144	102	-	-	-	-	2	-	-	2	-	-	2	-	-	2	-	-	2	2	-	2	-	-
2c		Batching plant	120	102	-	1	-	-	2	-	-	2	-	-	2	-	-	2	-	-	10	2	-	4	2	-
2d		Crushing works	120	102	-	3	-	-	15	2	-	15	2	-	42	2	-	42	2	-	80	14	2	20	2	-
3a	Utilities and	Peak impact	35	102	-	14	3	-	46	2	3	46	2	3	64	9	3	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	102	-	3	-	-	3	-	-	3	-	-	1	2	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	102	-	2	-	-	5	-	-	5	-	-	16	2	-	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5a	Clearing	Peak impact	20	102	-	4	3	-	27	2	1	27	2	1	46	2	3	_	-	-	-	-	-	-	-	-
5b		Typical impact	36	102	-	3	-	-	3	-	-	3	-	-	1	2	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	102	-	4	3	-	22	2	1	22	2	1	37	1	3	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	102	-	3	-	_	3	-	-	3	-	-	1	2	-	_	-	-	_	-	-	-	_	-
6c		Onsite haulage	144	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7a	Bridge works	Peak impact	48	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
7b		Typical impact	144	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7c		Concrete works	48	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7d		Girder lifts	50	102	-	-	-	_	2	-	-	2	-	-	2	-	-	2	-	-	1	1	-	2	_	_
8a	Road works	Concrete works	30	102	-	2	-	_	3	-	-	3	-	-	3	-	-	3	-	-	5	3	-	2	1	-
8b		Typical works	144	102	-	-	-	-	1	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-
8c		Tie-in works	48	102	-	4	3	-	21	3	-	21	3	-	31	3	2	31	3	2	54	16	3	49	8	3
9a	Signage, lighting	and landscaping	36	102	-	3	-	_	1	2	-	1	2	-	4	3	-	_	-	-	_	-	-	-	_	-

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 9 Predicted NML exceedances – all receiver types – NCA09

ID	Scenario	Activity	No.	Number of receivers																						
			weeks1	Total	HNA ²	A ² With NML exceedance ³																				
						Stand	dard		Out of hours works ⁴																	
						dayti	me		Morning shoulder			Daytime OOH			Evening shoulder			Evening			Night-time			Sleep disturbance		
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	28	-	7	1	-	13	2	-	13	2	-	18	5	1	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	28	-	1	-	-	3	-	-	3	-	-	7	1	-	7	1	-	14	3	-	10	2	-
2a	Ancillary	Operation	192	28	-	-	-	-	1	-	-	1	-	-	3	-	-	3	-	-	7	1	-	4	-	-
2b	facilities	Stockpiling	144	28	-	1	-	-	4	-	-	4	-	-	9	1	-	9	1	-	19	3	-	10	2	-
2c		Batching plant	120	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	9	_	-
2d		Crushing works	120	28	-	-	-	-	3	-	-	3	-	-	24	-	-	24	-	-	24	3	-	6	-	-
3a	Utilities and	Peak impact	35	28	-	16	4	-	16	10	1	16	10	1	9	14	4	_	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	28	-	1	-	-	4	-	-	4	-	-	9	1	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	28	-	-	-	-	6	-	-	6	-	-	18	-	-	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5a	Clearing	Peak impact	20	28	-	11	2	-	18	7	-	18	7	-	15	10	2	-	-	-	-	-	-	-	-	-
5b		Typical impact	36	28	-	1	-	-	4	-	-	4	-	-	9	1	-	-	-	-	-	-	-	-	-	-
6a	Earthworks	Peak impact	80	28	-	10	2	-	16	5	-	16	5	-	16	10	1	-	-	-	-	-	-	-	-	-
6b		Typical impact	144	28	-	1	-	-	4	-	-	4	-	-	9	1	-	-	-	-	-	-	-	-	-	-
6c		Onsite haulage	144	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7a	Bridge works	Peak impact	48	28	-	2	-	-	10	-	-	10	-	-	15	1	-	15	1	-	19	7	-	15	1	-
7b		Typical impact	144	28	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	10	-	-	5	-	-
7c		Concrete works	48	28	-	-	-	-	1	-	-	1	-	-	6	-	-	6	-	-	13	1	-	6	-	-
7d		Girder lifts	50	28	-	-	-	-	1	-	-	1	-	-	5	-	-	5	-	-	11	-	-	5	-	-
8a	Road works	Concrete works	30	28	-	1		-	4	-	-	4	-	-	8	1	-	8	1	-	12	2	-	8	1	-
8b		Typical works	144	28	-	1	-	-	4	-	-	4	-	-	8	1	-	-	-	-	-	-	-	-	-	
8c		Tie-in works	48	28	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	20	-	-	2	-	-
9a	Signage, lighting	and landscaping	36	28	-	2	-	-	8	1	-	8	1	-	11	2	-	_	-	-	-	-	-	-	_	-

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

Note 3: Based on worst-case predicted noise levels.

Note 4: OOH = Out of hours.

Table 10 Predicted NML exceedances – all receiver types – NCA10

ID	Scenario	Activity	No.	Number of receivers																						
			weeks1	Total	HNA ²	With NML exceedance ³																				
						Stand	dard		Out	of hou	rs wor	ks ⁴														
						dayti	me								Evening shoulder			Evening			Night-time			Sleep disturbance		
						1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB	1-10 dB	11-20 dB	>20 dB
1a	Ancillary facility	Peak impact	6	182	-	18	3	-	30	11	1	30	11	1	21	4	-	-	-	-	-	-	-	-	-	-
1b	establishment	Typical impact	12	182	-	7	-	-	15	1	-	15	1	-	7	-	-	7	-	-	30	11	1	24	7	-
2a	Ancillary	Operation	192	182	-	1	-	-	7	-	-	7	-	-	2	-	-	2	-	-	18	3	-	15	1	-
2b	facilities	Stockpiling	144	182	-	7	-	-	14	2	-	14	2	-	9	1	-	9	1	-	30	13	1	24	7	-
2c		Batching plant	120	182	-	4	-	-	15	1	-	15	1	-	4	-	-	4	-	-	56	8	-	40	4	-
2d		Crushing works	120	182	-	39	5	-	71	13	-	71	13	-	43	6	-	43	6	-	78	53	9	71	13	-
3a	Utilities and	Peak impact	35	182	-	6	1	-	15	2	-	15	2	-	7	1	-	-	-	-	-	-	-	-	-	-
3b	drainage	Typical impact	132	182	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4a	Demolition	Peak impact	36	182	-	6	3	-	14	5	-	14	5	-	7	3	-	-	-	-	-	-	-	-	-	-
4b		Typical impact	36	182	-	-	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5a	Clearing	Peak impact	20	182	-	4	-	-	10	1	-	10	1	-	5	1	-	-	-	-	-	-	-	-	-	-
5b		Typical impact	36	182	-	-	-	_	1	-	-	1	-	-	-	-	-	-	-	-	_	-	-	-	-	-
6a	Earthworks	Peak impact	80	182	-	3	-	_	7	1	-	7	1	-	4	-	-	_	-	-	_	-	-	-	-	-
6b		Typical impact	144	182	-	-	-	_	1	-	-	1	-	-	-	-	-	-	-	-	_	-	-	-	-	-
6c		Onsite haulage	144	182	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
7a	Bridge works	Peak impact	48	182	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
7b		Typical impact	144	182	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
7c		Concrete works	48	182	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-
7d		Girder lifts	50	182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8a	Road works	Concrete works	30	182	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	4	-	-	1	-	-
8b		Typical works	144	182	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8c		Tie-in works	48	182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1		
9a	Signage, lighting	and landscaping	36	182	-	1	-	-	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	_

Note 1: Durations should be regarded as indicative and represent typical works. The duration of the worst-case impacts would be less than the overall duration, and depends on the rate of progress.

Note 2: Highly Noise Affected, based on ICNG definition (ie predicted noise level at residential receiver is 75 dBA or greater).

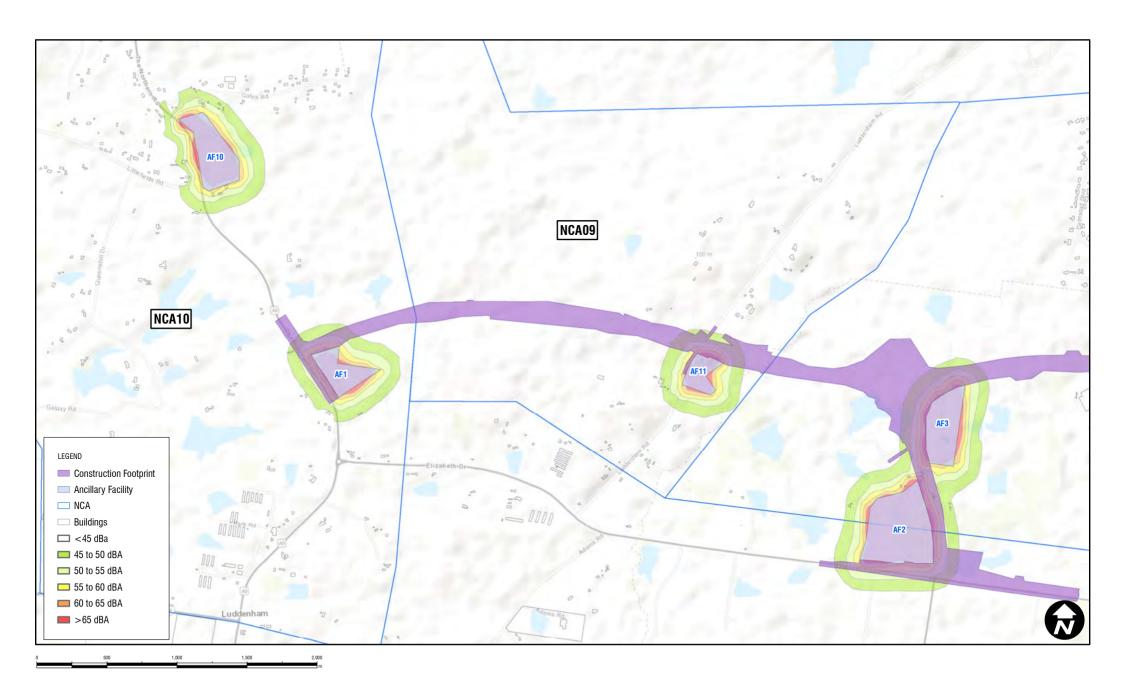
Note 3: Based on worst-case predicted noise levels.

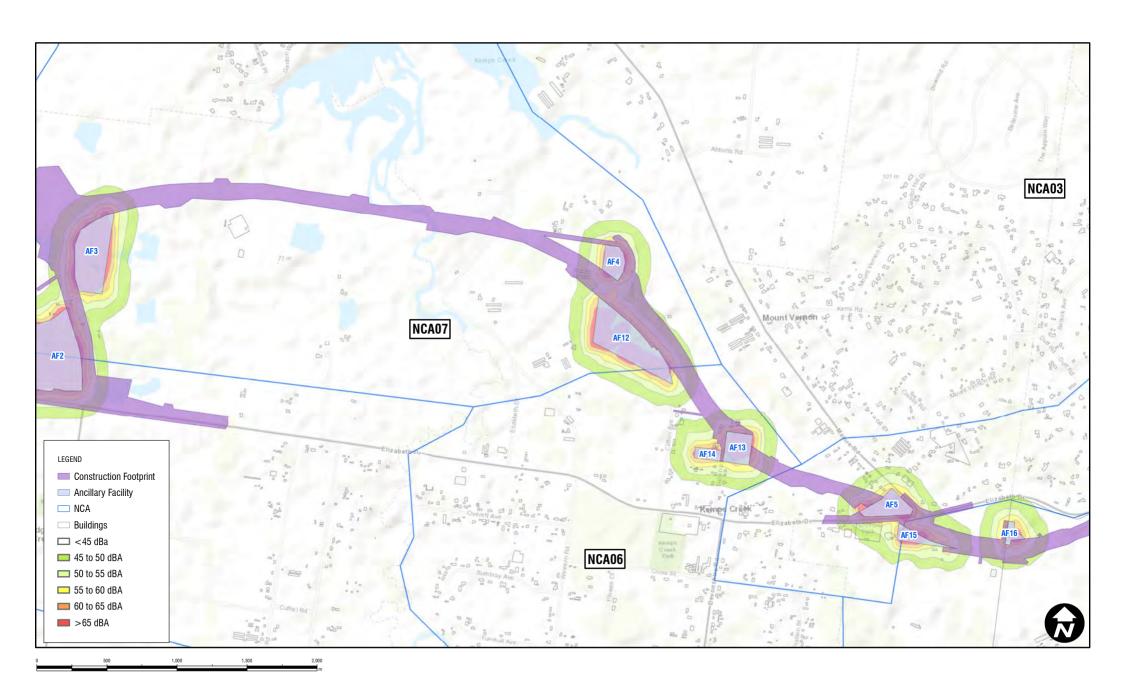
Note 4: OOH = Out of hours.

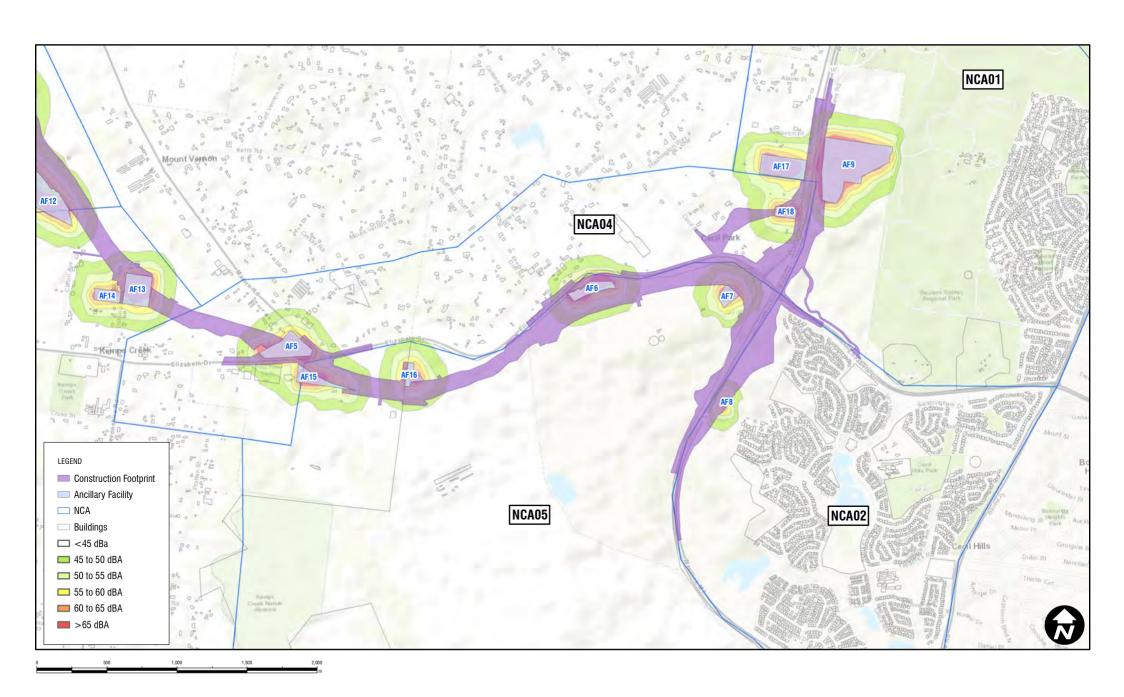
Construction traffic volumes

Road	Section	Baseline tr	affic volume	s - 2024		Proposed of	construction	traffic	
		AM Peak		PM Peak		AM Peak		PM Peak	
		Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
M7 Motorway	South of M7 Interchange	4,369	928	5,323	1,063	0	47	0	42
	Btwn On/Off Ramps to Elizabeth Dr & Wallgrove Rd	3,773	795	4,454	915	0	4	0	2
	North of M7 Interchange	4,434	939	5,269	1,089	0	46	0	39
M7 Motorway –	NB Off Ramp to Elizabeth Dr	323	82	332	44	0	20	0	19
Elizabeth Dr Interchange	NB On Ramp from Wallgrove Rd	247	68	218	77	0	22	0	20
interentinge	SB Off Ramp to Elizabeth Dr	416	78	583	110	0	20	0	17
	SB On Ramp from Elizabeth Dr	273	50	571	88	0	22	0	21
Elizabeth Dr	East of M7 Interchange	2,177	464	2,555	386	0	0	0	0
	Btwn On/Off Ramps to M7 and Wallgrove Rd	2,152	478	2,511	386	0	42	0	39
	Btwn Wallgrove Rd & Cecil Rd	1,936	450	2,059	367	0	82	0	81
	Btwn Cecil Rd & Duff Rd	1,871	437	2,004	356	0	84	0	78
	Btwn Duff Rd & Mamre Rd	1,764	400	1,985	311	0	90	0	81
	Btwn Mamre Rd & Devonshire Rd	1,573	357	1,775	333	0	87	0	75
	Btwn Devonshire Rd & Clifton Ave	1,399	310	1,502	239	0	89	0	76
	Btwn Clifton Ave & Western Rd	1,195	263	1,353	205	0	89	0	79
	Btwn Western Rd & Martin Rd	1,260	272	1,350	207	0	90	0	81
	Btwn Martin Rd & Airport Business Park East Access	1,145	245	1,285	196	0	88	0	82
	Btwn Airport Business Park East & West Access	1,203	266	1,320	232	0	87	0	82
	Btwn Airport Business Park West Access & Adams Rd	1,179	294	1,316	231	0	87	0	79
	Btwn Adams Rd & Luddenham Rd	1,367	310	1,514	292	0	87	0	74
	Btwn Luddenham Rd & The Northern Road	999	256	1,265	221	0	86	0	69
Wallgrove Rd	Btwn Elizabeth Dr & M7 NB On Ramp	1,099	272	1,156	223	0	29	0	20
	North of M7 NB On Ramp	848	202	986	160	0	7	0	0
Clifton Ave	North of Elizabeth Dr	205	50	247	43	0	7	0	7
Luddenham Rd	North of Elizabeth Dr	687	177	690	116	0	24	0	26
The Northern	South of Elizabeth Dr	986	194	1,263	293	0	43	0	35
Road	Btwn Elizabeth Dr & M12	2,085	392	2,460	562	0	42	0	35
	North of M12	2,085	392	2,460	562	0	42	0	35

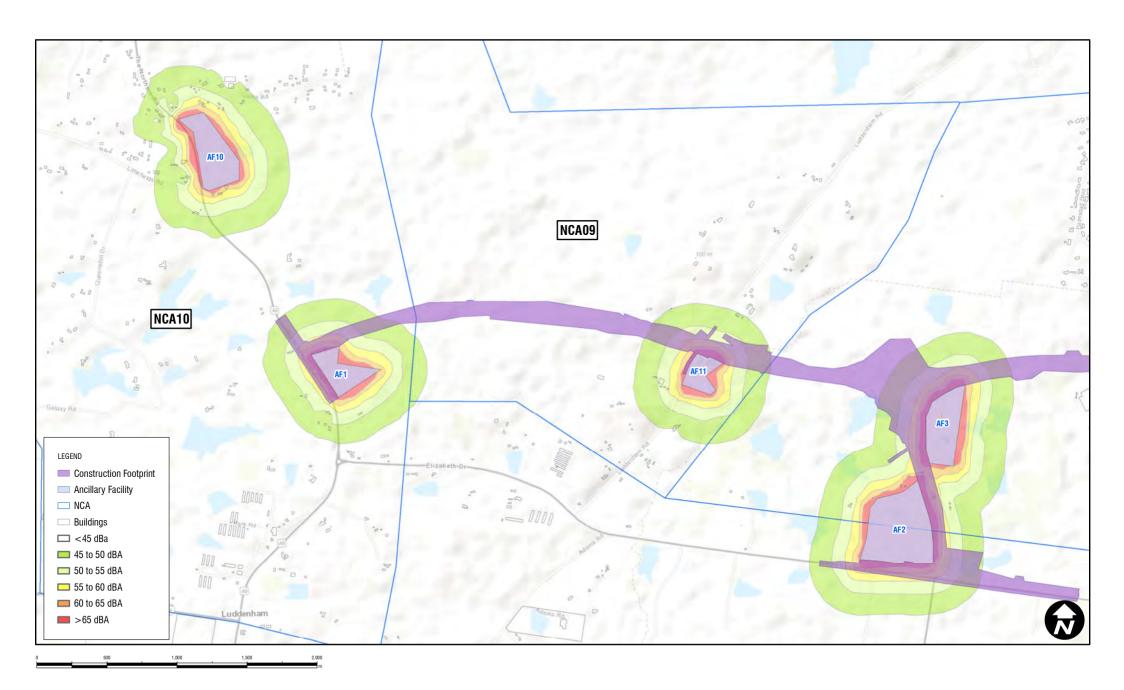
Scenario 2A, ancillary facilities – general operation

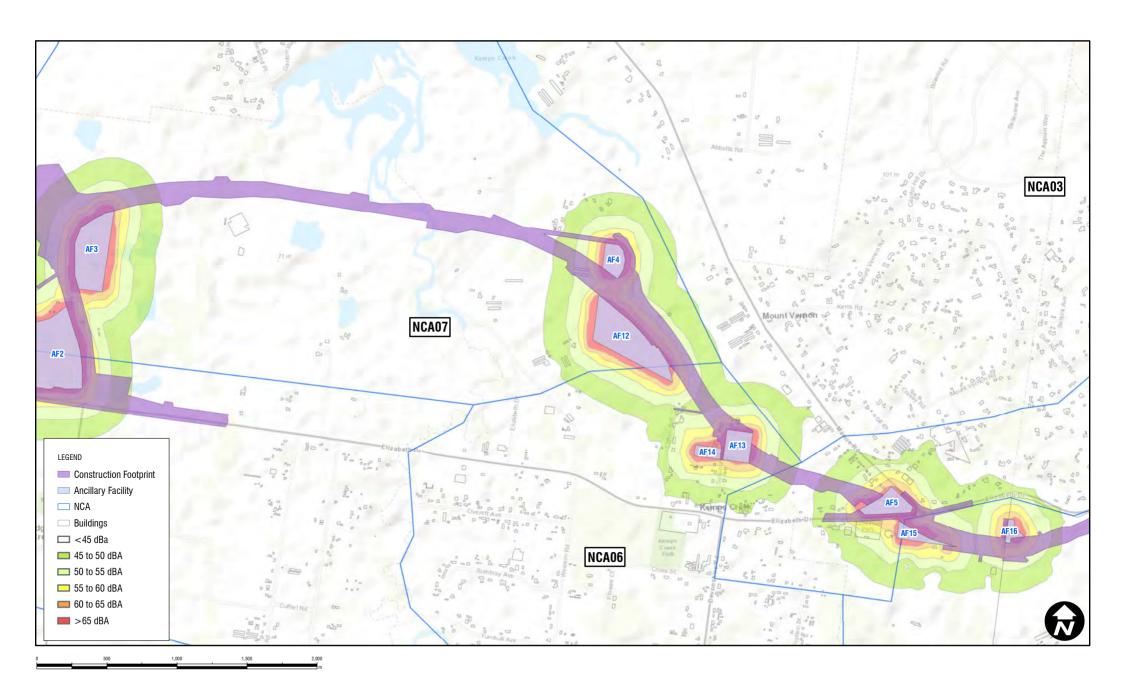


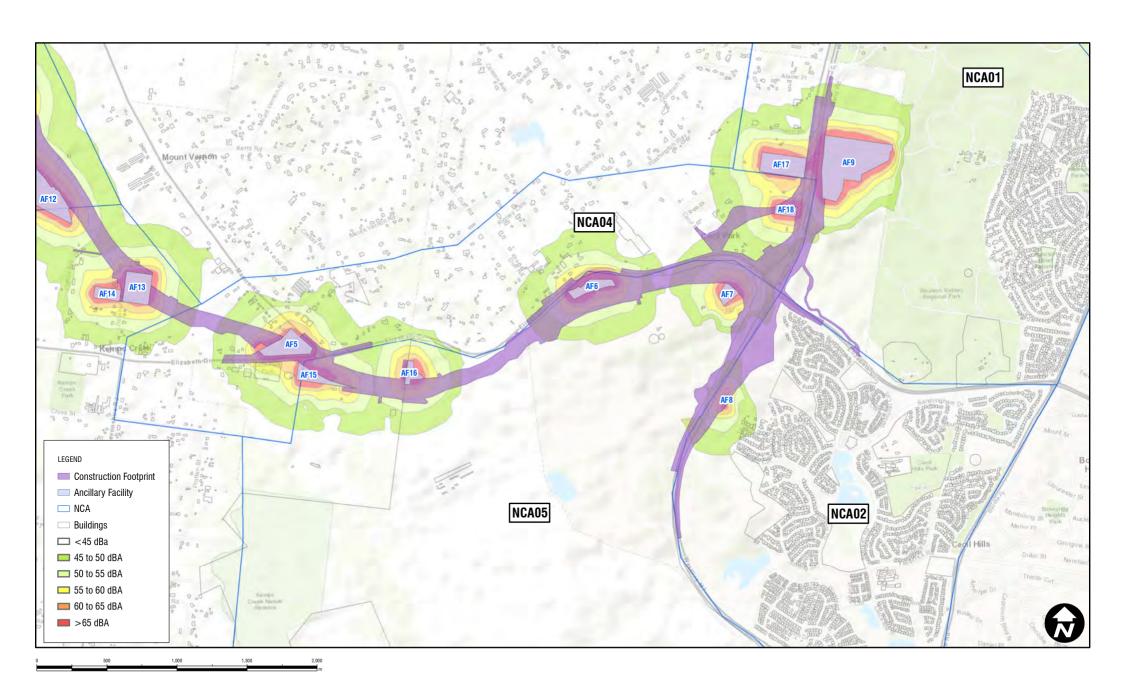




Scenario 2B, ancillary facilities – stockpiling

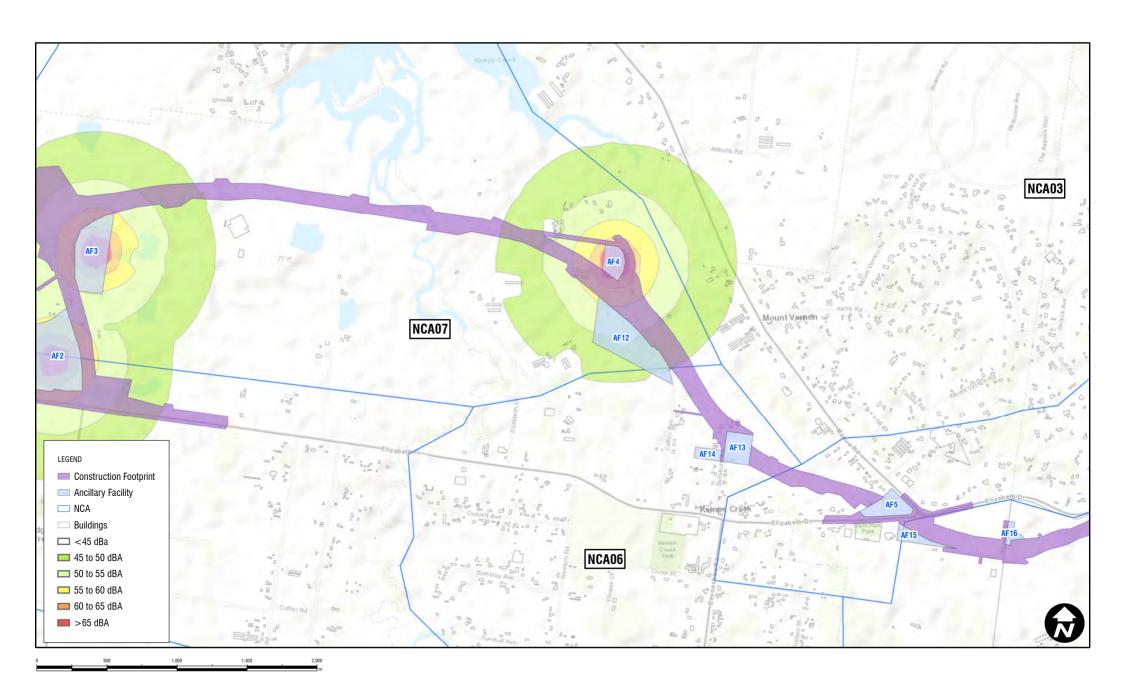


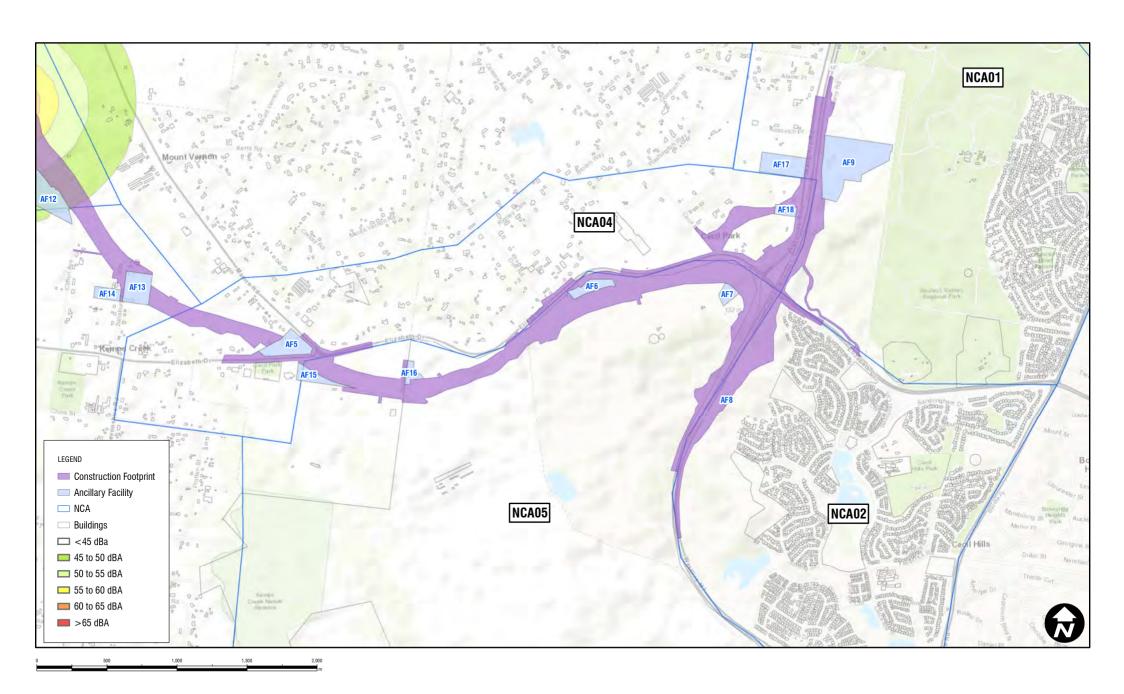




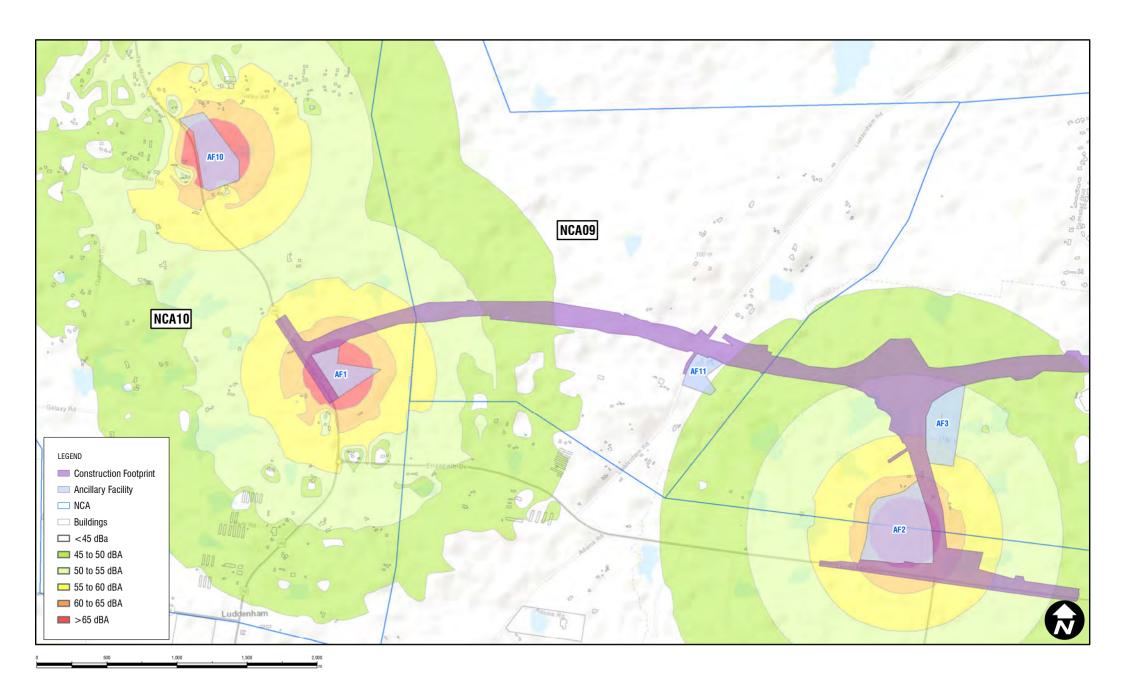
Scenario 2C, ancillary facilities – batching plant

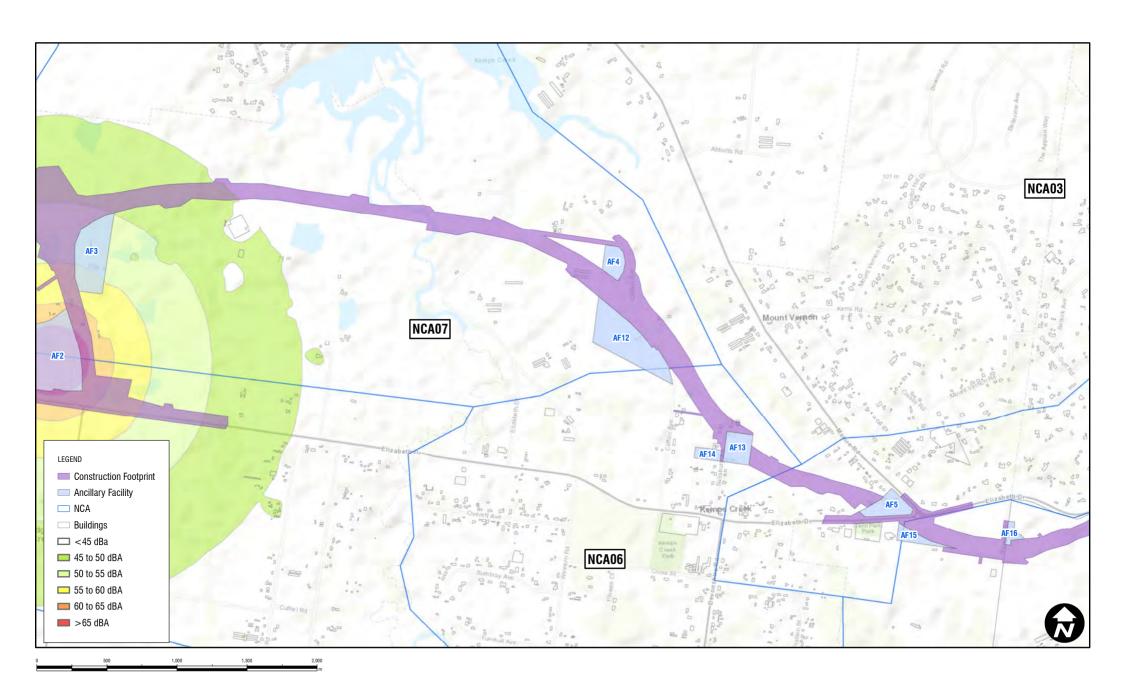


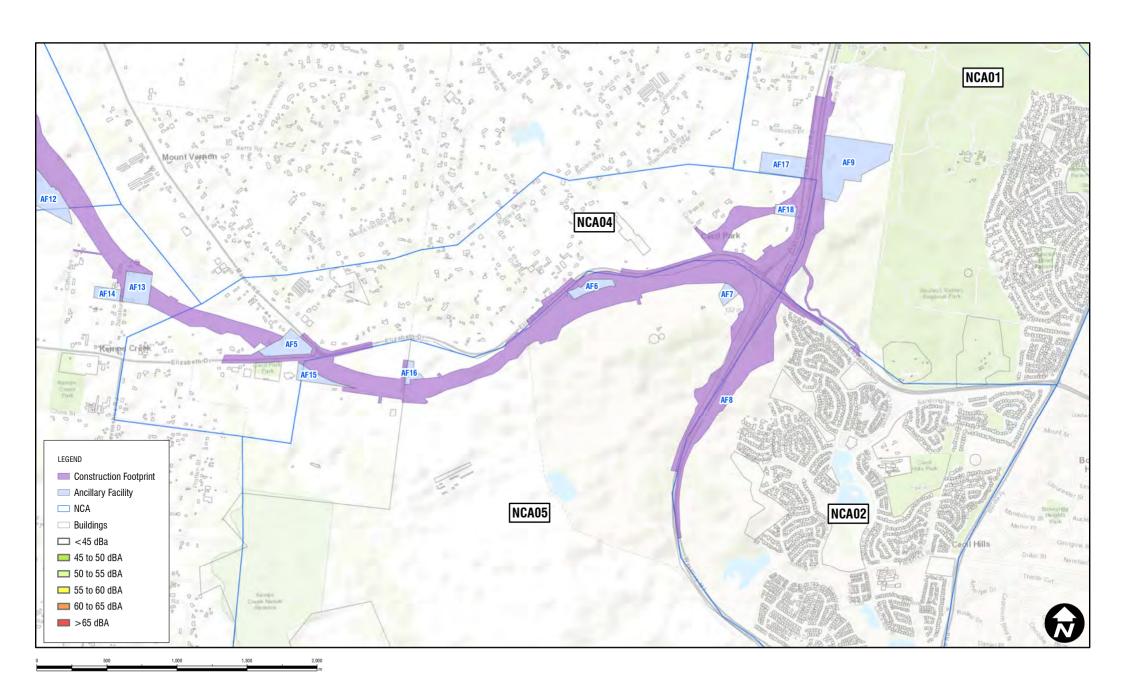




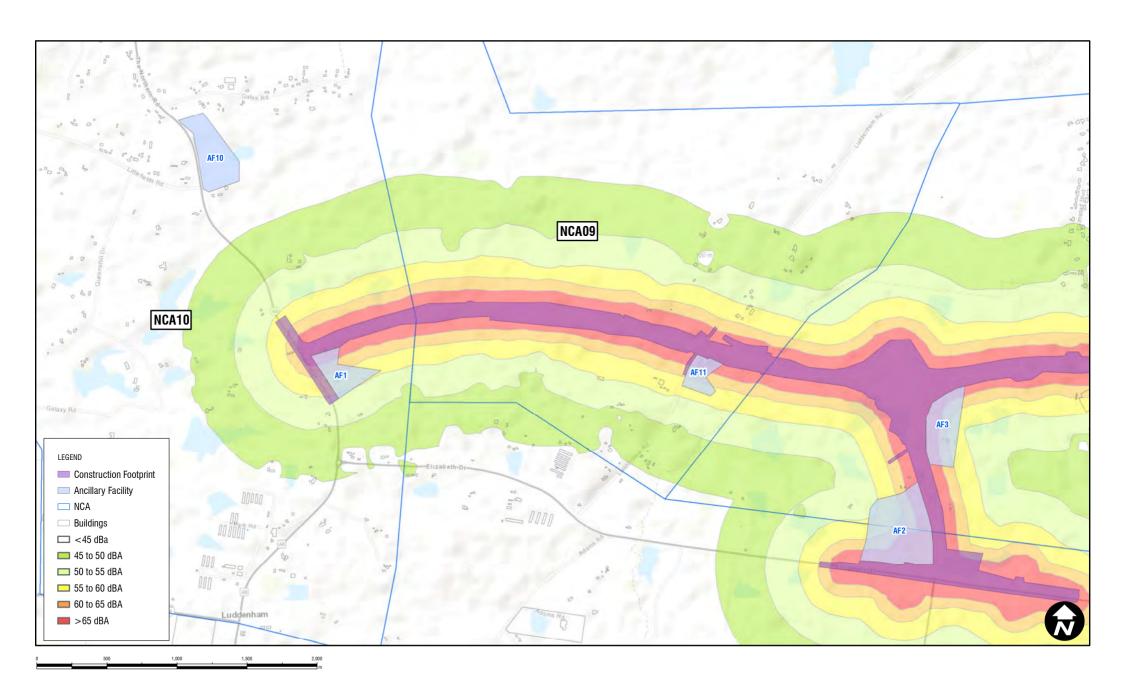
Scenario 2D, ancillary facilities – crushing, grinding and screening

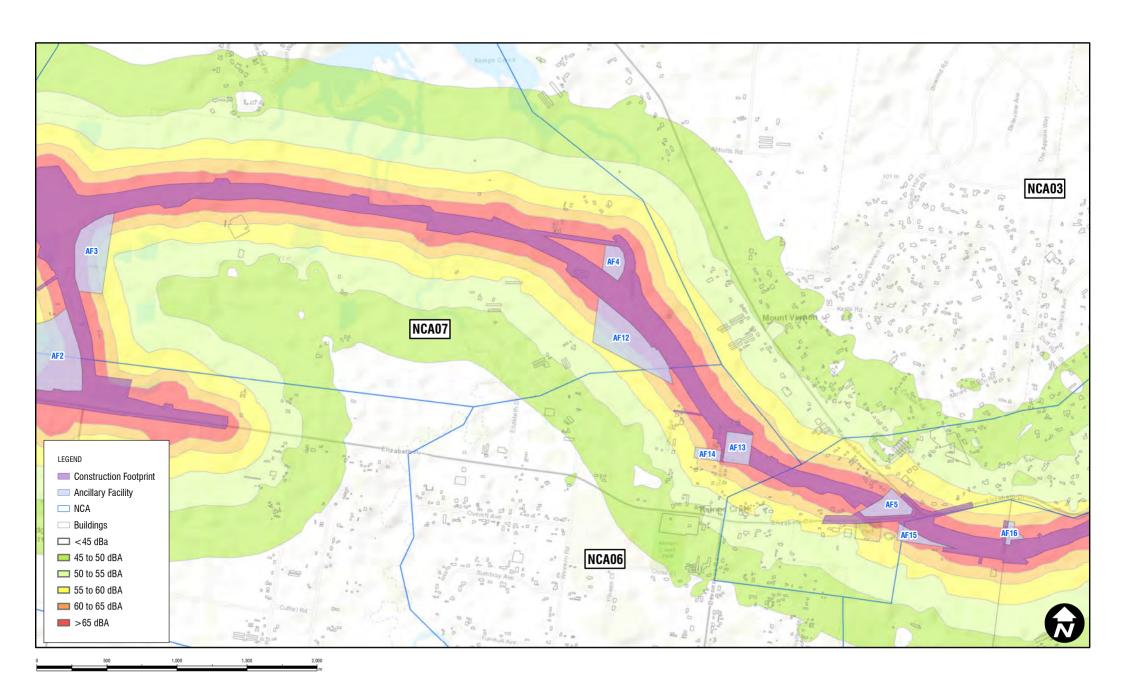


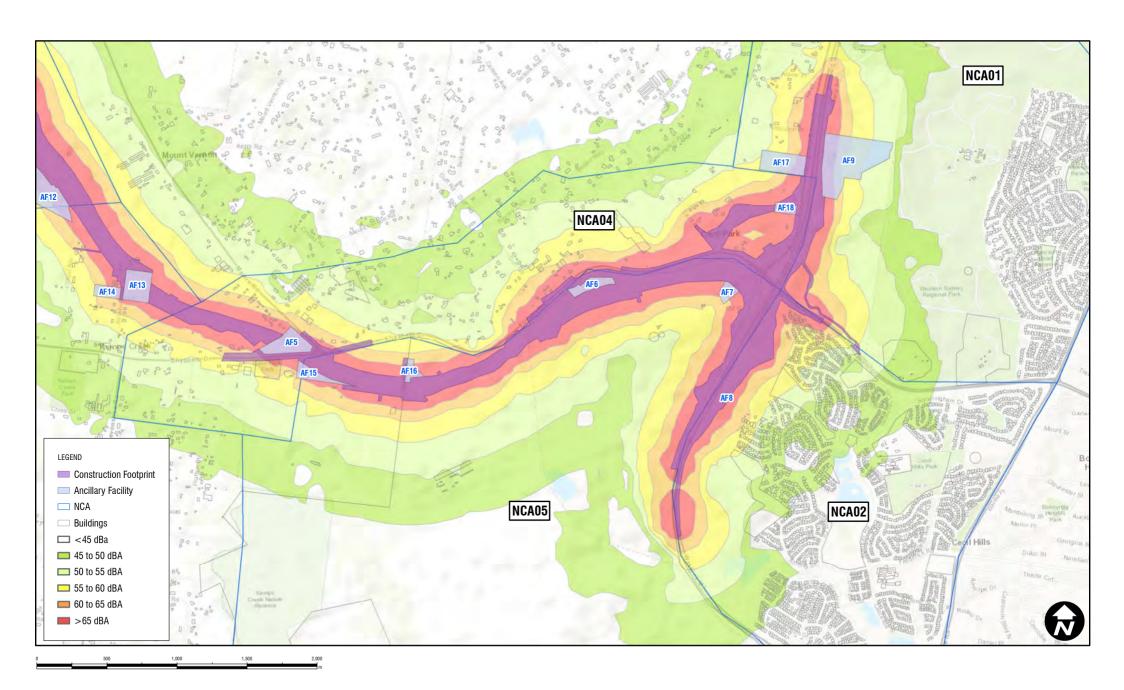




Scenario 6A, earthworks – peak impact

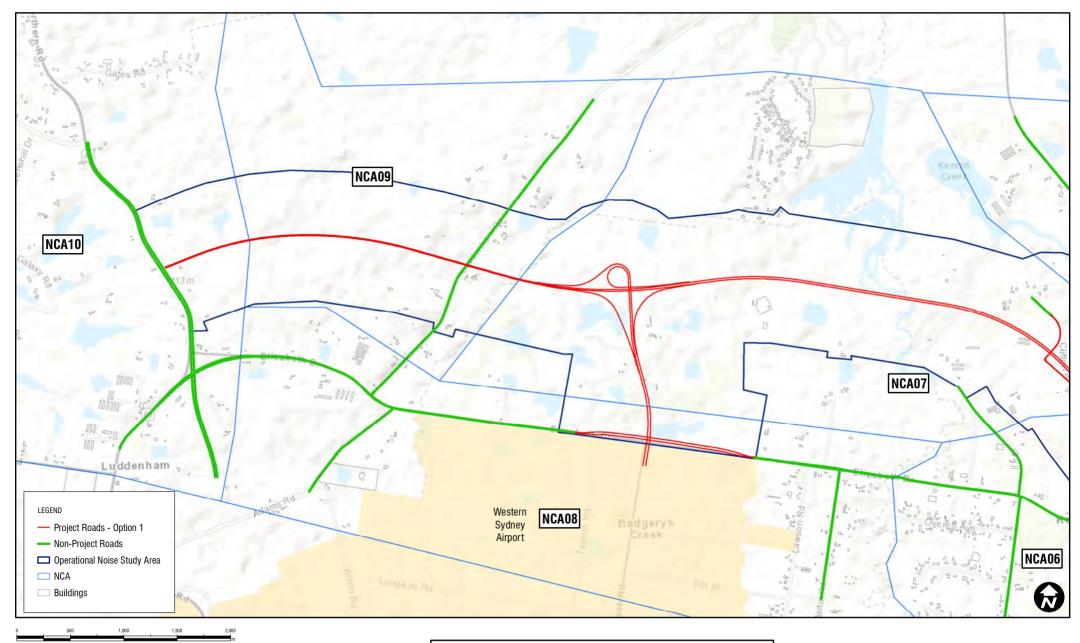




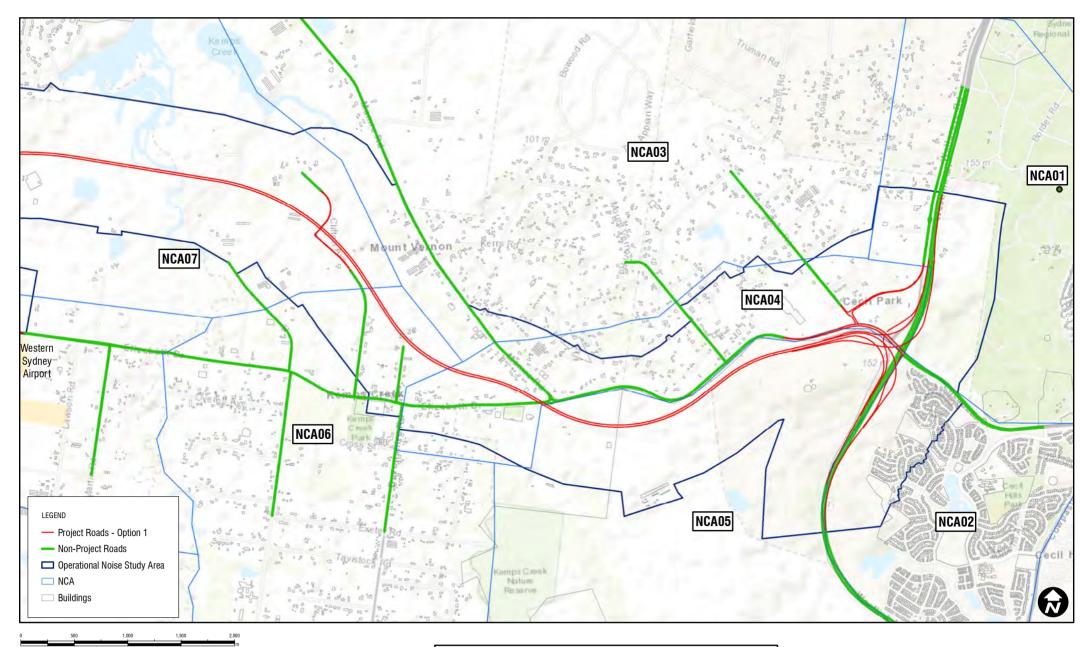


Annexure D Operational Information

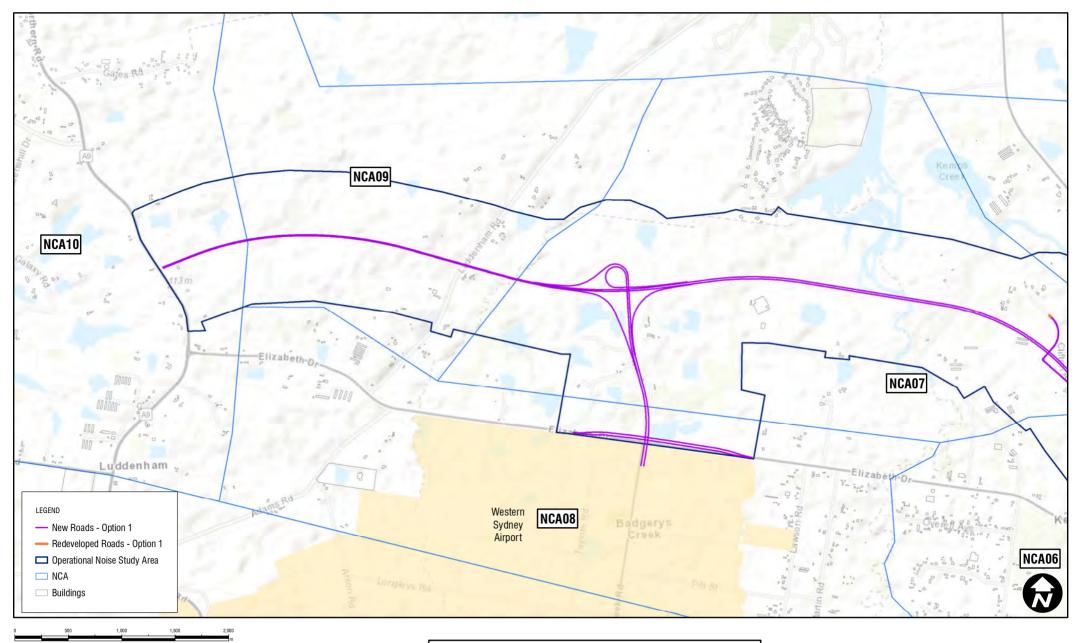
Noise Criteria Guideline requirements



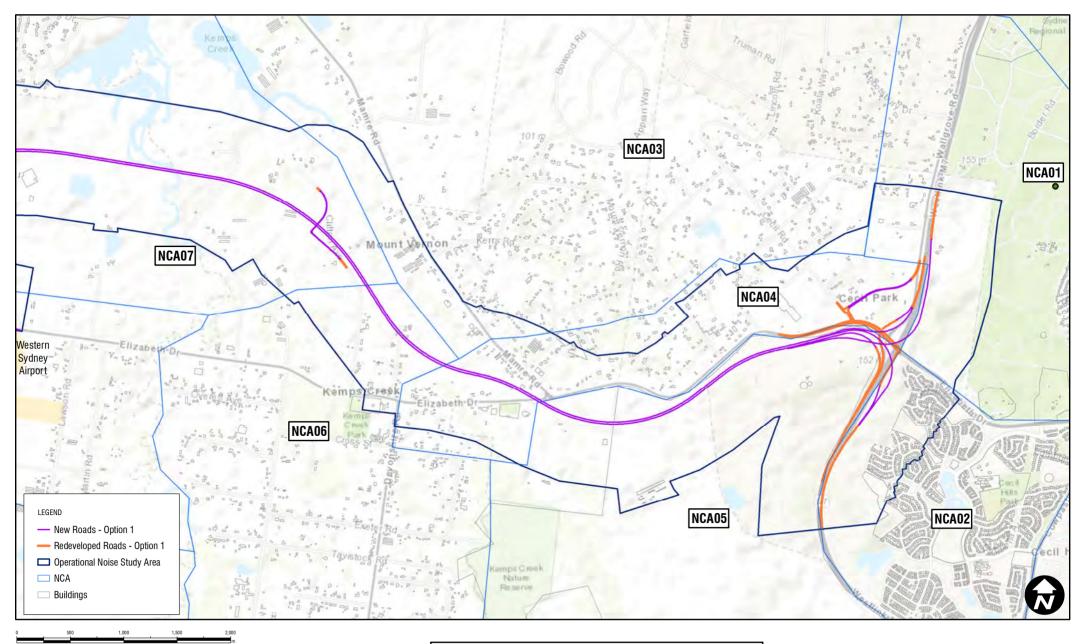
Road Classifications - Project and Non-Project Roads BUILD - OPTION 1



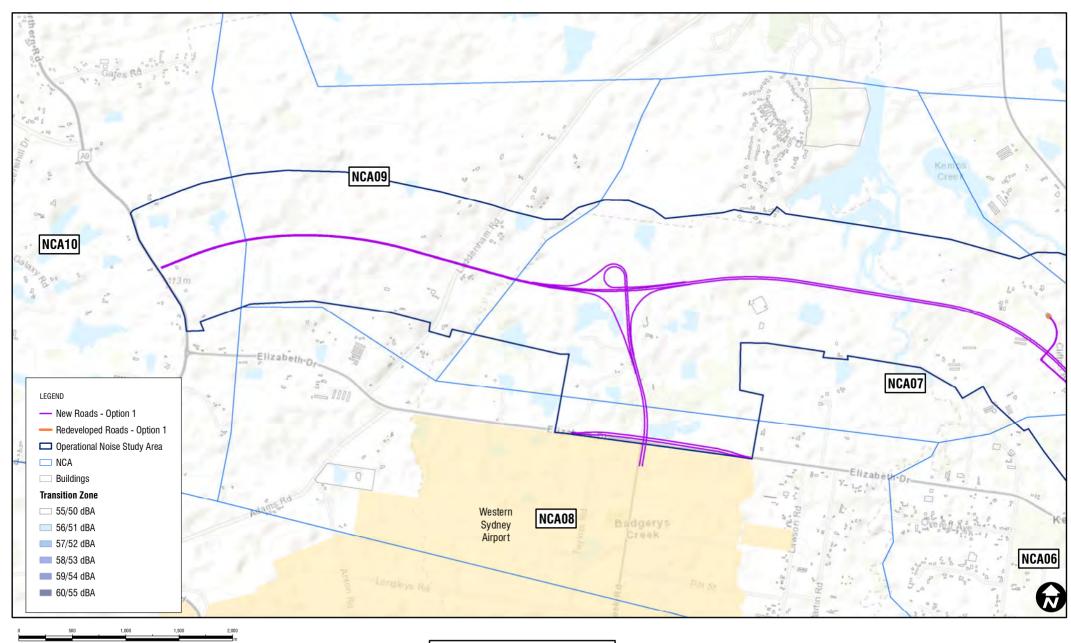
Road Classifications - Project and Non-Project Roads BUILD - OPTION 1



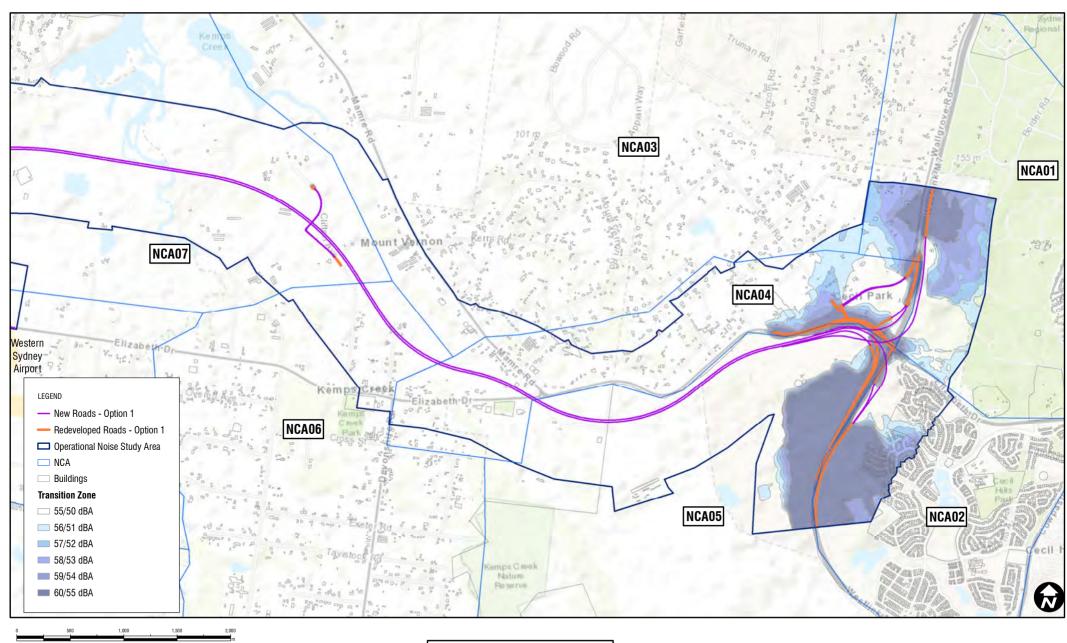
Road Classifications - New and Redeveloped Roads BUILD - OPTION 1



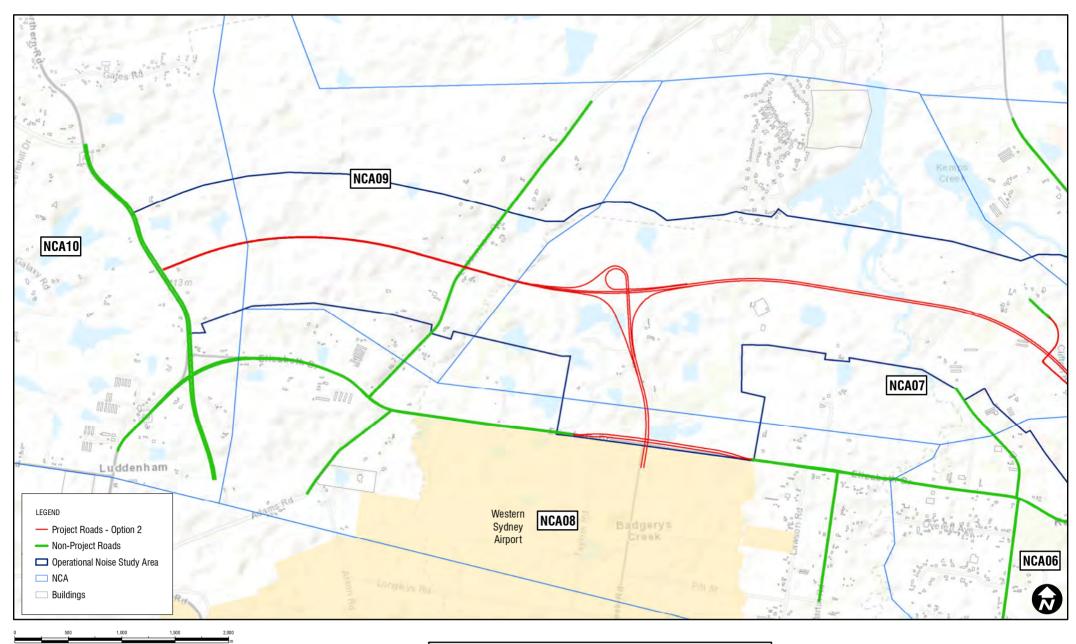
Road Classifications - New and Redeveloped Roads BUILD - OPTION 1



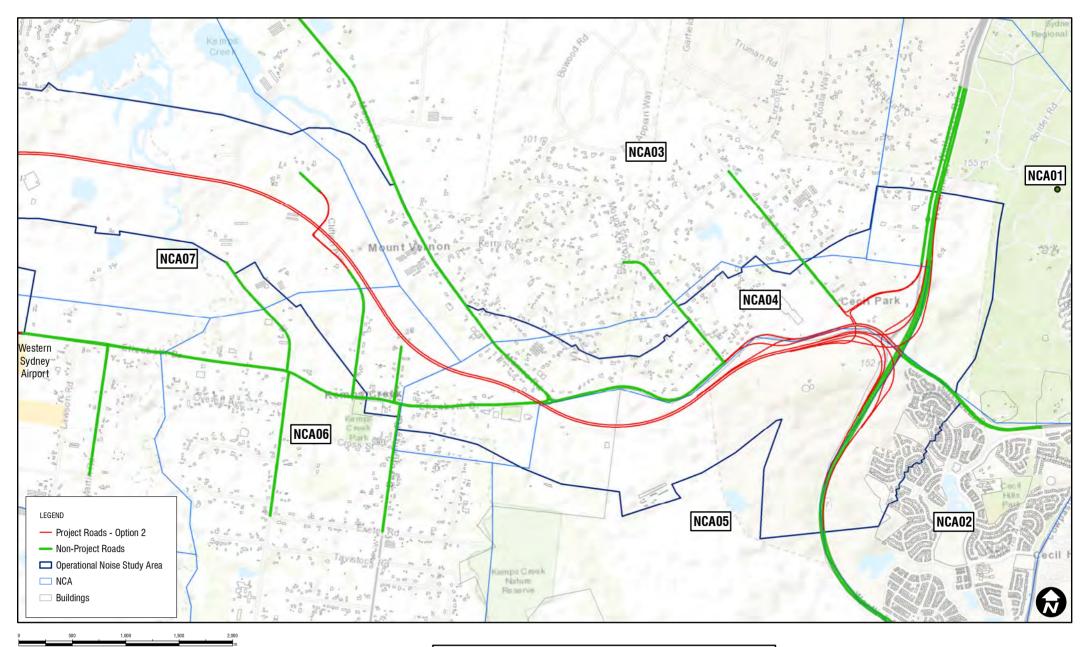
Operational Transition Zones BUILD - OPTION 1



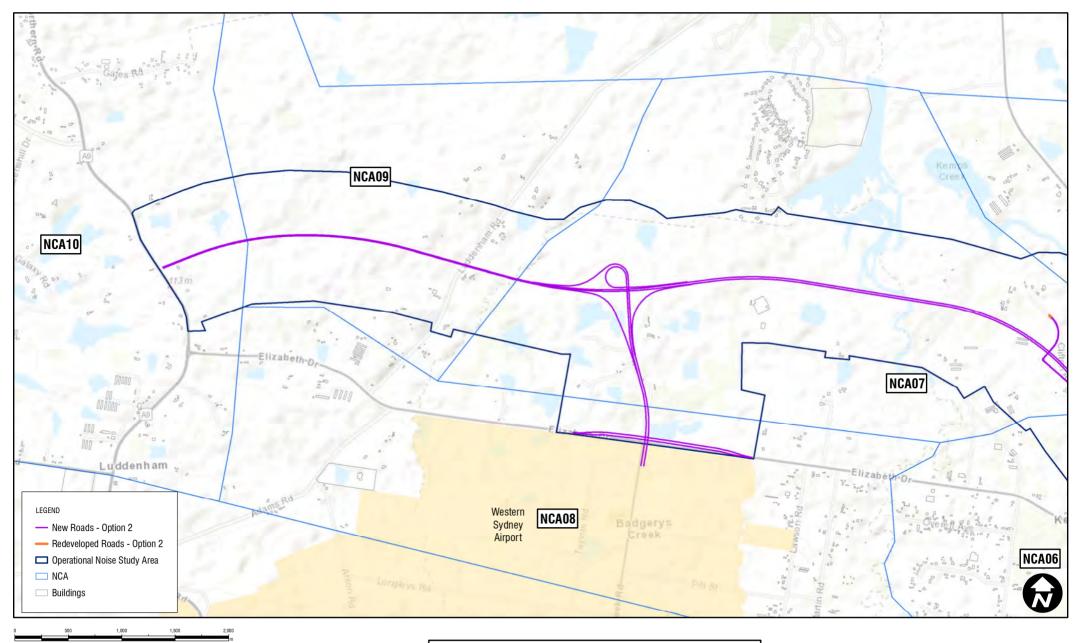
Operational Transition Zones BUILD - OPTION 1



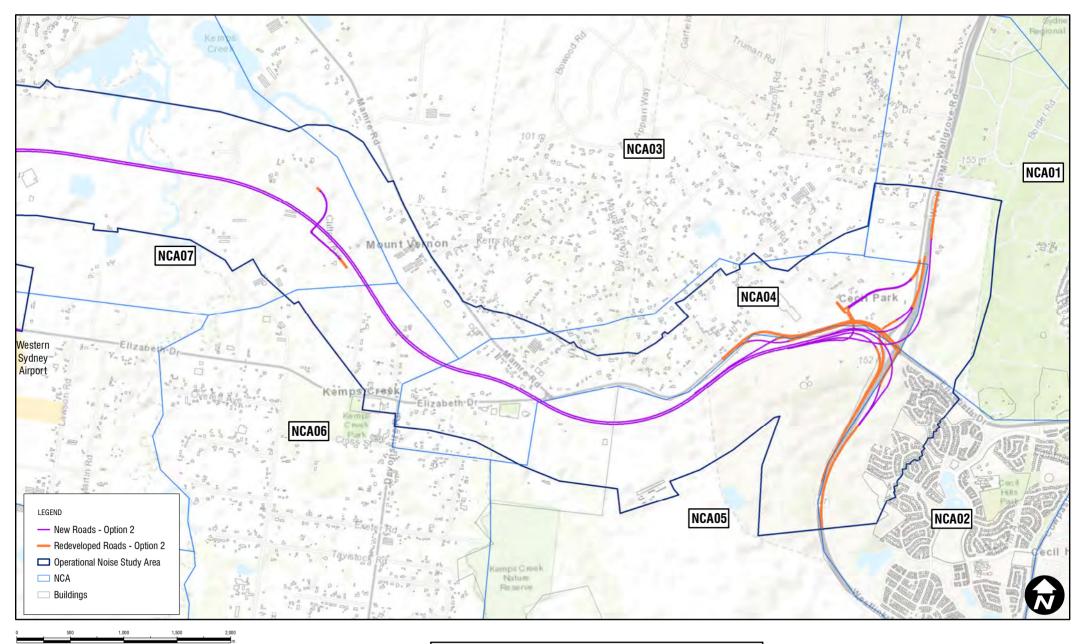
Road Classifications - Project and Non-Project Roads BUILD - OPTION 2



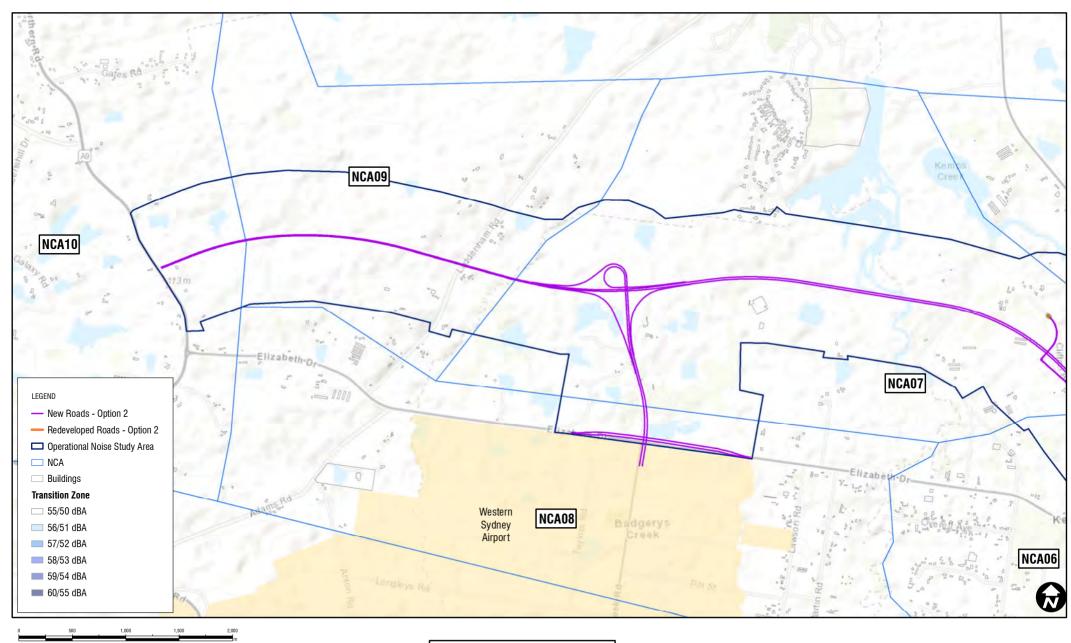
Road Classifications - Project and Non-Project Roads BUILD - OPTION 2



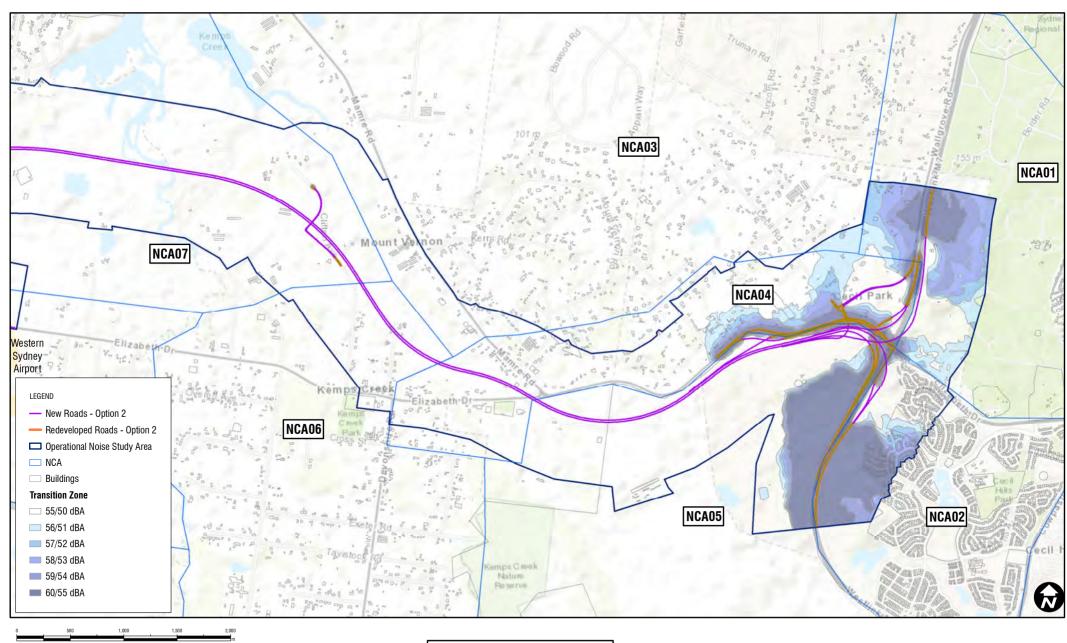
Road Classifications - New and Redeveloped Roads BUILD - OPTION 2



Road Classifications - New and Redeveloped Roads BUILD - OPTION 2



Operational Transition Zones BUILD - OPTION 2



Operational Transition Zones BUILD - OPTION 2

Traffic data – 2026

	No Build -	2026			Build - Op	tion 1 - 2026	5		Build - Op	tion 2 - 2026	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
M7 Northbound												
M7 NB Btwn M7 South End & M7 Off Ramp to M12 / Elizabeth Dr	19,572	4,530	7,581	1,697	21,199	4,579	7,983	1,798	21,203	4,580	7,983	1,798
M7 NB Btwn M7 Off Ramp to M12 / Elizabeth Dr & M7 On Ramp from M12 / Elizabeth Dr	16,486	3,750	6,933	1,612	12,693	3,012	6,547	1,596	12,682	3,010	6,541	1,594
M7 NB Btwn M7 On Ramp from M12 / Elizabeth Dr & M7 North End	18,213	4,229	7,321	1,749	17,320	4,238	7,353	1,859	17,290	4,231	7,365	1,872
M7 Southbound												
M7 SB Btwn M7 North End & M7 Off Ramp to M12 / Elizabeth Dr	20,602	3,875	6,638	1,202	22,786	3,946	6,849	1,185	22,786	3,946	6,849	1,185
M7 SB Btwn M7 Off Ramp to M12 / Elizabeth Dr & M7 On Ramp from M12 / Elizabeth Dr	15,280	2,878	6,050	1,096	12,570	2,429	5,790	1,030	12,578	2,429	5,790	1,030
M7 SB Btwn M7 On Ramp from M12 / Elizabeth Dr & M7 South End	18,451	3,462	6,364	1,143	18,314	3,827	6,319	1,232	18,408	3,864	6,309	1,236
M7 Interchange Ramps												
M7 NB Off Ramp to M12 / Elizabeth Dr	3,086	780	648	85	8,506	1,567	1,436	202	8,521	1,570	1,442	204
M7 NB Off Ramp to M12 WB On Ramp	-	-	-	-	6,204	877	1,005	124	6,138	872	1,002	124
M7 NB Off Ramp to to Elizabeth Dr	3,086	780	648	85	2,318	692	427	76	2,379	697	431	76
M12 EB Off Ramp to M7 NB On Ramp	-	-	-	-	2,490	756	243	92	2,386	699	238	89
Elizabeth Dr to M7 NB On Ramp	1,727	479	388	137	2,147	478	543	176	2,236	532	560	194
M12 / Elizabeth Dr to M7 NB On Ramp	1,727	479	388	137	4,627	1,226	806	263	4,608	1,221	824	278
M7 SB Off Ramp to M12 / Elizabeth Dr	5,271	985	574	108	10,216	1,517	1,059	155	10,208	1,517	1,059	155
M7 SB Off Ramp to M12 WB On Ramp	-	-	-	-	5,566	623	518	49	5,564	623	518	49
Elizabeth Dr Connection to M12 WB	-	-	-	-	-	-	-	-	2,157	472	244	12
M7 SB / Elizabeth Dr to M12 WB On Ramp	-	-	-	-	5,483	599	578	48	7,744	1,082	835	58
M7 SB Off Ramp to Elizabeth Dr	5,271	985	574	108	4,631	894	519	94	4,633	894	519	94
M12 EB Off Ramp to M7 SB On Ramp	-	-	-	-	2,712	888	323	124	2,653	862	317	121
Elizabeth Dr to M7 SB On Ramp	3,166	575	306	47	3,542	535	370	79	3,754	601	403	91

	No Build -	2026			Build - Op	tion 1 - 2026	;		Build - Op	tion 2 - 2026	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
M12 / Elizabeth Dr to M7 SB On	3,166	575	306	47	5,744	1,398	529	202	5,830	1,435	519	206
Ramp												
M12 EB Off Ramp Connection to	-	-	-	-	-	-	-	-	3,066	679	60	13
Elizabeth Dr												
M12 Westbound												
M12 WB Btwn M12 On Ramp from	-	-	-	-	11,687	1,476	1,583	172	13,882	1,954	1,837	182
M7 / Elizabeth Dr & M12 Off Ramp												
to Airport Access Rd												
M12 WB Btwn M12 Off Ramp to	-	-	-	-	8,620	753	1,219	138	9,211	819	1,305	143
Airport Access Rd & M12 On Ramp												
from Airport Access Rd												
M12 WB Btwn M12 On Ramp from	-	-	_	-	11,965	1,113	1,258	138	11,205	1,080	1,310	140
Airport Access Rd & The Northern												
Road												
M12 Eastbound												
M12 EB Btwn The Northern Road &	-	-	-	-	4,919	1,753	516	191	5,292	1,911	560	196
M12 Off Ramp to Airport Access Rd												
M12 EB Btwn M12 Off Ramp to	-	-	-	-	2,732	1,031	476	185	3,748	1,407	533	192
Airport Access Rd & M12 On Ramp												
from Airport Access Rd												
M12 EB Btwn M12 On Ramp from	-	-	_	-	5,217	1,656	579	225	8,109	2,250	629	229
Airport Access Rd & M12 Off Ramp												
to Elizabeth Dr												
M12 EB Btwn M12 Off Ramp to	-	-	-	-	5,217	1,656	579	225	5,039	1,561	555	210
Elizabeth Dr & M12 EB Off Ramp												
Airport Interchange Ramps												
Airport Interchange SB M12 WB Off	-	-	_	-	3,076	720	340	32	4,637	1,135	511	37
Ramp to Airport Access Rd SB												
Airport Interchange SB M12 EB Off	-	-	_	-	2,191	734	38	6	1,550	516	28	4
Ramp to Airport Access Rd SB												
Airport Interchange NB Airport	-	-	_	-	3,354	360	45	6	2,109	264	33	4
Access Road NB to M12 WB On												
Ramp												
Airport Interchange NB Airport	-	-	-	-	2,519	654	112	45	4,380	867	112	42
Access Road NB to M12 EB On												
Ramp												
Airport Access Road												
Airport Access Road SB Btwn M12	-	-	-	-	5,267	1,454	378	38	6,187	1,651	539	41
& Elizabeth Dr												

	No Build -	2026			Build - Op	tion 1 - 2026	6		Build - Op	tion 2 - 2026	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Airport Access Road NB Btwn Elizabeth Dr & M12	-	-	-	-	5,873	1,014	157	51	6,489	1,131	145	46
Elizabeth Dr Westbound												
Elizabeth Drive WB Btwn Elizabeth Dr East End & M7 SB On / Off Ramps	12,391	2,987	1,100	154	12,303	2,887	1,241	170	12,284	2,886	1,239	170
Elizabeth Drive WB Btwn M7 SB On / Off Ramps & M7 NB On / Off Ramps	12,800	3,186	1,577	239	12,258	2,966	1,629	230	12,223	2,964	1,631	231
Elizabeth Drive WB Btwn M7 NB On / Off Ramps & Cecil Rd	11,544	2,685	2,426	303	13,268	3,426	1,834	257	13,329	3,432	1,843	257
Elizabeth Drive WB Btwn Cecil Rd & Duff Rd	11,415	2,645	2,397	299	10,004	2,279	2,030	246	9,238	1,950	1,993	248
Elizabeth Drive WB Btwn Duff Rd & Mamre Rd	10,456	2,452	2,073	250	9,199	2,126	1,797	216	8,222	1,773	1,736	213
Elizabeth Drive WB Btwn Mamre Rd & Devonshire Rd	9,726	1,917	1,786	224	8,339	1,519	1,586	186	6,515	1,065	1,489	179
Elizabeth Drive WB Btwn Devonshire Rd & Clifton Ave	7,671	1,497	1,299	110	5,887	1,098	1,054	82	4,070	697	912	75
Elizabeth Drive WB Btwn Clifton Ave & Western Rd	6,974	1,321	1,230	101	5,897	1,099	1,063	82	4,041	697	908	75
Elizabeth Drive WB Btwn Western Rd & Martin Rd	7,214	1,545	1,103	101	5,380	1,166	879	76	3,405	743	729	71
Elizabeth Drive WB Btwn Martin Rd & Airport Business Park East Access	6,887	1,438	1,133	108	3,426	770	386	53	2,128	461	361	51
Elizabeth Drive WB Btwn Airport Business Park East Access & Airport Business Park West Access	5,683	1,377	594	83	3,599	813	410	55	2,190	475	376	53
Elizabeth Drive WB Btwn Airport Business Park West Access & Adams Rd	7,381	1,401	555	72	4,734	1,085	339	57	3,460	796	293	54
Elizabeth Drive WB Btwn Adams Rd & Luddenham Rd	6,894	1,229	602	84	4,752	1,054	421	85	3,609	800	368	78
Elizabeth Drive WB Btwn Luddenham Rd & The Northern Road	6,406	1,056	648	96	4,769	1,022	502	112	3,757	804	443	102
Elizabeth Dr Eastbound												
Elizabeth Drive EB Btwn The Northern Road & Luddenham Rd	5,494	1,726	451	102	5,648	1,287	529	109	3,524	903	452	101

	No Build -	2026			Build - Op	tion 1 - 2026	5		Build - Op	tion 2 - 2026	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Elizabeth Drive EB Btwn	6,284	1,901	421	101	5,570	1,297	517	116	3,386	882	443	109
Luddenham Rd & Adams Rd												
Elizabeth Drive EB Btwn Adams Rd	7,074	2,076	390	100	5,491	1,307	504	122	3,247	861	434	116
& Airport Business Park West												
Access												
Elizabeth Drive EB Btwn Airport	7,094	1,462	410	94	4,781	1,036	512	110	2,141	478	452	105
Business Park West Access &												
Airport Business Park East Access	7.077	4 707	508	127	7.000	4.500	673	139	4.400	971	631	137
Elizabeth Drive EB Btwn Airport Business Park East Access & Martin	7,977	1,727	508	127	7,233	1,526	6/3	139	4,469	971	031	137
Rd												
Elizabeth Drive EB Btwn Martin Rd	8,530	1,849	531	135	7,703	1,655	726	165	5,011	1,116	692	162
& Western Rd	0,550	1,049	331	133	7,703	1,033	/20	103	3,011	1,110	092	102
Elizabeth Drive EB Btwn Western	7,936	1,866	588	171	7,260	1,736	741	206	4,655	1,210	713	205
Rd & Clifton Ave	7,550	1,000	300	'''	7,200	1,730	'-''	200	7,000	1,210	/ 13	200
Elizabeth Drive EB Btwn Clifton Ave	8,860	2,086	677	189	8,164	1,953	830	228	5,579	1,435	798	227
& Devonshire Rd	0,000	2,000			0,101	1,000			, ,,,,,	1,100		
Elizabeth Drive EB Btwn Devonshire	10,371	2,542	757	231	10,026	2,446	930	266	7,830	2,102	973	300
Rd & Mamre Rd	,	,			,	,			,	,		
Elizabeth Drive EB Btwn Mamre Rd	9,174	2,024	841	171	9,661	2,270	1,065	234	8,138	2,060	1,135	274
& Duff Rd							,					
Elizabeth Drive EB Btwn Duff Rd &	9,892	2,330	988	249	10,537	2,660	1,327	334	9,052	2,461	1,404	377
Off Ramp from M12												
Elizabeth Drive EB Btwn Off Ramp	9,892	2,330	988	249	10,537	2,660	1,327	334	12,284	3,194	1,455	387
from M12 & Cecil Rd												
Elizabeth Drive EB Btwn Cecil Rd &	10,241	2,382	1,062	260	13,364	2,715	1,421	320	14,394	3,089	1,521	363
M7 NB On / Off Ramps												
Elizabeth Drive EB Btwn M7 NB On /	12,878	2,474	944	147	12,446	2,461	1,039	192	13,349	2,771	1,113	216
Off Ramps & M7 SB On / Off Ramps												
Elizabeth Drive EB Btwn M7 SB On /	14,720	2,727	769	123	13,648	2,768	795	146	14,357	3,008	824	156
Off Ramps &Elizabeth Dr East End												
Other Roads												
Wallgrove Road NB Btwn Elizabeth	6,524	1,830	595	206	4,629	1,532	209	63	4,774	1,586	224	69
Dr / Cecil Rd & Existing M7 On												
Ramp			225				225		:			
Wallgrove Road NB Btwn Existing	4,797	1,351	207	69	4,629	1,532	209	63	4,774	1,586	224	69
M7 On Ramp & Wallgrove Rd North												
End												

	No Build -	2026			Build - Op	tion 1 - 2026	;		Build - Op	tion 2 - 2026	;	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Wallgrove Road SB Btwn Wallgrove Rd North End Elizabeth Dr / Cecil Rd	4,700	640	706	61	4,956	578	671	54	4,956	578	671	54
Cecil Road NB Btwn Elizabeth Dr & Wallgrove Rd	2	-	-	-	5,091	1,714	284	75	6,013	1,897	359	85
Cecil Road NB Btwn Wallgrove Rd & Cecil Rd North End	2	-	-	-	87	44	36	11	87	44	39	10
Cecil Road SB Btwn Cecil Rd North End & Wallgrove Rd	381	70	66	8	255	20	65	8	259	20	65	8
Cecil Road SB Btwn Wallgrove Rd & Elizabeth Dr	381	70	66	8	5,585	691	760	63	6,385	818	823	68
Duff Road NB Btwn Elizabeth Dr & Duff Rd North End	1,694	331	377	64	1,536	295	323	48	1,670	311	342	51
Duff Road SB Btwn Duff Rd North End & Elizabeth Dr	1,510	451	217	95	1,623	531	376	119	1,631	537	377	119
Mamre Road NB Btwn Elizabeth Dr & Mamre Rd North End	7,135	1,856	452	58	7,167	1,874	459	53	7,596	1,968	495	56
Mamre Road SB Btwn Mamre Rd North End & Elizabeth Dr	6,456	1,325	399	25	6,444	1,321	373	20	6,445	1,321	373	20
Devonshire Road NB Btwn Southern End & Elizabeth Dr	2,951	819	265	54	3,038	836	304	62	3,091	863	311	65
Devonshire Road SB Btwn Elizabeth Dr & Southern End	3,408	695	578	104	3,419	662	635	109	3,491	664	673	110
Salisbury Road NB Btwn Elizabeth Dr & Northern End	15	7	16	6	20	10	6	3	20	10	8	4
Salisbury Road SB Btwn Northern End & Elizabeth Dr	232	17	18	-	219	19	22	-	219	19	22	-
Clifton Avenue NB Btwn Elizabeth Dr & Clifton Ave North End	677	169	67	8	677	169	67	8	677	169	67	8
Clifton Avenue SB Btwn Clifton Ave North End & Elizabeth Dr	954	229	86	17	922	225	91	22	924	226	91	22
Western Road NB Btwn Southern End & Elizabeth Dr	1,494	436	221	57	1,799	519	242	69	1,799	519	242	69
Western Road NB Btwn Elizabeth Dr & Northern End	339	114	28	5	339	114	28	5	339	114	28	5
Western Road SB Btwn Northern End & Elizabeth Dr	247	39	8	2	245	37	10	4	245	37	10	4
Western Road SB Btwn Elizabeth Dr & Southern End	1,763	127	286	20	2,049	135	323	28	2,075	137	327	28

	No Build -	2026			Build - Op	tion 1 - 2026	5		Build - Op	tion 2 - 2026	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Martin Road NB Btwn Southern End & Elizabeth Dr	628	143	144	36	665	160	169	48	665	160	169	48
Martin Road SB Btwn Elizabeth Dr & Southern End	526	152	197	41	482	146	188	37	489	145	190	37
Adams Road NB Btwn Elizabeth Dr & Adams Rd South End	629	210	119	23	754	275	91	15	754	275	91	15
Adams Road SB Btwn Adams Rd South End & Elizabeth Dr	1,234	243	158	41	1,939	337	104	27	1,931	337	103	28
Luddenham Road NB Btwn Elizabeth Dr & Luddenham Rd North End	3,602	1,056	83	7	3,551	1,044	81	9	3,500	1,035	84	9
Luddenham Road SB Btwn Luddenham Rd North End & Elizabeth Dr	5,087	1,087	161	34	4,809	990	225	62	4,811	991	225	62
The Northern Road Realignment NB Btwn The Northern Road Realignment South End & Elizabeth Dr	5,644	1,412	1,572	377	4,268	1,218	1,656	424	4,268	1,218	1,656	424
The Northern Road NB Btwn Elizabeth Dr & M12	11,917	2,495	1,962	451	9,407	2,667	2,197	588	9,556	2,755	2,202	583
The Northern Road NB Btwn M12 & The Northern Road North End	11,917	2,495	1,962	451	14,907	2,627	2,358	485	14,797	2,615	2,361	484
The Northern Road SB Btwn The Northern Road North End & M12	12,631	2,043	2,296	522	11,726	2,396	2,356	569	11,593	2,392	2,327	568
The Northern Road SB Btwn M12 & Elizabeth Dr	12,626	2,043	2,306	524	13,669	1,681	2,837	589	11,890	1,568	2,647	578
The Northern Road Realignment SB Btwn Elizabeth Dr & The Northern Road Realignment South End	6,832	662	1,915	436	6,280	531	1,845	441	5,773	513	1,719	438
Old Northern Road NB Btwn The Northern Road South End & Elizabeth Dr	3,299	943	48	8	3,771	1,074	216	52	3,771	1,074	216	52
Old Northern Road SB Btwn Elizabeth Dr & The Northern Road South End	3,760	585	261	19	4,031	615	539	62	3,785	608	478	61

Traffic data – 2036

	No Build -	2036			Build - Op	tion 1 - 2036	;		Build - Op	tion 2 - 2036	;	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
M7 Northbound												
M7 NB Btwn M7 South End & M7 Off Ramp to M12 / Elizabeth Dr	27,871	6,588	9,205	2,113	31,126	7,150	9,800	2,126	31,122	7,150	9,801	2,126
M7 NB Btwn M7 Off Ramp to M12 / Elizabeth Dr & M7 On Ramp from M12 / Elizabeth Dr	23,159	5,424	8,552	1,990	18,007	4,410	7,907	1,846	18,012	4,410	7,907	1,846
M7 NB Btwn M7 On Ramp from M12 / Elizabeth Dr & M7 North End	24,933	5,922	9,036	2,127	26,428	6,668	8,898	2,150	26,776	6,737	8,952	2,161
M7 Southbound												
M7 SB Btwn M7 North End & M7 Off Ramp to M12 / Elizabeth Dr	30,088	5,519	8,526	1,624	34,643	6,053	8,499	1,574	34,645	6,053	8,495	1,574
M7 SB Btwn M7 Off Ramp to M12 / Elizabeth Dr & M7 On Ramp from M12 / Elizabeth Dr	23,168	4,131	7,800	1,484	18,951	3,292	7,005	1,337	18,970	3,294	7,001	1,335
M7 SB Btwn M7 On Ramp from M12 / Elizabeth Dr & M7 South End	28,827	4,996	8,382	1,604	29,064	5,401	8,147	1,694	30,510	5,531	8,272	1,704
M7 Interchange Ramps												
M7 NB Off Ramp to M12 / Elizabeth Dr	4,712	1,164	653	123	13,119	2,740	1,893	280	13,110	2,740	1,894	280
M7 NB Off Ramp to M12 WB On Ramp	-	-	-	-	6,932	1,387	988	113	8,636	1,472	1,288	145
M7 NB Off Ramp to to Elizabeth Dr	4,712	1,164	653	123	5,858	1,331	828	159	4,488	1,260	608	128
M12 EB Off Ramp to M7 NB On Ramp	-	-	-	-	5,924	1,692	444	169	6,253	1,738	476	176
Elizabeth Dr to M7 NB On Ramp	1,774	498	484	137	2,651	629	576	145	2,593	636	598	147
M12 / Elizabeth Dr to M7 NB On Ramp	1,774	498	484	137	8,421	2,258	991	304	8,764	2,327	1,045	315
M7 SB Off Ramp to M12 / Elizabeth Dr	6,620	1,377	724	147	15,692	2,761	1,494	237	15,675	2,759	1,494	239
M7 SB Off Ramp to M12 WB On Ramp	-	-	-	-	10,081	1,460	826	77	8,742	1,397	661	83
Elizabeth Dr Connection to M12 WB	-	-	-	-	-	-	-	-	2,646	636	378	18
M7 SB / Elizabeth Dr to M12 WB On Ramp	-	-	-	-	9,937	1,438	889	82	11,105	1,991	1,033	91
M7 SB Off Ramp to Elizabeth Dr	6,620	1,377	724	147	5,680	1,305	677	170	6,888	1,361	823	163
M12 EB Off Ramp to M7 SB On Ramp	-	-	-	-	6,530	1,460	614	223	6,002	1,501	531	201
Elizabeth Dr to M7 SB On Ramp	5,675	855	566	115	3,688	662	594	158	5,693	766	808	190

	No Build -	2036			Build - Op	tion 1 - 2036	6		Build - Op	tion 2 - 2036	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
M12 / Elizabeth Dr to M7 SB On	5,675	855	566	115	10,113	2,109	1,142	357	11,540	2,237	1,271	369
Ramp												
M12 EB Off Ramp Connection to	-	-	-	-	-	-	-	-	2,873	706	50	11
Elizabeth Dr												
M12 Westbound												
M12 WB Btwn M12 On Ramp from	-	-	-	-	16,869	2,825	1,877	195	19,741	3,463	2,321	236
M7 / Elizabeth Dr & M12 Off Ramp												
to Airport Access Rd												
M12 WB Btwn M12 Off Ramp to	-	-	-	-	9,838	866	1,738	172	11,450	1,068	1,893	197
Airport Access Rd & M12 On Ramp					,		,		,	·	,	
from Airport Access Rd												
M12 WB Btwn M12 On Ramp from	_	_	-	-	13,256	1,490	1,757	176	14,383	1,608	1,854	193
Airport Access Rd & The Northern					,				1,000		,,,,,,	
Road												
M12 Eastbound												
M12 EB Btwn The Northern Road &	_	_	_	_	7,562	2,495	978	378	9,299	3,165	975	381
M12 Off Ramp to Airport Access Rd					,,002				0,200	0,.00		
M12 EB Btwn M12 Off Ramp to	_	_	_	_	5,459	1,643	940	370	6,332	2,214	943	375
Airport Access Rd & M12 On Ramp					0,100	1,010	0.10	0,0	0,002			0,0
from Airport Access Rd												
M12 EB Btwn M12 On Ramp from	_	_	_	_	12,859	3,167	1,078	399	15,372	4,004	1,101	408
Airport Access Rd & M12 Off Ramp	_	_	_	_	12,000	3,107	1,070	555	10,572	7,004	1,101	100
to Elizabeth Dr												
M12 EB Btwn M12 Off Ramp to	_	_	_	_	12,859	3,167	1,078	399	12,255	3,239	1,007	377
Elizabeth Dr & M12 EB Off Ramp	_	_	_	_	12,000	3,107	1,070	555	12,200	0,200	1,007	377
Airport Interchange Ramps												
Airport Interchange Namps Airport Interchange SB M12 WB Off	_				6,974	1,951	146	22	8,312	2,393	419	37
Ramp to Airport Access Rd SB	_	_	_	_	0,974	1,951	140	22	0,312	2,393	419	31
Airport Interchange SB M12 EB Off	_		_		2,074	865	42	9	2,924	931	35	5
Ramp to Airport Access Rd SB	-	_	_	_	2,074	000	42	9	2,924	931	35	3
Airport Interchange NB Airport					3,518	626	42	2	2 002	556	41	1
Access Road NB to M12 WB On	-	-	-	_	3,510	020	42		3,083	336	41	'
Ramp Airport Interchange NB Airport	-				7,573	1,530	145	30	0.000	1 010	165	34
Access Road NB to M12 EB On	-	_	_	_	1,513	1,530	145	30	9,090	1,810	105	34
Ramp	-											
Airport Access Road	-				0.040	0.040	400	0.4	44.000	2 204	454	40
Airport Access Road SB Btwn M12	-	_	_	_	9,048	2,816	188	31	11,236	3,324	454	42
& Elizabeth Dr												

	No Build -	2036			Build - Op	tion 1 - 2036	5		Build - Op	tion 2 - 2036	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Airport Access Road NB Btwn Elizabeth Dr & M12	-	-	-	-	11,091	2,156	187	32	12,173	2,366	206	35
Elizabeth Dr Westbound												
Elizabeth Drive WB Btwn Elizabeth Dr East End & M7 SB On / Off Ramps	14,488	3,632	1,229	185	13,932	3,329	1,345	183	13,931	3,326	1,346	184
Elizabeth Drive WB Btwn M7 SB On / Off Ramps & M7 NB On / Off Ramps	13,929	3,710	1,552	245	13,561	3,503	1,698	279	14,063	3,527	1,791	271
Elizabeth Drive WB Btwn M7 NB On / Off Ramps & Cecil Rd	12,149	2,898	2,205	291	17,670	4,361	2,104	341	16,570	4,291	1,986	305
Elizabeth Drive WB Btwn Cecil Rd & Duff Rd	12,156	2,901	2,201	289	13,570	3,099	2,249	339	11,068	2,563	2,050	299
Elizabeth Drive WB Btwn Duff Rd & Mamre Rd	11,342	2,767	1,970	243	11,711	2,904	1,826	296	10,059	2,401	1,778	261
Elizabeth Drive WB Btwn Mamre Rd & Devonshire Rd	7,946	1,840	1,594	194	8,535	1,624	1,591	266	5,952	1,110	1,465	228
Elizabeth Drive WB Btwn Devonshire Rd & Clifton Ave	8,480	1,561	898	75	10,971	2,185	1,137	133	9,851	1,659	1,033	104
Elizabeth Drive WB Btwn Clifton Ave & Western Rd	8,007	1,436	855	68	10,943	2,182	1,142	131	9,883	1,658	1,030	103
Elizabeth Drive WB Btwn Western Rd & Martin Rd	7,857	1,597	720	57	10,197	2,218	905	108	8,159	1,657	704	83
Elizabeth Drive WB Btwn Martin Rd & Airport Business Park East Access	7,669	1,551	765	62	5,950	1,246	523	65	3,354	745	361	46
Elizabeth Drive WB Btwn Airport Business Park East Access & Airport Business Park West Access	7,104	2,008	406	52	6,111	1,269	544	69	3,376	742	374	47
Elizabeth Drive WB Btwn Airport Business Park West Access & Adams Rd	8,731	1,185	350	38	6,826	930	428	59	4,392	609	263	37
Elizabeth Drive WB Btwn Adams Rd & Luddenham Rd	8,772	1,265	417	74	7,055	927	558	90	4,825	615	365	53
Elizabeth Drive WB Btwn Luddenham Rd & The Northern Road	8,812	1,344	483	110	7,284	923	687	121	5,258	620	466	69
Elizabeth Dr Eastbound												
Elizabeth Drive EB Btwn The Northern Road & Luddenham Rd	7,049	2,457	305	73	6,603	1,297	398	62	4,403	1,185	340	75

	No Build -	2036			Build - Op	tion 1 - 2036	5		Build - Op	tion 2 - 2036	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Elizabeth Drive EB Btwn	7,557	2,574	298	77	6,980	1,488	532	138	4,583	1,311	509	166
Luddenham Rd & Adams Rd												
Elizabeth Drive EB Btwn Adams Rd	8,064	2,691	291	81	7,357	1,679	665	214	4,762	1,437	678	257
& Airport Business Park West												
Access												
Elizabeth Drive EB Btwn Airport	9,093	1,346	320	65	7,320	1,587	701	193	5,642	1,202	723	232
Business Park West Access &												
Airport Business Park East Access	44.000	0.504	365	78	0.000	0.400	816	223	0.000	4 707	915	267
Elizabeth Drive EB Btwn Airport Business Park East Access & Martin	11,632	2,591	305	/8	9,622	2,190	810	223	8,226	1,787	915	207
Rd												
Elizabeth Drive EB Btwn Martin Rd	12,127	2,678	394	91	9,990	2,277	857	242	8,736	1,912	988	290
& Western Rd	12,121	2,070	394	91	9,990	2,211	657	242	0,730	1,912	900	290
Elizabeth Drive EB Btwn Western	11,531	2,682	465	111	10,399	2,547	1,001	284	8,852	2,140	1,121	330
Rd & Clifton Ave	11,001	2,002	403	'''	10,599	2,547	1,001	204	0,032	2,140	1,121	330
Elizabeth Drive EB Btwn Clifton Ave	12,439	2,887	574	139	11,243	2,762	1,095	306	9,788	2,373	1,218	354
& Devonshire Rd	12,100	2,00.	0, .		1 1,2 10		1,000		0,700	2,0.0	1,210	
Elizabeth Drive EB Btwn Devonshire	8,733	2,277	585	130	8,786	2,351	1,091	358	7,411	2,020	1,218	408
Rd & Mamre Rd	· ·	·			,	,	,		,	,	,	
Elizabeth Drive EB Btwn Mamre Rd	10,713	2,700	1,165	171	10,100	2,728	1,582	339	9,361	2,410	1,847	386
& Duff Rd												
Elizabeth Drive EB Btwn Duff Rd &	11,007	2,886	1,307	227	10,539	3,005	1,766	401	9,984	2,698	2,061	450
Off Ramp from M12												
Elizabeth Drive EB Btwn Off Ramp	11,007	2,886	1,307	227	10,539	3,005	1,766	401	12,972	3,462	2,106	460
from M12 & Cecil Rd												
Elizabeth Drive EB Btwn Cecil Rd &	11,355	2,976	1,466	269	13,870	3,170	1,974	387	16,301	3,414	2,290	434
M7 NB On / Off Ramps												
Elizabeth Drive EB Btwn M7 NB On /	15,562	3,244	1,445	203	12,905	3,036	1,745	327	15,758	3,287	2,056	372
Off Ramps & M7 SB On / Off Ramps												
Elizabeth Drive EB Btwn M7 SB On /	17,133	3,732	1,295	176	15,370	3,542	1,473	238	16,842	3,698	1,605	252
Off Ramps &Elizabeth Dr East End												
Other Roads												
Wallgrove Road NB Btwn Elizabeth	6,645	2,075	598	166	4,392	1,449	134	52	4,553	1,493	148	54
Dr / Čecil Rd & Existing M7 On												
Ramp	4.074	4 577	444	60	4.000	4 440	404	50	4.550	4.400	440	F.4
Wallgrove Road NB Btwn Existing	4,871	1,577	114	29	4,392	1,449	134	52	4,553	1,493	148	54
M7 On Ramp & Wallgrove Rd North End												
Ellu	<u> </u>									<u> </u>		

	No Build -	2036			Build - Op	tion 1 - 2036	;		Build - Op	tion 2 - 2036	;	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Wallgrove Road SB Btwn Wallgrove Rd North End Elizabeth Dr / Cecil Rd	4,764	493	700	45	4,650	472	773	52	4,650	472	773	52
Cecil Road NB Btwn Elizabeth Dr & Wallgrove Rd	11	2	3	-	5,508	1,670	327	72	5,958	1,907	284	80
Cecil Road NB Btwn Wallgrove Rd & Cecil Rd North End	11	2	3	-	76	42	37	10	74	41	37	10
Cecil Road SB Btwn Cecil Rd North End & Wallgrove Rd	801	141	230	47	536	92	78	11	654	97	95	12
Cecil Road SB Btwn Wallgrove Rd & Elizabeth Dr	801	141	230	47	6,087	690	970	74	6,677	889	958	79
Duff Road NB Btwn Elizabeth Dr & Duff Rd North End	1,625	317	396	81	1,547	298	349	66	1,714	307	394	67
Duff Road SB Btwn Duff Rd North End & Elizabeth Dr	1,144	366	282	84	1,372	444	336	93	1,341	443	344	94
Mamre Road NB Btwn Elizabeth Dr & Mamre Rd North End	4,911	1,314	329	41	4,556	1,575	290	50	5,665	1,628	384	54
Mamre Road SB Btwn Mamre Rd North End & Elizabeth Dr	4,176	955	659	40	3,683	825	672	35	3,890	836	706	36
Devonshire Road NB Btwn Southern End & Elizabeth Dr	5,179	1,111	538	78	6,378	1,709	604	128	6,372	1,709	604	128
Devonshire Road SB Btwn Elizabeth Dr & Southern End	4,542	670	845	166	4,506	724	827	225	5,471	760	997	231
Salisbury Road NB Btwn Elizabeth Dr & Northern End	8,593	1,907	497	88	8,145	2,074	514	115	8,837	2,133	536	116
Salisbury Road SB Btwn Northern End & Elizabeth Dr	6,477	889	417	92	7,288	1,216	500	142	9,344	1,285	572	143
Clifton Avenue NB Btwn Elizabeth Dr & Clifton Ave North End	496	122	49	7	496	122	49	7	496	122	49	7
Clifton Avenue SB Btwn Clifton Ave North End & Elizabeth Dr	945	219	104	27	885	232	101	22	957	239	102	23
Western Road NB Btwn Southern End & Elizabeth Dr	2,259	647	130	33	3,144	945	225	55	3,143	945	225	55
Western Road NB Btwn Elizabeth Dr & Northern End	345	111	18	4	345	111	18	4	345	111	18	4
Western Road SB Btwn Northern End & Elizabeth Dr	242	36	14	2	309	38	5	2	241	32	5	2
Western Road SB Btwn Elizabeth Dr & Southern End	2,749	309	156	11	2,939	417	200	22	3,970	471	293	24

	No Build -	2036			Build - Op	tion 1 - 2036	5		Build - Op	tion 2 - 2036	5	
	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)	Day (15 Ho	our)	Night (9 H	our)
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy
Martin Road NB Btwn Southern End & Elizabeth Dr	635	146	162	46	654	157	195	53	654	157	198	54
Martin Road SB Btwn Elizabeth Dr & Southern End	360	88	205	46	487	161	175	41	584	167	225	48
Adams Road NB Btwn Elizabeth Dr & Adams Rd South End	574	260	32	11	606	268	101	20	606	268	101	20
Adams Road SB Btwn Adams Rd South End & Elizabeth Dr	1,791	212	109	19	1,189	132	74	7	1,248	147	86	12
Luddenham Road NB Btwn Elizabeth Dr & Luddenham Rd North End	2,538	816	43	3	2,732	841	34	4	2,960	938	39	4
Luddenham Road SB Btwn Luddenham Rd North End & Elizabeth Dr	5,738	1,268	238	66	5,016	999	512	160	5,031	1,008	514	160
The Northern Road Realignment NB Btwn The Northern Road Realignment South End & Elizabeth Dr	6,189	1,828	1,834	539	5,786	1,904	1,812	596	5,915	1,964	1,838	611
The Northern Road NB Btwn Elizabeth Dr & M12	16,249	3,251	2,147	635	12,347	3,013	2,421	747	12,167	3,292	2,446	777
The Northern Road NB Btwn M12 & The Northern Road North End	16,249	3,251	2,147	635	16,226	2,920	2,078	451	17,482	3,034	2,187	488
The Northern Road SB Btwn The Northern Road North End & M12	15,746	2,958	2,183	481	13,470	2,684	1,927	426	14,985	3,394	2,122	540
The Northern Road SB Btwn M12 & Elizabeth Dr	15,709	2,949	2,180	480	15,475	1,496	2,854	399	15,135	1,958	3,245	612
The Northern Road Realignment SB Btwn Elizabeth Dr & The Northern Road Realignment South End	7,833	784	1,938	412	7,636	538	1,801	276	8,120	708	2,138	459
Old Northern Road NB Btwn The Northern Road South End & Elizabeth Dr	3,241	891	46	3	3,987	1,139	246	65	4,003	1,139	246	65
Old Northern Road SB Btwn Elizabeth Dr & The Northern Road South End	2,739	518	139	7	3,696	428	689	46	4,454	663	841	93

Predicted operational road traffic noise levels

No mitigation scenario – (all receivers) – Option 1

			Easting	Northing		NCG (Period	No E	e Openi Build	ng (2024 Bi	e) iild	No E	ture De: Build	aign (20 Bi	iid					Projec		n of
						D	N		D	N	D	N	D	N	D	N	D	N	D	N	D	N	Mitigati
	NCA01	- 1	300304	6250295	Residential	55	50	Р	56	53	57			54	59	54					-		-
3872	NCA01	2	300304	6250295	Residential	55	50	D	57	54	58	54	58	54	59	55		_	_	_			
	NCA01	-		6250820	Residential	59	54	D	69	64	69	64	70	64	70	65	-	-	-	-			
3935	NCA01	-	300766	6250775	Residential	60	54	P	68	64	68	64	69	65	69	65	-	_	_	_	-	-	_
		- 1					55										-	-	-	-	-	-	_
	NCA01	- 1	300669	6250546	Residential	60	55	P	64	60	64	60	65	61	65	61	-	-	-	-	-	-	
	NCA01	2	300669	6250546	Residential	60	55	Р	65	62	65	62	66	63	67	63						-	
	NCA01	- 1	300623	6250872	Residential	58	53	Р	59	56	59	56	60	57	60	57	-	-	-	-	-	-	
3939	NCA01	2	300623	6250872	Residential	58	53	Р	60	57	60	57	62	58	62	58		_					
3942	NCA01	- 1	300540	6250882	Residential	58	53	Р	59	56	59	56	60	57	61	57							
	NCA01	- 1		6250875	Residential	58	53	P	59	56	59	56	60	57	61	57	-	-	-	-	-	-	-
	NCA01	2	300513	6250875	Residential		53		60	57	60	57	62		62		-	_	_	_	-	-	_
		- 4			Residential	58		P		56		56		58 57		58 57	-	_	_	_	-	-	_
	NCA01	- 1	300436			58	53		59		59		60		60		-	-	-	-	-	-	
	NCA01	2	300436	6250877	Residential	58		P	60	57	60	56	61	57	61	57	-	-	-	-	-	-	_
	NCA01	- 1	300379	6250886	Residential	57	52	Р	57	54	57	54	58	55	59	55	-	- 1	-	-	-	- 1	
3946	NCA01	2	300379	6250886	Residential	57	52	Р	59	56	59	56	60	57	60	57	-	-	-	-	-	-	
3947	NCA01	- 1	300399	6250841	Residential	57	52	Р	57	54	57	54	58	55	59	55		-			-		
3953	NCA01	- 1	200522	6250555	Residential	59	54	P	58	55	58	55	59	56	59	56		-	_	_			_
	NCA01	-	300532	6250555	Residential	59	54	P	61	58	61	58	62	59	62	59	-	_	_	_	-	-	_
3964	NCA01	1		6250555	Other (Place of Worship)	50			61	57	57	57	58	58	62		V	-	· v	-	-	-	-
	NCA01	2		6250574		50	50 50	H	56 57	58	58	58	59	59	59 59	58 59	Y	_	Y	_	-	-	Y
					Other (Place of Worship)												-	_	Y	_	-	-	Y
	NCA01	- 1	300955	6250325	Residential	57	52	Р	62	60	62	60	64	61	64	61	-	-	-	-	-	-	_
	NCA01	- 1		6250280	Residential	55	50	Р	61	59	64	61	63	59	66	62	Y	Y	Y	-	-	-	Y
3969	NCA01	2	300913	6250280	Residential	55	50	Р	68	65	69	66	69	66	71	67	Y	Y	Y	-	Y	-	Y
3970	NCA01	- 1	300895	6250280	Residential	55	50	Р	68	65	70	67	69	66	71	68	Y	Y	Y		Y		Y
3971	NCA01	- 1	300559	6250420	Residential	58	53	P	62	59	62	59	63	60	64	60	-		-		-		
3973	NCA01	- 1	300533	6250459	Residential	58	53	P	62	59	62	59	63	60	63	60	_	_	_	_	_		
	NCA02	- 1	300495	6248464	Residential	57	52		51	49	51	49	53	50	53	50	_	-	-	-	-		
	NCA02	1	300495	6248464 6248484						57		57					-		-	-	-	-	_
					Residential	60	55		59		59		61	58	61	58	-	-	-	-	-	-	_
	NCA02	- 1	300461	6248445	Residential	59	54	Р	52	49	52	49	54	50	54	50	-	-	-	-	-		
	NCA02	- 1	300286	6248254	Residential	60	55		53	51	53	51	55	52	55	52					-	-	
	NCA02	2	300286	6248254	Residential	60	55	P	57	54	57	55	58	55	58	56	-		-	-	-		
1136	NCA02	- 1	300301	6248244	Residential	60	55	P P	57 52	50	57 52	50	58 54	51	58 54	51	-	-	-	-	-	- 1	-
	NCA02	- 1	300512	6248434	Residential	58	53		50	48	50	48	52	49	52	49							-
	NCA02	2	300512	6248434	Residential	58	53	P	51	49	51	49	53	50	53	50					_		
	NCA02	- 4	300512	6248434													-	-	-	-	-	-	_
1521	NCA02 NCA02	- 1		6248448 6248448	Residential Residential	60	55		59	56	59	57	60	57	60	58	-	-	-	-	-	-	_
		2	300296			60	55	Р	59	57	59	57	61	58	61	58	-	-	-	-	-		_
	NCA02	- 1	300608	6249131	Residential	55	50	Р	58	53	58	52	60	54	59	53	-	-	-	-	-	- 1	
	NCA02	2		6249131	Residential	55	50	P	60	53	60	53	61	54	61	54	-		-	-	-		
1540	NCA02	- 1	300311	6248436	Residential	60	55	Р	54	52	54	52	55	53	56	53	-	-	-	-	-		
1540	NCA02	2	300311	6248436	Residential	60	55		55	53	55	53	55 57	54	57	53 54		-					-
	NCA02	- 1		6248425	Residential	60			53	51	53	51	55	52	55	52	_		_	_			
1541	NCA02	2	300330	6248425	Residential	60	55		54	52	55	53	56	53	57	54	-	-	-	-	-	-	_
									59	56	59	57		57			-	-	_	_	-	-	_
	NCA02	- 1		6248463	Residential	60	55						60		61	58	-	-	_	_	-	-	_
	NCA02	2	300380	6248463	Residential	60	55		59	56	59	57	60	58	61	58	-	-	-	-	-	-	
1543	NCA02	- 1	300353	6248413	Residential	60	55	P	55	53	55	53	56	54	57	54	-		-	-	-	-	
	NCA02	2		6248413	Residential	60	55		56	53	56	54	57	55	58	55	-	-	-	-	-	-	
1544	NCA02	- 1	300373	6248407	Residential	60	55	Р	53	51	53	51	54	52	55	52	-	-	-	-	-	-	-
1544	NCA02	2	200272	6248407	Residential	60	55	Р	56	54	56	54	58	55	58	55		_	_	_			_
	NCA02	- 1		6248448	Residential	60	55		55	53	56	54	57	54	57	54			-	-			-
	NCA02	2		6248448	Residential	60	55		56	54	57	55	58	55	58	56	-	-	-	-	-	-	_
		- 4									56	54					-		-	-	-	-	_
	NCA02	- 1	300425	6248430	Residential				56	53			57	55	58	55	-	-	_	_	-	-	_
	NCA02	2		6248430	Residential	60	55		56	54	57	55	58	55	59	56	-	-	-	-	-	-	
1547	NCA02	- 1	300423	6248407	Residential	60	55		55	53	56	54	57	54	57	55	-	-	-	-	-	-	
	NCA02	2	300423	6248407	Residential	60	55	Р	56	54	57	55	58	55	58	56	-	-	-	-	-	-	
1548	NCA02	- 1		6248364	Residential	60	55	Р	49	46	49	46	51	47	51	47	-	-	-	-	-	- 1	
1548	NCA02	2	300440	6248364	Residential	60	55	Р	51	48	51	48	53	49	53	49		-					-
	NCA02	- 1	300404	6248374	Residential	60	55	P	53	51	54	51	55	52	55	52		-					-
	NCA02	-		6248374	Residential	60	55	P	55	53	55	53	56	54	57	54	-	_	_	_	-	-	_
	NCA02	- 4	300404	6248366	Residential												-	_	_	_	-	-	_
		1				60	55	Р	51	49	51	49	53	50	53	50	-	-	_	_	-	-	_
	NCA02	2		6248366	Residential	60	55	Р	53	51	53	51	54	52	55	52	-		-	-	-		
1552	NCA02	- 1	300296	6248390	Residential	60	55	P	58	56	58	56	60	57	60	57						-	
1552	NCA02	2	300296	6248390	Residential	60	55	Р	59	57	59	57	61	58	60	58	-	-	-	-	-	-	
1553	NCA02	- 1	300321	6248373	Residential	60	55	P	54	52	54	52	56	53	56	53	-		-	-	-		
1553	NCA02	2	300321	6248373	Residential	60	55	P	57	55	57	55	59	56	59	56							
	NCA02	- 1	300337	6248356	Residential	60	55	P	52	50	52	50	54	51	54	51	-		-	-	-		
	NCA02	2	300337	6248356	Residential	60	55	P	55	53	55	53	57	54	57	54	_	_			_		
	NCA02 NCA02	2	300337	6248356	Residential Residential												-	-	-	-	-	-	
		1				60	55	Р	58	56	58	56	60	57	60	57	-	-	-	-	-	_	
	NCA02	2	300288	6248369	Residential	60	55	Р	59	56	59	57	60	57	60	58	-	-	-	-	-	_	
	NCA02	- 1		6248349	Residential	60	55	Р	58	55	58	56	59	57	60	57	-	-	-	-	-		
	NCA02	2	300284	6248349	Residential	60	55	Р	58	56	58	56	60	57	60	57	4				-	-	
	NCA02	- 1	300273	6248328	Residential	60	55	Р	58	56	58	56	60	57	59	57	-	-	-	-	-		
		2	300273	6248328	Residential	60	55	P	58	56	58	56	60	57	60	57	-		-	-	-	-	-
1559	NCA02		_	6248320	Residential	60	55	P	51	49	51	49	53	50	53	50							
	NCA02	- 1											55	52	55	52			_	_			
1560		1 2	300305	6248320	Residential		5.5	D	52		52	54											
1560 1560	NCA02 NCA02	2	300305	6248320	Residential	60	55	P	53	51	53	51		60	50	40	-						
1560 1560 1561	NCA02 NCA02 NCA02		300305 300322	6248320 6248311	Residential Residential	60 60	55	P	53 50	51 48	53 50	48	52	49	52	49	÷	-	-		-	-	-
1560 1560 1561 1561	NCA02 NCA02 NCA02 NCA02	1 2	300305 300322 300322	6248320 6248311 6248311	Residential Residential Residential	60 60	55 55	P	53 50 53	51 48 50	53 50 53	48 51	52 54	49 52	52 55	49 52			÷	-	-	-	
1560 1560 1561 1561 1561	NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2	300305 300322 300322 300340	6248320 6248311 6248311 6248300	Residential Residential Residential Residential	60 60 60	55 55 55	P P	53 50 53 50	51 48 50 48	53 50 53 50	48 51 48	52 54 52	49 52 49	52 55 52	49 52 49		-		-		- 2	- 1
1560 1560 1561 1561 1562 1562	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2	300305 300322 300322 300340 300340	6248311 6248311 6248311 6248300 6248300	Residential Residential Residential Residential Residential Residential	60 60 60 60	55 55 55 55	P P P	53 50 53 50 53	51 48 50 48 51	53 50 53 50 53	48 51 48 51	52 54 52 55	49 52 49 52	52 55 52 55	49 52 49 52			1	1	-		- 1
1560 1560 1561 1561 1562 1562	NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2	300305 300322 300322 300340	6248320 6248311 6248311 6248300	Residential Residential Residential Residential	60 60 60	55 55 55	P P	53 50 53 50	51 48 50 48	53 50 53 50	48 51 48	52 54 52	49 52 49	52 55 52 55	49 52 49	1				-		- 1
1560 1560 1561 1561 1561 1562 1562 1563	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2	300305 300322 300322 300340 300340 300359	6248311 6248311 6248311 6248300 6248300	Residential Residential Residential Residential Residential Residential	60 60 60 60	55 55 55 55	P P P	53 50 53 50 53	51 48 50 48 51	53 50 53 50 53	48 51 48 51	52 54 52 55	49 52 49 52	52 55 52	49 52 49 52	1		1	-	-		
1560 1560 1561 1561 1561 1562 1562 1563 1563	NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02	2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359	6248320 6248311 6248311 6248300 6248300 6248291 6248291	Residential Residential Residential Residential Residential Residential Residential Residential	60 60 60 60 60 60	55 55 55 55 55 55	P P P P	53 50 53 50 53 51 53	51 48 50 48 51 48 51	53 50 53 50 53 51 53	48 51 48 51 49 51	52 54 52 55 55 52 55	49 52 49 52 50 52	52 55 52 55 53 55	49 52 49 52 50 52	1	- - - -	1	1	- 1 - 2 - 2 - 3	-	
1560 1560 1561 1561 1562 1562 1563 1563 1564	NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02	2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349	Residential Residential Residential Residential Residential Residential Residential Residential	60 60 60 60 60 60 60	55 55 55 55 55 55 55	P P P P P	53 50 53 50 53 51 53 51	51 48 50 48 51 48 51 48	53 50 53 50 53 51 53 51	48 51 48 51 49 51 49	52 54 52 55 52 55 52 55	49 52 49 52 50 52 49	52 55 52 55 53 55 53	49 52 49 52 50 52 50	1 2 2 2 2 3 4			1	- 1 - 2 - 2 - 3		
1560 1560 1561 1561 1562 1562 1563 1563 1564 1564	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359 300354 300354	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349	Residential	60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55	P P P P P	53 50 53 50 53 51 53 51 53	51 48 50 48 51 48 51 48 51	53 50 53 50 53 51 53 51 53	48 51 48 51 49 51 49 51	52 54 52 55 52 55 52 55 52	49 52 49 52 50 52 49 52	52 55 52 55 53 55 53 55	49 52 49 52 50 52 50 52		- - - - -					- 1
1560 1560 1561 1561 1561 1562 1562 1563 1563 1563 1564 1564 1564	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359 300354 300354	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349	Residential	60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55	P P P P P P P	53 50 53 50 53 51 53 51 53 51	51 48 50 48 51 48 51 48 51 48	53 50 53 50 53 51 53 51 54 54	48 51 48 51 49 51 49 51 49	52 54 52 55 52 55 52 55 52 55	49 52 49 52 50 52 49 52 49	52 55 52 55 53 55 53 55 53	49 52 49 52 50 52 50 52 50 52 49		- - - -			- 1 - 2 - 2 - 3		
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1564 1565	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359 300354 300354	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349	Residential	60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55	P P P P P P P P	53 50 53 50 53 51 53 51 53	51 48 50 48 51 48 51 48 51	53 50 53 50 53 51 53 51 53	48 51 48 51 49 51 49 51	52 54 52 55 52 55 52 55 52 55	49 52 49 52 50 52 49 52	52 55 52 55 53 55 53 55 53	49 52 49 52 50 52 50 52		- - - - -					
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1565 1565	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300340 300359 300359 300354 300354	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349	Residential	60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55	P P P P P P P	53 50 53 50 53 51 53 51 53 51	51 48 50 48 51 48 51 48 51 48	53 50 53 50 53 51 53 51 54 54	48 51 48 51 49 51 49 51 49	52 54 52 55 52 55 52 55 52	49 52 49 52 50 52 49 52 49	52 55 52 55 53 55 53 55	49 52 49 52 50 52 50 52 50 52 49		- - - - -					
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1564 1565 1565	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300305 300322 300322 300340 300359 300359 300354 300354 300371 300371	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349 6248337	Residential	60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55	P P P P P P P P P	53 50 53 50 53 51 53 51 53 51 53	51 48 50 48 51 48 51 48 51 48 51 48	53 50 53 50 53 51 53 51 54 51 53 53	48 51 48 51 49 51 49 51 49 51	52 54 52 55 52 55 52 55 52 55 52 54	49 52 49 52 50 52 59 52 49 51 51	52 55 52 55 53 55 53 55 53 55 55	49 52 49 52 50 52 50 52 49 52 52		- - - - -					
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1564 1565 1565 1566 1566 1566	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	300305 300322 300322 300340 300359 300359 300354 300354 300371 300371 300390 300408	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248337 6248337 6248337 6248338	Residential	60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P	53 50 53 50 53 51 53 51 53 51 53 51 53 51 53	51 48 50 48 51 48 51 48 51 48 50 50	53 50 53 50 53 51 53 51 54 51 53 53 53	48 51 48 51 49 51 49 51 49 51 49 51	52 54 52 55 52 55 52 55 52 55 52 54 54 54	49 52 49 52 50 52 49 52 49 51 51	52 55 52 55 53 55 55 53 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 52 50							
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1564 1565 1565 1565 1566 1567	NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	300305 300322 300322 300340 300340 300359 300354 300354 300371 300371 300390 300408	6248320 6248311 6248311 6248300 6248300 6248291 6248349 6248349 6248347 6248349 6248349 6248337 6248337 6248339	Residential	60 60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P	53 50 53 50 53 51 53 51 53 51 53 51 53 51 53 51 53	51 48 50 48 51 48 51 48 51 48 50 50 50	53 50 53 50 53 51 53 51 54 51 53 53 53 53 53	48 51 48 51 49 51 49 51 49 51 51 51	52 54 52 55 52 55 52 55 52 55 52 54 54 53	49 52 49 52 50 52 49 52 49 51 51 51 50	52 55 52 55 53 55 53 55 53 55 55 55 55	49 52 49 52 50 52 50 52 50 52 49 52 52 52 50 52							
1560 1560 1561 1561 1561 1562 1562 1563 1563 1564 1564 1565 1565 1566 1567 1567	NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	300305 300322 300322 300340 300340 300359 300359 300354 300371 300371 300390 300408 300408	6248320 6248311 6248311 6248300 6248301 6248291 6248291 6248349 6248347 6248337 6248337 6248338 6248339 6248339 6248339 6248339 624839 624839	Residential	60 60 60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 53 51 51 53 51 53 52 52 51	51 48 50 48 51 48 51 48 51 48 50 50 49 51	53 50 53 50 53 51 53 51 54 51 53 53 53 53 53 53 53	48 51 48 51 49 51 49 51 49 51 51 49 51 49	52 54 52 55 52 55 52 55 52 54 54 53 55 55	49 52 49 52 50 52 49 52 49 51 51 51 50 52 49	52 55 52 55 53 55 53 55 53 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 52 50 52 49 52 52 52 50							
1560 1560 1561 1561 1562 1562 1562 1563 1563 1564 1564 1565 1565 1565 1566 1567 1567 1567 1568	NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	300305 300322 300322 300340 300340 300359 300359 300354 300371 300371 300371 300408 300408 300377 300377	6248320 6248311 6248311 6248300 6248300 6248291 6248349 6248347 6248347 6248347 6248349 6248349 6248349 624836 6248319 6248319 624836 624836 624836	Residential	60 60 60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 53 51 53 51 53 51 53 52 51 53 53	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48	53 50 53 53 51 53 51 54 51 53 53 53 53 53 53 53	48 51 48 51 49 51 49 51 49 51 51 49 51 51	52 54 55 55 55 55 52 55 52 54 54 53 55 55 52	49 52 49 52 50 52 49 52 49 51 51 50 52 49 52	52 55 52 55 53 55 53 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 52 50 52 52 52 52 52 52 52 52 52 52 52 52 52							
1560 1560 1561 1561 1561 1562 1563 1563 1563 1564 1564 1565 1565 1565 1567 1567 1567 1568 1568 1568 1568 1568	NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	300305 300322 300322 300340 300340 300359 300359 300354 300371 300371 300390 300408 300408 300377 300377	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349 6248337 6248337 6248339 6248319 6248319 6248319 6248280 6248280 6248280	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 51 53 51 53 51 53 52 51 53 51 53 54 9	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48 50 48	53 50 53 53 51 51 54 51 53 53 53 52 53 54 54 51 53 53 53 54 54 54 54 54 54 54 54 54 54 54 54 54	48 51 48 51 49 51 49 51 51 51 51 49 51 51 49 51 49	52 54 52 55 52 55 52 55 52 54 54 53 55 52 55 52 54 54 53	49 52 49 52 50 52 49 52 49 51 51 51 50 52 49 52 49	52 55 55 53 55 53 55 53 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 52 50 52 49 52 52 49 52							
1560 1560 1561 1561 1561 1562 1563 1563 1563 1564 1564 1565 1565 1565 1567 1567 1567 1568 1568 1568 1568 1568	NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	300305 300322 300322 300340 300340 300359 300359 300354 300371 300371 300371 300408 300408 300377 300377	6248320 6248311 6248311 6248300 6248300 6248291 6248349 6248347 6248347 6248347 6248349 6248349 6248349 624836 6248319 6248319 624836 624836 624836	Residential	60 60 60 60 60 60 60 60 60 60 60 60	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 53 51 53 51 53 51 53 52 51 53 53	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48	53 50 53 53 51 53 51 54 51 53 53 53 53 53 53 53	48 51 48 51 49 51 49 51 49 51 51 49 51 51	52 54 55 55 55 55 52 55 52 54 54 53 55 55 52	49 52 49 52 50 52 49 52 49 51 51 50 52 49 52	52 55 52 55 53 55 53 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 52 50 52 52 52 52 52 52 52 52 52 52 52 52 52							
1990 1990 1990 1991 1991 1992 1992 1993 1993 1993 1994 1994 1995 1995 1997 1997 1997 1998 1999 1999	NGA02 NGA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	300305 300322 300322 300340 300340 300359 300359 300354 300371 300371 300390 300408 300408 300377 300377	6248320 6248311 6248311 6248300 6248300 6248291 6248291 6248349 6248349 6248337 6248337 6248339 6248319 6248319 6248319 6248280 6248280 6248280	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 51 53 51 53 51 53 52 51 53 51 53 54 9	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48 50 48	53 50 53 53 51 51 54 51 53 53 53 52 53 54 54 51 53 53 53 54 54 54 54 54 54 54 54 54 54 54 54 54	48 51 48 51 49 51 49 51 51 51 51 49 51 51 49 51 49	52 54 52 55 52 55 52 55 52 54 54 53 55 52 55 52 54 55	49 52 49 52 50 52 49 52 49 51 51 51 50 52 49 52 49 49	52 55 52 55 53 55 53 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 50 52 49 52 52 49 52 49 49 49							
1990 1990 1991 1991 1991 1992 1992 1993 1993 1993	NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	300305 300322 300322 300340 300340 300359 300354 300371 300371 300371 300377 300377 300377 300377 300377	6248320 6248311 6248301 6248300 6248291 6248291 6248291 6248349 6248349 6248349 6248349 6248349 6248349 6248328 6248328 6248249 6248211 6248280 6248271 6248271 6248271	Residoratal	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 50 53 51 53 51 53 52 51 53 52 51 53 54 54 49	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48 50 48	53 50 53 50 53 51 54 51 53 53 52 53 51 53 53 54 54 51 53 53 54 54 54 55 53 54 54 55 53 54 54 55 56 57 57 57 57 57 57 57 57 57 57 57 57 57	48 51 48 51 49 51 49 51 49 51 49 51 49 51 49 51 49 51 49	52 54 52 55 52 55 52 55 52 54 54 53 55 52 54 51 52 49	49 52 49 52 50 52 49 52 49 51 51 51 50 52 49 52 49 49 49 47	52 55 52 55 53 55 53 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 50 52 49 52 52 49 49 47							
1990 1990 1990 1991 1991 1991 1992 1992	NGA02 NGA02	2 1 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 1 2 1 1 1 1 1 2 1	300305 300322 300340 300340 300359 300354 300354 300354 300371 300371 300377 300377 300394 300394 300394 300394	6248320 6248311 6248301 6248300 6248300 6248291 6248291 6248349 6248349 6248349 6248349 624836 6248319 6248319 6248319 624826	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 50 53 51 53 51 53 52 51 53 53 51 53 51 53 51 53 51 53 51 51 53 51 51 53 51 51 51 51 51 51 51 51 51 51 51 51 51	51 48 50 48 51 48 51 48 51 48 50 50 49 51 48 50 48 48 48	53 50 53 50 53 51 54 51 53 53 52 53 51 53 53 51 54 51 53 53 51 53 51 51 53 53 51 51 51 51 51 51 51 51 51 51 51 51 51	48 51 48 51 49 51 49 51 49 51 49 51 49 51 49 51 49 51 48 48	52 54 52 55 52 55 52 55 52 54 54 53 55 52 54 54 53 55 52 54 54 55 52 54 54 55 52 54 54 55 55 52 54 55 55 56 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	49 52 49 52 50 52 50 52 49 51 51 51 50 52 49 52 49 52 49 57 49 49 57 49 57 49 57 49 57 49 57 49 57 49 57 49 57 49 57 57 57 57 57 57 57 57 57 57 57 57 57	52 55 52 55 53 55 53 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 50 52 49 52 49 52 49 49 52 49 49 47							
1990 1990 1990 1961 1961 1962 1962 1963 1964 1964 1964 1965 1965 1966 1967 1967 1968 1968 1968 1968 1969 1971 1971	NCA02 NCA02	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	300305 300322 300322 300340 300359 300359 300354 300354 300371 300371 300371 300377 300377 300394 300408 30	6248320 6248311 6248311 6248300 6248390 6248390 6248291 6248349 6248349 6248349 6248349 6248349 6248349 6248349 6248349 6248341 6248349 6248349 6248349 6248349 6248360	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 50 53 51 51 53 51 53 52 51 53 51 53 51 53 51 53 51 53 53 51 53 53 51 53 53 54 55 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	51 48 50 48 51 48 51 48 51 48 50 50 50 49 51 48 50 48 48 51 48 48 51 48 51 48 50 48 50 48 50 48 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	53 50 53 50 53 51 53 51 54 51 53 53 53 53 54 51 53 53 54 51 53 53 53 54 51 53 53 53 53 54 51 53 53 53 53 53 54 54 55 55 55 55 55 55 55 55 55 55 55	48 51 48 51 49 51 49 51 51 51 49 51 48 51 48 51 48 51	52 54 52 55 55 55 52 54 54 54 53 55 52 54 51 52 49 52	49 52 49 52 50 52 52 49 51 51 51 50 52 49 52 49 52 49 52 49	52 55 52 55 53 55 55 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 50 52 49 52 49 52 49 49 52 49 49 47							
1560 1560 1560 1561 1561 1562 1562 1563 1563 1564 1565 1565 1565 1565 1567 1567 1568 1568 1568 1569 1569 1571 1571 1571	NGA02 NGA02	2 1 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1	300305 300322 300342 300340 300359 300354 300354 300354 300371 300390 300408 300377 300394 300408 30	6248320 6248311 6248311 6248300 6248390 6248291 6248291 6248249 6248349 6248349 6248337 6248337 6248328 6248319 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 53 51 53 51 53 51 53 52 51 53 53 54 49 51 48 51 53 53 53 53 53 53 53 53 54 55 53 55 53 55 55 55 55 55 55 55 55 55	51 48 50 48 51 51 48 51 48 50 50 49 49 46 48 48 46 48 48 46 48 48	53 50 53 53 51 51 53 51 54 51 53 53 53 51 53 53 51 53 53 51 53 53 51 53 53 55 51 51 53 53 53 54 51 51 51 51 51 51 51 51 51 51 51 51 51	48 51 48 51 49 51 49 51 51 51 51 49 51 48 51 48 51 48 48 48 48	52 54 52 55 55 55 52 54 54 54 51 52 49 52 54 55	49 52 49 52 50 52 49 51 51 51 51 51 52 49 52 49 52 49 52 49 52 49 52 49 52 49 52 49 52 49 50 50 50 50 50 50 50 50 50 50 50 50 50	52 55 52 55 53 55 55 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 50 52 49 52 49 52 49 52 49 52 49 52 49 52 49 52 49 52 50 50 50 50 50 50 50 50 50 50 50 50 50							
1560 1560 1560 1561 1561 1562 1562 1563 1563 1564 1564 1565 1565 1565 1566 1567 1567 1568 1569 1569 1569 1571 1572 1573	NCA02 NCA02	2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 2 1	300305 300322 300322 300340 300340 300359 300359 300351 300371 300371 300408 300408 300377 300394 300408 30	6248320 6248311 6248311 6248300 6248390 6248291 6248291 6248249 6248349 6248349 6248337 6248337 6248328 6248319 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280 6248280	Residential	60 60 60 60 60 60 60 60 60 60 60 60 60 6	55 55 55 55 55 55 55 55 55 55 55 55 55	P P P P P P P P P P P P P P P P P P P	53 50 53 50 53 51 51 53 51 53 52 51 53 51 53 51 53 51 53 51 53 53 51 53 53 51 53 53 54 55 53 53 54 55 55 55 55 55 55 55 55 55 55 55 55	51 48 50 48 51 48 51 48 51 48 50 50 50 49 51 48 50 48 48 51 48 48 51 48 51 48 50 48 50 48 50 48 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	53 50 53 50 53 51 53 51 54 51 53 53 53 53 54 51 53 53 54 51 53 53 53 54 51 53 53 53 53 54 51 53 53 53 53 53 54 54 55 55 55 55 55 55 55 55 55 55 55	48 51 48 51 49 51 49 51 51 51 49 51 48 51 48 51 48 51	52 54 52 55 55 55 52 54 54 54 53 55 52 54 51 52 49 52	49 52 49 52 50 52 52 49 51 51 51 50 52 49 52 49 52 49 52 49	52 55 52 55 53 55 55 55 55 55 55 55 55 55 55 55	49 52 49 52 50 52 50 52 49 52 52 50 52 49 52 49 52 49 49 52 49 49 47							

Predicted Noise Level (dBA)

NCO Criteria

Al Opening (2025)
Future Dasign (2035)

> 2 dB(A)
Cumulative
Project Acuse Consideratio

ID			Easting		RecType			Period		t Openi	ng (202)	5)	Fu	ture Des	sign (20	36)	Inch	ease		mit	Project	Acuse	Consideratio
						D	N		No E	Suid	D BE	ild N	No E	Suild	- 10	alid N	D	N	D		D	N	n of Mitigation
1575	NCA02	2	202447	6248260	Residential		55	Р	40	46	40		50		- 500	47					-	~	
1575	NCA02	- 2		6248260			55	P	52	50	49 52	50	54	51	54	51	-		-	-	-	-	
1576	NCA02	-1		6248313	Residential	60											-	-	-	-	-	-	-
		2			Residential	60	55	Р	53	51	53	51	55	52	55	52	-	-	-	-	-	-	-
	NCA02	- 1		6248269		60	55	Р	49	46	49	46	50	47	51	47	-	-	-	-	-	-	-
1577	NCA02	2	300470	6248269	Residential	60	55	Р	51	48	51	49	52	49	53	50	-	-	-	-	-	-	-
1578	NCA02	- 1		6248313		60	55	Р	50	48	51	48	52	49	52	49	-		-	-	-	-	-
1578	NCA02	2	300471	6248313	Residential	60	55		52	49	52	50	54	50	54	51	-	-	-	-	-	-	-
1579	NCA02	- 1		6248358		60	55	Р	48	45	48	45	49	46	50	46	-	-	-	-	-	-	
1579	NCA02	2	300471	6248358	Residential	60	55	Р	50	47	50	48	51	48	52	48	-	-	-	-			-
1580	NCA02	- 1	300269	6248290	Residential	60	55	P	57	55	57	55	59	56	59	56	-	-	-	-	-	-	
1580	NCA02	2		6248290	Residential	60	55	Р	58	55	58	56	59	56	60	57	-	-	-	-	-	-	-
1581	NCA02	- 1	300263	6248270	Residential	60	55	Р	57	55	57	55	58	56	59	56	-	-	-	-	-	-	-
1582	NCA02	- 1	300256	6248258	Residential	60	55	Р	57	55	57	55	59	56	59	56	-	-	-	-	-	-	-
1582	NCA02	2	300256	6248258	Residential	60	55	Р	58	56	58	56	60	57	60	57	-	-	-	-	-	-	-
1583	NCA02	- 1	300294	6248276	Residential	60	55	Р	53	51	53	51	55	52	55	52	-	-	-	-	-	-	-
1583	NCA02	2	300294	6248276	Residential	60	55	Р	55	53	55	53	57	54	57	54	-	-	-	-	-	-	-
1584	NCA02	- 1	300311	6248264	Residential	60	55	Р	52	50	52	50	53	51	54	51	-	-	-	-	-	-	-
1584	NCA02	2	300311	6248264	Residential	60	55	Р	55	52	55	53	56	53	56	54	-	-	-	-	-	-	-
1585	NCA02	- 1	300325	6248258	Residential	60	55	Р	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
1585	NCA02	2	300325	6248258	Residential	60	55	Р	53	51	53	51	55	52	55	52	-	-	-	-	-	-	-
1586	NCA02	- 1	300345	6248245	Residential	60	55	Р	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
1586	NCA02	2	300345	6248245	Residential	60	55	Р	53	51	53	51	54	52	55	52							-
1587	NCA02	- 1	300286	6248242	Residential	60	55	P	52	50	52	50	54	51	54	51							
1587	NCA02	2		6248242		60	55	P	56	54	56	54	57	55	58	55	-	-	-	-	-	-	-
1588	NCA02	1		6248230		60	55	P	50	47	50	48	52	49	52	49							
1588	NCA02	2	300301		Residential Residential	60	55	P	53	51	53	48 51	55	49 52	55	52	-	-		-	-	-	
1588	NCA02	1		624823U		60	55	P	51	49	51	49	53	50	53	50	-	÷	-	-	-	-	
1589	NCA02	2		6248219				P	54	52	54	52					-	-	-	-	-	-	_
1589	NCA02	- 4		6248219		60	55	P	54 51		54		56 53	53	56	53 50	-	-	-	-	-	-	_
		-				60	55			49		49		50	53		-	-	-	-	-	-	_
1590 1591	NCA02 NCA02	2		6248212		60	55 55	Р	53 50	51	54 50	51	55 52	52 49	55 52	52 49	-	-	-	-	-	-	-
		- 1		6248200	Residential	60		Р		48		48					-	-	-	-	-	-	
1591	NCA02	2		6248200		60	55	Р	53	51	53	51	55	52	55	52	-	-		-	-	-	-
1592	NCA02	- 1	300359	6248234	Residential	60	55	Р	51	49	51	49	52	50	52	50	-	-	-	-	-	-	
1592	NCA02	2		6248234		60	55	Р	53	51	53	51	55	52	55	52	-	-		-	-	-	-
1593	NCA02	- 1		6248226	Residential	60	55	Р	51	48	51	48	52	49	52	50			-				
1593	NCA02	2		6248226		60	55	Р	52	50	52	50	54	51	54	51	4	100	-			-	
1594	NCA02	- 1	300368	6248191	Residential	60	55	Р	51	48	51	49	52	50	53	50	-	-	-	-	100		
1595	NCA02	- 1	300393	6248184	Residential	60	55	Р	51	49	52	49	53	50	53	50	-	-	-	-	-	-	-
1595	NCA02	2	300393	6248184	Residential	60	55	Р	53	51	53	51	55	52	55	52	-	-	-	-	-	-	-
1596	NCA02	- 1	300381	6248181	Residential	60	55	Р	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
1597	NCA02	- 1	300397	6248214	Residential	60	55	P	51	49	51	49	52	50	53	50	-	-	-	-	-	-	-
1597	NCA02	2	300397	6248214		60	55	P	53	50	53	51	54	51	54	52							-
1598	NCA02	- 1		6248212	Residential	60	55	P	51	48	51	48	52	49	52	49							-
1598	NCA02	2	300417	6248212	Residential	60	55	D	53	50	53	50	54	51	54	51	-	-	-	-	-	-	-
1599	NCA02	-	300409	6248174	Residential	60	55	D	49	47	49	47	51	40	51	48	-	-	-	-	_	_	_
1599	NCA02	2		6248174	Residential	60	55	P	52	49	52	49	53	50	53	50	-	+	-	-	-	-	
1600	NCA02	1		6248174		60	55	P	51	49	51	49	53	50	53	50	-	-	-	-	-	-	
1600	NCA02	2		6248174				P		51		51	54				-	-	-	-	-	-	-
1600	NCA02	1		6248177		60 60	55 55	P	53 51	48	53 51	49	53	52 49	55 53	52 49	-	+	-	-	-	-	-
1601	NCA02			6248177													-		-	-	-	-	
		2				60	55	Р	53	50	53	51	54	52	55	51	-	-	-	-	-	-	-
1602	NCA02	- 1		6248211		60	55	Р	52	49	52	49	53	50	53	50	-	-	-	-	-	-	-
1603	NCA02	- 1		6248219		60	55	Р	51	49	51	49	53	50	53	50	-		-	-	-	-	-
1603	NCA02	2		6248219		60	55	Р	52	50	52	50	54	51	54	51	-	-	-	-	-	-	-
1604	NCA02	- 1		6248221		60	55	Р	50	47	50	47	51	48	51	48	-	-	-	-	-	-	-
1605	NCA02	- 1		6248182		60	55	P	51	48	51	49	52	50	53	50	-	-	-	-	-	-	-
1605	NCA02	2		6248182		60	55	P	53	50	53	50	54	51	54	51	-	-	-	-	-	-	
1606	NCA02	1	300488	6248191	Residential	60	55	Р	50	47	50	47	51	48	52	48	-	-	-	-			-
1606	NCA02	2		6248191		60	55	Р	52	50	52	50	54	51	54	51	-	-	-	-	-	-	-
1607	NCA02	- 1		6248409		59	54	P	50	47	50	47	51	48	52	48	-	-	-	-	-	-	-
1607	NCA02	2	300483	6248409	Residential	59	54	Р	51	48	51	48	52	49	53	50	-	-	-	-	-	-	-
1608	NCA02	- 1	300477	6248388	Residential	59	54	Р	50	47	50	47	51	48	51	48	-	-	-	-	-	-	-
1608	NCA02	2	300477	6248388	Residential	59	54	P	51	49	51	49	53	50	53	50	-	-	-	-	-	-	
1609	NCA02	- 1	300533	6248429	Residential	57	52		48	45	48	45	49	46	49	46	-	-		-		-	
1609	NCA02	2		6248429		57	52	Р	49	47	49	47	51	48	51	48	-	-	-	-	-	-	
1610	NCA02	- 1	300506	6248424	Residential	58	53	P	50	48	50	48	52	49	52	49	-	-		-	-	-	
1610	NCA02	2	300506	6248424	Residential	58	53	P	51	49	52	49	53	50	53	50	-	-	-				
1611	NCA02	- 1	300525		Residential	57	52	P	50	48	50	48	51	49	52	49	-		-	-			
1611	NCA02	2	300525	6248457	Residential	57	52	Р	51	48	51	48	52	50	53	49	-	-	-				
1612	NCA02	- 1	300518	6248495	Residential	57	52	P	50	48	50	48	52	49	52	49	-		-	-			
1612	NCA02	2		6248495	Residential	57	52	P	51	49	51	49	53	50	53	50	-		-	-			
1613	NCA02	1	300510		Residential	57	52	Р	49	47	49	47	51	48	51	48							
1613	NCA02	2	300510	6248517	Residential	57	52	P	51	49	51	49	53	50	53	50	-		-	-			
1614	NCA02	1	300505	6248537	Residential	56	51	P	50	47	50	48	51	48	52	48		-					
1614	NCA02	2	300505	6248537	Residential	56	51	P	51	48	51	49	52	49	53	49	-	-	-	-			
1615	NCA02	1	300491			56	51	P	50	48	50	48	52	49	52	49							
1615	NCA02	2		6248564		56	51	P	51	48	51	40	53	49	53	49							
1616	NCA02	1		6248202		60	55	P	49	48	49	48	51	49	53	49	-	+		-	-	-	
1616	NCA02	2	300525			60	55		51	47	49 51	47	53	48 50	53	48 50	-	-	-	-	-	-	
1617	NCA02	1		6248202		60	55	P	49	49	51 49	49	53	50 48	53	50 48	-	+	-	-	-	-	-
1617	NCA02			6248222 6248222					49 51	47	49 51	47					-	-	-	-	-	-	-
		2				60	55	P					53	50	53	50	-	-	-	-	-	-	-
1618	NCA02			6248241		60	55	Р	49	47	49	47	51	48	51	48	-	-	-	-	-	-	-
1618	NCA02	2		6248241		60	55	Р	51	49	51	49	52	50	53	50	-	-	-	-	-	-	-
1619	NCA02	- 1		6248264		60	55	Р	49	47	49	47	51	48	51	48	-	-	-	-	-	-	
1619	NCA02	2		6248264	Residential	60	55	Р	51	49	51	49	52	50	53	50		-		-	-	-	
1620	NCA02	-1	300513	6248287	Residential	60	55	Р	50	48	50	48	52	49	52	49	-		-		-	-	
1620	NCA02	2		6248287	Residential	60	55	Р	51	49	51	49	52	50	53	50							
	NCA02	- 1		6248307		60	55	Р	50	47	50	47	51	48	52	48	-	-		-	-	-	
1621	NCA02	2	300511	6248307	Residential	60	55	Р	51	49	51	49	53	50	53	50	4		-		-	-	
1622	NCA02	- 1		6248329		60	55	Р	50	48	50	48	52	49	52	49	-	-	-	-	-	-	
1622	NCA02	2	300514	6248329	Residential	60	55	Р	51	48	51	49	53	50	53	49	-	-		-			
1623	NCA02	- 1	300519	6248350	Residential	59	54	Р	49	46	49	46	50	47	51	47	-	-	-	-		-	
1623	NCA02	2		6248350		59	54	P	50	48	50	48	52	49	52	49	-	-	-				
1624	NCA02	1		6248373		59	54	P	49	47	49	47	51	48	51	48							
1624	NCA02	2		6248373	Residential Residential	59	54	P	50	47	50	48	52	49	52	49	-	-					
1625	NCA02	-		6248202		60	55		49	47	49	47	51	48	51	48	-			-	-	-	
1625	NCA02	2	300557	6248202	Residential Residential	60	55	D	51	49	51	49	53	50	53	50	-	-	-	-	-	-	
	NCA02	-		6248226		60	55	P	48	46	48	49	50	47	50	47	-	-		-	-	-	
1020	rec.MUZ	_	300002	UZ40ZZ0	PRESIDENT	00	200		40	40	40	40	50	97	90	77			-				

Producted Noise Level (dBA)

Producted Noise Level (dBA)

A Oranize (MM)

Figure Dation (2008)

> 2 dB(A)

Cumulative

Purior Agree Consideration

Consideration

Column	ID			Easting	Northing	RecType	NCG (Period		a Openi	ng (2021	i)	Fu	ture Des	Lign (20 D.	36)						Acute	Consideratio
Section Column							n	N		0	N	D	N N	0	N	0	N	0	N	0	N	0	N	Mitigation
Total	1626	NC AG2	2	200552	6249226	Decidential		55	D	50	47	50	40	52	40	52	40	-		-	_	-	-	
Text			-															-	_	_	_	-		
1.00 1.00	1627		2	200547		Posidental		55								50		-	_	_	-	-	-	_
153 1672 2 1670 16189 1618										40								-	-	-	-	-	-	
150 16.00 7 10.00 16																		-	-	-	-	-	-	_
Section Column								55		50		50		51		5/2		-		-	-	-	-	_
Section Column																		-		-	-	-	-	-
Section Column																		-	-	-	-	-	-	
ST																		-	-	-	-		-	
153 1642 1 2000 GGS140 Pendertral 168 16 17 17 18 18 18 18 18 18			2															-		-			-	
153 1642 1 2000 GGS140 Pendertral 168 16 17 17 18 18 18 18 18 18	1631		- 1			Residential	59	54		48	45	48	45	49	46	50	46	-	-	-	-	-	-	
STATE CALCAR 1	1631	NCA02	2	300554	6248328	Residential	59	54	P	50	47	50	48	51	48	52	48	-	-	-	-	-	-	
Section Column	1632	NCA02	- 1	300552	6248349	Residential	59	54	Р	47	45	47	45	49	46	49	46	-	-	-	-	-	-	-
Section Column	1632	NCA02	2	300552	6248349	Residential	59	54	Р	49	47	49	47	51	48	51	48							
Section Column		NCA02	- 1	300562	6248371	Residential			P	48	45	48	45											
Section Column	1633	NCA02	2	300562	6248371	Residential			D										-	-			-	
Section Calcal			- 1						D									-		-	-	-	-	
150			-						-									-	_	_	_	-		
Section Column		NCA02	- 4	3000940	6240307	Paridental												-	-	-	-	-	-	_
150 M.A.C. 1 20031 College Properties 150 M.A.C. 1 1 1 1 1 1 1 1 1	1030		-	300022	02400094		56											-		-	-	-	-	
Section Column	1635		- 2			Residential									50			-		-	-	-	-	
STATE CACCO CACC			1															-		_	_	-	-	
157 M. A. C. 2 2004 1000			2															-		-	-		-	
Section Column	1637	NCA02	- 1	300544	6248557	Residential												-		-	-		-	
153 March 159 15			2					51	P					52				-	-	-	-	-	-	
153 March 159 15	1638	NCA02	- 1	300550	6248535	Residential			Р									-	4	-	-	-	-	
150	1638	NCA02	2	300550	6248535	Residential	57	52	Р	50	48			52		52		-		-	-		-	
Section Column	1639	NCA02	- 1						Р		47							-	-	-	-	-		-
150 150			2						Р									-	-					-
Section Column	1640	NCA02	1	300572	6248539	Residential	57		P							51	47							
Math			2	200572			57	52	P	51	40	51		52		52	50	-	-	-	-		-	
Section Proceedings Proc			- 4						-						40			_	_	_	-	-	-	
March Marc			1						P	51				53	49	53		-	-	-	-	-	-	
March Marc			2				.p.t							54		54		-	-	-	-	-	-	
Section Column	1642	NCA02	1	300620	b248543	Residential	57				48					53		-	-	-	-	-	-	-
140.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.			2				57				49					54		-	-	-	-	-	-	-
140.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	1643	NCA02	- 1	300638	6248531	Residential										51						-		-
Math	1643	NCA02	2	300638	6248531	Residential	57	52		50				52		52		4					-	
1645 1642 1 1645 1 1 1 1 1 1 1 1 1	1644	NCA02	- 1	300627	6248426	Residential	58	53		50				51		51		-		-	-		-	
Section Column	1644	NCA02	2	300627	6248426	Residential	58	53	Р	51	48	51	49	53	50	53	50	-	-	-	-	-		-
165 166 167	1645	NCA02		300584	6248412	Residential	58		Р		47		47				48		-	-		-		-
1640 1640	1645	NCA02	2	300584	6248412	Residential	58	53								52								-
1649 1642 1 1650 1644																		-		-				
Column																		-		-	-	-	-	_
Section Column																		-		-	-	-	-	-
Section Column								53										-	_	_	_	-	-	-
Section Column								53	Р						50	53		-	-	-	-		-	
160	1648	NCA02	- 1	300620	6248447	Residential	58	53	P	50	48	50	48	52	49	52	49	-	-	-	-	-	-	
Mathematical Content of the Conten	1648	NCA02	2	300620	6248447	Residential	58	53	Р	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
Section Column	1649	NCA02	- 1	300618	6248466	Residential	58		Р	50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
Section Column	1649	NCA02	2	300618	6248466	Residential	58	53	Р	51	49	51	49		50	53	50							
Section Column	1650	MCA02	- 1	200574	6249459				D									_	_	_	_	_	_	
Section Columbia			2			Posidential			D									-	-	-	-	-	-	
Section Column		MCAGO	-	200574	CO40400				-									-	_	_	_	-		
Section Column	1651	NUAU2	-1	300570	6248477													-		-	-	-	-	_
			- 2				57							52				-	_	_	_	-	-	-
			- 1	300600	6248491	Residential												-	_	_	_	-	-	-
Section Column	1652			300600	6248491	Residential	57	52	Р					53	50	53	50	-		-	-		-	
Total Tota			- 1			Residential												-	-	-	-	-	-	-
155 156 157 156 157			2				58	53	P	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
Mathematics	1654	NCA02	- 1	300664	6248479		58	53	Р	50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
Mathematics	1654	NCA02	2	300664	6248479	Residential			P															-
1500 CACAD 2 20070 CAMAD Proportional 50 50 70 64 50 65 50 60 50 60 60 60		NCA02	- 1	300673	6248452	Residential			D										-	-			-	
155 156			2						D									-	-	-	-	-	-	
Material Material			-						-									-	_	_	_	-		
1650 NCACO 1 207070 Celebral Residential 18 18 19 10 10 13 10 15 10 10		NCA02	1	3000099	0248460	Presidential	98		-							0/2		-	-	-	-	-	-	_
Total Column Co			- 2						P									-	-	-	-	-	-	
160		NUA02	-1-						P									-	-	-	-	-	-	
			2				58	53	Р	53	51			55	52	55	52	-	-	-	-	-	-	
			- 1	300729	6248493		58	53	Р					53		53						-		
160 160			2		6248493												48				-		-	
150 150	1660	NCA02	- 1	300722	6248459	Residential	58	53	P	46			43	47	44	48	44	-	-	-	-	-	-	
161 VACC 1 30000 Gelded Producted 50 50 7 07 05 07 07 08 08 08 08 08 08	1660	NCA02	2	300722	6248459	Residential	58	53	P	50	46			51	47	51	47	-	-	-	-	-	-	-
	1661	NCA02	- 1	300744	6248459	Residential	58		Р	47	45	47	45	49	46	49	46	-	-	-	-		-	
1650 1650	1661	NCA02	2	300744	6248459	Residential	58	53		49	46	49	47	51		51		-	-	-	-	-		
	1662	NCA02	- 1	300760	6248442	Residential			Р	48		48	46		47		47	-	-					-
			2													52								
1677 V.C. 1 1670 167							50	54		49		50				51		-	-	-	-		-	
Columb C																		_	_	_	-	-	-	
Columb C																		-	-	-	-	-	-	_
1679 167420 2 16600 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 1640400 16404000 16404000 1640400 1640400 1640400 1640400 1640400 1640400 16404000																		-		_	_	_	-	
ST								53								53		-	-	-	-	-	-	-
1679 1674															50	53		-	-				-	
150															49	52						-		-
160 Value 1 20040 Calabir Residental 68 53 P 50 44 50 40 52 40 50 40 50			2			Residential	58	53	P	51			49	53	50	53	50	-	-	-	-	-	-	-
150 150	1680	NCA02	- 1	300645	6248387	Residential	58	53	P	50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
Tell		NCA02	2	300645	6248387	Residential	58	53	P	51	49	51	49		50	53	50	-	-	-	-	-		-
Tell			1	300627	6248376	Residential																		
150 150			2	300627	6248376													-		-				
162 W. ACC 2 30000 Cell-56 Repotented 59 54 P 51 44 51 48 53 48 50 49 -																		-		-	-	-	-	
164 V.CA22 1 30000 Ce3535 Repotented 59 54 P 49 40 40 47 50 42 51 48 - - - - - - - - -			1	300062	6248354			54	P					50				-		-	-	-	-	
164 X-X-22 Z X0000 G48305 Residental 50 54 P 01 44 51 40 52 40 60 40			2						Р									-	-	-		-		-
165			-1															-	-	-		-		
1650 X-X-X-22 2 2000071 CREATION Proceeded 59 53 P 51 44 51 42 52 40 53 40			2						Р													-		
1650 NCACQ 2 300007 CellSYOT Receleral 58 30 P 51 48 51 48 52 48 53 49			- 1																			-		-
1660 X-X-22 1 30771 24387 Residental 58 38 P 40 47 61 40 47 51 48 51 40 4.	1685	NCA02	2	300687	6248370	Residential		53										-		-	-		-	
1509 150-10 150	1686	NCA02	- 1	300713	6248367	Residential	58	53	Р	49	47	49	47	51	48	51	48	-	-	-	-	-		
1568 NCAC2 1 30772 26329 Peadersial 58 31 P 43 47 49 47 51 48 51 48			2															-	-					-
1688 16.452 2 20775 24839 Pendersal 99 30 P 51 44 51 60 52 60 50 50			1																					
1690 NAZOZ 1 500731 GERSST Residential 59 54 P 40 40 40 40 50 47 50 47 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			- 2						P									-	-	-	-			
1669 NCA02 2 300743 8248387 Readental 59 54 P 50 48 50 48 52 49 52 49			- 2				98											-	-	-	-	-	-	_
1690 NCA02 1 300754 6248371 Residential 59 54 P 49 46 49 47 50 47 50 47			1			Residential	59	54	Р		46	48		50		50		-	-	-	-	-	-	-
1690 NCA02 2 300754 6248371 Residential 59 54 P 51 48 51 48 52 50 52 49			2						P									_	-	-	-	-	-	
		NCA02	-1			Residential	59	54	Р							50		-	-	-		-		
1691 NCA02 1 300632 6248336 Residential 59 54 P 49 47 49 47 51 48 51 48			2				59	54	Р	51	48	51	48	52	50	52	49					-		
	1691	NCA02	- 1	300632	6248336	Residential	59	54	P	49	47	49	47	51	48	51	48	-	-	-	-	-	-	

Predicted Noise Level (dBA)

NCG Criteria

At Opening (2026)

Future Dasign (2036)

> 2 dB(A)

Cumulative
Project Acuse Consideratio

				Northing		NCG (Period	No E	t Openi	ng (2021	6) allel	Fu	ture Des	sign (20	36)	Inch				Projec		Considerat
						n			0	N.	-	N	- 0	N.			D	N	D		D	N	Mitigation
1691	NCA02	2	200522	6248336	Residential	59	54	Р	51	48	51	48	52	49	52	49	-	N		-		~	
		- 4						P									-	_	_	_	-	-	_
	NCA02 NCA02	1 2	300628	6248319 6248319	Residential Residential	59	54		50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
						59	54	P	51	49	51	49	53	50	53	50	-		-	-	-	-	
	NCA02	1		6248358	Residential	59	54	P	50	47	50	47	51	48	52	48	-		-	-	-	-	
1693	NCA02	2	300608	6248358	Residential	59	54	Р	51	48	51	48	52	49	53	49	-	-	-	-	-	-	
1694	NCA02	- 1	300601	6248331	Residential	58	53	P	50	47	50	47	51	48	52	48	-	-	-	-	-	-	
1694	NCA02	2	200601	6248331	Residential	58	53	Р	51	48	51	48	52	49	53	49		-	_	_			-
	NCA02	1		6248308	Residential	59	54	P	50	47	50	48	52	49	52	48	-	_	_	_	-	-	
	NCA02	- 1		6248286	Residential	59	54	P	50	48	50	48	51	49	52	49	-	÷	_	_	+	-	
																	-	_	_	_	-	-	
	NCA02	2	300599	6248286	Residential	59	54 54	Р	51	48	51	48	52	50	53	50	-	-	-	-	-	-	-
1699	NCA02	- 1	300596	6248266	Residential	59	54	P	50	47	50	48	51	49	52	48	-	-	-	-	-	- 1	-
1699	NCA02	2	300596	6248266	Residential	59	54	Р	51	48	51	48	52	50	53	50	-	-	-	-	-	-	
1721	NCA02	- 1	300726	6248350	Residential	59	54	P	49	47	49	47	51	48	51	48		-	-	-			
	NCA02	2		6248350	Residential	59	54	P	50	48	50	48	52	49	52	49	-	_	_	_	-	-	_
1828	NCA02	1	300726	6248559	Residential												-	_	_	_	-	-	_
						56	51	P	50	47	50	47	51	48	51	48	-	-	-	-	-	-	-
	NCA02	2	300841	6248559	Residential	56	51	Р	51	48	51	48	53	49	53	49	-	-	-	-	-	-	
1829	NCA02	- 1	300843	6248578	Residential	55	50	P	49	46	49	46	50	47	51	47	-	-	-	-	-	- 1	
1829	NCA02	2	300843	6248578	Residential	55	50	Р	53	46	53	46	54	47	54	47							
1830	NCA02	- 1	300839	6248597	Residential	55	50	P	51	48	51	48	53	49	53	49							-
	NCA02	2	200920	6248597	Residential	55		P	53	50	52	50	54	51	54	51	_	-	_	_	_		
	NCA02	1		6248614	Residential	55	50	P	51	49	51	49	53	50	53	50	-	-	_	_	-	-	
																	-		-	-	-	-	
	NCA02	2	300833	6248614	Residential	55	50	Р	53	50	53	50	55	51	55	51	-	-	-	-	-	-	
	NCA02	- 1		6248630	Residential	55	50	P	53	48	53	48	54	49	54	49	-	-	-	-	-	- 1	
1832	NCA02	2	300831	6248630	Residential	55	50	P	55	48	55	49	56	50	56	50	-	-	-	-	-		
1873	NCA02	- 1	300887	6248601	Residential	55	50	P	50	44	50	45	52	45	52	46							
1873	NCA02	2		6248601	Residential	55	50	P	53	46	53	47	54	47	54	47							-
4070		-					50		52	46	52	46	54	47		47	_	_			-	-	
1878	NCA02		3UU882	6248619	Residential Residential	55		P							53		-	-	-	-	-	-	
	NCA02	2		6248619		55	50	Р	56	50	56	50	57	51	57	51	-	-	-	-	-		
	NCA02	- 1		6248637	Residential	55	50	Р	51	48	51	48	52	49	52	49		-	-	-	-	-	-
	NCA02	2	300873	6248637	Residential	55	50	P	55	50	55	50	56	51	56	51	-	-	-	-	-	-	
1880	NCA02	1	300901	6248643	Residential	55	50	P	57	51	57	51	58	52	58	52	-	-	-	-	-	- 1	
	NCA02	2	300901	6248643	Residential	55	50	P	60	52	60	52	61	53	61	54							
	NCA02	1	200001	6248658	Residential	55	50	P	58	51	58	51	59	52	59								
						.00										52	-	-	-	-	-	-	
1881	NCA02	2	300891	6248658	Residential	55	50	Р	60	52	60	53	61	53	61	54	-	-	-	-	-	_	
	NCA02	- 1	300870	6248658	Residential	55	50	Р	54	48	53	48	55	49	55	49						-	
	NCA02	- 1		6248673	Residential	55	50	P	57	50	56	50	58	51	57	51	-	-	-	-	-	-	
1884	NCA02	2	30087F	6248673	Residential	55	50	Р	58	52	58	52	59	53	59	53	-	-	-	-	-	-	-
	NCA02	1		6248665	Residential	55	50	P	50	47	50	47	52	48	52	48		-					
	NCA02	2		6248665	Residential	55	50	P	54	45	54	46	55	46	52	48	-	-	-	-	÷	-	
	NCA02	- 2		6248684				P		49		49	55				-		_	_	-	-	
					Residential	55	50		54		54			50	55	50	-	-	_	_	-	-	-
	NCA02	2		6248684	Residential	55	50	P	56	51	56	51	57	52	57	52	-	-	-	-	-	-	
1896	NCA02	- 1	300915	6248697	Residential	55	50	Р	55	48	54	48	56	49	55	49	-	-	-	-	-	-	
1896	NCA02	2	300915	6248697	Residential	55	50	Р	59	52	59	52	60	53	60	53							
1897	NCA02	- 1	300903	6248707	Residential	55	50	P	53	47	53	47	54	48	54	48		-	_	_	-		-
	NCA02	2		6248707	Residential	55	50	-	57	51	57	51	58		58		-	_	_	_	-	-	
	NCA02	- 4	300903	6248730	Residential	55	50	_	59	51	59	51	60	52 52	60	52 52	-	_	_	_	-	-	
		1						Р									-	-	-	-	-		
1898	NCA02	2	300935	6248730	Residential	55	50	P	61	52	60	52	62	53	61	54	-	-	-	-	-	-	
	NCA02	- 1	300922	6248740	Residential	55	50	P	58	48	58	49	59	49	59	50	-	-	-	-	-	-	
1899	NCA02	2	300922	6248740	Residential	55	50	Р	60	53	60	53	61	54	61	54	-	-	-	-	-	-	
	NCA02	- 1		6248726	Residential	55	50	P	50	45	51	45	52	46	52	46	-	-	_	_			
	NCA02	-	200911	6248711	Residential	55	50	P	55	50	54	50		51	56	51	-	-	_	_	-	-	
	NCA02	_		6248726	Residential	55	50	P	54	50	54	50	56 55	51	55	51	-	_	_	_	-	-	
		_															-	_	_	_	-	-	-
	NCA02	- 1	300905	6248745	Residential	55	50	P	58	49	58	49	59	50	59	50	-	-	-	-	-	-	
	NCA02	2		6248745	Residential	55	50	Р	59	51	59	51	60	52	60	52	-	-	-	-	-	-	
1904	NCA02	- 1	300886	6248745	Residential	55	50	Р	54	50	54	50	56	51	55	51	-	-	-	-	-		
1904	NCA02	2	300886	6248745	Residential	55	50	Р	57	52	56	52	58	53	58	53							
1905	NCA02	- 1	200902	6248764	Residential	55	50	D	57	50	57	50	58	51	58	51		_	_	_			-
1905	NCA02	2	200000	6248764	Residential	55		P	59	52	59	52	60	53	60	53	-	_	_	_	-	-	_
		- 4					50										-	_	_	_	-	-	-
	NCA02	- 1		6248718	Residential	55	50	Р	55	45	55	46	56	47	56	47	-	-	-	-	-		-
1906	NCA02	2	300846	6248718	Residential	55	50	Р	58	50	58	50	59	51	59	51	-	-	-	-	-	-	
1907	NCA02	- 1	300845	6248701	Residential	55	50	P	56	46	56	46	57	47	56	48	-	-	-	-	-		
1907	NCA02	2		6248701	Residential	55	50	P	58	48	58	49	59	50	59	50	-	-	-	-	-	-	
1908	NCA02	- 1		6248692	Residential	55	50	P	57	52	57	52	58	53	58	53							-
	NCA02	2		6248692	Residential	55	50	P	58	52	57	52	59	53	59	53							
		- 4				00		P		04	97		209	03	09	03	-	_	_	_	-		_
1909	NCA02	1	300802	6248696	Residential	55	50		56	52	55	52	57	53	57	53	-	-	-	-	-	-	-
	NCA02	2	300802		Residential	55	50	Р	57	52	56	52	58	53	58	53	-	-			-		-
	NCA02	- 1	300813	6248716	Residential	55	50	P	54	51	54	51	56	52	56	52		-	-	-	-	-	-
	NCA02	2		6248716	Residential	55	50	Р	57	50	57	50	58	51	58	51	4					-	-
	NCA02	- 1	300766	6248691	Residential	55	50	Р	56	51	56	51	57	52	57	52	-	-	-	-	-		
	NCA02	2		6248691	Residential	55	50	P	57	51	57	51	58	52	58	52							-
	NCA02	1		6248690		55	50	P	55	50	55	49	56	51	56	51	-	÷	_	_	-		
				6248690	Residential	55	50	P	57	52	57	52	58	53	58	53	-	_	_	_	-		
1010	NOAGC					55 55		P							58 56		-	-	-	-	-	-	
	NCA02	2		coupers.												52		-	-	-	-	_	
1913	NCA02	- 1	300727	6248700	Residential		50		55	51	55	51	56	52			_						
1913 1913	NCA02 NCA02	1 2	300727 300727	6248700	Residential	55	50	P	56	52	55 56	52	58	53	58	53				_	-	-	
1913 1913 1914	NCA02 NCA02 NCA02	1 2	300727 300727 300808	6248700 6248737	Residential Residential	55 55	50 50	P	56 55	52 50	55 56 55	52 49	58 56	53 51	58 56	53 50		-		÷	-	-	
1913 1913 1914	NCA02 NCA02	1 2	300727 300727 300808	6248700	Residential	55 55	50	P	56	52	55 56	52	58	53	58	53 50			-	÷	-	-	
1913 1913 1914 1914	NCA02 NCA02 NCA02	1 2	300727 300727 300808 300808	6248700 6248737	Residential Residential	55	50 50	P	56 55	52 50	55 56 55	52 49	58 56	53 51	58 56	53							-
1913 1913 1914 1914 1915	NCA02 NCA02 NCA02 NCA02	1 2 1 2	300727 300727 300808 300808	6248700 6248737 6248737	Residential Residential Residential	55 55 55 55	50 50 50 50	P P P	56 55 58 53	52 50 52 50	55 56 55 57 53	52 49 52	58 56 59 55	53 51 53 51	58 56 59 55	53 50 53 50		÷			-		
1913 1913 1914 1914 1915 1915	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1	300727 300727 300808 300808 300789 300789	6248700 6248737 6248737 6248744 6248744	Residential Residential Residential Residential Residential Residential	55 55 55 55 55	50 50 50 50	P P	56 55 58 53 56	52 50 52 50 52	55 56 55 57 53	52 49 52 49 51	58 56 59 55	53 51 53 51 53	58 56 59 55	53 50 53 50	1	÷			-		
1913 1913 1914 1914 1915 1915	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1	300727 300727 300808 300808 300789 300789 300795	6248700 6248737 6248737 6248744 6248744 6248758	Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55	50 50 50 50 50 50	P P P P	56 55 58 53 56 53	52 50 52 50 52 49	55 56 55 57 53 56 53	52 49 52 49 51 49	58 56 59 55 57 55	53 51 53 51 51 53 50	58 56 59 55 57 55	53 50 53 50 53 50	- - - - - - -	- - - - -	1	1	-		
1913 1913 1914 1914 1915 1915 1916 1916	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1	300727 300727 300808 300808 300789 300789 300795	6248700 6248737 6248737 6248744 6248744 6248758 6248758	Residential Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55	50 50 50 50 50 50 50	P P P P P	56 55 58 53 56 53	52 50 52 50 52 49 51	55 56 55 57 53 56 53	52 49 52 49 51 49 51	58 56 59 55 57 55 57	53 51 53 51 53 53 50 52	58 56 59 55 57 55 57	53 50 53 50 53 50 53 50		÷	1	1	-		
1913 1913 1914 1914 1915 1915 1916 1916 1917	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300795 300805	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248758	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P P	56 55 58 53 56 53 56 55	52 50 52 50 52 49 51 49	55 56 55 57 53 56 53 56 55	52 49 52 49 51 49 51 49	58 56 59 55 57 55 57	53 51 53 51 53 50 52 50	58 56 59 55 57 55 57 56	53 50 53 50 53 50 53 50 52		- - - - -		1 1 1	-		
1913 1913 1914 1914 1915 1915 1916 1916 1917	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1	300727 300727 300808 300808 300789 300789 300795 300795 300805	6248700 6248737 6248737 6248744 6248744 6248758 6248758	Residential Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55	50 50 50 50 50 50 50	P P P P P	56 55 58 53 56 53	52 50 52 50 52 49 51	55 56 55 57 53 56 53	52 49 52 49 51 49 51	58 56 59 55 57 55 57	53 51 53 51 53 53 50 52	58 56 59 55 57 55 57	53 50 53 50 53 50 53 50		- - - - -			-		
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300795 300795 300805 300805	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P P	56 55 58 53 56 53 56 55	52 50 52 50 52 49 51 49	55 56 55 57 53 56 53 56 55 57	52 49 52 49 51 49 51 49	58 56 59 55 57 55 57	53 51 53 51 53 50 52 50	58 56 59 55 57 55 57 56 58	53 50 53 50 53 50 53 50 52		- - - - - - - -			-		
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1918	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300795 300795 300805 300805	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783	Residential	55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50	P P P P P P	56 55 58 53 56 53 56 55 57	52 50 52 50 52 49 51 49 51	55 56 55 57 53 56 53 56 55 55	52 49 52 49 51 49 51 49 51	58 56 59 55 57 55 57 57 57 58	53 51 53 51 53 50 52 50 52	58 56 59 55 57 55 57 56 58	53 50 53 50 53 50 53 50 52 50 52 50			1				
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1918 1918	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300795 300805 300805 300820	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248778	Residential	55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50	P P P P P P P	56 55 58 53 56 53 56 55 57	52 50 52 50 52 49 51 49 51 49 51	55 56 55 57 53 56 53 56 55 57	52 49 52 49 51 49 51 49 51 49 51	58 56 59 55 57 55 57 57 57 58 58	53 51 53 51 53 50 52 50 52 50 52	58 56 59 55 57 56 57 56 58 56	53 50 53 50 53 50 52 50 52 50 52			- - - - - - - - - - - - - - - - - - -				-
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1918 1918 1919	NGA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300795 300795 300805 300805 300820 300820 300842	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248778 6248778	Residential	55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57	52 50 52 50 52 49 51 49 51 49 51	55 56 55 57 53 56 53 56 55 57 55 57	52 49 52 49 51 49 51 49 51 49 51 49	58 56 59 55 57 55 57 57 58 56 59	53 51 53 51 53 50 52 50 52 50 52 50	58 56 59 55 57 55 57 56 58 58 56 58	53 50 53 50 53 50 52 50 52 50 52 50 52			- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -			
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1918 1919	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300795 300805 300805 300805 300820 300842	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248778 6248778 6248778 6248778	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P	56 58 53 56 53 56 57 55 57 55 57	52 50 52 50 52 49 51 49 51 49 51 49 51	55 56 55 57 53 56 53 56 55 57 55 57 55	52 49 52 49 51 49 51 49 51 49 51 49 51 49 51	58 56 59 55 57 55 57 57 57 58 56 59 55	53 51 53 51 53 50 52 50 52 50 52 50 52 52	58 56 59 55 57 56 58 56 58 56 58	53 50 53 50 53 50 52 50 52 50 52 50 52 50 52							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1919 1919	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300805 300805 300805 300820 300820 300842 300842	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248783 6248783 6248783 6248783 6248786 6248786 6248786	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57 54 58 53	52 50 52 50 52 49 51 49 51 49 51 45 52 47	55 56 55 57 53 56 53 56 55 57 55 57 54 58	52 49 52 49 51 49 51 49 51 49 51 49 51 49 51 49 51	58 56 59 55 57 57 57 57 58 56 59 55 60 54	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 53 48	58 56 59 55 57 55 57 56 58 58 56 58 56 58	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1918 1918 1919 1919 1920	NCA02 NCA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300808 300789 300789 300795 300805 300805 300820 300820 300842 300842 300842	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248758 6248783 6248778 6248778 6248778 6248778 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 57 57 54 58 53	52 50 52 50 52 49 51 49 51 49 51 45 52 47	55 56 55 57 53 56 53 56 55 57 55 57 55 57 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47	58 56 59 55 57 55 57 57 58 56 59 55 60 54	53 51 53 51 53 50 52 50 52 50 52 50 52 46 53 48	58 56 59 55 57 55 57 56 58 56 58 56 58 55 59	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1918 1919 1919	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300795 300805 300805 300820 300842 300842 300846 300846	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248758 6248763 6248778 6248778 6248778 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57 54 58 58 58	52 50 52 50 52 49 51 49 51 49 51 45 52 47	55 56 55 57 53 56 53 56 55 57 57 54 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52	58 56 59 55 57 57 57 58 56 59 55 60 54 59	53 51 53 51 53 50 52 50 52 50 52 50 52 46 53 48	58 56 59 55 57 56 58 58 58 58 59 54 59	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1918 1919 1919	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300789 300795 300795 300805 300805 300820 300842 300842 300846 300846	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248758 6248763 6248778 6248778 6248778 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57 54 58 58 58	52 50 52 50 52 49 51 49 51 49 51 45 52 47	55 56 55 57 53 56 53 56 55 57 57 54 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52	58 56 59 55 57 57 57 58 56 59 55 60 54 59	53 51 53 51 53 50 52 50 52 50 52 50 52 46 53 48	58 56 59 55 57 56 58 58 58 58 59 54 59	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1919 1920 1920 1921	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300789 300795 300795 300805 300805 300820 300820 300842 300842 300842 300845 300845 300845	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248768 6248763 6248778 6248778 6248736 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57 54 58 53 58	52 50 52 50 52 49 51 49 51 49 51 45 52 47 52 50 50	55 56 55 57 53 56 53 56 55 57 55 57 54 58 53 58 56 56	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49	58 56 59 55 57 57 57 58 56 59 55 60 54 59 57	53 51 53 51 53 50 52 50 52 50 52 52 52 53 48 53 51 51	58 56 59 55 57 56 58 58 58 58 58 59 54 59 57	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48 53 51							
1913 1913 1914 1914 1915 1915 1915 1916 1916 1917 1917 1918 1918 1918 1919 1920 1920 1920 1921 1922	NGA02 NCA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300808 300789 300795 300795 300805 300805 300820 300842 300842 300846 300846 300846 300840	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248778 6248778 6248778 6248778 6248778 6248778 6248778 6248778 6248778 6248778 6248754	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P	56 55 53 56 53 56 55 57 55 57 54 58 53 58 56 56 56	52 50 52 50 52 49 51 49 51 49 51 45 52 52 47	55 56 55 57 53 56 53 55 57 55 57 54 58 53 58 53 56 55 57	52 49 52 49 51 49 51 49 51 49 51 45 52 47	58 56 59 55 57 55 57 57 58 56 59 55 60 54 59 57 57	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 50 50 50 50 50 50 50 50 50 50 50 50	58 56 59 55 57 56 58 56 58 56 58 55 59 57 57 57	53 50 53 50 53 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 50 50 50 50 50 50 50 50 50 50 50 50							
1913 1913 1914 1914 1914 1915 1915 1916 1916 1917 1917 1918 1919 1919 1919 1920 1921 1922 1922 1923	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300808 300789 300795 300805 300805 300805 300820 300842 300842 300846 300846 300847 300840 300840 300840 300840 300840	6248700 6248737 6248737 6248744 6248744 6248758 6248758 6248783 6248783 6248778 6248778 6248736 6248736 6248736 6248736 6248754 6248754 6248778	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 55 57 54 58 53 58 58 56 56 56 56	52 50 52 50 52 49 51 49 51 45 52 47 52 50 50	55 56 57 53 56 53 56 55 57 55 57 54 58 53 58 56 57 55 57 55 57 55 57 55 57 55 57 55 57 55 55	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49 49 51 52 47 52	58 56 59 55 57 55 57 57 58 56 59 55 60 54 59 57 57 57	53 51 53 51 53 50 52 50 52 50 52 46 53 48 53 51	58 56 59 55 57 55 57 56 58 58 58 56 58 59 54 59 57 57	53 50 53 50 53 50 52 52 50 52 52 46 53 48 53 51							
1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1919 1920 1920 1920 1921 1922 1923 1923	NGA02 NCA02 NCA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300808 300808 300808 300789 300795 300805 300805 300805 300820 300842 300842 300846 300845 30	6248700 6248737 6248737 6248744 6248744 6248748 6248758 6248758 6248758 6248773 6248736 6248736 6248736 6248736 6248754 6248754 6248754 6248748 6248748	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 57 57 54 58 58 58 58 56 56 57 57 57 57 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	52 50 52 50 52 49 51 49 51 45 52 47 52 50 50 50 50 51 45 51 45 52 47 52 50 50 51 51 51 52 49 51 51 51 52 51 51 51 51 51 51 51 51 51 51 51 51 51	55 56 55 57 53 56 55 57 55 57 55 57 55 57 58 58 58 58 58 56 57 58 58 58 58 58 58 58 58 58 58 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49 49 49 51 45 52 47 52 49 49	58 56 59 55 57 55 57 57 58 56 59 55 60 54 59 57 57 57 57	53 51 53 51 53 50 52 50 52 50 52 50 52 53 48 53 51 51 48	58 56 59 55 57 55 57 56 58 56 58 56 58 56 57 57 57 57 57 57 57 57 58 59 59 59 59 59 59 59 59 59 59	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 48 53 51							
1913 1913 1914 1914 1914 1915 1915 1916 1916 1917 1917 1918 1918 1918 1919 1920 1920 1921 1922 1923 1923 1923	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300727 300808 300808 300789 300795 300805 300805 300805 300820 300842 300842 300846 300846 300857 3008057 3008057 300805	6248700 6248737 6248737 6248734 6248744 6248744 6248783 6248783 6248783 6248783 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 55 57 55 57 55 57 54 58 58 58 56 56 56 56 55 55 55 55	52 50 52 50 52 49 51 49 51 45 52 47 52 50 50 50 47 51 52 47 52 50 51 49 51 49 51 49 51 49 51 51 51 52 49 49 51 51 51 51 51 51 51 51 51 51 51 51 51	55 55 55 57 53 56 55 57 55 57 55 57 55 58 58 58 58 58 58 58 58 58 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49 49 49 47	58 56 59 55 57 57 58 56 59 56 59 57 57 57 57 57 57 53 53 54	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 50 51 51 51 51 51 51 51 51 51 51 51 51 51	58 56 59 55 57 56 58 56 58 56 58 56 57 57 57 57 57 57 53 55 57 57 56 58 58 58 58 58 58 58 58 58 58	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 53 48 53 51 50 48 51 50 48							
1913 1913 1914 1914 1914 1915 1915 1916 1916 1917 1917 1918 1918 1918 1919 1920 1920 1921 1922 1923 1923 1923	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300727 300808 300808 300789 300795 300805 300805 300805 300820 300842 300842 300846 300846 300857 3008057 3008057 300805	6248700 6248737 6248737 6248734 6248744 6248744 6248783 6248783 6248783 6248783 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 53 56 55 57 57 57 54 58 58 58 58 56 56 57 57 57 57 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	52 50 52 50 52 49 51 49 51 45 52 47 52 50 50 50 50 51 45 51 45 52 47 52 50 50 51 51 51 52 49 51 51 51 52 51 51 51 51 51 51 51 51 51 51 51 51 51	55 56 55 57 53 56 55 57 55 57 55 57 55 57 58 58 58 58 58 56 57 58 58 58 58 58 58 58 58 58 58 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49 49 49 51 45 52 47 52 49 49	58 56 59 55 57 57 58 56 59 56 59 57 57 57 57 57 57 53 53 54	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 51 51 51 51 51 51 51 51 51 51 51 51 51	58 56 59 55 57 55 57 56 58 56 58 56 58 56 57 57 57 57 57 57 57 57 58 59 59 59 59 59 59 59 59 59 59	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 53 48 53 51 50 48 51 50 48							
1913 1913 1913 1914 1914 1915 1916 1916 1916 1917 1917 1918 1918 1918 1919 1920 1920 1921 1922 1922 1923 1923 1924 1925	NGA02 NCA02 NCA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300727 300808 300808 300789 300795 300805 300805 300820 300820 300842 300842 300846 300845 300840 300840 300840 300840 300840 300840 300840 300840 300840 300840	6248700 6248737 6248737 6248737 6248744 6248744 6248758 6248783 6248783 6248778 6248778 6248778 6248778 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248774 6248778	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 55 57 57 54 58 53 58 56 56 56 56 56 56	52 50 52 50 52 50 51 49 51 49 51 49 51 45 52 47 52 50 50 50 47 51 51 52 52 54 54 54 54 54 55 56 56 56 56 56 56 56 56 56 56 56 56	55 56 55 57 53 56 53 56 55 57 57 54 58 53 58 56 55 57 57 54 58 58 56 56 57 57 54 58 58 58 58 58 58 58 58 58 58 58 58 58	52 49 52 49 51 49 51 49 51 45 52 47 52 47 52 47 52 47 52 47 50 49 49 51 51 51 51 51 51 51 51 51 51	58 56 59 55 57 57 58 56 59 55 57 57 57 57 57 57 57 57 57 57 57 57	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 50 52 51 53 51 51 48 53 51 51 51 48 53 51 51 53 54 55 55 55 55 55 55 55 55 55 55 55 55	58 56 59 55 57 55 58 58 56 58 59 57 57 57 57 53 59 57 57 57 57 53 55 55 55 55 56 56 56 56 56 56 56 56 57 57 57 57 57 57 57 57 57 57 57 57 57	53 50 53 50 53 50 50 52 50 52 50 52 46 53 51 50 48 48 53 51 50 48 48 51 51 50 48 51 51 51 51 51 51 51 51 51 51 51 51 51							
1913 1913 1913 1914 1914 1915 1915 1916 1916 1917 1917 1917 1918 1918 1919 1919 1920 1920 1921 1922 1923 1923 1923 1925 1925	NGA02 NGA02	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	300727 300727 300727 300808 300808 300789 300795 300805 300805 300820 300820 300842 300842 300846 30086 30086 30086 30086 30086 30086 3	6248700 6248737 6248737 6248734 6248744 6248744 6248783 6248783 6248783 6248783 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736 6248736	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	56 55 58 53 56 55 57 55 57 55 57 54 58 58 58 56 56 56 56 55 55 55 55	52 50 52 50 52 49 51 49 51 45 52 47 52 50 50 50 47 51 52 47 52 50 51 49 51 49 51 49 51 49 51 51 51 52 49 49 51 51 51 51 51 51 51 51 51 51 51 51 51	55 55 55 57 53 56 55 57 55 57 55 57 55 58 58 58 58 58 58 58 58 58 58 58 58	52 49 52 49 51 49 51 49 51 49 51 45 52 47 52 49 49 49 47	58 56 59 55 57 57 58 56 59 56 59 57 57 57 57 57 57 53 53 54	53 51 53 51 53 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 52 50 51 51 51 51 51 51 51 51 51 51 51 51 51	58 56 59 55 57 55 56 58 58 56 59 54 59 57 57 57 53 56 53 55 55 55 56 56 56 56 56 56 56 56 56 56	53 50 53 50 53 50 52 50 52 50 52 50 52 46 53 53 48 53 51 50 48 51 50 48							

Predicted Noise Level (dBA) > 2 dB(A) Commutative Eligible for NCG Criteria At Opening (2026) Future Design (2035) - 2 dB(A) Commutative Project Acuse Consideration

The color The				Easting	Northing		NCG (Period		t Openi	ng (202	S)	Fu	ture De	sign (20	36)	Inch	ease		mit	Projec		Considerati
March Marc							_			Not				No t			and							n of Mitigation
Section Column	4007	NCAGO		200700	60.40700	Desidential			- 0					- 50		- 50	50				-		~	
Text			- 4															-		-	-	-	-	
The column Column			-															-	-	-	-	-	-	_
Texas			- 4						Р									-	-	-	-	-	-	-
Section Column			1						Р									-		-	-	-	-	-
1930 1940	1929			300733	0240001		55		Р	5/	51	5/		58	5/2	58	52			-	-			-
STATE CASC 1 STATE CASC C																		-		-	-	-	-	
Section Column			2	300/12	6248781	Residential												-		-	-	-	-	-
Section Column			-						Р									-	-	-	-	-	-	-
1932 1967 1968	1931	NUAU2	- 2	300698	6248794	Residential			Р								51	-	-	-	-	-	-	-
1931 1942			1						Р	54		54						-	-	-	-	-	-	-
150 150			2						Р									-	-	-	-	-	-	
1531 1542 1500	1933	NCA02	- 1	300698	6248817	Residential	55		P									-	-	-	-	-	-	
STATE MACKED 2			2				55	50	Р	55	50			56	51	56	51	-	-	-	-	-	-	
1950 N.C.CO 1			- 1	300686	6248812	Residential			Р					54				-	-		-	-	-	
1955 W. A.C. 1 19000 C. 1975 W. A.									Р					56	52			-	-	-	-	-	-	
150 150	1935		- 1	300697	6248722	Residential	55	50	Р	56	51	56	51	57	52	57	52	-	-	-	-	-	-	
1905 WAZZ 1 30000 G4875 Resident 55 50 F 50 10 50 10 50 10 50 10 50 10 50 10 50 10 50 10 50 10 50 10 50 5	1935	NCA02	2	300697	6248722	Residential	55	50	Р	57	52	57	52	58	53	58	53	-	-	-	-	-	-	
1906 1907	1936	NCA02	- 1	300684	6248734		55	50	Р	56	51	56	51	57	52	57	52	-	-	-	-	-	-	
1937 W. A.CO 1 MOST CHATTO Resident Sept Sept Color Sept Sept Color Sept Color Sept Color Sept Sept Color Sept Sep	1936	NCA02	2	300684	6248734	Residential	55	50	Р	57	52	57	52	58	53		53	-	-	-	-	-	-	
Section Control Cont	1937	NCA02	- 1	300673	6248750	Residential	55	50	Р	55	51	55	51	56	52	56	52	-	-	-	-	-	-	
1999 1999	1938	NCA02	- 1	300660	6248765	Residential	55	50	Р	55	50	55	50	56	51	56	51	-	-	-	-	-	-	
1939 1942	1938	NCA02	2	300660	6248765	Residential	55	50	Р	57	52	57	52	58	53	58	53							-
1999 1999	1939	NCA02	- 1	300653	6248784	Residential				54	40	5.4	40								-			
1500 1500			2					50							52	50	52	-	-	-	-	-	-	
Section Proceeding			1					50																
Section Proceeding			2				55											+	-	-	-	-	-	
Section Column																		-		-		-		
Section Column																		-	-	-	-	-		
1942 1945			- 4				55	50	P					5/	51	56	51	-	-	-	-	-	-	
Section Column			1						P									-	-	-	-	-	-	_
Section Control Cont	1942	NCAC-	2	300625	6248827		55		P	55	50	55	50	5/	51	5/	51	-		-	-	-	-	
1945 1942			-1						Υ.									-		-	-	-		-
1945 N.A.CO 2		NCA02																-		-	-	-	-	-
1946 1967 1968 1968 1968 1968 1968 1968 1968 1968 1969		NCA02	1											54				-	-	-		-		-
1464 147-20 1			2															-	-		-			_
151 152 153		NCA02	- 1			Residential			Р														-	
1948 N. CACO 1 20000 Celler Resolution Sep			- 1						Р									-	-	-	-	-	-	
Section Column			2	300643	6248871	Residential	55	50	Р	53	50	53	49	55	51	54	50	-	-	-	-	-	- 1	
1599 1500	1948	NCA02	- 1	300660	6248961	Residential	55	50	Р	51	45	51	45	52	46	52	46	-	-	-	-	-		
150 160	1948	NCA02	2	300660	6248861	Residential	55	50	Р	54	49	54	49	55	50	55	50	-	-	-	-	-	-	
150 160	1949	NCA02	-1	300679	6248857	Residential	55	50	Р	52	48	51	47	53	49	53	48	-	-	-	-	-	-	
	1950	NCA02	- 1	300697	6248857	Residential	55	50	P	50		50		51	47	52		-	-	-	-	-	-	
150 160			2				55		P				47											
Second Column C		NCA02	1															-	-	-	-	-		
Section Column			- 1				55	50	P		51			55	57	55	51	-	-	-	-	-		-
150 150				300004	6240093	Peridental Decidental			Р.									-	-	-	-	-	-	
1951 1962	1952		2	300664	6248893	Residential		50						56	53		52	-	-	-	-	-	-	-
150 150																		-	-	-	-	-	-	
150 150																		-	-	-	-	-	-	-
1955 PACACO 2							55	50		53	46	53						-		-	-	-		-
150 150																		-		-	-	-	-	
1951 M. A.CAZ 1																		-	-	-	-	-	-	
1956 N. A.CAZ 1 20000 Colored Resolvent St. 20 P. 12 0.0 1.0																		-	-	-	-	-	-	
1500 1600			- 1											57				-	-	-	-	-	-	
150 150			- 1	300699			55	50		52	49	52	49	54	50	54	50	-	-	-	-	-	-	
1500 1500	1958	NCA02	2	300699	6248918	Residential	55		Р	56	48		48	57	49	57		-	-	-	-	-	-	
1950 1964 1965	1959	NCA02	-1	300700	6248936	Residential	55	50	Р	54	46	54	47	55	47	55	48	-	-	-	-	-	-	
Mathematics	1960	NCA02	- 1	300707	6248953	Residential	55	50	Р	56	50	56	50	57	51	57	51	-	-	-	-	-	-	
1997 Vic.Acc 1	1960	NCA02	2	300707	6248953	Residential	55		P	58	53	58	52					-	-	-	-	-	-	
1997 Value 1 2000 20	1961	NCA02	1	300675	6248957	Residential			P															
1979 CALCO 1			- 1				55		P									-		-	-	-	-	
1999 1,000			2				55		D									-	-	-	-	-		
1500 1500		NCA02	- 2						P									-	-	-	-	-	-	_
1909 1907 1908 1909		MCACC	2	200610	6240053		55	50										-		-	-	-		
1999 CACAD 2 20000 CADADO Paudoriud 155 10 10 10 10 10 10 1			1	300606	6249070	Residential																		
Section Calcida Calc			2								56							-				-		
2001 CALCO 1			- 2															-	-	-	-	-	-	
Section Column	2000	NCAC-	-	300679	6248995	Residential												-	-	-	-	-	-	
Section Columbia			1															-	-	-	-	-	-	-
Section Conference Confer		NUA02	2						Р									-	-	-	-	-	-	_
2003 CACAS 2 20073 CACAS 2 2 2 2 2 2 2 2 2			-1				55	50	Р			55		56	48	56	48	-	-	-	-	-	-	-
2003 CALCO 2 NOTES GARDON Producted St. 10 P. 27 O. 1 C. 27 O. 1 O. 28 O. 28 O. 24 O. 1 O. 1 O. 28 O. 28 O. 24 O. 1 O. 1 O. 28 O			2				55		Р					59				-	-	-	-	-	-	-
Section Proceeding		NCA02	1						Р									-	-	-	-	-	-	-
2014 2015			2				55		Р	57	51				52	58	52	-	-	-	-	-	-	-
200	2004		- 1		6249012	Residential	55							57		57		-	-	-	-	-		-
100 100							55	50			52		52		53	59							-	
2006 Vicinity 2007 200801 Residential S5 9 P 55 41 55 48 91 49 55 49 10 40 40 40 40 40 40 40			- 1															-	-	-	-	-		
2006	2005		2							58	52	58	52					-	-		-	-		-
2006 Calcular Ca	2006						55			55	48	55	48			56		4	-	-	-		-	
2027 CACA2 1 20071 Geologic Reciberate 85 80 P 50 05 50 50 50 50 50							55									58		-	-	-	-	-	-	-
2007 Value 2 20071 Geologic Residential S5 9 P S5 10 50 22 90 50 50 50 80 10 10 10 10 10 10 1	2007	NCA02	- 1	300715	6249042	Residential	55		Р		50		50					-	-		-	-		
2009 CACA2 2 20090 George G	2007	NCA02	2	300715	6249042	Residential			Р	58	52	58	52					-	-	-	-	-		-
2008 CACAC 2 X0000 GARDY Considerate 55 50 P 55 0 50 50 50	2008	NCA02	- 1	300681	6249012	Residential	55	50	Р	55	46	55	47	56	47	56	48	-	-		-	-		-
2009 MCAC2 1 20070 Celebra 20080 Residential 55 00 P 27 01 57 51 08 08 08 02 0 0 0 0 0 0 0 0	2008	NCA02	2	300681	6249012	Residential			Р	58	49	58	50		50		51	-	-			-		-
250 McAC2 2 30501 George Parameteral 55 69 Pa 50 50 54 60 55 61 55 61 65 65																		-				-		
2010 10.002 1 20000 200007 Paudoriud 55 50 P 57 50 75 50 50 51 50 51 50 50 5																								-
2011 M.A.CAZ 1 307070 200909 Readered 55 50 P 55 47 50 48 50 98 51 4 4 5 4 4			1				55		P									-	-	-	-	-		-
STI CACC STOTO GROUP Resident St. St.			-						D									-		-		-		
2012 M.A.CA2 1 30000 040077 Registeral 55 56 70 75 61 61 65 64 77 65 65 65 70 70 70 70 70 70 70 7	2011		2	200703	6249055													-		-	-	-		
2012 NCACE 2 30000 024077 Residential 55 50 P 55 10 50 51 90 82 09 52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			- 4				55											-		-	-	-	-	_
\$313 McA22 1 \$30500 George Passioners 55 90 P 27 0 54 05 07 07 51 98 02 96 02 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																		-		-	-	-	-	_
2013 NeACQ 2 2 300060 G00002 Rendered 55 50 P 00 15 4 00 15 5 10 15 5 1 0 15	2012	NCA02		300699	6249072	Residential	55		Р	58	51	58		59	52	59	52	-		-	-			
2314 NGAZ2 1 30050 200976 Readertal 55 90 P 55 40 55 40 57 90 57 90									Р									-						
254 N.CA2 2 50500 249976 Randerdal 55 50 P 55 10 59 52 01 53 50 10 53			2	300658	6249062	Residential												-			-			-
2015 X-X-X2 1 20001 G-20000 Residential 55 50 P 56 40 57 50 50			- 1						Р														-	
2015 NCACQ 1 200901 (200900 Residential 55 50 P 56 50 55 59 20 50 50 50 50 50 50 50			2	300653	6249078	Residential			Р									4	-		-	1	-	
2015 NCARZ 2 300691 (249000) Residential 55 50 P 58 51 58 51 59 52 59 52			- 1	300691	6249090	Residential	55	50		56				57				-	-	-	-	-	-	
2016 NCA02 1 300644 (249104 Residential 55 50 P 55 49 55 49 57 50 57 50			2			Residential	55	50						59				-	-		-	-		
2016 NCA02 2 300684 6249104 Residential 55 50 P 58 51 58 51 59 52 59 52	2016	NCA02	- 1	300684	6249104	Residential	55	50	Р		49	56	49	57	50	57	50	-	-		-	-	-	
2017 NCA02 1 30067 5249118 Residential 55 50 P 56 51 56 50 57 52 57 51	2016	NCA02	2	300684	6249104	Residential	55		Р	58	51	58	51	59	52	59		-	-	-	-	-	-	
	2017	NCA02	- 1	300667	6249118	Residential	55	50	Р	56	51	56	50	57	52	57	51	-	-	-	-	-	-	-
	_					•	_				_	_	_					_	_	_	_	_		

Predicted Noise Level (dBA)

Predicted Noise Level (dBA)

Selection (dBA)

Predicted Noise Level (dBA)

Selection (dBA)

Sele

2018 2018 2019 2019 2020				Northing				Period	No E	Build	В	ald	No E	Build		iild					
2018 2018 2019 2019 2020								1							D						
2018 2019 2019 2020	NCA02	2	300667	6249118	Residential	55	50	Р	58	51	58	51	59	52	59	52			-	-	-
2018 2019 2019 2020	NCA02	- 1	200640	6249093	Residential	55	50	Р	56	52	56	52	58	54	58	53	_		_		
2019 2019 2020	NCA02	2	300649	6249093	Residential				60	55	60	54					_	_	_	-	-
2019						55	50						61	56	61	55	-	-	-	-	
2020	NCA02	- 1	300651	6249122	Residential	55	50		57	51	56	51	58	52	58	52				-	-
	NCA02	2	300651	6249122	Residential	55	50	Р	59	53	59	53	60	54	60	54					
	NCA02	- 1	300600	6249151	Residential	55	50	P	60	54	59	54	61	55	61	54 55					
		-															_	-	-	-	-
	NCA02	2		6249151	Residential	55	50		61	56	61	56	63	57	62	57	-	-	-	-	-
2021	NCA02	- 1	300591	6249166	Residential	55	50	Р	60	52	59	52	61	53	60	53			-		
2021	NCA02	2	300591	6249166	Residential	55	50	Р	61	54	61	54	62	55	62	55	_		-		
2022	NCA02	- 1	300587	6249185	Residential	55	50	D	62	55	61	55	63	56	62	56	_	_	_	_	_
		_						-									_	_	_	-	_
	NCA02	2	300587	6249185	Residential	55	50	Р	63	57	63	57	64	58	64	58	-	-	-	-	-
2023	NCA02	- 1	300626	6249197	Residential	55	50	Р	62	53	62	53	63	54	63	54	-	-	-	-	-
2023	NCA02	2	300626	6249197	Residential	55	50	Р	64	55	64	55	65	56	65	56					
	NCA02	-		6249180	Residential	55	50		61	53	61	53	62	56 54	62	56 54	_	_	-	-	-
2024	NUAUZ	1			Residential												_	_	_	-	-
2024	NCA02	2	300630	6249180	Residential	55	50	P	63	55	63	55	64	56	64	56	- 1	-	-	-	-
2025	NCA02	- 1	300643	6249170	Residential	55	50	Р	59	51	58	51	60	53	59	52	-	-	-	-	-
	NCA02	2		6249170	Residential	55	50		61	54	61	54	62	55	61	55	_	-	_	_	_
2026	NCA02		300043	6249176	Residential												_		-	-	-
		- 1				55	50	Р	57	48	57	49	58	49	58	49		-	-	-	
2026	NCA02	2		6249166	Residential	55	50		60	53	60	54	61	54	61	54	-	-		-	
2027	NCA02	1	300663	6249197	Residential	55	50	Р	66	57	66	57	67	58	67	58		-			
2027	NCA02	2	200662	6249197	Residential	55	50	D	69	60	69	60	70	61	70	61	_	-	_		
		_				55		P			66	59					_		_	_	_
	NCA02	1		6249218	Residential		50		66	58			67	59	67	59	_	-	_	_	
	NCA02	2	300631	6249218	Residential	55	50	Р	69	61	69	61	70	62	70	62	- 1	-	-	-	-
2029	NCA02	- 1	300694	6249180	Residential	55	50	Р	66	58	66	58	67	59	67	59	_		-		
	NCA02	2		6249180	Residential					61							_	_	_	_	_
						55	50		69		69	61	70	62	70	62	-	-	-	-	-
	NCA02	- 1		6249162	Residential	55	50		58	49	58	49	59	50	59	50		-	-	-	-
	NCA02	2	300684	6249162	Residential	55	50	P	61	54	61	54	62	55	61	55	-	-	-	-	-
2031	NCA02	- 1	300702	6249153	Residential	55	50		60	52	60	52	61	53	61	53					
		2		6249153	Residential			-				55	64		64			_	_	_	-
2031	NCA02	- 2	300702	6249153		55	50	P	63	55	63			56		56	-	-	-	-	-
	NCA02	- 1	300729	6249158	Residential	55	50	P	65	56	65	56	66	57	65	57		-	-	-	-
2032	NCA02	2	300729	6249158	Residential	55	50	P	70	60	69	61	71	61	70	61	-	-	-	-	-
	NCA02	- 1		6249142	Residential	55	50	D	57	48	57	48	58	49	58	49					
2033	NCA02	-	300713	6249142	Residential Residential	00									00		-	_	-	-	-
		- 2				55	50	Р	59	51	59	51	60	52	60	52	-	-	-	-	-
	NCA02	- 1	300727	6249108	Residential	55	50	P	56	50	56	50	57	51	57	51		-		-	-
2034	NCA02	2	300727	6249108	Residential	55	50	Р	58	52	58	52	59	53	59	53					
2034	NCA02	- 1	300727	6249108	Residential	55	50	P	57	50	57	50	59	51	58	51					
		_															_	_	_	-	-
	NCA02	- 1	300735	6249092	Residential	55	50	P	53	49	52	49	54	50	54	50		-		-	-
2036	NCA02	2	300735	6249092	Residential	55	50	Р	56	49	56	49	57	50	57	50	-	-	-	-	-
2037	NCA02	- 1	300755	6249125	Residential	55	50	D	63	53	62	54	64	55	63	55		_	_		
	NCA02	-		6249113	Residential	55	50	-	65	56	64	56	66	57	65	57	_	_	_	-	-
		1						Р									_	_	_	-	-
	NCA02	2	300769	6249113	Residential	55	50	P	67	59	67	59	68	60	68	60	- 1	-	-	-	-
2039	NCA02	- 1	300777	6249099	Residential	55	50	Р	64	55	64	55	65	56	64	56	-	-	-	-	-
2039	NCA02	2	200777	6249099	Residential	55	50	Р	66	57	66	57	67	58	67	58		_			
	NCA02	- 1		6249078	Residential	00	50	P	54	48	54	48	55	49	55	49	_	_	-	-	-
		1				55		Р										-		-	
2040	NCA02	2	300746	6249078	Residential	55	50	P	56	49	56	49	57	50	57	50	-	-	-	-	-
2041	NCA02	- 1	300759	6249068	Residential	55	50	Р	53	47	53	47	54	48	54	48	-	-	-	-	-
2042	NCA02	-	300790	6249086	Residential	55	50	D	64	56	64	56	65	57	65	57	_	_	_	_	_
	NCA02	2	300790	6249086	Residential	00			04	56	04			37	03		_	_	_	-	_
						55	50	P	66	57	66	58	67	59	67	59		-		-	
2043	NCA02	- 1	300773	6249055	Residential	55	50	Р	53	48	52	48	54	49	54	49	-	-	-	-	-
2043	NCA02	2	300773	6249055	Residential	55	50	D	56	51	55	51	57	52	57	52	_	_	_		
	NCA02	1		6249041	Residential	55	50	P	54	47	54	47	55	48	55	48	_	-	_	-	-
						55											-	-	-	-	
	NCA02	2		6249041	Residential	55	50		57	49	56	50	58	50	57	50	-			-	
2045	NCA02	- 1	300806	6249079	Residential	55	50	P	65	56	64	56	66	57	65	57		-			
2045	NCA02	2	200906	6249079	Residential	55	50	P	67	58	67	58	68	59	67	59	_		_		
	NCA02	- 1	300820														_		_	_	_
					Residential	55	50	P	65	56	64	56	66	57	65	57	-	-	-	-	
	NCA02	2		6249077	Residential	55	50		67	58	67	58	68	59	67	59	- 1	-	-	-	-
2047	NCA02	- 1	300790	6249026	Residential	55	50	Р	52	49	52	48	53	50	53	49	-	-	-	-	-
2047	NCA02	2	300790	6249026	Residential	55	50		55	49	54	49	56	50	56	50	_	_	_	_	_
	NCA02	1	300700	6249029	Residential	55	50	P P	54	48	54	48	55	49	55	49	_	÷	-	-	-
																	-	-	-	-	
2048	NCA02	2	300805	6249029	Residential	55	50	P	56	48	56	48	57	49	57	49	-	-	-	-	-
2049	NCA02	- 1	300818	6249037	Residential	55	50	P	54	48	54	47	55	49	55	48					
	NCA02	- 1	300833	6249034	Residential	55	50		54	47	54	47	55	48	55	48					-
	NCA02	-	300841	6249034	Residential			P	66	57	66	57					-	_	_	-	-
		1				55	50						67	58	67	58	-	-	-	-	-
	NCA02	2	300841	6249071	Residential	55	50	Р	69	60	69	60	70	61	69	61	-	-		-	-
2052	NCA02	- 1	300854	6249062	Residential	55	50	Р	65	55	64	55	66	56	65	56		-	-	-	-
	NCA02	2	300854	6249062	Residential	55	50	P	68	58	67	58	69		68	59					
	NCA02	-		6249062		00	- 50			54		54	- 69	59	- 00	23	_	_	_	-	-
2053	NUAU2			0249048	Residential	55	50		63		63		64	55	64	55	_	-	_	-	-
2053	NCA02	2	300861	6249048	Residential	55 55	50	Р	66	56	65	56	66 62	57 52	66	57 52		-	-	-	
	NCA02	- 1		6249031	Residential	55	50	Р	61	51	61	51	62	52	61	52	-	-	-	-	-
	NCA02	2		6249031	Residential	55	50	P	63	53	63	54	64	54	64	55					
2054	NCA02	- 1	200000	6249031	Residential			P	59	51	59	51	60	52				-			
		1				55	50								60	52	-		-	-	-
2056	NCA02	- 1		6249048	Residential	55	50		66	57	66	57	67	58	67	58		-		-	-
	NCA02	- 1		6249018	Residential	55	50	P	62	52	61	53	62	53	62	54	-	-		-	-
2057	NCA02	2	300911	6249018	Residential	55	50	P	65	56	65	56	66	57	65	57					
		-		6249018		55	50		65	55	64	55	66	56	65	56	_	_		_	-
	NCA02				Residential												-	-	-	-	-
	NCA02	2	300929	6249017	Residential	55	50	Р	68	59	68	59	69	60	69	60		-	-	-	
2058	NCA02	- 1	300945	6249003	Residential	55	50	P	65	55	65	56	66	57	65	57	-	-	-	-	-
2058 2059	NCA02	2	300945	6249003	Residential	55	50		69	59	68	59	70	60	69	60					
2058 2059	NCA02	1	2000000	6248988	Residential	55	50		64	55	64	55	65	56	64	56	_	-	_	_	-
2058 2059 2059		_															_		_	_	-
2058 2059 2059 2060	NCA02	- 1		6248975	Residential	55	50		63	54	63	54	64	55	63	55				-	-
2058 2059 2059 2060 2061		- 1		6248964	Residential	55	50		64	54	63	55	64	55	64	56	-	-		-	-
2058 2059 2059 2060 2061 2062	NCA02		300982	6248964	Residential	55	50		68	58	67	58	69	59	68	59					
2058 2059 2059 2060 2061 2062	NCA02	2			Desidental			P	64		64										
2058 2059 2059 2060 2061 2062 2062	NCA02 NCA02	2		6248950	Residential	55	50	P		55		55	65	56	64	56	_			-	-
2058 2059 2059 2060 2061 2062 2062 2062 2063	NCA02 NCA02 NCA02	2	300996			55	50	P	64	54	64	55	65	55	64	56					
2058 2059 2059 2060 2061 2062 2062 2063 2064	NCA02 NCA02 NCA02 NCA02	1 1	301007	6248935	Residential				68	58	68	58	69	59			-		-	-	-
2058 2059 2059 2060 2061 2062 2062 2062 2063 2064 2064	NCA02 NCA02 NCA02 NCA02 NCA02	1 1 2	301007 301007	6248935	Residential	55	50	Р							68	59	-	-	-	-	-
2058 2059 2059 2060 2061 2062 2062 2062 2063 2064 2064	NCA02 NCA02 NCA02 NCA02 NCA02	1 1 2	301007 301007	6248935	Residential						65			56			-	-	-	-	-
2058 2059 2059 2060 2061 2062 2062 2062 2063 2064 2064 2064	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2	301007 301007 301019	6248935 6248922	Residential Residential	55	50	P	65	55	65	55	66	56	65	57	-		-	-	1
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2065 2066	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2 1	301007 301007 301019 301029	6248935 6248922 6248913	Residential Residential Residential	55 55	50 50	P	65 65	55 56	65	56	66	57	65 66	57 57	- - - -	1	-	1	-
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2064 2065 2066 2067	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2 1 1	301007 301007 301019 301029 301045	6248935 6248922 6248913 6248898	Residential Residential Residential Residential	55 55 55	50 50 50	P P	65 65 66	55 56 57	65 66	56 57	66 67	57 58	65 66 67	57 57 58		1			
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2064 2065 2066 2067	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2 1 1 1 1	301007 301007 301019 301029	6248935 6248922 6248913	Residential Residential Residential	55 55	50 50	P	65 65	55 56	65	56	66	57	65 66	57 57					
2058 2059 2059 2060 2061 2062 2062 2062 2063 2064 2064 2065 2066 2067 2067	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2 1 1 1 2	301007 301007 301019 301029 301045 301045	6248935 6248922 6248913 6248898 6248898	Residential Residential Residential Residential Residential Residential	55 55 55 55	50 50 50 50	P P P	65 65 66 71	55 56 57 61	65 66 71	56 57 61	66 67 72	57 58 62	65 66 67 71	57 57 58 62		1		1	- - - - - - -
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2066 2066 2067 2067 2068	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052	6248935 6248922 6248913 6248898 6248898 6248884	Residential Residential Residential Residential Residential Residential	55 55 55 55 55	50 50 50 50 50	P P P	65 65 66 71 66	55 56 57 61 56	65 66 71 66	56 57 61 56	66 67 72 67	57 58 62 57	65 66 67 71 67	57 57 58 62 57	- - - - - - -	- - - - - - - -		1 1 1	
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2065 2066 2067 2068 2068 2068 2068	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	2 1 1 2 1 1 1 2 1 2	301007 301007 301019 301029 301045 301045 301052	6248935 6248922 6248913 6248898 6248898 6248884 6248884	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55	50 50 50 50 50 50	P P P	65 65 66 71 66 70	55 56 57 61 56 59	65 66 71 66 69	56 57 61 56	66 67 72 67 70	57 58 62 57 61	65 66 67 71 67 70	57 57 58 62 57 61	- - - - - - - -				
2058 2059 2059 2060 2061 2062 2062 2062 2063 2064 2064 2065 2066 2067 2067 2068	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052	6248935 6248922 6248913 6248898 6248898 6248884	Residential Residential Residential Residential Residential Residential	55 55 55 55 55	50 50 50 50 50	P P P	65 65 66 71 66	55 56 57 61 56	65 66 71 66	56 57 61 56	66 67 72 67	57 58 62 57	65 66 67 71 67	57 57 58 62 57					
2058 2059 2059 2060 2060 2061 2062 2062 2063 2064 2064 2065 2066 2067 2067 2067 2068 2068 2068 2068 2068	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052 301052 301049	6248935 6248922 6248913 6248898 6248898 6248884 6248884 6248884	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55	50 50 50 50 50 50	P P P P	65 66 71 66 70 65	55 56 57 61 56 59 55	65 66 71 66 69	56 57 61 56 60 56	66 67 72 67 70 66	57 58 62 57 61 56	65 66 67 71 67 70 66	57 57 58 62 57 61 57					
2058 2059 2059 2060 2060 2061 2062 2062 2063 2064 2064 2064 2065 2066 2067 2067 2068 2068 2068 2069 2069	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301062 301062 301049	6248935 6248922 6248913 6248898 6248898 6248884 6248884 6248884 6248864	Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P	65 65 66 71 66 70 65	55 56 57 61 56 59 55	65 66 71 66 69 65	56 57 61 56 60 56	66 67 72 67 70 66 67	57 58 62 57 61 56 58	65 66 67 71 67 70 66 67	57 58 62 57 61 57 58				2 2 2 2 2 2 2 2 2 3 3 4 3 4 3 4 3 4 4 4 4	
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2065 2066 2067 2067 2068 2068 2068 2069 2069 2070	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052 301052 301049 301049 300996	6248935 6248922 6248913 6248898 6248898 6248884 6248884 6248864 6248864 6248864	Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P P P	65 66 71 66 70 65 67 60	55 56 57 61 56 59 55 56 51	65 66 71 66 69 65 66 60	56 57 61 56 60 56 57	66 67 72 67 70 66 67 61	57 58 62 57 61 56 58 52	65 66 67 71 67 70 66 67 61	57 57 58 62 57 61 57 58 52	-			2 2 2 2 2 2 2 2 2 2 2 3 2 3 3 3 4 3 3 4 3 4	
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2064 2065 2066 2067 2068 2068 2068 2069 2069 2069 2070	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052 301052 301062 301049 300996	6248935 6248922 6248913 6248898 6248894 6248884 6248884 6248864 6248864 6248866 6248866 6248866 6248866	Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P P P	65 66 71 66 70 65 67 60	55 56 57 61 56 59 55 55 56 51	65 66 71 66 69 65 66 60	56 57 61 56 60 56 57 51	66 67 72 67 70 66 67	57 58 62 57 61 56 58	65 66 67 71 67 70 66 67	57 58 62 57 61 57 58				2 2 2 2 2 2 2 2 2 2 2 3 2 3 3 3 3 3 3 3	
2058 2059 2059 2059 2060 2061 2062 2062 2063 2064 2065 2066 2067 2067 2068 2068 2068 2069 2069 2070	NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02 NCA02	- 1	301007 301007 301019 301029 301045 301045 301052 301052 301062 301049 300996	6248935 6248922 6248913 6248898 6248898 6248884 6248884 6248864 6248864 6248864	Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P P P P	65 66 71 66 70 65 67 60	55 56 57 61 56 59 55 56 51	65 66 71 66 69 65 66 60	56 57 61 56 60 56 57	66 67 72 67 70 66 67 61	57 58 62 57 61 56 58 52	65 66 67 71 67 70 66 67 61	57 57 58 62 57 61 57 58 52					

Predicted Noise Level (dBA) > 2 dB(A) Complete

ID N/A Fr Eating Northing Rocker NCO Citeria Period Ad Opining (2009) Foture Design (2009) Increase Limit Increase

Limit Project Acute Considerate

											Predict	ed Noi	se Levi	el (dBA)				10/40		durker			Eligible for
			Easting	Northing				Period	A No E	t Openi Sulld	ng (202) Bu	i) ild	Fu No	ture De Build	sign (20 Bi	36) uild	Inch	sB(A) ease	Li	mit	Project	Acute	Consideratio n of
						D	N		D		D	N	D	N	D	N	D	N	D	N	D	N	Mitigation
2072	NCA02 NCA02	1 2	300978	6248853	Residential Residential		50 50	P	56 58	47	56 58	47	57 59	48 50		48 50	-		-	-	-	-	
2073	NCA02	1	300969	6248964	Residential	55	50	P	56	48	55	48	57	49	56	49							
2074	NCA02	- 1	300990		Residential	55	50		57	50	57	50	58	51	58	51	-	-	-	-	-	-	-
2075 2076	NCA02 NCA02	1	300999 300977		Residential Residential	55 55	50		59 57	50	59 57	50	60 58	51 51	59 58	51 51	-	-	-	-	-	-	
2077	NCA02	- 1	300938	6248890	Residential	55	50	P	55	48	55	48	57	49	56	49	-		-	-		-	
2077	NCA02 NCA02	2	300938	6248890	Residential Residential	55 55	50	P	59	51 48	59	52 48	60 57	52 49	60 56	53 49	-	-	-	-	-	-	
2078	NCA02	2		6248875	Residential Residential	55	50	P	56 60	48 52	55 60	52	61	53	61	53	-	+	÷	-	-	-	-
2079	NCA02	- 1	300965		Residential	55	50	Р	57	50	57	50	58	51	58	51	-	-	-	-	-	-	
2080	NCA02 NCA02	1 2	300951		Residential Residential	55 55	50	P	57 60	49 52	57 60	49 52	58 61	50 53	58 60	50 53	-	-	-	-	-	-	-
2080	NCA02	1	300961		Residential	55	50	P	57	50	57	50	58	53	58	53	+	+	÷	-	-	-	-
2081	NCA02 NCA02	2	300941	6248935	Residential	55	50	Р	60	52	60	52	61	53	61	53	-	-	-	-	-	-	
2082	NCA02 NCA02	2	300931	6248947	Residential Residential	55 55	50 50	P	58 60	50 52	57 60	50 52	59 61	51 53	58 61	51 53	-	-	-	-	-	-	
2083	NCA02	1	300925	6248906	Residential	55	50	P	55	49	55	49	56	50	56	50	-	-	-	-	-	-	- 1
2084 2085	NCA02 NCA02	- 1	300914 300902		Residential Residential	55	50	Р	56	48	56	48	57	49	56	49	-	-	-	-	-	-	-
2085	NCA02	2	300902		Residential Residential	55 55	50	P	56 60	49 52	56 60	49 52	57 61	50 53	57 61	50 53	+	÷	÷	+	-	-	
2086	NCA02	- 1	300890		Residential	55	50	Р	56	48	56	49	57	49	57	50	-	-	-	-	-	-	-
2086 2087	NCA02	2		6248940	Residential	55	50 50	P	60	52	60	52 49	61	53	61 57	53	-	-	-	-	-	-	-
2088	NCA02 NCA02	- 1	300866	6248948 6248955	Residential Residential	55 55	50	P	56 56	49 49	56 56	49	57 57	50 50	57	50 50	-	-	-	-			
2088	NCA02	2	300866	6248955	Residential	55	50	Р	58	49	58	50	59	50	59	51	-	-	-	-	-	-	
2089	NCA02 NCA02	1 1	300914	6248959 6248969	Residential Residential	55 55	50 50	P	58 58	50 51	57 58	50 51	59 59	51 52	58 59	51 52	-	-	-	-	-	-	-
2091	NCA02	- 1	300888	6248978	Residential	55	50	P	58	51	58	51	59	52	59	52		-					
2092	NCA02 NCA02	1 2	300872		Residential Residential	55 55	50	P	58	50	58 60	51 52	59	52	59	51	-	-	-	-	-	-	-
2092	NCA02 NCA02	1	300872 300854		Residential Residential	55 55	50	P	60 58	52 50	60 58	52 51	61 59	53 51	61 59	53 52	-	-	-	-	-	-	
2093	NCA02	2	300854	6248988	Residential	55	50		60	52	60	52	61	54	61	54		÷				-	
2094 2094	NCA02 NCA02	1 2	300838		Residential Residential	55 55	50 50	P	56 58	50 52	56 58	49 52	57	51	57 59	51	-	-	-	-	-	-	-
2094 2095	NCA02 NCA02	1	300838 300852		Residential Residential	55 55	50	P	58 55	52 49	58 55	52 49	59 56	53 50	59 56	53 50	-	-	-	-	-	-	- 1
2095	NCA02	2	300852		Residential	55	50	Р	58	51	58	51	59	52	59	52	-	-	-	-	-	-	-
2096 2096	NCA02 NCA02	1 2	300839 300839		Residential Residential	55 55	50 50	P	55 58	49 52	55 58	49 52	56 59	50 53	56 59	50 53	-	-	-	-	-	-	-
2097	NCA02	1	300821	6248961	Residential	55	50	P	56	50	55	49	57	51	56	50	-	+	÷	-	-	-	
2097	NCA02	2	300821	6248961	Residential	55	50	Р	58	52	58	52	59	53	59	53	-			-	-	-	
2098 2099	NCA02 NCA02	1	300823	6248991 6248984	Residential Residential	55 55	50 50	P	56 56	50 51	56 56	50 50	57 57	51 52	57 57	51 51	-	-	-	-	-	-	-
2100	NCA02	- 1	300807	6248955	Residential	55	50	P	54	49	54	49	56	50	55	50	-	+	-	-	-	-	-
2101	NCA02 NCA02	1 2	300790	6248982	Residential Residential	55 55	50 50	Р	56 58	52 53	56 58	51 53	57 60	53 54	57 59	52 54	-	-	-	-	-	-	-
2101	NCA02	2		6248982 6248949	Residential Residential	55 55	50	P	58	53	58	53	60 57	54 51	59 56	54 51	-		-	-	-	-	
2103	NCA02	1	300775	6248974	Residential	55	50	P	55	51	55	50	57	52	56	51	-	-	-	-	-	-	- 1
2104	NCA02	- 1	300761	6248962	Residential	55	50	Р	56	51	56	50 54	57	52 55	57	51	-	-	-	-	-	-	
2104 2105	NCA02 NCA02	1	300761 300755	6248962 6248946	Residential Residential	55 55	50 50	P	59 54	54 50	59 54	54	60 55	55	60 55	55 51	÷	-	÷	÷	-	-	-
2105	NCA02	2	300755		Residential	55	50	Р	57	52	56	52	58	54	58	53	-	-	-	-	-	-	-
2106	NCA02 NCA02	1 2	300776		Residential Residential	55 55	50	P	55 59	49 53	55 58	49 52	56 60	50 54	56 59	50 53	-	-	-	-	-	-	-
2100	NCA02	1		6248928	Residential	55	50	P	53	50	53	50	55	51	55	51	-	+	+	-	-	-	-
2107	NCA02	2		6248928	Residential	55	50	Р	56	52	55	52	57	53	57	53	-	-	-	-	-	-	
2108 2108	NCA02 NCA02	1 2	300744 300744		Residential Residential	55	50 50	P	54 57	50 52	54 56	49 51	56	51	55	50	-	-	-	-	-	-	
2109	NCA02	1	300763	6248883	Residential	55 55	50	Р	54	48	54	48	58 55	53 49		52 49	-	+	+	-	-	-	-
2109	NCA02 NCA02	2	300763	6248883	Residential	55	50	Р	56	49	56	49	57	51	57	50	-	-	-	-	-	-	-
2110 2110	NCA02 NCA02	2	300742 300742	6248859	Residential Residential	55 55	50 50	P	51 54	47 48	50 54	47 48	52 55	48	52 55	48	-	-	-	-	-	-	
2111	NCA02	1	300753	6248850	Residential	55	50	P	51	47	50	47	52	49	52	48		-	-	-		-	
2111	NCA02 NCA02	2	300753	6248850 6248841	Residential Residential	55 55	50 50	P	54 51	48 46	54 51	48 46	55 53	49 47	55 52	49 47	-	-	-	-	-	-	-
2112	NCA02 NCA02	2		6248841 6248841	Residential Residential	55 55	50	P	51 54	46 49	51 54	46 49	53 55	47 50	52 55	47 50	-	-	-	-	-	-	
2113	NCA02	- 1	300784		Residential	55	50	P	52	47	52	46	53	48	53	47	-	-	-	-	-	-	-
2113 2114	NCA02 NCA02	2		6248840 6248836	Residential Residential	55 55	50	P	54 51	49 46	54 51	49 46	55 52	50 47	55 52	50 47	+	-	-	-	-	-	
2114	NCA02	2	300797	6248836	Residential	55	50	P	53	48	53	48	55	49	55	49							
2115	NCA02	- 1	300814	6248836	Residential	55	50	P	52	44	52	44	53	45 48	53	45	-	-	-	-	-	-	
2115 2116	NCA02 NCA02	1	300814 300783	6248836 6248878	Residential Residential	55 55	50 50	P	55 54	47	55 54	47	56 55	48	56 55	49 49	+	-	+	-	-	-	
2116	NCA02	2	300783	6248878	Residential	55	50	Р	58	51	57	51	59	52	58	52		100				-	
2117	NCA02 NCA02	1	300797	6248894 6248908	Residential Residential	55	50	P	54	49	54 55	49 50	55	50	55	50	-	-	-	-	-	-	-
2118	NCA02 NCA02	2	300811		Residential Residential	55 55	50 50	P	55 58	50 52	55 58	50	56 59	51 54	56 59	51 53	-	-	-	-	-	-	
2119	NCA02	1	300824	6248914	Residential	55	50	P	55	50	55	50	56	51	56	51	-	Ė	-	-		-	-
2120 2121	NCA02 NCA02	1	300840 300854	6248916	Residential Residential	55 55	50 50	P	56 55	50 48	56 55	50 48	57 56	51 49	57 56	50 49	-	-		-		-	
2121	NCA02	2	300854	6248911	Residential	55	50	P	58	51	58	51	59	52	59	52	-	-	-	-			
2122	NCA02	- 1		6248904	Residential	55	50	Р	56	49	55	49	57	50	56	50	-	-	-	-	-	-	-
2122	NCA02 NCA02	2		6248904 6248860	Residential Residential	55 55	50 50	P	58 51	52 48	58 51	52 48	59 53	53 49	59 53	53 49	+	-	-	-	-	-	
2123	NCA02	2	300810	6248860	Residential	55	50	P	55	46	55	47	56	48	56	48		-					
2124	NCA02	1	300815		Residential Residential	55	50	Р	52	47	52	47	53	48	53	48	-	-	-	-	-	-	-
2124 2125	NCA02 NCA02	1		6248874 6248887	Residential Residential	55 55	50 50	P	56 53	50 46	56 53	50 46	57 54	51 47	57 54	51 47	+	+	+	-	÷	-	
2125	NCA02	2	300827	6248887	Residential	55	50	P	57	50	56	50	58	52	57	51							
2126	NCA02 NCA02	1 2	300845	6248886	Residential Residential	55	50	P	53	48	53	48	54	49	54	49	-	-	-	-		-	-
2126	NCA02 NCA02	1		6248886 6248870	Residential Residential	55 55	50 50	P	57 54	52 49	57 54	52 49	58 56	53 50	58 55	53 50	-	-	-	-	-	-	
2128	NCA02	1	300879	6248889	Residential	55	50	Р	55	48	55	48	56	49	56	49	-	-	-	-		-	-
2129 2129	NCA02 NCA02	1	300887	6248874 6248874	Residential Residential	55 55	50 50	P	54 57	47 50	54 57	47 50	56 58	48 51	55 58	48 51	-	-	-	-	-	-	-
2129	NCA02 NCA02	1		6248874 6248851	Residential Residential		50		57 54	50 49	57 54		58	51		51	-	-	-	-	-	-	
	NCA02	- 1	300853			55			53		53		54			49	-	-	-	-	-	-	
_	_																					_	

				Northing		NCG 1			No	e Open Build	ing (202	uild	No	Build	aign (20 Bi	iid					Projec		n of
						D	N		D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2132	NCA02	- 1	300851	6248818	Residential	55	50	Р			52	48		49		49							
	NCA02	2	200951	6248818	Residential		50	P	56	51	56		58		57	52	-	-	_	_	-		
2132	NCA02	- 4	200971	6248818	Residential Residential	55		P	53	49	53	48	54	50	54	49	-	÷	-	-	÷	-	
		-			Residential			P				51					-	-	-	-	-	-	_
2133	NCA02	2	300876	6248820		55	50		56	51	55		57	52	57	52	-	_	_	_	_	-	
2134	NCA02	- 1		6248816	Residential	55	50	Р	54	48	54	48	55	49	55	49	-	-	-	-	-	-	
2134	NCA02	2		6248816	Residential	55	50	Р	57	51	57	51	58	52	58	52	-	-	-	-	-	-	
2135	NCA02	- 1	300904	6248809	Residential	55	50	Р	53	48	53	48	54	49	54	49	-	-	-	-	-	-	-
2136	NCA02	- 1	300896	6248856	Residential	55	50	Р	54	47	54	47	55	48	55	48							-
2136	NCA02	2		6248856	Residential	55	50	P	57	50	56	50	58	51	57	51		_	_	_	_		
2137	NCA02	- 1	300912	6248847	Residential	55	50		56	49	56	49	57	50	57	50	_	_	_	_	_	_	
2137	NCA02	-		6248847	Residential	55	50	P	58	51	58	51	59	52	59	52	-	-	-	-	-	-	_
		2	300912	6248847													-	_	-	-	_	-	
2138	NCA02	- 1	300927	6248842	Residential	55	50	Р	56	47	56	47	57	48	57	48	-	-	-	-	-	-	
2138	NCA02	2			Residential	55	50	P	58	51	58	51	59	52	59	53	-	-	-	-	-	-	
2139	NCA02	- 1	300937	6248829	Residential	55	50	Р	58	51	58	51	59	52	59	52	-		-	-		-	
2139	NCA02	2	300937	6248829	Residential	55	50	P	59	52	59	52	61	53	60	53	-	-	-	-	-	-	-
2140	NCA02	- 1	300950	6248819	Residential	55	50	Р	58	51	58	51	59	52	59	52	-	-	-	-	-	-	-
2140	NCA02	2			Residential	55	50	P	60	52	60	52	61	53	60	53	-	-	_	_	-		
2141	NCA02	-	200000	6248801	Residential		50	P	53	47	52	47	54	48	54	48	-	_	_	_	_	-	_
2141	NCA02	-		6248801	Residential	55	50	P	56	50	56	50	57	48 51	57	48 51	-	-	-	-	-	-	-
2141	NCA02	1		6248801	Residential Residential												-	-	-	-	-	-	-
						55	50	Р	52	47	52	47	53	48	53	48	-		-	-		-	
	NCA02	- 1		6248777	Residential	55	50	P	59	49	58	49	59	50	59	50	-	-	-	-	-	-	
2143	NCA02	2	300948	6248777	Residential	55	50	Р	59	50	59	50	60	51	60	51	-	-	-	-	-	-	-
2144	NCA02	- 1	300960	6248794	Residential	55	50	Р	59	49	59	50	60	51	60	51							
2144	NCA02	2	200960	6248794	Residential	55	50	P	60	50	60	51	61	52	61	52			_	_	_		
2145	NCA02	- 1		6248809	Residential	55	50	P	60	50	60	51	61	52	61	52	-	_	_	_	_	-	_
2145	NCA02	2		6248809	Residential	55	50	P	61	52	61	52	62	52	61	53	-	-	-	-	-	-	
2145	NCA02			6248809					53								-	-	_	_	_	-	
		1			Residential	60		Р		51	53	51	55	52	55	52	-	-	-	-	-	-	
2838	NCA02	2	300454	6248113	Residential	60	55	Р	54	52	54	52	56	53	56	53	-	-	-	-	-	-	
2839	NCA02	- 1		6248094	Residential	60	55	Р	54	51	54	52	55	52	55	53						-	
2839	NCA02	2	300460	6248094	Residential	60	55	P	54	52	54	53	56	53	56	54	-	-	-	-	-	-	
2840	NCA02	- 1	300467	6248072	Residential	60	55	P	52	50	52	50	54	51	54	51	-	-	-	-	-	-	
2840	NCA02	2		6248072	Residential	60	55	P	53	51	54	52	55	52	55	53		-					
2841	NCA02	1			Residential	60	55	P	52	49	52	50	54	51		51			_	_			
2841	NCA02	- 1		6248113	Residential Residential	60 60	55 55	P	52 53	49 51	52 54	50	54	51 52	54 55	51 52	-	-	-	-	-	-	
		2															-	-	-	-	-	-	
2842	NCA02	- 1		6248119	Residential	60	55	Р	52	49	52	49	53 55	50 52	54 55	50 52	-	-	-	-	-	-	
2842	NCA02	2		6248119	Residential	60	55	Р	53	51	53	51					-	-	-	-	-	-	
2850	NCA02	- 1	300463	6248001	Residential	59	54	Р	54	52	55	52	56	53	56	53						-	
2860	NCA02	2		6248001	Residential	59	54	Р	55	52	56	53	57	53	57	54	-	-	-	-	-	-	
2861	NCA02	- 1	300440	6247992	Residential	58	53	P	53	51	54	52	55	52	56	53	-	-	-	-	-	-	-
2861	NCA02	2		6247992	Residential	58	53	P	55	52	55	53	56	53	57	54	-	-	_	_	-		
8002	NCA02	-	300440	6248764	Other (Outdoor Passive)	55	500		63	54	63	54	64	55	64	55	-	-	_	_	-	-	_
		-	301100	6248599		55	-	P	56	52	56	52	57	53	57	53	-		_	-	-	-	
	NCA02	- 1	300687	6248599	Other (Outdoor Passive)		-										-	-	-	-	-	-	-
8004	NCA02	- 1	300405	6247901	Other (Outdoor Passive)	55	-	Р	51	48	51	49	52	49	52	50	-	-	-	-	-	-	
0813	NCA03	- 1		6250264	Residential	55		P	50	40	56	49	49	40	58	50	Y	-	-	-	-	-	Y
1196	NCA03	- 1	300326	6250900	Residential	56		Р	55	51	55	51	56	52	56	52	-	-	-	-	-	-	-
1272	NCA03	- 1	295910	6250592	Residential	55	50	Р	61	49	61	50	59	49	60	51	Y	Y	-	-	-	-	Y
4609	NCA03	- 1	296644	6249514	Residential	55	50	Р	65	54	66	55	64	54	65	56	Y	Y	Y		-		Y
4609	NCA03	2	296644	6249514	Residential	55	50	P	65	53	65	55	63	53	65	56	Y	Y	Y	Y	-		v
4610	NCA03	-		6249537	Residential	55			52	43	58	50	52	43	60	52	V	Y	Y	_	_	-	·
4614	NCA03	-				55		-	58	47	61	52	57	47		54	-	Y	Y	-	-	-	- 1
		-	29/024	6249538	Residential			Р							62		Y			_	_	-	Y
4614	NCA03	2		6249538	Residential	55		Р	59	48	61	53	58	48	63	55	Υ	Υ	Y	Y	-	-	Y
4615	NCA03	- 1		6249591	Residential	55	50	P	59	48	61	53	58	48	62	55	Y	Y	Y	Y	-	-	Y
4615	NCA03	2	296972	6249591	Residential	55	50	Р	60	49	62	54	58	49	63	55	Y	Y	Y	Y	-	-	Y
4616	NCA03	- 1	296947	6249619	Residential	55	50	Р	59	48	61	53	58	49	63	55	Y	Y	Y	Y	-	-	Y
4616	NCA03	2		6249619	Residential	55	50	Р	60	49	62	54	58	49	63	55	Y	Y	Y	v	_		V
4619	NCA03	- 1		6249676	Residential	55	50	P	58	47	60	52	57	47	61	53	Y	Y	v	_	_	_	v
4619	NCA03	-	296898		Residential	55	50	Р.	59	48	61	52	58	48	62	54	- T	Y	- T	-	-	-	T V
4685	NCA03	1	290090	62490765	Residential		50	-	64	40						34	Y	Y	-	Y	_	-	-
		1				55	50	Р		52	65	55	62	53	65	56	Y		Υ	Y	_	-	Y
4685	NCA03	2	296629		Residential	55	50	Р	65	54	66	56	64	54	66	57	Y	Y	Y	Y	-	-	Y
4686	NCA03	- 1	296663	6249737	Residential	55	50	Р	64	53	65	55	63	53	65	56	Υ	Υ	Υ	Υ		-	Y
4686	NCA03	2		6249737	Residential	55	50	P	65	54	66	56	64	54	66	57	Y	Y	Y	Y	-	-	Y
4689	NCA03	- 1	296744	6249605	Residential	55	50	P	64	52	65	55	62	53	65	56	Υ	Y	Y	Y	-	-	Y
4691	NCA03	- 1	296761	62497na	Residential	55	50	P	61	50	63	54	60	50	63	55	Y	Y	Y	Y			Y
	NCA03	2		6249708	Residential	55	50	P	62	51	64	54	61	51	63 64	56	Y	Y	Y	Y	÷	-	Y
4692	NCA03	-		6249700	Residential	55	50	P	60	49	62		59	49	62	54	Y	Y	Y	_	_	_	
4692 4693	NCA03	1		6249721 6249716	Residential Residential			P				53					Y	Y	Y	-	-	-	T
						55	50		63	52	64	53	62	52	63	54				-	-	-	Y
4706	NCA03	1		6249918	Residential	55		Р	62	51	63	53	61	51	62	54	Υ	Υ	Υ	-	-	-	Υ
4706	NCA03	2		6249918	Residential	55	50	Р	63	52	64	54	62	52	64	55	Υ	Υ	Υ	Υ	-	-	Y
4799	NCA03			6250678	Residential	55	50	Р	57	45	58	49	56	46	59	50	Υ	Υ					Y
4799	NCA03	2		6250678	Residential		50	P	59	47	60	51	57	47	61	52	Y	Y	Y	-	-	-	Y
4800	NCA03	- 1	295729	6250694	Residential	55	50	Р	49	39	58	51	48	39	60	52	Υ	Υ	Υ	-	-	-	Y
4801	NCA03	- 1	295785	6250657	Residential	55	50	P	55	44	58	49	54	44	59	51	Y	Y	-	-	-	-	Y
4802	NCA03	1		6250622	Residential	55	50	P	55	44	59	50	54	44	60	52	Y	Y	Y				Y
4803	NCA03	- 1		6250662	Residential	55	50	P	49	39	56	49	48	39	58	51	Y	Y					· v
4803	NCA03	- 1		6250662	Residential Residential	55		P	51	41	58	50	48 50	39 41	58	51	Y	Y	- Y	-	-	-	T V
		- 2																	Y	-	-	-	T
4804	NCA03	- 1		6250637	Residential	55	50	Р	51	41	57	50	50	41	59	51	Υ	Υ	-	-	-	-	Y
4805	NCA03	- 1	295930	6250581	Residential	55	50	P	51	40	56	48	50	40	58	50	Y	-	-	-	-	-	Y
4806	NCA03	- 1	295923	6250457	Residential	55	50	Р	59	47	60	50	57	47	60 61	51	Υ	Υ	Υ			-	Y
4807	NCA03	- 1	296000	6250417	Residential	55	50	P	61	49	61	50	59	49	61	51	Y	Y	-	-	-	-	Y
4808	NCA03	- 1		6250399	Residential	55	50	P	60	48	61	50	58	48	60	51	Y	Y			-		Y
4809	NCA03	- 1		6250385	Residential	55	50	P	50	40	57	49	49	40	59	51	Y	Y					V
	NCA03	-		6250369	Residential		50	P	52	40	56	49	51	40	58	50	Y	Y	-	-	-	-	Y
		- 1																	-	-	-	-	T
4811	NCA03			6250330	Residential		50	Р	62	50	63	52	60	50	62	53	Υ	Υ	-	-	-	-	Υ
4812	NCA03	- 1		6250241	Residential	55	50	Р	61	49	61	51	59	49	61	52	Υ	Υ					Y
	NCA03	- 1		6250212	Residential	55	50	P	62	51	63	53	61	51	63	54	Y	Y	Y	-	-	-	Y
4813	NCA03	2	296116	6250212	Residential	55	50	Р	64	52	65	54	63	53	64	55	Υ	Υ	Υ	Υ	-	-	Y
4814	NCA03	- 1	29616R	6250143	Residential	55	50	P	51	41	58	51	50	41	60	52	Y	Y	Y	-	-	-	Y
4815	NCA03	- 1		6250026	Residential	55	50	P	63	52	64	53	62	52	63	54	Y	Y	Y				Y
0161	NCA04	- 1		6249765	Residential		50	D	54	48	57	50	55	48	59	52	v	Y					·
0219	NCA04	-		6249765	Residential Residential	55	50	-	52	48	61	54	53	48	64	56	Y	Y	- Y	· ·	-	-	V
0219	NCA04	1	∠₩5155	6249009				Υ.												Y	-	-	T
		- 1			Residential	55	50	Р	59	52	60	54	59	52	62	55	Y	Y	Υ	Y		-	Y
1180	NCA04	- 1		6249951	Residential	55	50	Р	58	54	63	56	59	55	63	57	Υ		Υ	Υ		-	Y
1180	NCA04	2	300114	6249951	Residential	55	50	P	60	55	63	57	61	56	64	58	Y	-	Y	Y	-	-	Y
1243	NCA04	- 1	297023	6249025	Commercial	-	-	Р	60	49	-32	-29	58	49	-32	-29	-	-	-	-	-	-	
1243	NCA04	2	297023		Commercial			P	61	51	-32	-29	60	51	-32	-29	-	-			-		
1484	NCA04	1	296034		Residential	55	50	P	61	54	63	56	61	53	64	57	Y	Y	Y	Y			Y
	NCA04	-		6249667	Residential	59	54	P	69	62	68	61	69	62	70	63	V	-	V	V	· v	v	Y
3004	ACM34		JUU245	UZ49057	Personnia	00	24		69	62	00	01	- 63	02	70	03							

Predicted Noise Level (dBA) > 2 dB(A) Cumulative
NCG Criteria At Opening (2026) Future Design (2036) Cumulative
Project Acute Consideratio

				Nothing		┖	_	Period	No I	Build	В	ild	No	Build	В	ıild				_		_	
	NCA04	2		6249667	Residential	D	F4	-	D	N	71	N	D	65	D	N	Y	N	Y	Y	Y	Y	Y
	NCA04	- 2		6249997	Residential Residential	55		P	60	56	65	58	61	56	65	58	Y	- Y	Y	Y	Y	Y	Y
	NCA04	2		6249925	Residential Residential			P									Y	Y	Y	Y		-	Y
	NCA04	- 2		6249925	Residential Residential	55	50	P	61	56 56	65 64	58 57	62	57	66	59	Y	Y	Y	Y	Υ	-	Y
						57	52						62	57	65	58					-	-	Y
	NCA04	2	299974	6249868	Residential	57	52	Р	62	56	64	58	63	57	65	59	Υ	Υ	Υ	Υ	Υ	-	Y
	NCA04	- 1		6249965	Residential	57	52	Р	58	54	60	55	59	54	62	56	Y		Y	-	-	-	Y
	NCA04	2		6249965	Residential	57	52	Р	59	54	61	55	60	55	63	57	Y	Y	Y	Y	-	-	Y
3869	NCA04	- 1	299997	6249999	Residential	57	52	Р	59	54	61	55	60	55	62	56	Y	Y	Y	-	-		Y
3859	NC404	2	299997	6249999	Residential	57	52	P	59	55	62	56	60	56	63	57	Y	Y	Y	Y			Y
3870	NCA04	- 1	299840	6250018	Residential	56	51	P	56	50	55	51	58	55	58	52				-			
	NCA04	- 1		6250017	Residential	55	50	P	59	55	62	56	60	55	63	57	Y	-	Y	Y	-	-	Y
	NCA04	2		6250017	Residential	55		P	59	55	63	57	60	56	64	57	Y	-	Y	Y	-	-	- 1
																	Y	_	Y	Y	-	-	Y
	NCA04	- 1		6250213	Residential	56	51	Р	58	54	59	55	59	55	60	56	-	-	-	-	-	-	
	NCA04	- 1		6250029	Residential	55		Р	53	48	55	50	54	49	57	51	Y			-	-	-	Y
	NCA04	2	299712	6250029	Residential	55	50	Р	54	50	57	51	55	51	59	53	Y	-	-	-	-	-	Y
3877	NCA04	- 1	299590	6250143	Residential	55	50	Р	53	49	55	51	55	51	57	51	-	-	-	-	-	- 1	
3880	NC404	- 1	299457	6249587	Residential	58	53	Р	68	61	69	63	68	61	70	64		Y	Y	Y	Y	Y	Y
3881	NCA04	- 1	299610	6249537	Residential	59	54	P	68	61	69	63	69	61	71	64	Y	Y	Y	Y	Y	Y	Y
	NCA04	- 1	300604	6249809	Residential	55		P	67	63	65	63	68	64	67	64	-	-	Y	Y	-	-	Y
	NCA04	-	300586	6250081	Residential	56	51	P	59	55	63	57	60	56	64	58	Y	Y	Y	Y	-	-	-
	NCA04	2	300586	6250081	Residential	56	51	-	64	60	65	60	65	60	66	61	Y	_	- 1		-	-	- 1
								Р										_	Y	Y	-	-	Y
	NCA04	- 1		6250025	Residential	55		P	65	61	-32	-29	66	61	-32	-29	-	-	-	-	-	-	
	NCA04	- 1	299199	6250145	Residential	55	50	Р	51	46	53	48	52	47	55	49	-	-	- 1	-	-	- 1	
	NCA04	2	299199	6250145	Residential	55	50	Р	52	47	54	49	53	48	56	50	Y	-	-	-	-	- 1	Y
4189	NCA04	- 1	299211	6250004	Residential	55	50	Р	50	46	53	47	51	46	54	48	-	-	-	-	-	-	
4191	NCA04	- 1	299150	6249964	Residential	55	50	P	54	47	56	50	54	47	58	51	Y	Y			-		Y
	NCA04	2	299150	6249964	Residential	55		P	54	48	57	50	55	48	59	52	Y	Y					Y
	NCA04	-	299171	6249995	Residential		50	P	51	46	54	48		46		49	_	_					
	NCA04	-	299093	6249922	Residential	55 55	50	P	51 54	46	54 57	48 51	52	46	55 59	49 52		- Y	-	-	-	-	
		-1						Ρ.	54					48			Y		-	-	-	-	T
4194	NCA04	_ 1	299076	6249950	Residential	55 55	50	Р	53	47	56	49	54 55	47	58 59	51 52	Υ	Υ	-	-	-	-	Y
	NCA04	2	299076	6249950	Residential			Р	55	48	57	51		48			Υ	Υ	-	-	-	- 1	Y
	NCA04	- 1	299033	6249975	Residential	55	50	Р	53	47	56	49	54	47	58	51	Υ	Υ	-	-	-	-	Y
	NCA04	2	299033	6249975	Residential	55	50	Р	54	48	57	50	55	48	58	52	Υ	Υ		-	-		Y
4196	NCA04	- 1	299034	6250023	Residential	55	50	P	49	44	51	46	50	45	53	47		-			-		
	NCA04	2	299034	6250023	Residential	55	50	P	50	45	53	47	51	46	55	48		-					
	NCA04	- 4	299000	6250004	Residential Residential	55	50	P	51	45	54	48	52	46	56	49	- Y	-		-	-		v
	NCA04	2		6250004	Residential Residential	55	50	-	52	47	55		53	46	57	50		_	_	_	-	-	- 1
		2	299000					Р				49					Υ	_	-	_	-	-	Y
	NCA04	- 1	299058	6250058	Residential	55 55	50	Р	49	44	53	46	50 52	44	55 56	48	-	-	-	-	-	-	
	NCA04	2	299058	6250058	Residential		50	Р	51	45	54	48		45		49	Y	-	-	-	-	-	Y
	NCA04	- 1	299036	6250092	Residential	55	50	Р	48	43	50	44	49	43	52	45	-	-	-	-	-	- 1	
4220	NCA04	- 1	298866	6250082	Residential	55	50	Р	51	45	54	48	52	45	56	49	Y	-	-	-	-	- 1	Y
4220	NCA04	2	298866	6250082	Residential	55	50	Р	52	46	55	49	52	46	57	50	Y						Y
4223	NCA04	- 1	298793	6250007	Residential	55	50	P	52	46	54	48	53	47	56	50	Y	-		-			v
	NCA04	2		6250007	Residential	55	50	Р.	53	47	56	50	54	40	58	51	Y	Υ .	-	-	-	-	T V
		- 2				55		Р			55		53	48	57			Y	-	-	-	-	Y
	NCA04	- 1	298815	6249956	Residential	55	50	Р	53	47		49	53			51	Υ		-	_	-	-	Y
	NCA04	- 1	298687	6249910	Residential	55	50	Р	53	47	55	49	53	48	57	51	Υ	Υ	-	-	-	-	Y
	NCA04	2	298687	6249910	Residential	55	50	Р	54	48	57	51	55	49	58	52	Y	Y	-	-	-	-	Y
4227	NCA04	- 1	298702	6249890	Residential	55	50	Р	54	48	56	50	55	49	58	52	Y	Y	-	-	-	-	Y
4228	NCA04	1	298609	6249864	Residential	55	50	Р	54	49	55	50	54	50	56	50	-	-	-	-	-	-	
	NCA04	2	200600	6249864	Residential	55	50	P	51	45	54	48	51	46	56	49	Y	-		_			v
4264	NCA04	- 1	200005	6249703	Residential	55	50	P	57	51	59	53	58	51	61	54	Y	Y	Y	_	-	-	. v
	NCA04	-		6249703				P											Y	-	-	-	Y
4200		-1			Residential	55			64	58	66	59	65	58	67	60	Υ	Υ		-	-	-	Y
	NCA04	2		6249610	Residential	55	50	Р	66	59	67	60	66	59	68	61	Y	Υ	Y	-	-	-	Y
4266	NCA04	- 1	299064	6249625	Residential	55	50	Р	59	52	61	54	59	52	62	55	Y	Y	Y	Y	-	- 1	Y
	NCA04	- 1		6249559	Residential	55	50	Р	66	60	67	61	67	60	68	62	-	Y	-	-	-	- 1	Y
4267	NCA04	2	299103	6249559	Residential	55	50	Р	68	61	69	62	69	61	70	63		Y					Y
4268	NC404	- 1		6249501	Residential	55		P	64	57	65	58	64	57	66	59		Y					Y
4269	NCA04	- 1	200010	6249457	Residential	55		Р	70	63	70	64	70	63	71	65	_	Y		_	Y		v
	NCA04	2		6249457	Residential	55	50	P	71	65	72	65	72	65	73	66	· ·		-	-	Y	-	T V
		-						P									-	-	-	-		-	-
	NCA04	- 1		6249475	Residential	55	50		62	56	64	58	63	56	66	59	Υ	Υ	Y	Υ	-	-	Y
	NCA04	- 1		6249389	Other (Educational)	50	-	н	66	63	67	64	66	63	69	66	Y	-	Y	-	-		Y
	NCA04	- 1	298882	6249375	Other (Educational)	50		Н	68	65	69	66	68	65	71	67	Υ		Y			-	Y
	NCA04	- 1		6249368	Other (Educational)	50	-	Н	63	60	65	62	64	60	67	63	Υ		Y			-	Y
4275	NCA04	- 1	298919	6249365	Other (Educational)	50		Н	73	70	73	70	74	70	75	72	Υ	-		-	Υ		Y
	NCA04	-1		6249342	Other (Educational)	50		Н	73	70	73	70	73	70	74	71					Y		Y
	NCA04	-1	298819	6249318	Residential	55		P	66	60	67	61	66	60	67	62							
	NCA04	-		6249311	Residential	55	50	P	68	61	69	62	69	61	70	64	-	Y		-	· v		v
	NCA04	2	200029	6249311	Residential Residential	55		P			70	62					-	_		-	Y		- T
	NCA04	- 4		6249311	Residential	55 55	50	P	70 63	63 57	70 64	64 58	70	63 57	72	65 59		-	-	-		-	T
		1					50						63		66		Y	-	Y	-	-		Y
	NCA04	2	298741	6249398	Residential	55	50	Р	64	58	65	59	64	58	66	60	Υ	-	Υ	-	-	-	Y
	NCA04	- 1		6249457	Residential	55	50	Р	62	57	64	58	63	57	65	59	Y	Υ	Y	-	-		Y
4280	NCA04	2	298696	6249457	Residential	55	50	Р	63	57	64	59	63	58	66	60	Υ	Υ	Y			-	Y
4281	NCA04	- 1	298623	6249392	Residential	55	50	Р	60	53	62	56	61	54	64	57	Υ	Υ	Y	Υ	-		Y
4282	NCA04	- 1		6249473	Residential	55	50	P	53	48	55	49	54	48	57	50	Y		-	-	-	- 1	Y
	NCA04	2		6249473	Residential	55		P	58	53	59	54	58	53	60	54	Y	Υ	Y				Y
				6249473	Residential	55		P	55	50	56	51	55	50	57	51	Y	_					. v
							50	P	55 56		56 57						Y	-	-	-	-	-	T
4285	NCA04	1			Desidential							52	56	51	58	52							
4285 4285	NCA04 NCA04	2	298549	6249562	Residential	55	50	-		51							_	_	_	-	-	-	_
4285 4285 4287	NCA04 NCA04 NCA04	1 2 1	298549 298720	6249562 6249538	Residential	55	50	P	63	57	64	58	63	58	65	59	Υ	Υ	Υ	÷	-	-	Y
4285 4285 4287 4288	NCA04 NCA04 NCA04 NCA04	1 2 1	298549 298720 298743	6249562 6249538 6249542	Residential Residential	55 55	50 50	P P	63 60	57 55	64 62	56	61	55	63	59 57	Υ	Y	Y	-	-	-	Y
4285 4285 4287 4288 4289	NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1	298549 298720 298743 298699	6249562 6249538 6249542 6249566	Residential Residential Residential	55 55	50	P P	63 60	57 55	64 62	56 52	61	58 55 50	63	59	Y	Y	Y Y	-	-		Y Y
4285 4285 4287 4288 4289	NCA04 NCA04 NCA04	1 2 1 1 1 2	298549 298720 298743	6249562 6249538	Residential	55	50 50	P P P	63	57	64	56 52		55		59 57	Υ	Y	Y Y Y	- - - Y	1		Y Y Y
4285 4285 4287 4288 4289 4289	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 1 1 2 1 2 1	298549 298720 298743 298699 298699	6249562 6249538 6249542 6249566 6249566	Residential Residential Residential Residential	55 55 55 55	50 50 50	Р	63 60 56 57	57 55 50 51	64 62 58 60	56 52 54	61 56 58	55 50 52	63 60 62	59 57 53 55	Y	Y Y Y	Y Y Y	- - - - Y	1		Y Y Y Y
4285 4285 4287 4288 4289 4289 4291	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662	6249562 6249538 6249542 6249566 6249565	Residential Residential Residential Residential Residential Residential	55 55 55 55 55	50 50 50 50 50	Р	63 60 56 57 58	57 55 50 51 53	64 62 58 60 59	56 52 54 54	61 56 58 58	55 50 52 53	63 60 62 60	59 57 53 55 55	Y	Υ	Y Y Y Y	- - - Y	- - - - - - -		Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 1 2 1 2	298549 298720 298743 298699 298699 298662 298662	6249562 6249538 6249542 6249566 6249566 6249622 6249622	Residential Residential Residential Residential	55 55 55 55 55 55	50 50 50 50 50 50	Р	63 60 56 57 58 60	57 55 50 51 53 55	64 62 58 60 59	56 52 54 54 56	61 56 58 58 60	55 50 52 53 55	63 60 62 60 62	59 57 53 55 55 56	Y		Y Y Y Y Y	Y	1	- - - - - - -	Y Y Y Y Y
4285 4287 4287 4288 4289 4289 4289 4291 4291 4292	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 1 2 2 1	298549 298720 298743 298699 298669 298662 298662 298630	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55	50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57	57 55 50 51 53 55 55	64 62 58 60 59 61	56 52 54 54 56 53	61 56 58 58 60 57	55 50 52 53 55 55	63 60 62 60 62 60	59 57 53 55 55 56 56	Y	Y Y Y	Y Y Y Y Y	- - - - Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4291 4292 4292	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 2 2 1 2 1 2	298549 298720 298743 298699 298669 298662 298662 298630 298630	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677 6249677	Residential Residential Residential Residential Residential Residential Residential Residential	55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	Р	63 60 56 57 58 60 57	57 55 50 51 53 55 52 54	64 62 58 60 59 61 59 60	56 52 54 54 56 53 55	61 56 58 58 60 57	55 50 52 53 55 55 52 54	63 60 62 60 62 60 61	59 57 53 55 55 56 54 55	Y	Υ	Y Y Y Y Y Y	- - - - Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4291 4292 4292 4292	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 1 2 1 2 1 2	298549 298720 298743 298699 298669 298662 298662 298630 298630 298564	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677 6249778	Residential	55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57 59	57 55 50 51 53 55 52 54 55	64 62 58 60 59 61 59 60	56 52 54 54 56 53 55	61 56 58 58 60 57 59	55 50 52 53 55 55 52 54 55	63 60 62 60 62 60 61 61	59 57 53 55 55 56 54 55 55	Y	Y Y Y	Y Y Y Y Y Y	-			Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4291 4292 4292 4295 4296	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 2 1 2 1 2 1	298549 298720 298743 298699 298669 298662 298662 298630 298630 298564 298568	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677 6249677 6249788 6249243	Residential	55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57 59 60	57 55 50 51 53 55 52 54 56	64 62 58 60 59 61 59 60 60	56 52 54 54 56 53 55 56 58	61 56 58 58 60 57	55 50 52 53 55 55 52 54	63 60 62 60 62 60 61	59 57 53 55 55 56 54 55	Y Y Y Y Y Y	Y Y Y Y	Y Y Y Y Y Y Y				Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4291 4292 4292 4292 4295 4296 4299	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 1 2 1 2 1 2 1 1 2	298549 298720 298743 298699 298669 298662 298662 298630 298630 298564	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677 6249677 6249788 6249243	Residential	55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57 59 60	57 55 50 51 53 55 52 54 56	64 62 58 60 59 61 59 60	56 52 54 54 56 53 55 56	61 56 58 58 60 57 59 59	55 50 52 53 55 55 52 54 55	63 60 62 60 62 60 61 60 66	59 57 53 55 55 56 54 55 55	Y	Y Y Y	Y Y Y Y Y Y Y	-			Y Y Y Y Y Y Y
4285 4287 4288 4289 4289 4289 4291 4291 4291 4292 4292 4295 4296 4299	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 2 1 2 1 2 1 2 1 1 2	298549 298720 298743 298699 298669 298662 298662 298630 298630 298564 298568	6249562 6249538 6249542 6249566 6249566 6249622 6249622 6249677 6249778	Residential	55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57 59	57 55 50 51 53 55 52 54 55	64 62 58 60 59 61 59 60 60	56 52 54 54 56 53 55 56 58	61 56 58 58 60 57 59 59 63 63	55 50 52 53 55 52 54 55 56	63 60 62 60 62 60 61 60 66	59 57 53 55 55 56 54 55 55 55 55 59	Y Y Y Y Y Y	Y Y Y Y	Y Y Y Y Y Y Y Y	-		- - - - - - - - - - - - - - - - - - -	Y Y Y Y Y Y Y Y Y
4285 4287 4288 4289 4289 4289 4291 4291 4292 4292 4292 4296 4296 4299 4299	NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04 NCA04	1 2 1 1 2 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 1 2 2 1 1 1 1 1 1 2 2 1 1 1 1 1 1 2 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298568 298539	6249562 6249538 6249542 6249566 6249566 6249622 6249627 6249677 6249677 6249788 6249221 6249221	Residential	55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50	P P P	63 60 56 57 58 60 57 59 60 63 63	57 55 50 51 53 55 55 52 54 55 56 56	64 62 58 60 59 61 59 60 60 64 64	56 52 54 54 56 53 55 56 58 57	61 56 58 58 60 57 59 63 63 64	55 50 52 53 55 52 54 55 56 56	63 60 62 60 62 60 61 60 66 66	59 57 53 55 55 56 54 55 55 55 59 59	Y Y Y Y Y Y	Y Y Y Y - Y	Y Y Y Y Y Y Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4287 4288 4288 4289 4289 4291 4291 4291 4292 4292 4295 4296 4299 4300	NCA04 NCA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1	298549 298720 298743 298699 298699 298662 298630 298630 298630 298564 298569 298539 298539	6249562 6249538 6249542 6249566 6249566 6249566 6249622 6249677 6249677 6249788 6249243 6249243 6249243 6249243 6249241	Residential	55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63	57 55 50 51 53 55 52 54 55 56 56 56	64 62 58 60 59 61 59 60 60 64 64 65	56 52 54 54 56 53 55 56 58 57 58	61 56 58 58 60 57 59 59 63 63 64 65	55 50 52 53 55 52 54 55 56 56 56 56	63 60 62 60 62 60 61 60 66 66 66	59 57 53 55 55 56 54 55 55 55 59 59 59	Y Y Y Y Y Y Y	Y Y Y Y Y Y	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4287 4287 4288 4289 4289 4289 4291 4291 4291 4292 4292 4295 4296 4299 4300 4301	NCA04 NCA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298539 298539 298539 298539 298539	6249562 6249538 6249542 6249566 6249626 6249622 6249622 6249677 6249677 6249788 6249243 6249221 624921 624921 624921 624921 624921 6249163	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 63	57 55 50 51 53 55 52 54 55 56 56 56 56	64 62 58 60 59 61 59 60 60 64 64 65 66	56 52 54 54 56 53 55 56 58 57 58 59	61 56 58 58 60 57 59 59 63 63 64 65	55 50 52 53 55 52 54 55 56 56	63 60 62 60 62 60 61 60 66 66 66 67 70	59 57 53 55 55 56 54 55 55 55 59 59 59 60 63	Y Y Y Y Y Y Y	Y Y Y - - Y Y	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4291 4292 4292 4295 4296 4299 4299 4300 4301 4301 4302	NGA04 NGA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298539 298539 298539 298539 298539	6249562 6249538 6249542 6249566 6249566 6249622 6249677 6249677 6249788 6249243 6249221 624923 624963 624963 624963 624963 624963 624963 624963 6249150	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50	P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 63 65 68	57 55 50 51 53 55 52 54 55 56 56 56 56 57 61	64 62 58 60 59 61 59 60 60 64 64 65 66 68	56 52 54 54 56 53 55 56 58 57 58 59 62	61 56 58 58 60 57 59 63 63 64 65 69 63	55 50 52 53 55 52 54 55 56 56 56 56 58 61	63 60 62 60 62 60 61 60 66 66 66 67 70	59 57 53 55 55 56 54 55 55 59 59 60 63	Y Y Y Y Y Y Y	Y Y Y Y Y Y Y	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4287 4287 4288 4289 4289 4291 4291 4292 4292 4292 4295 4296 4299 4299 4300 4301 4302 4302	NCA04 NCA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298669 298662 298662 298630 298539 298539 298539 298539 298539 298539 298539 298539	6249562 6249538 6249542 6249566 6249566 6249662 6249677 6249677 6249783 6249783 6249784 6249784 6249784 6249784 6249163 6249163 6249165 6249165 6249165	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 63 65 68	57 55 50 51 53 55 52 54 55 56 56 56 56 57 61 55	64 62 58 60 59 61 59 60 60 64 64 65 65 66 68	56 52 54 54 56 53 55 56 58 57 58 59 62 56	61 56 58 58 60 57 59 63 63 64 65 69 63	55 50 52 53 55 55 56 56 56 56 56 56 56	63 60 62 60 62 60 61 60 66 66 66 67 70 64	59 57 53 55 55 56 54 55 55 59 59 60 63 57	Y Y Y Y Y Y Y	Y Y Y 	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4292 4292 4295 4296 4299 4300 4301 4302 4302 4302 4303	NGA04 NGA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298568 298539 298539 298539 298551 298498 298498	6249562 6249538 6249565 6249566 6249566 6249662 6249677 6249677 6249788 6249243 6249241 624921 624921 6249150 6249145 6249145	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 65 65 68 62 57	57 55 50 51 53 55 52 54 55 56 56 56 56 57 61 55 48	64 62 58 60 59 61 59 60 60 64 64 65 66 68 63 57	56 52 54 54 56 53 55 56 58 57 58 59 62 56 50 51	61 56 58 58 60 57 59 63 63 64 65 69 63 56	55 50 52 53 55 55 56 56 56 56 56 56 56 58 61 55	63 60 62 60 62 60 61 60 66 66 66 67 70 64 58	59 57 53 55 55 56 54 55 55 59 59 60 63 57 51	Y Y Y Y Y Y Y	Y Y Y - Y Y Y Y Y	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4292 4292 4295 4296 4299 4300 4301 4302 4302 4302 4303	NGA04 NGA04	1 2 1 1 1 2 1 2 1 1 2 1 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298568 298539 298539 298539 298551 298498 298498	6249562 6249538 6249565 6249566 6249566 6249662 6249677 6249677 6249788 6249243 6249241 624921 624921 6249150 6249145 6249145	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 65 65 68 62 57	57 55 50 51 53 55 52 54 55 56 56 56 56 57 61 55	64 62 58 60 59 61 59 60 60 64 64 65 65 66 68	56 52 54 54 56 53 55 56 58 57 58 59 62 56	61 56 58 58 60 57 59 63 63 64 65 69 63	55 50 52 53 55 55 56 56 56 56 56 56 56 58 61 55	63 60 62 60 62 60 61 60 66 66 66 67 70 64	59 57 53 55 55 56 54 55 55 59 59 60 63 57 51	Y Y Y Y Y Y Y	Y Y Y 	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
4285 4285 4287 4288 4289 4289 4291 4291 4292 4295 4296 4296 4299 4299 4301 4301 4302 4302 4302 4303 4304	NCA04 NCA04	1 2 1 1 1 2 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1	298549 298720 298743 298699 298699 298662 298662 298630 298564 298568 298539 298539 298539 298551 298498 298498	6249562 6249538 6249565 6249566 6249566 6249667 6249677 6249677 6249788 6249221 6249150 6249150 6249145 6249145 6249145 6249145	Residential	55 55 55 55 55 55 55 55 55 55 55 55 55	50 50 50 50 50 50 50 50 50 50 50 50 50 5	P P P P P P P P P P P P P P P P P P P	63 60 56 57 58 60 57 59 60 63 63 63 63 65 68	57 55 50 51 53 55 52 54 55 56 56 56 56 57 61 55 48	64 62 58 60 59 61 59 60 60 64 64 65 66 68 63 57	56 52 54 54 56 53 55 56 58 57 58 59 62 56 50 51	61 56 58 58 60 57 59 63 63 64 65 69 63 56	55 50 52 53 55 55 56 56 56 56 56 56 56	63 60 62 60 62 60 61 60 66 66 66 67 70 64 58	59 57 53 55 55 56 54 55 55 59 59 60 63 57	Y Y Y Y Y Y Y	Y Y Y - Y Y Y Y Y	Y Y Y Y - Y Y	- - - - - Y			Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

April	N Milipati -
Color Colo	- Y
April	- Y - Y - Y - Y - Y - Y - Y - Y - Y - Y
April Columb Co	- Y - Y - Y - Y - Y - Y - Y - Y - Y
ACCOL 1 20041	- Y - Y - Y - Y - Y - Y - Y - Y
450	- Y - Y - Y - Y - Y - Y - Y - Y - Y
April	- Y - Y - Y - Y - Y - Y - Y - Y - Y
April Apri	- Y - Y - Y - Y - Y - Y - Y - Y
April Apri	- Y - Y - Y - Y - Y
412	- Y - Y - Y - Y - Y
\$\frac{413}{14}\$ \$\color{1}{\color{\color{1}	- Y - Y - Y - Y
\$\frac{1}{1}\) \$\frac{1}{1}\] \$\frac{1}{1}\) \$\frac{1}{1}\] \$\frac{1}\] \$\frac{1}\] \$\frac{1}{1}\] \$\frac{1}{1}\] \$\frac{1}{	- Y - Y - Y
416 N.CAM 1 20350 204302 Paudoriud 55 00 P 50 12 01 54 60 92 00 55 07 V V V	- Y - Y
Althe NAA44 2 280002 [Georgia Residentia 55 80 P 80 91 81 81 83 83 81 74 74 4 4 4 4 4 4 4	- Y
April	- Y
4119 N.CAC4 2 20051 200344 Residental 55 50 P 55 48 50 51 50 60 50 52 7 V	
A319 N.OA46 1 284816 (260377) Residential 55 20 P 53 46 55 40 5 47 30 5 10 V 7	
Model 1 Select General Resolution S5 S6 P S0 Al S5 Al S7 S1 Al S5 Al S Al Al	. Y
ASSO M.O.Ada 2 Zebedo Geodetry Residentia 55 00 P 22 05 54 48 02 48 70 60 49 V	
#221 N.O.46 1 20895 (2090) Resolvation 55 00 P S3 17 55 40 S4 47 57 50 V	. v
### 1531 N.CA4 1 1 29816 (2001)4 Resolution 55 00 P 00 12 05 05 02 00 32 65 50 V V · · · A 150 N.CA4 1 1 29816 (2001)4 Resolution 55 00 P 00 12 05 05 02 00 32 65 05 0 V V · · · A 150 N.CA4 1 1 29816 (2001)4 Resolution 55 00 P 00 13 05 05 05 05 05 05 05 05 05 07 0 V · · · A 150 N.CA4 1 1 29817 (2001)5 Resolution 55 00 P 00 13 05 05 05 05 05 05 05 07 07 V · · · · A 150 N.CA4 1 1 29817 (2001)5 Resolution 55 05 P 00 13 05 05 05 05 05 05 05 05 07 07 V · · · · · · · · · · · · · · · · · ·	. V
4331 N.CAC4 2 25950 (242914) Residental 55 90 P 60 52 00 53 60 52 61 55 V V · · · · · · · · · · · · · · · ·	. v
4333 NCA04 1 298207 6249165 Residential 55 50 P 59 51 59 52 59 51 60 54 - Y 4335 NCA04 1 298164 6249266 Residential 55 50 P 61 54 62 55 62 54 63 55 Y Y Y	- Y
4333 NCA04 1 298207 6249165 Residential 55 50 P 59 51 59 52 59 51 60 54 - Y 4335 NCA04 1 298164 6249266 Residential 55 50 P 61 54 62 55 62 54 63 56 Y Y Y -	. Y
4335 NCA04 1 298164 6249266 Residential 55 50 P 61 54 62 55 62 54 63 56 Y Y Y -	. v
	. Y
	. Y
4337 NCA04 1 299057 6249315 Residential 55 50 P 60 53 62 55 61 53 63 56 Y Y Y Y	. Y
4337 NCAO4 2 298057 6249315 Residential 55 50 P 61 53 62 55 61 54 64 57 Y Y Y -	
4337 NC-004 2 28007 0249313 NC-0041 55 50 P 58 51 59 52 59 51 61 54 Y Y Y -	. v
4339 NCAM 1 29007 504932 Residential 55 50 P 51 59 52 59 51 61 54 77 Y Y Y X X	. Y
4339 NC-004 1 299007 0249320 NC-0049320 NC-0	. v
4417 NCA04 2 297905 6249289 Residential 55 50 P 59 51 61 54 50 51 63 55 Y Y Y Y Y	
4411 NCAGA 1 27586 CA42209 Residential 50 00 P 50 51 61 54 60 51 63 50 1 1 1 1 1 1 1 4418 NCAGA 1 27586 NCAGA 1 27	. v
4418 NCA04 2 297856 [24274 Residential 55 50 P 59 52 61 54 60 52 62 55 Y Y Y Y Y	. v
4419 NCA04 1 297742 (249282) Residential 55 50 P 55 48 58 51 56 48 59 52 Y Y	. Y
	. Y
4421 NCA04 1 297825 6249131 Residential 55 50 P 65 58 66 59 66 58 68 61 Y Y Y Y - 4422 NCA04 1 297742 6249158 Residential 55 50 P 65 57 66 59 65 57 67 60 Y Y Y Y Y Y	
4422 NCA04 2 297742 6249158 Residential 55 50 P 66 58 67 60 66 58 68 61 Y Y Y Y Y	. v
44/22 NCA04 1 2 297/42 (8/49158 N66668fffall 55 50 P 65 57 66 59 65 57 67 7 7 Y Y Y Y Y	, Y
4423 NCA04 2 297660 (249122 Residential 55 50 P 66 58 67 60 66 58 68 61 Y Y Y Y Y	. Y
4423 NCAU4 2 237620 0249122 Residential 55 50 P 65 58 67 60 66 58 68 67 Y Y Y Y Y 424 NCAU4 1 237622 0249111 Residential 55 50 P 65 58 64 56 66 59 Y Y Y Y Y	· Y
4424 NCA04 1 297622 (2491111 Nesidential 55 50 P 65 58 64 56 65 99 Y Y Y Y Y Y 4424 NCA04 2 297622 (2491111 Residential 55 50 P 66 58 67 60 66 58 68 61 Y Y Y Y Y	- Y
***24** NCA04* 1 2 27536 (24937) Residential 55 50 P 67 60 68 61 68 60 70 63 Y Y Y Y	- T
	- Y
	- Y
	- Y
4437 NCA04 1 297475 [6249305 Residential 55 50 P 57 49 61 54 57 49 63 55 Y Y Y Y Y 4438 NCA04 1 297489 [6249415] Residential 55 50 P 58 51 61 54 58 51 63 56 Y Y Y Y Y	- Y
	- Y
	- Y
	- Y
4577 NCA04 1 297390 6249406 Residential 55 50 P 54 46 59 52 54 46 61 53 Y Y Y -	- Y
4578 NCA04 1 297357 6249375 Residential 55 50 P 57 49 60 53 57 49 62 54 Y Y Y -	- Y
4579 NCA04 1 297288 (249340) Residential 55 50 P 58 49 62 54 58 49 63 55 57 Y Y Y Y 47675 NCA04 2 29728 (249340) Residential 56 60 P 50 67 55 58 59 154 56 Y Y Y Y Y X 1579 NCA04 2 29728 (249340) Residential 56 60 P 50 67 55 58 59 154 56 Y Y Y Y Y X 1579 NCA04 2 29728 (249340) Residential 56 60 P 50 P 50 P 50 P 50 P 50 P 50 P 5	- Y
	- Y
	- Y
4580 NCAD4 2 297262 6249288 Residential 55 50 P 58 49 62 54 58 49 63 56 Y Y Y Y	- Y
4582 NCAD4 1 297197 6249239 Residential 55 50 P 60 51 63 56 59 51 65 57 Y Y Y Y	- Y
4582 NCAD4 2 297197 6249239 Residential 55 50 P 61 53 65 57 61 52 66 59 Y Y Y Y	- Y
4583 NCAD4 1 297116 6249216 Residential 55 50 P 65 54 67 58 64 54 67 59 Y Y Y Y	- Y
4583 NCAD4 2 297116 6249216 Residential 55 50 P 66 56 68 59 65 56 68 60 Y Y Y Y Y	- Y
4584 NCAD4 1 297291 6249014 Residential 55 50 P 68 59 70 62 67 59 71 63 Y Y Y Y Y	Y Y
4584 NCA04 2 297291 6249014 Residential 55 50 P 69 60 71 63 69 60 72 64 Y Y Y Y Y	Y Y
4585 NCA04 1 297373 6249003 Residential 55 50 P 67 60 69 62 68 60 71 64 Y Y Y Y	Y Y
4585 NCAD4 2 297373 6249003 Residential 55 50 P 69 61 70 63 69 61 72 65 Y Y Y Y Y	Y Y
4586 NCAO4 1 297110 6249039 Commercial - P 66 54 -32 -29 64 54 -32 -29	
4586 NCAD4 2 297110 6249039 Commercial P 67 56 -32 -29 65 56 -32 -29	
4587 NCA04 1 297101 6249019 Commercial P 63 52 -32 -29 61 52 -32 -29	
4588 NCAD4 1 297044 6249262 Residential 55 50 P 64 53 65 54 63 53 64 55 Y Y Y Y	- Y
4588 NCA04 2 297044 6249262 Residential 55 50 P 66 55 67 58 64 55 67 59 Y Y Y Y	- Y
4594 NCAD4 1 297218 6249377 Residential 55 50 P 56 47 59 51 55 46 60 53 Y Y Y -	- Y
4595 NCA04 1 296917 6249012 Garage P 56 47 -32 -29 56 47 -32 -29	
4595 NCAD4 2 296917 6249012 Garage P 58 49 -32 -29 57 49 -32 -29	
4596 NCA04 1 296960 6249162 Residential 55 50 P 56 48 65 59 55 47 68 61 Y Y Y Y Y	Y Y
4596 NCAD4 2 296960 6249162 Residential 55 50 P 66 55 69 60 64 55 70 62 Y Y Y Y	Y Y
4598 NCAD4 1 296990 6249123 Residential 55 50 P 58 50 68 61 57 49 70 63 Y Y Y Y	Y Y
4598 NCA04 2 296990 6249123 Residential 55 50 P 59 51 69 62 59 50 72 64 Y Y Y Y Y	YY
4599 NCA04 1 296915 6249201 Residential 55 50 P 62 51 64 56 61 51 65 57 Y Y Y Y	- Y
4599 NCAD4 2 296915 6249201 Residential 55 50 P 64 53 66 57 62 53 67 59 Y Y Y Y	- Y
4600 NCA04 1 296869 5249256 Residential 55 50 P 56 48 64 57 55 47 66 58 Y Y Y Y Y	- Y
4601 NCA04 1 296843 6249279 Residential 55 50 P 55 47 63 56 54 46 65 58 Y Y Y Y Y 4602 NCA04 1 296807 6249306 Residential 55 50 P 55 47 64 57 55 47 66 59 Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- Y
	- Y
4603 NCA04 1 296757 6249374 Residential 55 50 P 64 52 65 55 62 52 65 56 Y Y Y Y	- Y
4508 NCA04 1 296694 6249403 Residential 55 50 P 61 50 63 54 59 50 64 56 Y Y Y Y	- Y
4611 NCA04 1 296943 6249318 Residential 55 50 P 69 57 69 58 67 58 68 59	
4612 NCA04 1 296962 6249367 Residential 55 50 P 64 52 65 55 62 53 64 56 Y Y Y Y	- Y
4612 NCA04 2 296962 6249367 Residential 55 50 P 65 54 66 56 64 54 66 57 Y Y Y Y Y	- Y
4613 NCA04 1 296960 6249464 Residential 55 50 P 61 50 62 53 59 50 63 54 Y Y Y -	- Y
4613 NCA04 2 296960 6249464 Residential 55 50 P 62 51 63 54 60 51 64 55 Y Y Y Y	- Y
4695 NCA04 1 296695 6248946 Residential 55 50 P 69 61 68 62 68 60 68 63 Y Y Y Y	- Y
4695 NCA04 2 296695 6248946 Residential 55 50 P 70 62 70 63 69 61 70 64 Y Y Y Y	Y Y
4696 NCA04 1 296651 6248965 Residential 55 50 P 52 42 65 58 52 42 68 60 Y Y Y Y Y	YY
4696 NCA04 2 296651 6248955 Residential 55 50 P 54 44 66 59 53 44 69 61 Y Y Y Y Y	Y Y
4698 NCAO4 1 296567 6248937 Residential 55 50 P 70 62 69 62 69 61 69 63 Y Y Y Y	- Y
4701 NCA04 1 29608 6248806 Residential 55 50 P 69 62 68 60 69 63 - Y	. Y
4701 NCA04 2 256028 604825 Residential 55 50 P 70 63 70 64 70 62 71 65 Y Y	. v
4702 NCA04 1 296556 6248829 Residential 55 50 P 69 62 69 60 69 63 - Y	
	. V
4702 NO.0004 1 200000 0240029 NUSUGERIAN DO DU F 09 02 09 02 00 00 09 03 - 1 1	, , ,
5570 NCA04 1 296110 6248921 Residential 55 50 P 69 62 69 62 69 61 69 63 Y Y Y Y	
5570 NCA04 1 296110 6249921 Residential 55 50 P 69 62 69 62 69 61 69 63 Y Y Y Y	- I

Predicted Noise Level (dBA) > 2 dB(A) Cumulative
NCG Criteria At Opening (2026) Future Design (2036) Cumulative
Project Acute Consideratio

				Fasting	Northina		NCG (Parind		kt Openi	ng (202	6)		ture De	sign (20	(36)	> 2 c	IB(A)	Cumu	rlative mit		t Acuse	
							_	_		No	Build	В	uild	No	Build	8	uid					_	_	n of Mitigation
	5575	NCA04			6248738	Residential	- 0	50	-		52	ь	N		N		55	Y	Y	Y	N		N	minganon
	5576	NCA04					55	50	P	67	60	67	60	66	59	67	61	Y	Y	Y	-	-	-	Y
		NCA04	2	296032	6248797 6248797	Residential Residential		50	P		61		61	68	60	69	62	Y	Y	-	-	-	-	Y
	5577	NCA04	- 2		6248811	Paridental	55 55	50	P	68 69	62	68 68	62	68	61	69	63	Y	Y	-	-	-	-	T Y
н	5577	NCA04	2	200121	6248811	Residential	55	50	P	70	62	69	63	69	61		64	-	Y	-	-	-	-	, ,
		NCA04	1		6248811	Residential Residential	55	50	P	70 69	62	69	63	69	61	70 69	64 63	-	Y	-				Y
		NCA04	+		6248809	Residential	55	50	P	62	55	63	56	62	54	64	58	- V	Y	· v	- v			V
		NCA04	2		6248715	Residential	55	50	P	63	56	64	57	63	55	65	58	Y	Y	V	-	-	-	, ,
		NCA04	- 1		6248650	Residential	55	50	P	59	51	60	53	58	50	62	55	Y	Y	Y	Y	-		V V
	5586	NCA04	2		6248650	Residential	55	50	P	60	52	62	55	59	51	63	56	Y	Y	Y	Y	-		Y
		NCA04	1		6248806	Other (Outdoor Active)	60		P	62	55	64	57	62	54	65	58	Y	-	Y	-	-	-	Y
		NCA04	- 1		6249429	Other (Outdoor Passive)	55	-	P	54	47	57	51	55	47	59	52	Y	-	-	-	-		· ·
	0002	NCA05	1		6248068	Other (Outdoor Active)	60	-	P	49	43	52	46	50	44	54	48	-	-	-	-	-		
		NCA05	-1		6247979	Other (Outdoor Active)	60	-	P	45	39	49	43	46	39	52	44	-	-	-	-	-	-	
	0056	NCA05	2	298146	6247979	Other (Outdoor Active)	60		P	48	41	52	45	48	41		47							-
н	0072	NCA05	-1		6248051	Other (Outdoor Active)	60	-	P	46	41	50	45	47	42	54 52	46	-	-	-	-	-	-	
н	0436	NCA05	-1	298115	6247977	Other (Outdoor Active)	60	-	Р	47	40	51	45	47	41	54	47	-	-	-	-	-	-	
г	0547	NCA05	- 1		6248001	Other (Outdoor Active)	60	-	Р	45	39	47	42	46	40	50	43	-	-	-		-	-	-
		NCA05	- 1	298145	6248006	Other (Outdoor Active)	60	-	Р	45	41	48	43	46	41	51	44	-	-	-		-	-	-
	8011	NCA05	- 1		6247596	Other (Outdoor Passive)	55	-	P	56	50	62	55	57	50	64	57	Y	-	Y		-	-	Y
	8011	NCA05	- 1		6247596	Other (Outdoor Passive)	55	-	P	56	50	62	55	57	50	64	57	Y	-	Y		-	-	Y
Е	8011	NCA05	- 1		6247596	Other (Outdoor Passive)	55		Р	56	50	62	55	57	50	64	57	Y	-	Υ		-	-	Y
	8011	NCA05	1		6247596	Other (Outdoor Passive)	55	-	P	56	50	62	55	57	50	64	57	Y		Y		-	-	Y
Е	4816	NCA06	- 1		6249494	Garage	-	-	Р	51	40	-32	-29	50	40	-32	-29	-	-		-	-	-	-
	4816	NCA06	2		6249494	Garage			Р	52	41	-32	-29	51	42	-32	-29					-		
	4817	NCA06	- 1	295912	6249499	Residential	55	50	Р	51	40	-32	-29	51	41	-32	-29	-	-		-	-	-	
Е	4818	NCA06	- 1	295927		Residential	55	50	Р	50	39	-32	-29	49	39	-32	-29	-	-		-	-	-	
		NCA06	- 1		6249584	Residential	55	50	Р	51	40	-32	-29	50	41	-32	-29	-	-		-	-		-
Ю	4821	NCA06	-1	295968	6249576	Garage	-	-	Р	48	39	-32	-29	48	39	-32	-29	-	-	-	-	-	-	-
Н		NCA06	1 1	295974	6249561	Garage Residential	- 55	- 50	P	51 52	40	-32	-29	50	41	-32	-29 -29	-	-	-	-	-	-	-
		NCA06			6249553 6249512	Residential Residential			P									-		-	-	-	-	-
		NCA06	1		6249512 6248865	Residential Residential	55	50		50	40	-32	-29	50	40	-32	-29	-	-	-	-	-	-	
							55	50	P	70	62	69	62	71	61	71	64	-	Υ	-	-	-	-	Y
	5542 5542	NCA06	1 2		6248967 6248967	Other (Public Building)	50 50		Н	71	66 68	70	67	71	65 67	72	68	-	-	-	-	-	-	-
	5542 5543	NCA06 NCA06	2		6248867 6248850	Other (Public Building) Other (Outdoor Active)	50 60	-	H P	72 64	68 56	71 64	68 56	73 65	67 55	73 66	69 58	-	-	-	-	-	-	-
		NCA06	1		6248850	Other (Outdoor Active) Residential	55	50	P	72	65	72	65	73	55 54	73	58	- Y	- Y	- Y	- Y	-	-	
		NCA06	2		6248929	Residential Residential			P	74	67	74	67	74				Y	Y	Y	Y	-	-	Y
		NCA06	- 2		6248984	Residential	55 55	50 50	P	66	58	65	58	67	66 57	74 67	68 59	Y	Y	Y	Y	-	-	Y
		NCA06	-1		6248984	Residential Residential	55	50	Р	68	60	67	60	69	59	69	61	Y	Y	Y	-	-	-	Y
н	5547	NCA06	2	295/19	6248984	Residential Residential	55	50	P	70	62	69	62	71	61	71	63	Y	Y	Y	-	-	-	Y
		NCA06	-		6249169	Residential	55		P	60	52	60	53	61	52	62	54	Y	Y	,	-	-	-	T V
		NCA06	2		6249169	Residential	55	50	P	62	53	62	54	62	53	63	55	Y	Y	Y	-	-	-	V
	5550	NCA06	1		6249229	Residential	55	50	P	56	47	58	50	56	48	59	51	Y	Y	-	-	-		Y Y
		NCA06	- 1		6249375	Residential		50	D	52	44	57	50	53	44	60	52	v	Y	v	-	-		v
	5551	NCA06	2		6249375	Residential	55	50	P	54	45	60	53	54	45	62	54	v	Y	V	-	-		V V
	5552	NCA06	- 1		6249443	Residential	55		D	53	44	59	52	53	44	61	53	v	Y	v	-	-		v
н	5553	NCA06	1	295517	6249549	Residential	55	50	D	59	50	60	52	59	50	61	53	v	Y	v	-	-		Y
н	5553	NCA06	2		6249549	Residential	55	50	P	53	45	61	54	54	45	63	55	Y	Y	Y	Y	-	-	Y
н	5556	NCA06	1	295539	6249636	Residential	55	50	P	57	47	62	55	56	48	64	56	Y	Y	Y	Y			Y
н	5559	NCA06	1		6249413	Residential	55	50	D	55	47	67	60	66	57	71	63	Y	Y	v	Y	Y	Y	Y
н	5560	NCA06	-1		6249152	Residential	55	50	P	57	49	60	54	68	58	69	60	Y	Y	Y	Y	-	-	Y
-	5560	NCA06	2	295795	6249152	Residential	55	50	P	58	51	62	55	69	59	70	61	Y	Y	Y	Y			Y
н	5561	NCA06	1	295813	6249216	Residential	55	50	P	57	50	61	54	70	60	71	62	Y	Y	Y	Y	-	-	Y
н		NCA06	-1		6249269	Residential	55	50	P	55	48	63	56	67	58	70	61	Y	Y	Y	Y	Y		Y
		NCA06	2		6249269	Residential	55	50	P	57	49	64	57	69	59	71	62	Y	Y	Y	Y	Y		Y
-	5564	NCA06	-1	295893	6249316	Residential	55	50	P	52	46	60	53	69	60	70	62	Y	Y	Y	Y	Y	Y	Y
-	5566	NCA06	-1	295882	6249209	Residential	55	50	P	52	46	57	50	68	58	69	60	Y	Y	Y	Y	-		Y
-	5566	NCA06	2	295882	6249209	Residential	55	50	P	54	47	58	51	70	60	70	62	Y	Y	Y	Y	Y	-	Y
-	5567	NCA06	-1	295877	6249155	Residential	55	50	Р	52	46	56	49	68	58	69	60	Y	Y	Y	Υ	-	-	Y
		NCA06	- 1	295863	6249087	Residential	55	50	Р	53	46	56	49	68	59	69	60	Y	Y	Y	Y	-	-	Y
		NCA06	- 1	295844	6249053	Residential	55	50	Р	54	46	59	52	68	58	69	60	Υ	Y	Y	Y	-	-	Y
	5569	NCA06	2	295844	6249053	Residential	55	50	Р	55	48	61	54	69	60	70 66	62 58	Υ	Υ	Υ	Y	-	-	Y
		NCA06	- 1		6248856	Other (Outdoor Active)	60	-	Р	64	57	64	57	65	55			-	1	-	-	-	-	
		NCA07	- 1	294243	6250299	Residential	55	46	Р	44	34	54	47	44	34	56	48	Υ	Υ		Υ			Y
т		NCA07	- 1	294860	6250660	Garage		-	Р	50	38	-32	-29	48	39	-32	-29	-				-	-	
	1291	NCA07	2	294860	6250660	Garage	-	-	Р	50	39	-32	-29	49	39	-32	-29				-			-
Щ	1292	NCA07	-1		6250623	Garage	-	-	Р	46	37	-32	-29	47	36	-32	-29		-		-	-		-
Щ	1292	NCA07	2	294853	6250623	Garage	-	-	Р	47	38	-32	-29	47	37	-32	-29		-		-	-	-	-
Е	1378	NCA07	- 1	291336	6250783	Garage	-	-	Р	44	31	-32	-29	44	32	-32	-29	-	-		-	-	-	-
Щ	1378	NCA07	2		6250783	Garage	-	-	Р	45	33	-32	-29	45	33	-32	-29		-		-	-		-
Ю	1379	NCA07	-1	291364	6250790	Garage	-	-	Р	45	32	-32	-29	45	33	-32	-29	-	-	-	-	-	-	-
		NCA07	1		6250812	Garage	-	-	P	46	37	-32	-29	47	36	-32	-29	-	-	-	-	-	-	-
			1	291359	6250844	Garage	-	-	P	46	37	-32	-29		35	-32	-29	-	-	-	-	-	-	-
	4825 4831	NCA07	1	295413	6250325 6250512	Garage Residential	-	-		52	41	-32	-29	51	42	-32	-29	- V	- Y	- V	- Y	-	-	
	4831 4831	NCA07	1		6250512 6250512	Residential Residential	54	44 45	P	43	32	59	52	42	32	61	53 54	Y	Y	Y	Y	-	-	Y
		NCA07	2		6250512 6250950	Residential Residential	55	45 50	P	44	33	59 63	52 56	43	33	62	54 58	Y	Y	Y	Y	- V	-	Y
		NCA07	2		6250950	Residential Residential	55 55	50	P	48	39	63	56	48	38	66 68	58 60	Y	Y	Y	Y	Y	- Y	Y
		NCA07	1		6250950	Residential Residential	55	49	P	49	39	59	52	49	39	61	53	Y	Y	Y	Y	,	-	, , ,
		NCA07	2		6251017	Residential Residential	55 55	49 50	P	47	37	59 60		47			53 55	Y	Y	Y	Y	-	-	Y
		NCA07	1		6251017	Residential Residential	55 55	50 49	P	48	38	56	53 49	48	38 37	63 59	55 51	Y	Y	Y	Y			Y
			1		6250117	Residential Residential	55	49 50	P	48	39	56	49	48	37	59	51	Y	Y					V
		NC ACT			6251132	Residential Residential	55	46	P	48	35	55	48	48	39	58	50	Y	Y	-		-		Y
	4837	NCA07	- 1			Residential	55	50	P	51	41	56	49	50	42	58	50	Y	Y			-		Y
	4837 4838	NCA07	1	201051			55	50	P	51	40	55	47	50	41		49	Y	Y	-	÷	-	-	V
ь	4837 4838 4840		1 1	294951 295061	6251150	Residential					42	57	50	51	42	57 59	70							
F	4837 4838 4840 4841	NCA07 NCA07 NCA07	1 1 1 2	295061	6251145		55	50										Y	Y					Y
E	4837 4838 4840 4841 4841	NCA07 NCA07 NCA07 NCA07	1 1 2 1	295061 295061	6251145 6251145	Residential	55	50	P	52 49				48		58	51 50		Y	÷	÷	÷	-	Y
Ē	4837 4838 4840 4841 4841 4842	NCA07 NCA07 NCA07	1 2	295061 295061 295047	6251145			50	P P	49 52	40	56 57	48	48	40	58 59	51 50 51	Y		-	-	-	-	Y Y Y
E	4837 4838 4840 4841 4841 4842 4843	NCA07 NCA07 NCA07 NCA07 NCA07	1 2	295061 295061 295047 295000	6251145 6251145 6251126	Residential Residential	55 55	50 50 50	P P P	49 52	40	56	48	48 52 52	40 44	58	50	Y	-	- - - Y	-	1	-	Y Y Y
E	4837 4838 4840 4841 4841 4842 4843	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000	6251145 6251145 6251126 6251091	Residential Residential Residential Residential Residential	55 55 55	50 50 50	P	49	40 43	56 57	48 50	52	40	58 59	50 51	Y	Y	- - - Y	- - - - Y	- - - - Y		Y Y Y Y
	4837 4838 4840 4841 4841 4842 4843 4843	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131	6251145 6251145 6251126 6251091 6251091	Residential Residential Residential Residential Residential	55 55 55 55	50 50 50 50	P	49 52 53	40 43 44	56 57 58	48 50 50	52 52	40 44 44	58 59 60	50 51 52	Y	Y Y		Y	- - - - Y		Y Y Y Y
	4837 4838 4840 4841 4841 4842 4843 4843 4843 4844 5142	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131 291358	6251145 6251145 6251126 6251091 6251091 6251211	Residential Residential Residential Residential	55 55 55 55	50 50 50 50 47	P	49 52 53 45	40 43 44 37	56 57 58 63	48 50 50 57	52 52 46	40 44 44 35	58 59 60 66	50 51 52 58	Y	Y Y Y		- - - - Y	- - - - Y		Y Y Y Y
	4837 4838 4840 4841 4841 4842 4843 4843 4843 4844 5142	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131 291358 291387	6251145 6251145 6251126 6251091 6251091 6251211 6250701	Residential Residential Residential Residential Residential Residential Garage Residential Residential	55 55 55 55 55	50 50 50 50 47 -	P	49 52 53 45 43	40 43 44 37 30	56 57 58 63 -32	48 50 50 57 -29	52 52 46 43	40 44 44 35 31	58 59 60 66 -32	50 51 52 58 -29	Y	Y Y Y			- - - - - Y		Y Y Y Y
	4837 4838 4840 4841 4841 4842 4843 4843 4843 5142 5143 5144	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131 291358 291387 291407	6251145 6251145 6251126 6251091 6251091 6251211 6250701 6250696 6250685	Residential Residential Residential Residential Residential Residential Garage Residential Residential	55 55 55 55 55 -	50 50 50 50 47 - 46 42	P P P	49 52 53 45 43 45	40 43 44 37 30 35	56 57 58 63 -32 -32 -32	48 50 50 57 -29 -29	52 52 46 43 46	40 44 44 35 31 34 26	58 59 60 66 -32 -32 -32	50 51 52 58 -29 -29 -29	Y	Y Y Y		- - - - - - - - - - - - - - - - - - -	- - - - - Y		Y Y Y Y
	4837 4838 4840 4841 4841 4841 4842 4843 4843 4844 5142 5143 5144 5144 5144	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131 291358 291387 291407 291407	6251145 6251146 6251126 6251091 6251091 6251211 6250701 6250696 6250685 6250685 6250678	Residential Residential Residential Residential Residential Residential Garage Residential Garage Residential Residential Residential Residential Residential Residential	55 55 55 55 55 - 55 50 55	50 50 50 50 47 - 46 42 43	P P P P P	49 52 53 45 43 45 43 44	40 43 44 37 30 35 26 31	56 57 58 63 -32 -32 -32 -32	48 50 50 57 -29 -29 -29 -29	52 52 46 43 46 38 44	40 44 44 35 31 34 26 32	58 59 60 66 -32 -32 -32 -32	50 51 52 58 -29 -29 -29 -29	Y	Y Y Y		· · · · · · · · · · · · · · · · · · ·	Y		Y Y Y Y
	4837 4838 4840 4841 4841 4841 4842 4843 4843 4844 5142 5143 5144 5144 5144	NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07 NCA07	1 2 1	295061 295061 295047 295000 295000 294131 291358 291387 291407 291407	6251145 6251145 6251126 6251091 6251091 6251211 6250701 6250696 6250685 6250685	Residential Residential Residential Residential Residential Residential Garage Residential Residential Residential Residential	55 55 55 55 55 - 55 - 55	50 50 50 50 47 - 46 42	P P P	49 52 53 45 43 45 38	40 43 44 37 30 35 26	56 57 58 63 -32 -32 -32	48 50 50 57 -29 -29 -29 -29 -29	52 52 46 43 46 38 44 42	40 44 44 35 31 34 26	58 59 60 66 -32 -32 -32	50 51 52 58 -29 -29 -29	Y	Y Y Y		· · · · · · · · · · · · · · · · · · ·			Y Y Y Y

Predicted Noise Level (dBA) > 2 dB(A) Computative Eighbe for

											Predic	ted Noi	se Levi	I (dRA)									Flinible for
						NCG I				e Oneni					sian (20	190			Cums		Project		Consideratio
ID				Northing				Period	100	Build		elel		Build		ıild							n of
						D	N		0	N	D	N	D	N	0	N	0		0	N	0	N	Mitigation
5147	NCA07	- 1	291219	6250427	Garage			Р	46	35	-32	-29	46	34	-32	-29							-
5149	NCA07	- 1	291097	6250357	Residential	55	50	Р	48	39	59	49	49	38	FI2	50	v	v	v	_	_	_	Y
5151	NCA07	- 1	291298	6250282	Residential	55	46	D	45	34	-32	-29	46	34	-32	-29			-		-	-	
5152	NCA07	- 1	291313	6250287	Garage	- 55	40	P	45	34	-32	-29	46	34	-32	-29	-	-	-	-	-	-	
5153	NCA07	- 1	290701	6250217	Residential	55	48	P	47	37	55	47	48	36	57	49	v	v	-	v	-	-	v
5153	NCA07	2	290701	6250217	Residential	55	50	P	49	39	56	48	50	38	58	50	v	v	-	-	-	-	Y
5167	NCA07	1		6250206	Residential	55	50	P	52	42	62	51	52	40	65	51	- V	· V	V	_	Y	_	V
5170	NCA07	- 1	293161	6250509	Residential	53	43	D	42	31	56	49	41	31	58	51	-	- 1	- 1	-	-	-	, i
5170	NCA07	2	293161	6250509	Residential	53	43	P	42	31	56	50	41	31	59	51	Y	Y	Y	Y	-	-	Y
6026	NCA07	1	293161	6251805	Residential Residential		43	P					42	31		49	Y	Y	Y	Y	-	-	Y
						55			43	33	55	48			57		Y	Y	Y	Y	-	-	Y
6027	NCA07	- 1	292378	6251791	Residential	54	43	Р	42	33	55	49	43	31	58	50	Y	Y	-	Y	_	_	Y
6034	NCA07	- 1	292558	6251818	Residential	53	42	Р	41	31	56	49	41	30	59	51	Y	Y	Y	Y	_	_	Y
6035	NCA07	- 1	292577	6251861	Residential	53	42	Р	41	32	55	48	42	30	58	50	Y	Y	Y	Y	-	-	Y
0637	NCA09	- 1	289649	6251240	Garage	-	-	Р	58	45	-32	-29	58	46	-32	-29	-	-	-	-	-	-	-
1097	NCA09	- 1		6251258	Garage		-	Р	51	38	-32	-29	51	39	-32	-29	-	-	-	-	-	-	
4882	NCA09	- 1	289904	6251579	Residential	55	50	Р	61	47	64	55	61	49	65	57	Y	Y	Y	Y	-	-	Y
4884	NCA09	- 1	289977	6251640	Residential	55	50	Р	58	44	62	53	58	46	62	55	Y	Y	Y	Y		-	Y
4884	NCA09	2	289977	6251640	Residential	55	50	P	62	48	63	52	62	50	63	55	Υ	Y	Y	Υ			Y
4887	NCA09	- 1	289957	6251717	Residential	55	50	Р	68	54	68	56	68	56	68	60	Y	Y	Y	Y		-	Y
4887	NCA09	2	289957	6251717	Residential	55	50	Р	70	56	70	58	70	58	69	61	Y	Y	Y	Y	-	-	Y
4889	NCA09	- 1	290001	6251751	Residential	55	50	Р	66	52	66	55	66	54	66	58	Y	Y	-	Y	-	-	Y
4916	NCA09	- 1	289706	6251907	Residential	55	50	Р	56	43	60	52	56	44	61	54	Y	Y	Y	-	-	-	Y
4916	NCA09	2	289706	6251907	Residential	55	50	Р	57	44	61	52	57	45	61	55	Y	Y	Y	Y	-	-	Y
4918	NCA09	- 1	289282	6251621	Residential	55	50	Р	55	42	65	57	55	43	66	59	Y	Y	Y	Y	Y	-	Y
5128	NCA09	- 1	289006	6250929	Residential	55	50	Р	51	42	57	50	51	42	58	52	Υ	Y	-		-	-	Y
5129	NCA09	- 1	289085	6250946	Residential	55	50	Р	53	39	60	52	52	40	61	54	Υ	Y	Y		-	-	Y
5129	NCA09	2	289085	6250946	Residential	55	50	Р	57	44	61	53	57	45	62	55	Y	Y	Y	Y	-	-	Y
5137	NCA09	- 1	289463	6250776	Residential	55	50	Р	64	50	64	53	64	51	64	56	Y	Y	Y				Y
5138	NCA09	- 1	289625	6251228	Residential	55	50	P	61	47	-32	-29	61	49	-32	-29			-	-	-	-	
5139	NCA09	- 1	289697	6251241	Garage	-	-	Р	55	41	-32	-29	55	42	-32	-29	-	-	-		-	-	-
5139	NCA09	2	289697	6251241	Garage	-	-	P	58	44	-32	-29	58	46	-32	-29		-	-	-	-	-	-
5140	NCA09	- 1	289728	6251226	Garage			P	53	39	-32	-29	53	41	-32	-29					-	-	
5141	NCA09	- 1	289721	6251256	Garage			P	59	45	-32	-29	59	46	-32	-29							-
5765	NCA09	- 1	289405	6251049	Residential	55	50	P	64	49	65	54	63	51	65	57	Y	Y	Y	Υ	-	_	Y
5022	NCA10	- 1	287045	6251118	Garage			P	63	58	-32	-29	64	58	-32	-29		·	-				-
5064	NCA10	- 1	287090	6250792	Residential	55	50	P	77	72	76	73	78	72	77	72		-	-		-	_	
5067	NCA10	- 1	287082	6250865	Residential	55	50	D	54	49	56	51	56	49	57	51		v					· ·
7629	NCA10	- 1		6251333	Residential	55	50	P	60	56	-32	-29	62	56	-32	-29	_	-	-	_	_	_	-
7 329	INCA IO		1.000001	ww 1333	rvearJerital	25	50	-	60	- 56	-32	-29	62	26	-52	-29	_			_	_	_	

Predicted operational road traffic noise levels

No mitigation scenario – (triggered receivers only) – Option 1

	,	EA .		Easting			Namo	Address			Perior		a U para	ng (zuz	٥)		ture Des	gn (av.	2)					NO SHE	200000	
				Linking				AUGUSTA COMPANIES COMPANIE					Build			No E										
																								D	N	
.OPW.3	35 NO	CA01	- 1	300378	6250574	Other (Place of Worship)	Nca01.Opw.3964.01	32 - 40 Kosovich Place, Cecil Park 2178	50	50	н	56	57	57	57	58	58	59	58	Y		Y			- 1	Y
1.RES.3			- 1	300913		Residential	Nca01.Res.3969.01	112 - 128 Wallorove Road, Cecil Park 2178														Y			_	Y
																								-	_	- :
11.RES.3			1	300895		Residential		112 - 128 Wallgrove Road, Cecil Park 2178														Y	_	Y	-	Y
3.RES.0			1	296081		Residential	Nca03.Res.0813.01	1143 - 1147 Mamre Road, Kemps Creek 2178		50							40					-	-	-		Y
3.RES.1	2 NO	CA03	- 1	295910	6250592	Residential	Nca03.Res.1272.01	1107 - 1115 Mamre Road, Kemps Creek 2178	55	50	Р	61	49	61	50	59	49	60	51	Y	Y	-	-	-	-	Y
3.RES.4	E NO	CA03	- 1	296544	6249514	Residential	Nca03.Res.4609.01	1239 - 1245 Mamre Road, Kemps Creek 2178	55	50	Р	65	54	66	55	64	54	65	56	Y	Y	Y			- 1	Y
3.RES.4			-	296627	COLOCOT	Residential	Nca03.Res.4610.01	1233 - 1237 Mamre Road, Kemps Creek 2178		50							43							-	_	Y
																								_	-	
3.RES.4			- 1		6249538	Residential	Nca03.Res.4614.01	1258 Mamre Road, Mount Vernon 2178														Y		-	-	Y
3.RES.4	E NO	CA03	1	296972	6249591	Residential	Nca03.Res.4615.01	1242 - 1256 Mamre Road, Mount Vernon 2178	55	50	Р	59	48	61	53	58	48	62	55	Y	Y	Y	Y		- 1	Y
3.RES.4	F NO	2003	- 1	296947	6249619	Residential	Noo03 Res 4616 01	1242 - 1256 Mamre Road Mount Verron 2178	55	50	Р	59	48	61	53	58	49	63	55	Υ	Y	Y	Y		_	Υ
3.RES.4			- 1	296898		Residential	Nca03.Res.4619.01	1234 Mamre Road, Mount Vernon 2178				58												-	_	v
3.RES.4				296629		Residential																		-	-	
			1				Nca03.Res.4685.01	1210-1216 Mamre Road, Mount Vernon 2178		50												Υ		-	-	Y
3.RES.4			- 1	296663		Residential	Nca03.Res.4695.01	1218-1224 Mamre Road, Mount Vernon 2178	55	50	Р	64	53	65	55	63	53	65	56	Y	Y	Y	Y	-		Y
3.RES.4	E NO	CA03	- 1	296744	6249605	Residential	Nca03.Res.4689.01	1236 - 1240 Mamre Road, Mount Vernon 2178	55	50	Р	64	52	65	55	62	53	65	56	Y	Y	Y	Y	-	-	Y
3.RES.4	F NO	CAO3	- 1	296761	6249708	Residential	Nca03.Res.4691.01	1226 - 1232 Mamre Road, Mount Vernon 2178	55	50	Р	61	50	63	54	60	50	63	55	Υ	Y	Y	Y		_	Υ
3.RES.4			-	296750		Residential	Nca03.Res.4692.01	1226 - 1232 Mamre Road, Mount Vernon 2178		50							49							_	_	
																								_	-	Y
3.RES.4			- 1	295481		Residential	Nca03.Res.4693.01	1205 - 1217 Mamre Road, Kemps Creek 2178				63													-	4
3.RES.4	7 NO	CA03	1	296293	6249918	Residential	Nca03.Res.4706.01	1179 - 1189 Mamre Road, Kemps Creek 2178	55	50	Р	62	51	63	53	61	51	62	54	Y	Y	Y	-	- 1	-	Y
RES.4	7 NO	CA03	- 1	295799	6250678	Residential	Nca03.Res.4799.01	1097 - 1099 Mamre Road, Kemps Creek 2178				57													-	Y
RES.4			- 1		6250694	Residential	Noa03 Res 4800 01	1097 - 1099 Mamre Road, Kernos Creek 2178														Y	_			Ý
			-1	295785		Residential	Nca03.Res.4801.01	1097 - 1099 Marrie Road, Kemps Creek 2178																-	_	
3.RES.4			1									55											-	_	-	Y
3.RES.4			1	295829	6250622	Residential	Nca03.Res.4802.01	1101 - 1105 Mamre Road, Kemps Creek 2178				55											-		- 1	Y
RES.4	E NO	CA03	- 1	295890	6250662	Residential	Nca03.Res.4803.01	1101 - 1105 Mamre Road, Kemps Creek 2178	55	50	Р	49	39	56	49	48	39	58	51	Y	Y	-		-	-	Y
3.RES.4			- 1	295895		Residential	Nca03.Res.4804.01	1101 - 1105 Mamre Road, Kemps Creek 2178		50							41								$\overline{}$	v
3.RES.4			- 1	295930		Residential		1107 - 1115 Mamre Road, Kemps Creek 2178															_	_	_	
			1																			-		_	-	Y
3.RES.4			- 1	295923		Residential	Nca03.Res.4805.01	1117 Marrie Road, Kemps Creek 2178				59											-	-		Y
3.RES.4	E NO	CA03	- 1	296000	6250417	Residential	Nca03.Res.4807.01	1127 - 1133 Mamre Road, Kemps Creek 2178	55	50	Р	61	49	61	50	59	49	61	51	Y	Y	-	-	-	-	Y
RES.4	E NO	CAO3	- 1	295012	6250399	Residential	Noof13 Res 4808 01	1127 - 1133 Mamre Road Kernes Creek 2178	55	50	Р	60	48	61	50	58	48	60	51	Υ	Y	-			_	Y
3.RES.4			- 1		6250385	Residential	Nca03.Res.4809.01	1127 - 1133 Mamre Road, Kernos Creek 2178		50							40							-	_	Y
			-																			-	_	-	-	
3.RES.4			- 1	296033		Residential	Nca03.Res.4810.01	1135 - 1141 Mamre Road, Kemps Creek 2178				52										-	-	-	-	Y
3.RES.4	E NO	CA03	1	296047	6250330	Residential	Nca03.Res.4811.01	1135 - 1141 Mamre Road, Kemps Creek 2178	55	50	Р	62	50	63	52	60	50	62	53	Y	Y	-			- 1	Y
3.RES.4	E NO	CA03	- 1	296081	6250241	Residential	Nca03.Res.4812.01	1149 - 1155 Mamre Road, Kemps Creek 2178	55	50	Р	61	49	61	51	59	49	61	52	Y	Y	-	-	-	- 1	Y
3.RES.4			- 1	296116	6250212	Residential	Nca03.Res.4813.01	1149 - 1155 Mamre Road, Kemps Creek 2178														Y	_	-	_	V
3.RES.4			_	296168		Residential	Nca03.Res.4814.01	1157 - 1161 Mamre Road, Kemps Creek 2178															_	_	_	Y
												51											_	_	-	Y
3.RES.4	IS NO	CA03	- 1	296240	6250026	Residential	Nca03.Res.4815.01	1169 - 1177 Mamre Road, Kemps Creek 2178	55	50	Р	63	52	64	53	62	52	63	54	Y	Y	Y			- 1	Y
4.0ED.4	2 NO	CA04	- 1	298897	6249389	Other (Educational)	Nca04.Oed.4272.01	2089 - 2109 Elizabeth Drive, Ceoli Park 2178	50		н	66	63	67	64	66	63	69	66	Y	-	Y	-	-	- 1	Y
4.0ED.4	IS NO	2004	- 1	29RRR2	6249375	Other (Educational)	Nca04.Oed.4273.01	2089 - 2109 Filzaheth Drive, Ceril Park 2178	50	-	н	68	65	69	66	68	65	71	67	Y		Y				Y
4.0ED.4			- 1	298873	6240269	Other (Educational)	Nca04.Oed.4274.01	2089 - 2109 Filzaheth Drive, Ceril Park 2178				63								v	_	v	_	-	_	v
4.0ED.4			_			Other (Educational)	Nca04.Oed.4275.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178														_	_	_	_	v
				298919													70					_		Y	-	Y
4.0ED.4	IZ NO	CA04	1	298883	6249342	Other (Educational)	Nca04.Oed.4276.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178	50	-	Н	73	70	73	70	73	70	74	71		-	-	-	Y	- 1	Y
1.00A.8	C NO	CA04	- 1	296908	6248806	Other (Outdoor Active)	Nca04.Ooa.8012.01	1490 Elizabeth Drive Cecil Park 2178	60		Р	62	55	64	57	62	54	65	58	Y	-	Y	-	-	- 1	Y
1.00P.8	E NO	A04	- 1	297485	6249429	Other (Outdoor Passive)	Nca04.Oop.8013 01	316-318 Mount Vernon Road Mount Vernon 2178				54										-			-	Y
4.RES.0			- 1	299075		Residential	Nca04.Res.0161.01	1183-1185 Elizabeth Drive Cecil Park 2178				54											_	_	_	v
			-			Residential																	-	-	-	
4.RES.0			- 1	296155			Nca04.Res.0219.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178		50												Y		-	-	- 1
RES.0			1	299131		Residential	Nca04.Res.0461.01	1183-1185 Elizabeth Drive Cecil Park 2178		50							52				Y	Y	Y	-		Ÿ
RES.1	1 NO	CA04	- 1	300114	6249951	Residential	Nca04.Res.1180.01	18 Cecil Road, Cecil Park 2178	55	50	P	58	54	63	56	59	55	63	57	Y	-	Y	Y	- 1	- 1	Y
RES.1			1	296034		Residential	Nca04.Res.1484.01	1413 - 1415 Elizabeth Drive. Kemps Creek 2178		50										Y	Y	Y	Y		-	Y
RES.3			4	300245		Residential		1111 - 1141 Elizabeth Drive, Cecil Park 2178																Y	v	Y
			-																						-	-
4.RES.3			- 1	300093		Residential		18 Cecil Road, Cecil Park 2178															Υ	Y	-	Y
RES.3			1	299974		Residential	Nca04.Res.3866.01	28 Cecil Road, Cecil Park 2178	57	52	Р	61	56	64	57	62	57	65	58	Y	Y	Y	Y		- 1	Y
RES.3	E NO	CA04	- 1	299952	6249965	Residential	Nca04.Res.3868.01	30-36 Cecil Road. Cecil Park 2178	57	52	Р	58	54	60	55	59	54	62	56	Y	-	Y		-	-	Y
4.RES.3			- 1	299997		Residential	Nca04.Res.3869.01	38 - 42 Cecil Road, Cecil Park 2178		52							55					Y			$\overline{}$	Y
RES.3			- 1	300182		Residential		20 - 22 Ceril Road, Ceril Park 2178														Y		-	-	
			-									59									-		Υ	₩		ſ
RES.3		CA04	- 1	299712		Residential		99 - 117 Cecil Road, Cecil Park 2178		50							49			Υ	-	_		-	-	Y
RES.3	E NO	CA04	1	299457	6249587	Residential	Nca04.Res.3880.01	1183-1185 Elizabeth Drive Cecil Park 2178	58	53	Р	68	61	69	63	68	61	70	64		Y	Y	Y	Y	Y	Y
4.RES.3	E NO	2004	- 1	299610	6249537	Residential	Nca04.Res.3881.01	1183-1185 Elizabeth Drive Cecil Park 2178														Y		Y	Y	Y
4.RES.3			1	300604		Residential		37 - 73 Wallgrove Road, Ceol Park 2178														Y			_	Y
																								-	-	T
4.RES.3			- 1	300586		Residential		97 - 123 Waligrove Road, Cecil Park 2178				59											Y	-	-	Y
4.RES.4	1 NO	CA04	- 1	299150	6249964	Residential	Nca04.Res.4191.01	43 - 45 Brolen Way, Cecil Park 2178	55	50	Р	54	47	56	50	54	47	58	51	Y	Y	- 1	- 1	1 - T	-	Y
4.RES.4	1 NO	CA04	- 1	299093	6249922	Residential	Nca04.Res.4193.01	47 - 49 Brolen Way, Cecil Park 2178		50							48			Υ				-	-	Y
4.RES.4			- 1	299076		Residential		47 - 49 Brolen Way, Cecil Park 2178				53											_		-	· v
4.RES.4			-1		6249975	Residential																	_	-	-	
								51 - 53 Brolen Way, Cecil Park 2178		50							47				Y		_	-	-	Y
4.RES.4			- 1	299000		Residential		55 - 57 Brolen Way, Cecil Park 2178				51														

14.RES.42	NCA04	- 1	298815	6249956	Residential	Nca04.Res.4224.01	9 - 10 Rigney Close, Cecil Park 2178	55	50	Р	53	47	55	49	53	47	57	51	Y	Υ	-	-	-	-	Y
14.RES.42	NCA04	- 1	298687	6249910	Residential	Nca04.Res.4226.01	5 - 6 Rigney Close, Cecil Park 2178	55	50	P	53	47	55	49	53	48	57	51	Y	Υ	-	-	-	-	Y
14.RES.42	NCA04	- 1	298702	6249890	Residential	Nca04.Res.4227.01	5 - 6 Rigney Close, Cecil Park 2178	55	50	Р	54	48	56	50	55	49	58	52	Y	Υ	-	-	-		Y
14.RES.42	NCA04	- 1	299055	6249703	Residential	Nca04.Res.4264.01	2061 - 2063 Elizabeth Drive, Cecil Park 2178	55	50	P	57	51	59	53	58	51	61	54	Y	Υ	Y	-	-	-	Y
4.RES.42	NCA04	- 1	299138	6249610	Residential	Nca04.Res.4265.01	2055 - 2059 Elizabeth Drive. Cecil Park 2178	55	50	Р	64	58	66	59	65	58	67	60	Y	Υ	Y	-	-	-	Y
4.RES.42	NCA04	- 1	299064	6249625	Residential	Nca04.Res.4266.01	2065 - 2071 Elizabeth Drive, Cecil Park 2178	55	50	Р	59	52	61	54	59	52	62	55	Y	Υ	Y	Y	-	-	Y
4.RES.42		- 1	299103	6249559	Residential	Nca04.Res.4267.01	2065 - 2071 Elizabeth Drive, Cecil Park 2178		50				67							Y	-	-	-	-	Y
4.RES.42	NCA04	- 1	299060	6249501	Residential	Nca04.Res.4268.01	2073 - 2081 Elizabeth Drive. Cecil Park 2178	55	50	Р	64	57	65	58	64	57	66	59		Υ		-			Y
4.RES.42	NCA04	- 1	299019	6249457	Residential	Nca04.Res.4269.01	2073 - 2081 Elizabeth Drive. Cecil Park 2178		50				70					65	-	Y	-	-	Y	-	Y
4.RES.42	NCA04	- 1	298958	6249475	Residential	Nca04.Res.4270.01	2083 - 2087 Elizabeth Drive. Cecil Park 2178		50				64						Y	Υ	Y	Y	-		Y
4.RES.42		- 1		6249311	Residential	Nca04.Res.4278.01	1 - 7 Duff Road, Cecil Park 2178		50			61			69					v			v		v
4.RES.42		- 1		6249398	Residential	Nca04 Res.4279.01	9 - 17 Duff Road, Cecil Park 2178		50				64							•	Y	-	-	-	Y
4.RES.42		- 1		6249457	Residential	Nca04.Res.4280.01	19 - 27 Duff Road, Cecil Park 2178		50				64							Y					Y
4.RES.42		1		6249392	Residential	Nca04 Res.4281.01	29 - 35 Duff Road, Cecil Park 2178		50			53			61				Ÿ	Y	Ÿ	Y	-	-	Ý
4.RES.42		- 1		6249473	Residential	Nca04 Res.4282.01	37 - 45 Duff Road, Cecil Park 2178		50				55							-	-	-			Y
4.RES.42		- 1		6249562	Residential	Nca04 Res. 4285.01	47 - 55 Duff Road, Cecil Park 2178		50				56						Y	-	-	-	_	-	Y
4.RES.42		- 1		6249538	Residential	Nca04.Res.4287.01	20 - 38 Duff Road, Cecil Park 2178		50				64							Y	v	-	-		Y Y
4.RES.42		- 1		6249542	Residential	Nca04.Res.4288.01	20 - 38 Duff Road, Cecil Park 2178		50		60	55			61					Ÿ	Y	-	_	-	Y
4.RES.42		1		6249542	Residential	Nca04 Res. 4288.01 Nca04 Res. 4289.01	20 - 38 Duff Road, Cecil Park 2178 40-46 Duff Road, Cecil Park 2178		50				58							Y	v				Y
4.RES.42		-		6249622	Residential	Nca04 Res.4291.01	48-56 Duff Road, Cardi Park 2178		50				59						Y		·	-	_	-	Y
4.RES.42		1		6249622	Residential	Nca04 Res.4291.01 Nca04 Res.4292.01	48-56 Duff Road, Cecil Park 2178 58 - 76 Duff Road, Cecil Park 2178		50		58				57				Y	· ·	Y	-	-	-	Y
4.RES.42		1		6249243	Residential	Nca04 Res.4295.01	2131 Elizabeth Drive. Cecil Park 2178												Y	7			-	-	Y
4.RES.42		-		6249221	Residential	Nca04 Res.4299.01	2151 Elizabeth Drive, Cecil Park 2178 2169 - 2177 Elizabeth Drive, Cecil Park 2178		50				64							Y	Y	-	_	-	Y
4.RES.43		1		6249221	Residential	Nca04 Res. 4299.01 Nca04 Res. 4300.01	2169 - 2177 Elizabeth Drive, Cecil Park 2178 2131 Elizabeth Drive, Cecil Park 2178		50			56								Y	Y	Y	_	-	Y
															65						Y	-	_	-	
4.RES.43 4.RES.43		1		6249150 6249145	Residential Residential	Nca04.Res.4301.01	2131 Elizabeth Drive, Cecil Park 2178												Y	Y	Y	-	_	-	Y
		1				Nca04.Res.4302.01	2179 Elizabeth Drive, Cecil Park 2178		50				63						Υ	Υ	-	-	_	-	Y
4.RES.43		- 1		6249077	Residential	Nca04.Res.4303.01	2197 - 2201 Elizabeth Drive, Cecil Park 2178		50			50			58			52		Υ	-	-		-	Y
4.RES.43		- 1		6249030	Residential	Nca04.Res.4304.01	2203 - 2211 Elizabeth Drive, Cecil Park 2178												Υ	Υ	-	-	_	-	Y
14.RES.43		- 1		6249034	Residential	Nca04.Res.4308.01	2213 Elizabeth Drive, Cecil Park 2178						59						-	Υ	-	-		-	Y
4.RES.43		- 1		6249150	Residential	Nca04.Res.4310.01			50				61							Υ	-	-	_	-	Y
4.RES.43		- 1		6249158	Residential	Nca04.Res.4311.01			50				57							Υ	-	-		-	Y
14.RES.43		- 1		6249153	Residential	Nca04.Res.4312.01	2219 Elizabeth Drive, Cecil Park 2178		50				62							Υ	-	-		-	Y
4.RES.43		- 1		6249195	Residential	Nca04.Res.4313.01	2219 Elizabeth Drive, Cecil Park 2178		50				60							Υ	-	-		-	Y
14.RES.43		- 1		6249200	Residential	Nca04.Res.4314.01	2197 - 2201 Elizabeth Drive, Cecil Park 2178		50				62							Υ	Υ	-		-	Y
4.RES.43		- 1		6249302	Residential	Nca04.Res.4316.01	2159 Elizabeth Drive, Cecil Park 2178						61							Υ	Υ	-		-	Y
14.RES.43		- 1		6249344	Residential	Nca04.Res.4318.01	2149 Elizabeth Drive, Cecil Park 2178		50			46			54				Υ	Υ	-	-		-	Y
14.RES.43		- 1		6249377	Residential	Nca04.Res.4319.01	2149 Elizabeth Drive, Cecil Park 2178		50				56							Υ	-	-	-	-	Y
14.RES.43		- 1		6249505	Residential	Nca04.Res.4321.01	25 - 27 Warana Road, Cecil Park 2178						55							-	-	-	-		Y
14.RES.43		- 1		6249194	Residential	Nca04.Res.4331.01	2235 Elizabeth Drive, Cecil Park 2178	55	50	Р	59	52			60			54		Υ	-	-	-		Υ
14.RES.43		- 1		6249185	Residential	Nca04.Res.4332.01	2245 - 2249 Elizabeth Drive, Cecil Park 2178		50										Υ		-	-	-		Υ
14.RES.43		- 1		6249165	Residential	Nca04.Res.4333.01	2235 Elizabeth Drive, Cecil Park 2178	55	50	Р	59	51	59	52	59	51	60	54	-	Υ	-	-	-		Υ
14.RES.43		- 1		6249266	Residential	Nca04.Res.4335.01	2251 - 2253 Elizabeth Drive, Cecil Park 2178		50		61				62					Υ	Y	-	-	-	Y
14.RES.43		- 1		6249315	Residential	Nca04.Res.4337.01	2255-22771 Elizabeth Drive, Cecil Park 2178		50										Y			-	-		Y
14.RES.43		1		6249322	Residential	Nca04.Res.4338.01	2255-22771 Elizabeth Drive, Cecil Park 2178	55	50	Р			59							Υ	Υ	-	-	-	Y
4.RES.43		- 1		6249320	Residential	Nca04.Res.4339.01	2265-22771 Elizabeth Drive, Cecil Park 2178	55	50	Р	61	54	62	56	62	54	64	57	Y	Υ	Υ	Y	-	-	Y
14.RES.44		1		6249289	Residential	Nca04.Res.4417.01	1227 - 1229 Elizabeth Drive, Mount Vernon 2178		50											Υ	Υ	-		-	Y
4.RES.44	NCA04	- 1	297856	6249274	Residential	Nca04.Res.4418.01	1231A Elizabeth Drive, Mount Vernon 2178	55	50	Р	58	51	60	53	59	51	61	54	Y	Υ	Y	-	-		Y
4.RES.44		1		6249282	Residential	Nca04.Res.4419.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178	55	50	Р	56	48	58	51	56	48	59	52	Y	Υ	-	-	-	-	Y
4.RES.44	NCA04	- 1	297825	6249131	Residential	Nca04.Res.4421.01	1231 - 1237 Elizabeth Drive, Mount Vernon 2178	55	50	Р	65	58	66	59	66	58	68	61	Y	Υ	Y	-	-		Y
4.RES.44		- 1		6249158	Residential	Nca04.Res.4422.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178	55	50	Р	65	57	66	59	65	57	67	60	Υ	Υ	Υ	Υ	-	-	Υ
14.RES.44	NCA04	- 1	297660	6249122	Residential	Nca04.Res.4423.01	1247 - 1253 Elizabeth Drive, Mount Vernon 2178	55	50	Р	65	57	66	59	65	57	67	60	Y	Υ	Y	Y	-		Y
4.RES.44	NCA04	- 1	297622	6249111	Residential	Nca04.Res.4424.01	1255 - 1261 Elizabeth Drive, Mount Vernon 2178	55	50	Р	63	56	65					59	Y	Υ	Y	Y	-	-	Y
4.RES.44	NCA04	- 1	297536	6249037	Residential	Nca04.Res.4434.01	1263 - 1269 Elizabeth Drive, Mount Vernon 2178												Y	Υ	Υ	Υ	Υ	-	Y
4.RES.44	NCA04	- 1	297451	6249000	Residential	Nca04.Res.4435.01	1271 - 1277 Elizabeth Drive, Mount Vernon 2178		50										Y			-	Y	-	Y
4.RES.44		- 1	297498	6249308	Residential	Nca04.Res.4436.01	320 Mount Vernon Road, Mount Vernon 2178												Y			Y	-	-	Y
4.RES.44		- 1		6249305	Residential		320 Mount Vernon Road, Mount Vernon 2178												Y					-	Y
		_								_	-		-	-	-		-						_	_	-

4.RES.42 NCA04 1 298956 6250082 4.RES.42 NCA04 1 298793 6250007

4.RES.44 NCA04 1 297489 6249415

4.RES.45 NCA04 1 297283 6249469 4.RES.45 NCA04 1 297390 6249406 4.RES.45 NCA04 1 297397 6249375

Residential Nca04.Res.4220.01 11 Rigney Close, Cecil Park 2178 Nca04 Res. 4223.01 9 - 10 Rigney Close, Cecil Park 2178

Residential Residential Residential Nca04,Res.4438.01 316 Mount Vernon Road, Mount Vernon 2178

Noa04-Res.4575.01 309 - 319 Mount Vermon Road, Mount Vermon 2178
Noa04-Res.4577.01 316 Mount Vermon Road, Mount Vermon 2178
Noa04-Res.4578.01 324 Mount Vermon Road, Mount Vermon 2178

Predicted Noise Level (dBA) > 2 dB(A)
At Opening (2025) Future Design (2036) Increase
No Build Build No Build Build D N D N D N D N D N D N Mitigatic

55 50 P 51 45 54 48 52 45 56 49 Y - - - - - Y 55 50 P 52 46 54 48 53 47 56 50 Y - - - - - - Y

55 50 P 58 51 61 54 58 51 63 56 Y Y Y Y - - Y

55 50 P 55 48 60 52 56 48 61 54 Y Y Y Y - - - Y 55 55 50 P 57 49 62 54 46 61 53 Y Y Y Y - - - Y

4.RES.45	NCA04	- 1	297197	6249239	Residential	Nca04.Res.4582.01	340 - 344 Mount Vernon Road, Mount Vernon 2178	55	50	Р	60	51	63	56	59	51	65	57	Y	Υ	Y	Y	-		Y
4.RES.45	NCA04	- 1	297116	6249216	Residential	Nca04.Res.4583.01	346 - 356 Mount Vernon Road, Mount Vernon 2178	55	50	Р	65	54	67	58	64	54	67	59	Y	Υ	Y	Y	Y		Y
4.RES.45	NCA04	- 1	297291	6249014	Residential	Nca04.Res.4584.01	1306 Marrie Road, Mount Vernon 2178	55	50	Р	68	59	70	62	67	59	71	63	Y	Υ	Y	Y	Υ	Y	Y
4.RES.45	NCA04	- 1	297373	6249003	Residential	Nca04.Res.4585.01	1279 Elizabeth Drive, Mount Vernon 2178	55	50	Р	67	60	69	62	68	60	71	64	Y	Υ	Y	Y	Y	Y	Y
4.RES.45	NCA04	- 1	297044	6249262	Residential	Nca04.Res.4588.01	343 Mount Vernon Road, Mount Vernon 2178	55	50	Р	64	53	65	54	63	53	64	55	Y	Υ	Y	Y	-	-	Y
4.RES.45	NCA04	- 1	297218	6249377	Residential	Nca04.Res.4594.01	321 - 333 Mount Vernon Road, Mount Vernon 2178	55	50	Р	56	47	59	51	55	46	60	53	Y	Υ	Y		-		Y
4.RES.45	NCA04	- 1	296960	6249162	Residential	Nca04.Res.4596.01	1285 - 1291 Mamre Road, Kemps Creek 2178						65									Y	Y	Y	Y
4.RES.45	NCA04	- 1	296990	6249123	Residential	Nca04.Res.4598.01	1293A Mamre Road, Kemps Creek 2178						68										Y	Y	Y
4.RES.45	NCA04	- 1	296915	6249201	Residential	Nca04.Res.4599.01	1277 - 1283 Mamre Road, Kemps Creek 2178		50				64										-		Y
4.RES.46			296869		Residential	Nca04.Res.4600.01	1269 - 1275 Mamre Road, Kemps Creek 2178						64										Υ		Y
4.RES.46			296843		Residential	Nca04.Res.4601.01	1269 - 1275 Mamre Road, Kemps Creek 2178						63												Y
4.RES.46			296807		Residential	Nca04 Res.4602.01	1261 - 1267 Mamre Road, Kemps Creek 2178						64										Y		T V
4.RES.46			296757		Residential	Nca04.Res.4603.01	1255-1259 Mamre Road, Kemps Creek 2178						65									Y	_	-	V
4.RES.46			296694		Residential	Nca04 Res.4608.01	1247 Marrie Road, Kemps Creek 2178						63								Y	Y	-	-	Y
																							-	-	Y
4.RES.46			296962		Residential	Nca04.Res.4612.01	1266-1272 Mamre Road, Mount Vernon 2178						65									Y	-	-	Y
4.RES.46			296950		Residential	Nca04.Res.4613.01	1260 - 1264 Mamre Road, Mount Vernon 2178						62									-	-	-	Y
4.RES.46			296695		Residential	Nca04.Res.4695.01	1341 - 1347 Elizabeth Drive, Kemps Creek 2178						68									Y			Y
4.RES.46			296651		Residential	Nca04.Res.4696.01	1349 - 1355 Elizabeth Drive, Kemps Creek 2178						65									Y	Υ	Υ	Y
4.RES.46			296567		Residential	Nca04.Res.4698.01	1357 - 1371 Elizabeth Drive, Kemps Creek 2178		50				69								Y	Y	-		Y
4.RES.47			296628		Residential	Nca04.Res.4701.01	1560 Elizabeth Drive, Cecil Park 2178	55	50	Р	69	62	69	62	68	60	69	63		Υ	-	-	-	-	Y
4.RES.47	NCA04	- 1	296556	6248829	Residential	Nca04.Res.4702.01		55	50	Р	69	62	69	62	68	60	69	63	-	Υ	-	-	-	-	Y
4.RES.55	NCA04	1	296110	6248921	Residential	Nca04.Res.5570.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178	55	50	Р	69	62	69	62	69	61	69	63	Y	Υ	Y	Y	-		Y
4.RES.55	NCA04	- 1	296166	6248967	Residential	Nca04.Res.5571.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178		50				62							Υ	Y	Y			Y
4.RES.55			296133		Residential	Nca04.Res.5572.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178						61							Y	Y	Y			Y
4.RES.55			295876		Residential	Nca04.Res.5575.01	617 Devonshire Road, Kemps Creek 2178						60									-	_		Y
4.RES.55			296032		Residential	Nca04.Res.5576.01	1630 Elizabeth Drive. Kemps Creek 2178						67							Ÿ		_	-	-	Y
4.RES.55			296121		Residential	Nca04.Res.5577.01	1610 Elizabeth Drive, Kemps Creek 2178						68							Y	-	-	-	-	Y
4.RES.55			296121			Nca04.Res.5578.01	1600 Elizabeth Drive, Kemps Creek 2178															_	-	-	Y
				6248715	Residential	Nca04.Res.5579.01	1590 Elizabeth Drive, Kemps Creek 2178 1590 Elizabeth Drive, Kemps Creek 2178						69									Y	-	-	Y
4.RES.55													63										_	-	Y
4.RES.55			296358		Residential	Nca04.Res.5586.01	1572 Elizabeth Drive, Cecil Park 2178						60									Υ	_	-	Y
5.00P.80				6247596			Western Sydney Parklands, Cecil Hills 2171						62								Y	-	-	-	Y
5.00P.80				6247596		Nca05.Oop.8011.01	Western Sydney Parklands, Cecil Hills 2171						62								Y	-	-	-	Y
5.00P.80	NCA05	- 1	298815	6247596	Other (Outdoor Passive)	Nca05.Oop.8011.01	Western Sydney Parklands, Cecil Hills 2171	55		Р	56	50	62	55	57	50	64	57	Y		Y	-	-	-	Y
5.00P.80	NCA05	- 1	298815	6247596	Other (Outdoor Passive)	Nca05.Oop.8011.01	Western Sydney Parklands, Cecil Hills 2171	55	-	Р	56	50	62	55	57	50	64	57	Y		Y	-	-		Y
6.RES.55	NCA06	- 1	295765	6248865	Residential	Nca06.Res.5541.01	1640 Elizabeth Drive, Kemps Creek 2178	55	50	Р	70	62	69	62	71	61	71	64	-	Υ	-	-	-		Y
6.RES.55	NCA06	- 1	295849	6248929	Residential	Nca06.Res.5544.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178	55	50	Р	72	65	72	65	73	64	73	66	Y	Υ	Y	Y	-	-	Y
6.RES.55	NCA06	- 1	295719	6248984	Residential	Nca06.Res.5546.01	51 Salisbury Avenue, Kemps Creek 2178	55	50	Р	66	58	65	58	67	57	67	59	Y	Υ	Y	-	-	-	Y
6.RES.55	NCAGE	- 1	295676	6248977	Residential	Nca06.Res.5547.01	51 Salisbury Avenue, Kemps Creek 2178						69												Y
6.RES.55			295474		Residential	Nca06.Res.5548.01	442-449 Clifton Avenue. Kemps Creek 2178		50				60								-				Y
6.RES.55			295493		Residential	Nca06.Res.5550.01	434-441 Clifton Avenue, Kemps Creek 2178						58									-	-		Y
6.RES.55			295513		Residential	Nca06.Res.5551.01	422-433 Clifton Avenue, Kemps Creek 2178						57								v				Y
6.RES.55			295520		Residential	Nca06.Res.5552.01	410 Clifton Avenue, Kemps Creek 2178						59								Y	-	-	-	Y
6.RES.55			295520		Residential	Noa06 Res 5553.01	395 - 409 Clifton Avenue, Kemps Creek 2178						60									_	-	-	Y
																							-	-	
6.RES.55			295539		Residential	Nca06.Res.5556.01	395 - 409 Clifton Avenue, Kemps Creek 2178						62										-	-	Y
6.RES.55			295825		Residential	Nca06.Res.5559.01	13 - 23 Salisbury Avenue, Kemps Creek 2178						67										Υ	Y	Y
6.RES.55			295795		Residential	Nca06.Res.5560.01	41 - 49 Salisbury Avenue, Kemps Creek 2178						60									Υ	-	-	Y
6.RES.55			295813		Residential	Nca06.Res.5561.01	41 - 49 Salisbury Avenue, Kemps Creek 2178						61									Y			Y
6.RES.55			295808		Residential		33-39 Salisbury Avenue, Kemps Creek 2178						63												Y
6.RES.55				6249316	Residential	Nca06.Res.5564.01	26 - 32 Salisbury Avenue, Kemps Creek 2178		50				60										Υ	Υ	Y
6.RES.55			295882		Residential	Nca06.Res.5566.01	34-42 Salisbury Avenue, Kemps Creek 2178	55	50	Р	52	46	57	50	68	58	69	60	Y	Υ	Y	Y	-	-	Y
6.RES.55	NCA05	- 1	295877	6249155	Residential	Nca06.Res.5567.01	44 - 56 Salisbury Avenue, Kemps Creek 2178	55	50	Р	52	46	56	49	68	58	69	60	Y	Υ	Y	Y		-	Y
6.RES.55	NCA06	- 1	295863	6249087	Residential	Nca06.Res.5568.01	44 - 56 Salisbury Avenue, Kemps Creek 2178						56									Y	-	-	Y
6.RES.55			295844		Residential	Nca06.Res.5569.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178						59									Y			Y
7.RES.04			294243		Residential	Nca07.Res.0478.01	146 Clifton Avenue, Kemps Creek 2178		46				54									Y			Y
7.RES.48			294082		Residential	Nca07.Res.4831.01	146 Clifton Avenue, Kemps Creek 2178						59										-	-	Y
7.RES.48			294703		Residential	Nca07.Res.4833.01	203 - 229 Clifton Avenue, Kemps Creek 2178						63											-	Y
7.RES.48			294703		Residential																				
			294/21				203 - 229 Clifton Avenue, Kemps Creek 2178						59												Y

4.RES.45 NCA04 1 297298 6249340 4.RES.45 NCA04 1 297262 6249288 4.RES.45 NCA04 1 297262 6249288

7.RES.48 NCA07 1 294803 6250117 7.RES.48 NCA07 1 294785 6251132 7.RES.48 NCA07 1 294892 6251157

Residential

Residential Residential Residential Nca04.Res.4579.01 326 - 332 Mount Vernon Road, Mount Vernon 2178 Nca04 Res. 4580.01 334 - 338 Mount Vernon Road, Mount Vernon 2178

Nca07 Res. 4835.01 1541A Elizabeth Drive, Kemps Creek 2178 Nca07 Res. 4837.01 230 - 234 Clifton Avenue, Kemps Creek 2178 Nca07 Res. 4838.01 230 - 234 Clifton Avenue, Kemps Creek 2178

Predicted Noise Level (dBA) > 2 dB(A)
At Opening (2025) Future Design (2036) Increase
No Build Build No Build Build D N D N D N D N D N D N Mitigation

55 50 P 58 49 62 54 58 49 63 56 Y Y Y Y - - Y 55 50 P 57 48 61 53 56 48 63 55 Y Y Y Y - - Y

7.RES.48 NCA07	- 1	295047 6251126	Residential	Nca07.Res.4842.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	P	49	40	56	48	48	40	58	50	Y	-	-	-			Y
7.RES.48 NCA07	- 1	295000 6251091	Residential Residential	Nca07.Res.4843.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	P	52	43	57	50	52	44	59	51	Y	Y	-	-	-	-	Y
7.RES.48 NCA07	- 1	294131 6251211	Residential Residential	Nca07.Res.4844.01	885A Mamre Road, Kemps Creek 2178	55	47	Р	45	37	63	57	46	35	66	58	Y	Y	Y	Y	Y		Y
7.RES.51 NCA07	- 1	291097 6250357	Residential	Nca07.Res.5149.01	Mcgarvie Smith Farm, 1793 - 1951 Elizabeth Drive, Badgerys Creek 2555	55	50	Р	48	39	59	49	49	38	62	50	Y	Y	Y	-			Y
7.RES.51 NCA07	- 1	290701 6250217	Residential	Nca07.Res.5153.01	Unit 15, 1953 Elizabeth Drive, Badgerys Creek 2555			Р			55						Y	Y	_	Y		_	Y
7.RES.51 NCA07	- 1	291419 6250206		Nca07.Res.5167.01	Mcgarvie Smith Farm, 1793 - 1951 Elizabeth Drive, Badgerys Creek 2555		50		52				52			51					v		Y
7.RES.51 NCA07	- 1	293161 6250509		Nca07.Res.5170.01	1669 Elizabeth Drive, Badgerys Creek 2555			P			56									v	_	-	Y
7.RES.60 NCA07	- 1	292227 6251805		Nca07.Res.6026.01	16 Farminodale Court Luddenham 2745		44		43								Y			v			Y
7.RES.60 NCA07	- 1	292378 6251791		Nca07.Res.6027.01	22 Farmingdale Court Luddenham 2745			P			55								-	Y	-	-	Y
7.RES.60 NCA07		292558 6251818		Nca07.Res.6034.01	11 Farmingdale Court Luddenham 2745			P		31									v	·	_	-	·
7.RES.60 NCA07	-	292577 6251861		Nca07.Res.6035.01	11 Fairningdale Court Eudenham 2745															-	_	-	-
9.RES.48 NCA09	-	289904 6251579		Nca09.Res.4882.01	734 Luddenham Road, Luddenham 2745		42	P	41		55 64		42			50	Y			Y	_	-	Y
9.RES.48 NCA09	- 1	289977 6251640			734 Ludderham Road, Ludderham 2745 734 Ludderham Road, Ludderham 2745															Y	_	-	Y
	1			Nca09.Res.4884.01			50		58				58				Y			Y	بنا	-	Y
9.RES.48 NCA09	1	289957 6251717		Nca09.Res.4887.01	710 - 732 Luddenham Road, Luddenham 2745		50			54			68			60				Y	_	-	Y
9.RES.48 NCA09	- 1	290001 6251751		Nca09.Res.4889.01	710 - 732 Luddenham Road, Luddenham 2745			Р			66									Y	_	-	Y
9.RES.49 NCA09	- 1	289706 6251907		Nca09.Res.4916.01	713 - 733 Luddenham Road, Luddenham 2745		50		56								Υ			-	-		Y
9.RES.49 NCA09	1	289282 6251621		Nca09.Res.4918.01	765 Ludderham Road, Ludderham 2745						65									Y	Y		Y
9.RES.51 NCA09	1	289006 6250929		Nca09.Res.5128.01	851 Luddenham Road, Luddenham 2745		50			42			51			52					-	-	Y
9.RES.51 NCA09	1	289085 6250946		Nca09.Res.5129.01	821-849 Luddenham Road, Luddenham 2745	55	50	P	53								Υ	Υ	Y	-	-	-	Y
9.RES.51 NCA09	1	289463 6250776		Nca09.Res.5137.01	812 - 844 Luddenham Road, Luddenham 2745	55	50	P	64	50	64	53	64	51	64	56	Y	Y	Y	-		-	Y
9.RES.57 NCA09	1	289405 6251049	Residential	Nca09.Res.5765.01	777 - 819 Luddenham Road, Luddenham 2745	55	50	Р	64	49	65	54	63	51	65	57	Y	Y	Y	Y		-	Y
RES.50 NCA10	1	287082 6250865	Residential	Nca10.Res.5057.01	2830 - 2844 The Northern Road , Luddenham 2745	55	50	Р	54	49	56	51	56	49	57	51		Y	-	-			Y
.OPW.31 NGA01	2	300378 6250574	Other (Place of Worship)	Nca01.Opw.3964.01	32 - 40 Kosovich Place, Cecil Park 2178			н		58	58	58	59	59	59	59			Y				Y
1.RES.35 NCA01	2	300913 6250280	Residential	Nca01.Res.3969.01	112 - 128 Wallgrove Road, Cecil Park 2178	55	50	Р	68	65	69	66	69	66	71	67	Y	Y	Y	-	Y		Y
3.RES.46 NCA03	2	296644 6249514	Residential	Nca03.Res.4609.01	1239 - 1245 Mamre Road, Kemps Creek 2178			Р			65								Y	Y			Y
RES.46 NCA03	2	297024 6249538		Nca03.Res.4614.01	1258 Mamre Road, Mount Vernon 2178		50		59						63		Y			v			Y
RES.46 NCA03	2	296972 6249591		Nca03.Res.4615.01	1242 - 1256 Mamre Road, Mount Vernon 2178		50		60								Y			Ÿ	_	-	Y
3.RES.46 NCA03	2	296947 6249619		Nca03.Res.4616.01	1242 - 1256 Mamre Road, Mount Vernon 2178			P		49					63					v	_	-	Y
3.RES.46 NCA03	2	296898 6249676		Nca03.Res.4619.01	1234 Marrie Road, Mount Vernon 2178		50		59				58			54	Ÿ			-	_	-	Y
3.RES.46 NCA03	2	296629 6249765		Nca03.Res.4685.01	1210-1216 Marrire Road, Mount Vernon 2178			P			66									v	_	-	·
3.RES.46 NCA03	2	296663 6249737		Nca03.Res.4686.01	1218-1224 Mamre Road, Mount Vernon 2178			P		54					66					Y.	-	-	Y
3.RES.46 NCA03	2	296761 6249708		Nca03.Res.4691.01	1226 - 1232 Mamre Road, Mount Vernon 2178		50		62				61							- V	_	-	V
																			-	-	بنا	-	- 1
3.RES.47 NCA03 3.RES.47 NCA03	2	296293 6249918 295799 6250678		Nca03.Res.4706.01 Nca03.Res.4799.01	1179 - 1189 Mamre Road, Kemps Creek 2178			Р		52									Y	Y	_	-	Y
3.RES.48 NGA03	2				1097 - 1099 Mamre Road, Kemps Creek 2178		50		59								Υ			-	_	-	Y
	2	295890 6250662		Nca03.Res.4803.01	1101 - 1105 Mamre Road, Kemps Creek 2178			Р		41							Υ			-	_	-	Y
3.RES.48 NCA03	2	296116 6250212		Nca03.Res.4813.01	1149 - 1155 Mamre Road, Kemps Creek 2178		50		64				63			55	Υ		Y	Y	_	-	Y
4.RES.11 NCA04	2	300114 6249951		Nca04.Res.1180.01	18 Cecil Road, Cecil Park 2178			Р			63								Y	Y	-	-	Y
4.RES.38 NCA04	2	300245 6249667		Nca04.Res.3864.01	1111 - 1141 Elizabeth Drive, Cecil Park 2178			Р			71								Υ	Y		Υ	Y
4.RES.38 NCA04	2	300093 6249925		Nca04.Res.3865.01	18 Cecil Road, Cecil Park 2178		50			56								Υ			Υ		Y
4.RES.38 NCA04	2	299974 6249868		Nca04.Res.3866.01	28 Cecil Road, Cecil Park 2178			P			64										Y	-	Y
4.RES.38 NCA04	2	299952 6249965		Nca04.Res.3868.01	30-36 Cecil Road, Cecil Park 2178		52		59									Υ		Υ			Y
4.RES.38 NCA04	2	299997 6249999		Nca04.Res.3869.01	38 - 42 Cecil Road, Cecil Park 2178	57	52	P		55			60			57	Υ	Υ	Υ	Y	-	-	Y
4.RES.38 NCA04	2	300182 6250017		Nca04.Res.3871.01	20 - 22 Cecil Road, Cecil Park 2178	55	50	P	59	55	63	57	60	56	64	57	Y		Y	Y		-	Y
4.RES.38 NCA04	2	299712 6250029		Nca04.Res.3876.01	99 - 117 Cecil Road, Cecil Park 2178		50		54														Y
4.RES.35 NCA04	2	300586 6250081		Nca04.Res.3974.01	97 - 123 Wallgrove Road, Cecil Park 2178	56		P	64	60	65	60	65	60	66	61	Y		Y	Y		-	Y
4.RES.41 NCA04	2	299199 6250145	Residential	Nca04.Res.4187.01	35 - 37 Brolen Way, Cecil Park 2178	55	50	P	52	47	54	49	53	48	56	50	Y	-	-	-		-	Y
4.RES.41 NCA04	2	299150 6249964	Residential	Nca04.Res.4191.01	43 - 45 Brolen Way, Cecil Park 2178	55	50	P	54	48	57	50	55	48	59	52	Y	Y	-	-	-	-	Y
4.RES.41 NCA04	2	299076 6249950	Residential	Nca04.Res.4194.01	47 - 49 Brolen Way, Cecil Park 2178	55	50	P	55	48	57	51	55	48	59	52	Y	Y	-	-		-	Y
RES.41 NCA04	2	299033 6249975	Residential	Nca04.Res.4195.01	51 - 53 Brolen Way, Cecil Park 2178			Р			57					52	Y						Y
RES.41 NCA04	2	299000 6250004	Residential	Nca04.Res.4197.01	55 - 57 Brolen Way, Cecil Park 2178			P			55						Y		-	-			Y
4.RES.41 NCA04	2	299058 6250058		Nca04.Res.4198.01	59 - 61 Brolen Way, Cecil Park 2178			P					52			49	Y						Y
4.RES.42 NCA04	2	298866 6250082		Nca04.Res.4220.01	11 Rigney Close, Ceoil Park 2178		50		52				52			50	Ÿ	1	-	-			Y
4.RES.42 NCA04	2	298793 6250007		Nca04 Res.4223.01	9 - 10 Rigney Close, Cecil Park 2178			P		47			54					V	-	-	_	-	v
4.RES.42 NCA04	2	298687 6249910		Nca04 Res.4225.01	5 - 6 Rigney Close, Cecil Park 2178		50		54				55			52	- 1	Y	-	-	_	-	Y
4.RES.42 NCA04	2	298609 6249864		Nca04 Res.4228.01	92 - 106 Duff Road, Cecil Park 2178			P			54						Ý		-	-	_	-	Y
4.RES.42 NCA04	2	299138 6249610		Nca04 Res.4265.01	2055 - 2059 Elizabeth Drive. Cecil Park 2178			P			67								v	-	_	-	Y
4.RES.42 NCA04	2	299103 6249559		Nca04 Res.4267.01	2065 - 2071 Elizabeth Drive, Cardi Park 2178																_	-	Y
								Р			69										-		Y
4.RES.42 NCA04	2	299019 6249457	Residential	Nca04.Res.4269.01	2073 - 2081 Elizabeth Drive, Cecil Park 2178	55	50	Ρ	71	65	72	55	12	ხ5	/3	66	Y		-		Y		Y

Residential Residential Residential

4.RES.42 NCA04 2 299019 6249457 4.RES.42 NCA04 2 299019 6249457 4.RES.42 NCA04 2 298829 6249311 4.RES.42 NCA04 2 298741 6249398

Nca04 Res.4269.01 2073 - 2081 Elizabeth Drive, Cecil Park 2178
Nca04 Res.4278.01 1 - 7 Duff Road, Cecil Park 2178
Nca04 Res.4279.01 9 - 17 Duff Road, Cecil Park 2178

Predicted Noise Level (dBA) > 2 dB(A) Cumulative Project Acc.

At Opening (2026) Future Design (2036) Increase Limit Project Acc. D N D N D N D N D N D N D N Mitigatio

55 50 P 51 41 56 49 50 42 58 50 Y Y - - - - Y 55 50 P 51 40 55 47 50 41 57 49 Y Y - - - Y

								D	N.		D	N	D	N	D	N	D	N		N	D	N		N.	Mitigation
4.RES.42	NCA04	2	298696	6249457	Residential	Nca04.Res.4280.01	19 - 27 Duff Road, Cecil Park 2178	55	50	P	63	57	64	59	63	58	66	60	Y	Y	Y	-	-	-	Y
RES.42	NCA04	2	298579	6249473	Residential	Nca04.Res.4282.01	37 - 45 Duff Road, Cecil Park 2178	55	50	Р	58	53	59	54	58	53	60	54	Y	Y	Y	-	-	-	Y
4.RES.42	NCA04	2	298549	6249562	Residential	Nca04.Res.4285.01	47 - 55 Duff Road, Cecil Park 2178	55	50	Р	56	51	57	52	56	51	58	52	Y	-	-	-	-	-	Y
4.RES.42	NCA04	2	298699	6249566	Residential	Nca04.Res.4289.01	40-46 Duff Road, Cecil Park 2178	55	50	Р	57	51	60	54	58	52	62	55	Y	Y	Y	Y	-	-	Υ
4.RES.42	NCA04	2	298662	6249622	Residential	Nca04.Res.4291.01	48-56 Duff Road, Cecil Park 2178	55	50	Р	60	55	61	56	60	55	62	56	Y	Y	Y	-	-	-	Y
4.RES.42	NCA04	2	298630	6249677	Residential	Nca04 Res. 4292.01	58 - 76 Duff Road, Cecil Park 2178	55	50	Р	59	54	60	55	59	54	61	55	Y	Y	Y	-			Y
4.RES.42	NCA04	2	298539	6249221	Residential	Noo04 Res 4299 01	2169 - 2177 Elizabeth Drive. Ceoil Park 2178				63									Y	Y	Y			Y
4.RES.43		2	298498	6249145	Residential	Noo04 Res 4302 01	2179 Elizabeth Drive. Cecil Park 2178		50		55	48	57	50			58		Y	v	-	-			Y
4.RES.43		2	298334		Residential	Nca04.Res.4308.01	2213 Elizabeth Drive. Cecil Park 2178				60									v	-	-			Y
4.RES.43		2	298298	6249150	Residential	Nca04.Res.4310.01	ZETO ELEMBRITOTTO		50			54									-	-			Y
	NCA04	2	298392		Residential	Nca04.Res.4316.01	2159 Elizabeth Drive. Cecil Park 2178		50				61							Y	Y	-			·
	NCA04	2	298403		Residential	Nca04.Res.4318.01	2149 Elizabeth Drive, Cecil Park 2178		50				58							Y	-	_	_	_	·
4.RES.43		2	298450		Residential	Nca04.Res.4320.01	15 - 20 Warana Road, Cecil Park 2178												Y	-	-	-	_	_	
	NCA04	2	298195		Residential	Nra04 Res 4331 01	2235 Elizabeth Drive. Gecil Park 2178		50		52		54		52		56	49		-	-	-	-	-	Y
					Residential	Nca04.Res.4331.01 Nca04.Res.4335.01	2251 - 2253 Elizabeth Drive, Cecil Park 2178 2251 - 2253 Elizabeth Drive, Cecil Park 2178												Υ		-	-	-	-	Y
	NCA04		298164						50		61		63							Υ	Υ	_	-	-	Y
	NCA04	2	298057		Residential	Nca04.Res.4337.01	2255-22771 Elizabeth Drive, Cecil Park 2178		50				62							Υ	Υ	-	النا	النا	Y
4.RES.44		2	297905		Residential	Nca04.Res.4417.01	1227 - 1229 Elizabeth Drive, Mount Vernon 2178				59		61							Y	Y	Y	استا	-	Y
4.RES.44		2	297856		Residential	Nca04.Res.4418.01	1231A Elizabeth Drive, Mount Vernon 2178		50		59		61				62			Y	Y	Y			Y
	NCA04	2	297742		Residential	Nca04.Res.4422.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178		50		66								Y			Y			Y
4.RES.44		2	297660	6249122	Residential	Nca04.Res.4423.01	1247 - 1253 Elizabeth Drive, Mount Vernon 2178		50		66		67		66				Y	Υ	Υ	Υ	_	_	Y
4.RES.44		2	297622		Residential	Nca04.Res.4424.01	1255 - 1261 Elizabeth Drive, Mount Vernon 2178		50		66				66		68		Y	Υ	Υ	Υ	Υ	-	Υ
4.RES.44		2	297489		Residential	Nca04.Res.4438.01	316 Mount Vernon Road, Mount Vernon 2178	55	50	P	57		61							Y	Y	Y	-	-	Y
4.RES.45	NCA04	2	297298	6249340	Residential	Nca04.Res.4579.01	326 - 332 Mount Vernon Road, Mount Vernon 2178	55	50	Р	59	50	62	55	58	50	64	56	Y	Y	Y	Y	-	-	Y
4.RES.45	NCA04	2	297262	6249288	Residential	Nca04.Res.4580.01	334 - 338 Mount Vernon Road, Mount Vernon 2178	55	50	Р	58	49	62	54	58	49	63	56	Y	Y	Y	Y	-	-	Y
4.RES.45	NCA04	2	297197	6249239	Residential	Nca04 Res.4582.01	340 - 344 Mount Vernon Road, Mount Vernon 2178	55	50	Р	61	53	65	57	61	52	66	59	Y	Y	Y	Y	Y	-	Y
4.RES.45	NCA04	2	297116	6249216	Residential	Nca04.Res.4583.01	346 - 356 Mount Vernon Road, Mount Vernon 2178	55	50	Р	66	56	68	59	65	56	68	60	Y	Y	Y	Y	Y		Y
4 RES 45	NCA04	2	297291	6249014	Residential	Nca04.Res.4584.01	1306 Mamre Road, Mount Vernon 2178		50				71						Y	Y	Y	Y	Y	Y	Y
4.RES.45		2	297373		Residential	Nca04.Res.4585.01	1279 Elizabeth Drive, Mount Vernon 2178		50		69		70							Y	Y	Y	Y	Y	Y
	NCA04	2	297044		Residential	Nca04.Res.4588.01	343 Mount Vernon Road, Mount Vernon 2178		50		66					55			Y	Ÿ	Y	v	_	_	·
	NCA04	2	296960		Residential	Nca04.Res.4596.01	1285 - 1291 Mamre Road, Kemps Creek 2178		50		66		69						Y	Y	Y	v	v	v	v
	NCA04	2		6249123	Residential	Nca04.Res.4598.01	1293A Mamre Road, Kemps Creek 2178		50					62					Ÿ	Y	Y	Y	Ÿ	Ÿ	Y
	NCA04		296915		Residential	Nca04.Res.4599.01	1277 - 1283 Mamre Road, Kernos Creek 2178				64		66							Y		Y	- 1	_	·
4.RES.46		2	296962		Residential	Nca04.Res.4512.01	1266-1272 Mamre Road, Mount Vernon 2178		50		65	54		56					Y	Y	Y	Y	_	_	-
4.RES.46			296950		Residential																	Y	-	-	Y
		2				Nca04.Res.4613.01	1260 - 1264 Mamre Road, Mount Vernon 2178		50			51		54			64		Υ	Υ	Υ	Y	_	_	Y
4.RES.46		2	296695		Residential	Nca04.Res.4695.01	1341 - 1347 Elizabeth Drive, Kemps Creek 2178		50		70		70							Υ	Υ	Y	Y	Y	Y
4.RES.46		2	296651		Residential	Nca04.Res.4696.01	1349 - 1355 Elizabeth Drive, Kemps Creek 2178		50										Υ		Υ	Υ	Υ	Υ	Y
	NCA04	2	296628		Residential	Nca04.Res.4701.01	1560 Elizabeth Drive, Cecil Park 2178		50										Y		_	_	-	-	Y
4.RES.55		2	296032		Residential	Nca04.Res.5576.01	1630 Elizabeth Drive, Kemps Creek 2178		50							60				Y	-	-			Y
4.RES.55		2	296121		Residential	Nca04.Res.5577.01	1610 Elizabeth Drive, Kemps Creek 2178		50		70	62	69	63			70			Y	-	-	-	-	Y
4.RES.55		2	296278		Residential	Nca04.Res.5579.01	1590 Elizabeth Drive, Kemps Creek 2178		50										Y		Y	-	-	-	Υ
4.RES.55		2		6248650	Residential	Nca04.Res.5586.01	1572 Elizabeth Drive, Cecil Park 2178		50		60		62							Y	Y	Y			Y
5.RES.55		2	295849		Residential	Nca06.Res.5544.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178	55	50	P	74	67	74	67	74	66	74	68	Y	Y	Y	Y	-	-	Y
5.RES.55		2	295719		Residential	Nca06.Res.5546.01	51 Salisbury Avenue, Kemps Creek 2178	55	50	Р		60		60			69		Y	Υ	Υ	-		-	Y
5.RES.55	NCA05	2	295474	6249169	Residential	Nca06.Res.5548.01	442-449 Clifton Avenue, Kemps Creek 2178	55	50	P	62	53	62	54	62	53	63	55	Y	Y	Y	-	-	-	Y
RES.55	NCA06	2	295513	6249375	Residential	Nca06.Res.5551.01	422-433 Clifton Avenue, Kemps Creek 2178	55	50	Р	54	45	60	53	54	45	62	54	Y	Y	Y	-	-	-	Y
5.RES.55	NCA06	2	295517	6249549	Residential	Nca06.Res.5553.01	395 - 409 Clifton Avenue, Kemps Creek 2178	55	50	Р	53		61				63			Y	Y	Y	-	-	Y
RES.55	NCA06	2	295795	6249152	Residential	Nca06.Res.5560.01	41 - 49 Salisbury Avenue, Kemps Creek 2178		50		58		62							Y	Y	Υ			Y
5.RES.55	NCA06	2	295808	6249269	Residential	Nca06.Res.5563.01	33-39 Salisbury Avenue, Kemps Creek 2178	55	50	Р	57		64				71			Y	Y	Y	Y	-	Y
5.RES.55	NCA06	2	295882	6249209	Residential	Nca06.Res.5566.01	34-42 Salisbury Avenue, Kemps Creek 2178		50		54	47		51			70			Y	Y	Y	Y		Y
	NCA06	2	295844	6249053	Residential	Nca06.Res.5569.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178		50				61							Y	Y	Y			Y
	NCA07	2	294082		Residential	Nca07.Res.4831.01	146 Clifton Avenue, Kemps Creek 2178		45		44	33	59	52			62		Y	Y	Y	Y			v
	NCA07	2	294703		Residential	Nca07.Res.4833.01	203 - 229 Clifton Avenue. Kemos Creek 2178				49								Y		Y	Y	v	v	Y
	NCA07	2	294703		Residential	Nca07.Res.4834.01	203 - 229 Ciliton Avenue, Kemps Creek 2178				48		60							Y		Y			Y
	NCA07	2		6251017	Residential	Nca07.Res.4841.01	235 - 225 Cilifon Avenue, Kemps Creek 2178		50		52			50						Y	-	-	-	-	Y
	NCA07	2	295000	6251091	Residential	Nca07.Res.4843.01					53		58						Y	Y	Y	_	-	-	Y
					Residential Residential		235 - 245 Clifton Avenue, Kemps Creek 2178		50												Y	-	_	_	T
		2	290701			Nca07.Res.5153.01	Unit 15, 1953 Elizabeth Drive, Badgerys Creek 2555		50		49			48			58		Y	Y	-	-	-	-	- 1
	NCA07	2	293161		Residential	Nca07.Res.5170.01	1669 Elizabeth Drive, Badgerys Creek 2555				42										Υ	Υ	-	-	Y
9.RES.48		2	289977		Residential	Nca09.Res.4884.01	734 Luddenham Road, Luddenham 2745				62										Υ	Y	_	_	Y
9.RES.48		2		6251717	Residential	Nca09.Res.4887.01	710 - 732 Luddenham Road, Luddenham 2745		50				70				69			Y	Y	Y	-	-	Y
9.RES.49		2	289706	6251907	Residential	Nca09.Res.4916.01	713 - 733 Luddenham Road, Luddenham 2745				57								Y			Y			Y
	NCA09	2	289085	6250946	Residential	Nca09.Res.5129.01	821-849 Luddenham Road, Luddenham 2745	5.5	50	D	5.7	44	61	53	57	45	62	55	Y	Y	Y	Y			

NCG Criteria
Period
A Opening (00%) Fauuro Design (00%) - Fauuro D

Predicted operational road traffic noise levels

No mitigation scenario – (all receivers) – Option 2

1882 1							NOG C	ritoria			At Openis	Predi 1g (2026	cted Nois	e Leve	i (dBA) Future De	ılgn (203	s)	> 2 t	iB(A)	Cumi	dative mit	Pro	ject Acute	Eligible for
10										D	Build N	D	N N	D D	N	0	N N							ation of Mitigatio
Section Property	3872	NCA01	1	300304	6250295	Residential	55	50	Р	56	53	57	53	58	54	59	54	-	-	-	-	-	-	n -
100 100	3934	NCA01	1	300785	6250820	Residential	59	54	P	629	64	69	64	70	64	70	65	-	- 1	-	-	-		-
100 100	3937	NCA01	1	300669	6250546	Residential		54	P	64	60	64	60	65	61	65	61		-			-	- 1	
March Marc			1				59 58		P		62 56			60	57	61	57	-	-	-	-	-		-
March Marc	3939 3942	NCA01 NCA01	2	300623 300540	6250872 6250882	Residential Residential	58 58	53 53	P	59	57 56	60 59	57 56	62		61	58 57	-	-	-	-	-	- 1	-
100 100	3943	NCA01	1 2		6250875	Residential	58 58		P	59 60	56	59 60	56 57			61	57	-	-	-	-	-	- 1	-
March Marc	3945	NCA01	1 2	300436	6250877	Residential	57 57	52 52	P	59	56	59	56	60	57 57	60	57	-	-	-	-	-	- 1	-
100 100		NCA01	1 2	300379	6250886	Residential	57	52	P	57	54		54	58	55	59	55	-	-	-	-	-	-	-
150 150	3947	NCA01	î	300399	6250841	Residential	57	52	P	57	54	57	54	58	55	59	55		-	-	-	-	- 1	
March Marc	3963	NCA01	2	300532	6250555	Residential	58	53	Р	61	58	61		62	50	63	59	-	-	-			- 1	-
March Marc	3964	NCA01	2	300378	6250574	Other (Place of Worship)	50	50	н	57	58	58	58	59	59	60	59	Y	-	Y	-	-		Y
100 100	3969	NCA01	1	300913	6250280	Residential	55	52 50	P	61	59	64	61	63	59	68	62	Y	Y	Y	-	-	- 1	Y
100 100	3970	NCA01	1	300895	6250280	Residential	55	50	P	68	65	70	67	69	66	72	67	Y		Y	-		- 1	Y
March Marc	3973	NCA01	1	300533	6250459	Residential	58 58		P	62	59		59	63	60	63	60	-		-	-		-	-
March Marc	0539 0546		1			Residential Residential	57		P	51 59	49 57	52 59	49 57	53 61		53 61	50 58	-	-	-	-	-	- 1	-
110 C.C. 3 Single C.C. 5 Single C.C. 5 Single Single	0583	NCA02	1	300461	6248445	Residential	50	54	P	52	49	52	49	54	50	54	50	-	-	-	-	-	- 1	-
1100 Col. 2 2002 2004 Col. 2 2 2 2 2 2 2 2 2			2	300286	6248254	Residential	60	55	P						55		56	-	-	-	-	-	- :	
150 150	1138	NCA02	1	300512	6248434	Residential Residential	58	53	P	50	48	50	48	52		52	49	Ė						
150 150	1521	NCA02	1 2	300298	6248448	Residential	60	55	P	59	56	59	57	60	57	61	58					-		
150 150	1539	NCA02	1	300608	6249131	Residential	55	50	P	58	53	58	52	60	54	59		- 1	-	-	-	- 1	- 1	-
Mathematics	1540	NCA02	1	300311	6248436		60	55	P	54	52	54	52	55		56			1					
Section Column	1541	NCA02	1	300330	6248425	Residential	60	55 55	P	53	51	53	51			55	52	-	-	-	-	-	- 1	-
150 150			2			Residential	60	55 55	P						57	57 61	54 58		-	-	-	- 1	- 1	
Mathematics	1542 1543	NCA02 NCA02	2	300380 300353	6248463 6248413		60	55 55	P	59 55	56 53	59 55	57 53	60 56	58 54	61 57	58 54	-	-	-	-	-	- 1	-
Mathematics 1	1543	NCA02	2	300353	6248413	Residential Residential	60	55	P	56	53	56	54	57 54	55 52	58 55	55 52	-	-	-	-	-	- 1	-
March Marc	1544	NCA02	2	300373	6248407	Residential	60	55	P	56	54		54	58	55	58	55	-	-	-	-	-	-	-
March Marc	1545	NCA02	2	300434	6248448	Residential	60	55	P	56	54	57		58	55	58	56		-	-		-	- 1	
Section Control Cont	1546	NCA02	2	300425	6248430	Residential	60	55	P	56	54	57	55	58	55	59	56	÷	-	-	-	-		
Mathematics	1547	NCA02	2	300423	6248407	Residential	60	55	P	56	54	57	55	58		58	56	-	-	-	-	-	- 1	
March Marc	1548 1548	NCA02 NCA02	2	300440 300440	6248364 6248364	Residential Residential	60	55 55	P	49 51	46 48	50 51	46 48	51 53	47	51 53	47	-	-	-	-	-	- 1	-
100 100	1549	NCA02	1 2	300404	6248374	Residential	60	55 55	P	53 55	51 53	55	53	55	54		54	-	-	-	-	-		-
150 150	1550 1550	NCA02 NCA02	1 2	300420 300420	6248366 6248366	Residential Residential	60	55 55	P	51 53	49 51	53	49 51	53 54	50 52	53 55	50 52	-	-	-	-	-	- 1	-
150 150	1552	NCA02	1 2	300298 300298	6248390 6248390	Residential Residential	60	55	P		56 57	58 50	58 57		57 58	60		-	-	-	-	-	- 1	-
150 150	1553	NCA02	1 2	300321	6248373	Residential	60	55	P	54	52	54	52	56	53	56		-	-	-	-	-	-	-
1985 1985	1554	NCA02	1	300337	6248356	Residential	60	55	P	52	50	52	50	54	51	54			-	-		-	- 1	
100 K.Col. 2 300-34 Cell-100 Resident 10 50 5			1	300288		Residential	60	55	P					60	57	60	57	÷	-	-	-	-		
100	1557	NCA02	1	300284	6248389 6248349	Residential	60	55	P		55	58	56	59	57		57	-	-	-	-	-	- 1	
150 150	1559	NCA02	1	300273	6248328	Residential Residential	60	55 55	P	58 58	56 56	58	56	60	57	60	57	-	-	-	-	-	- 1	-
100 100	1559 1560	NCA02 NCA02	1		6248328		60	55 55	P		56 49	58 51	49		57 50		57 50	-	-	-	-	-		-
100 100	1580	NCA02 NCA02	2	300305	6248320 6248311	Residential Residential	60	55 55	P	53 50	48	54 50	51	52	49	55 52	49	-	-	-	-	-	- 1	-
150 150 2 2 2 2 2 2 2 2 2	1561	NCA02 NCA02	2	300322 300340	6248311	Residential Residential	60	55 55	P	53	50 48	53 51	51 49	54 52	52 49	55 53	52 50	- 1	- 1	-	-	- 1	- :	-
1906 K. Col. 2 20090 Schill Resident 60 60 7 10 10 10 10 10 10 10	1582	NCA02	2	300340	6248300 6248391	Residential	60	55	P	53	51	53 51	51	55	52	55	52	-	-	-	-	-	- :	
100 100	1563	NCA02	2	300359	6248291	Residential Residential		55	P	53	51	53	51	55	52	55	52	Ė						
1906 K. 2 2007 Cel. 2 2007 Cel. 2 2 2 2 2 2 2 2 2	1584		2	300354	6248349	Residential	60	55	P	53	51			55	52	55	52	Ė						
100 100	1585	NCA02	2	300371	6248337	Residential	60	55	P	53	50	53	51	54	51	55			-			-		
100 100	1587	NCA02		300408	6248319		60	55	P	51	49		50	53	50	53	50		1					
100 100	1568	NCA02	1	300377	6248280	Residential Residential	60	55 55	P	51	50 48	53 51	51 48	52	49	55 52	49	-	-	-	-	-	- 1	
1906 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 1907 190	1588 1589	NCA02 NCA02	2	300377 300394	6248280 6248271	Residential Residential	60	55 55	P	49	50 46	53 49	51 47	51	52 47	55 51	47		-	-	-	- 1	- 1	
100 100			2	300394 300411		Residential	60	55 55	P	51 48			48	52 49	49		49			-				
150 150 2 3 3 5 5 5 5 5 5 5 5	1572	NCA02	2	300411	6248314	Residential	60	55 55	P	51	48 50			52 54	49	54	49	-	- 1	-	-	-	- 1	
130 150	1573	NCA02	1 2	300432	6248268	Residential Residential	60	55	P	50	47	50	47	51	48	52	48	-	-	-	-	-	- :	
100 KG20 1 20044 20143 1 20044 20143 1 20143 1 20144	1575	NCA02	1 2	300447	6248260	Residential	58	55	P	46	43	47	44			48		Ė						
157 1562 1 20013 15499 Resident 16 15 17 15 15 17 15 17 17	1576	NCA02	1	300449	6248313	Residential	60	55	P	52	50	52	50		51	54			-			-		
150 150	1577	NCA02	1	300470	6248269	Residential	60	55	P	49	46	49	46	50	47	51	47		1					
150 KASU 2 30641 64450 Resident 60 50 8 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 50 50 50 50 50 50 50 50 50 50 50 50			1			Residential		55 55	P	50				52	49		49	-	-	-	-	-	- 1	
150 KASU 2 30641 64450 Resident 60 50 8 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 40 50 50 50 50 50 50 50 50 50 50 50 50 50	1578 1579	NCA02 NCA02	2		6248313 6248358	Residential Residential	60	55 55	P		49 45	52 48	45	49	46	54 50	46		-	-	-	- 1	- 1	
1950 KAC2 2 30(2) C44200 Residential (8) 15 19 19 19 19 19 19 19	1579 1580	NCA02 NCA02	2	300471 300269	6248358 6248290	Residential Residential	60	55 55	P	50 57	47 55	50 57	47 55	59	56	52 59	56			-				
150 KAC2 1 20026 CMU29 Resident 60 65 7 5 50 7 6 7 6 7 7 7 7 7 7	1580	NCA02	2	300269	6248290	Residential	60	55 55	P	58	55	58	56	59	56 56	60	57 58	-	- 1	-	-	-	- 1	
1583 NCA02 2 500294 6048276 Residential 60 55 P 55 53 55 53 57 54 57 54	1582	NCA02	1 2	300256	6248258		60	55	P	57		57	55 56		58	59	56	-	-	-	-	-	- :	
1594 N.CAG2 1 300311 6042094 Residential 60 55 P 52 50 52 50 53 51 54 51	1583	NCA02	1 2	300294	6248276	Residential Residential	60	55	P	53	51	53	51	55	52	55	52	Ė						
Sept. McArin 1 200325 (2-04256 Residential 60 55 P 51 40 51 40 53 50 53 55	1584	NCA02	1 2	300311	6248264	Residential	60	55	P	52	50	52	50	53	51	54	51	Ė						
	1585	NCA02	1	300325	6248258		60	55	P	51	49	51	49	53	50	53	50							

										At Openi	Pred ing (2026	ched Nois	P	(dBA) uture De	sign (203	5)		B(A)		dative			for
10										fulld		ild	No t	Suild		illd							Consider ation of
																							Mitigatio
1585	NCA02	2	300325	6248258 6248245	Residential	60	55 55	Р	53 51	51	53 51	51 49	55 53	52 50	55 53	52 50	-	-	-	-	-	-	-
	NCA02 NCA02	2	300345	6248245	Residential	60	55	P	53	49 50	53	51	54	52	53	52	- 1	- 1	-	-	-	- 1	
1587	NCA02 NCA02	1 2	300286 300286	6248242 6248242	Residential Residential	60	55 55	P	52 56	50 54	52 58	50 54	54 57	51 55	54 58	51 55	-	-	-	-	-		-
1588	NCA02	1	300301	6248230	Residential	60	55	P	50	47	50	48	52	49	52	49			-			- 1	
	NCA02 NCA02	2	300301 300318	6248230 6248219	Residential Residential	60	55	P	54 51	51 49	54 51	52 49	55 53	53	58 53	53	-	-	-	-	-	-	-
		2		6248219	Residential	60	55	Р	54		54	52	56	53	56	53			-	-		- 1	
1590	NCA02 NCA02	1 2	300333 300333	6248212 6248212	Residential Residential	60	55	P	51 53	49 51	51 54	49 51	53	50 52	53 55	50 52		-	-	-	-		
1591	NCA02	1		6248200	Residential	60	55	Р	50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
1592	NCA02 NCA02	1	300351 300359	6248200 6248234	Residential Residential	60	55	P	53 51	51 49	54 51	51 49	55	52 50	55 53	52 50	-	-	-	-	-		
1592	NCA02 NCA02	2	300359 300376	6248234 6248226	Residential Residential	60	55	Р	53 51	51 48	53 51	51 49	55 52	52 50	55 53	52 50	-	-	-	-	-	-	-
1593	NCA02 NCA02	2	300376	6248226	Residental Residental	60	55	P	53	48 50	51 53	49 51	52 54	52	53	52	-	-	-	-	-	- 1	-
	NCA02 NCA02	1	300368	6248191 6248184	Residential	60 60	55	Р	51 51	48 48	51 51	49 48	52	50 49	53	50	-	-	-	-	-	-	-
1595	NCA02	2	300393 300393	6248184	Residential Residential	60	55	P	53	51	53	51	55	52	55	49 52			-			- 1	
1596	NCA02 NCA02	1	300381 300397	6248181 6248214	Residential Residential	60	55	P	51 51	49 49	51 51	49 49	53	50 50	53 53	50 50	-	-	-	-	-	-	-
		2	300397		Residential	60	55	Р	53	50	53	51	54	51	55	52			-	-		- 1	
1598	NCA02 NCA02	1 2	300417	6248212 6248212	Residential Residential	60	55	P	51 53	48 50	51 53	48 50	52 54	49 51	52 55	49 51		-	-	-	-		-
1599	NCA02	1	300409	6248174	Residential	60	55	Р	49	47	50	47	51	48	51	48	-	-	-	-	-	-	-
1599	NCA02 NCA02	2	300409 300429	6248174 6248174	Residential Residential	60	55	P	52 51	49 49	52 51	49 49	53 52	50	54 53	50	- 1	- 1	-	-	-		
		2		6248174		60	55	Р	53	51	53	51	54	52	55	52	-	-	-	-	-	-	-
1601	NCA02 NCA02	2	300448 300448	6248177 6248177	Residential Residential	60	55	P	51 53	48 50	51 53	49 51	53	49 52	53	49 52	- 1	- 1	-	-	-	- 1	
	NCA02 NCA02	1		6248211 6248219	Residential	60	55	P	52 51	49	52 51	49	53	50	53	50	-	-	-	-	-	-	-
		2	300458 300458	6248219	Residential Residential	60	55 55	P	52	50	52	50	53 54	51	53 54	50 51							
1604	NCA02	1	300474	6248221	Residential	60	55	P	50	47	50	47	51	48	51	48	-	-	-	-	-	-	-
1605	NCA02 NCA02	2	300470 300470	6248182 6248182	Residential Residential	60	55	P	51 53	48 50	51 53	49 50	52 54	50 51	53 54	50 51							
1606	NCA02	1 2	300488	6248191		60	55	P	50		50	48	51 54	48	52	48	-	-	-	-	-	-	-
1606	NCA02 NCA02	1	300488 300483	6248191 6248409	Residential Residential	60 50	55	P	52 50	50 47	52 50	50 47	54	51 48	54	51 48					-	- 1	
1607	NCA02	2	300483	6248409	Residential	50	54	P	51	48	51	48	52	49	53 51	50 48	-	-	-	-	-	-	-
1608	NCA02 NCA02	2	300477 300477	6248388 6248388	Residential Residential	59	54 54	P	50 51	49	50 51	49	51 53	48 50	51 53	48 50 46					-	- 1	
1609	NCA02	- 1	300533	6248429	Residential	57	52	Р	48	45	48	45	49	46	49	46	-	-	-	-	-	-	-
1610	NCA02 NCA02	1	300533 300506	6248429 6248424	Residential Residential	57 58	52 53	P	49 50	47 48	49 51	47 48	51 52	48 49	51 52	48 49	- 1	- 1	-	-	-	- 1	
		2		6248424	Residential	58	53	Р	51		52	49 47	53	50	53		-	-	-	-	-	-	-
	NCA02 NCA02	2	300525 300525	6248457 6248457	Residential Residential	57	52	P	50 51	47 48	50 51	48	51	48 50	52	48 50	- 1	- 1	-	-	-	- 1	
1612	NCA02 NCA02	- 1	300518 300518	6248495 6248495	Residential Residential	57 57	52	Р	50	48	50 51	48	52	49 50	52 53	49 50	-	-	-	-	-	-	-
1613	NCA02	1		6248517	Residential	57	52	P	51 49	49	49	49 47	53	48	53	48	- 1	- 1	-	-	-	- 1	
1613	NCA02	2	300510	6248517	Residential	57	52	Р	51	49	51	49	53	50	53	50	-	-	-	-	-	-	-
	NCA02 NCA02	1 2	300505 300505	6248537 6248537	Residential Residential	57 57	52	P	50 51	47 48	50 51	48 49	51 52	48 49	52 53	49 50	- 1	- 1	-	-	-		
		1	300491	6248564	Residential	56	51	Р	50	48		48	52	49	52	49	-	-	-	-	-	-	-
1615	NCA02 NCA02	2	300491 300525	6248564 6248202	Residential Residential	56 60	51	P	51 49	48 47	51 49	48 47	53	49 48	53 51	49 48	- 1	- 1	-	-	-		-
1616	NCA02 NCA02	2	300525 300518	6248202 6248222	Residential Residential	60	55	Р	51	40	51	49 47	53	50	53	50 48	-	-	-	-	-	-	-
1617	NCA02 NCA02	1 2		6248222 6248222	Residential Residential	60	55	P	49 51	47	49 51	49	51 52	48 50	51 53	48	- 1	- 1	-	-	-		
1618	NCA02	1	300512	6248241	Residential	60	55	Р	49	47	50	47	51	48	51	50 48	-	-	-	-	-	-	-
1618	NCA02 NCA02	2	300512 300511	6248241 6248264	Residential Residential	60	55	P	51 49	49 47	51 50	49 47	52 51	50 48	53 51	50 48	- 1	- 1	-	-	-		
		2	300511	6248264	Residential	60	55	Р	51	49	51	49	52	50	53	50	-	-	-	-	-	-	-
1620	NCA02 NCA02	1 2	300513 300513	6248287 6248287	Residential Residential	60	55	P	50 51	48 49	50 51	48 49	52 52	49 50	52 53	49 50	- 1	- 1	-	-	-		
1621	NCA02	1	300511	6248307	Residential	60	55	Р	50	47	50	48	51	48	52	49	-	-	-	-	-	-	-
1621	NCA02 NCA02	2	300511	6248307	Residential Residential	60	55	P	51 50	49	51 50	49	53	50 49	53 52	50 49	- 1	- 1	-	-	-		
1622	NCA02	2	300514 300514	6248329	Residential	60	55	Р	51	48	51	49	53	50	53	49	-	-	-	-	-	-	-
1623	NCA02 NCA02	1 2	300519 300519	6248350 6248350	Residential Residential	50 50	54 54	P	49 50	46 48	49 51	47 48	50 52	47 49	51 52	48 49	- 1	- 1	-	-	-		
		1	300523	6248373		50	54	Р	49	47	49	47	51	48	51	48	-	-	-	-	-		-
	NCA02 NCA02	1	300523 300557	6248373 6248202	Residential Residential	59 60	54 55	P	50 49	47 47	50 49	48 47	52 51	49 48	52 51	49 48	-	-	-	-	-	- 1	
1625	NCA02	2	300557	6248202	Residential	60	55	Р	51	49	51	49	53	50	53	50	-	-	-	-	-		-
		2		6248226 6248226		60	55 55	P	48 50	46	48 50	46 48	50 52	49	50 52	47 49	-	-	-	-	-	- 1	
1627	NCA02 NCA02 NCA02	1 0	300552 300547 300547	6248226 6248245 6248245	Residential Residential	60	55	P	48	45 47	50 48 50	45 48	50	46 48	50 52	49 46 48	-	-	-	-	-	-	-
1628	NCA02	1	300549	6248267	Residential Residential	60	55 55	P	49	46	49	47	50	47	51	47					-	- 1	
		2	300549	6248267	Residential	60	55	P	50	47	50	48	51	49	52	49	-	-	-	-	-	-	-
	NCA02 NCA02	2	300549 300549	6248290 6248290	Residential Residential	50	54 54	P	48 50	46 47	49 50	46 47	50 52	47 48	50 52	48					-	- 1	
1630	NCA02	1 2	300553	6248308	Residential	50	54	P	49	46	49	46	50 52	47	51	47	-	-	-	-	-		
1631	NCA02 NCA02 NCA02	1	300553 300554 300554	6248308 6248328	Residential Residential	50 50	54	P	50 48	48 45 47	50 48	48 46	49	49 46	52 50	49 47						- 1	
1631	NCA02 NCA02	2	300554 300552	6248328 6248349	Residential	50	54 54	P	50 47	47	50 47	48	51 49	48 46	52 49	49	-	-	-	-	-		
1632	NCA02	2	300552	6248349	Residential Residential	59	54	P	49	47	49	47	51	48	51	48						- 1	
	NCA02 NCA02	1 2	300562 300562	6248371 6248371	Residential Residential	58 58	53	P	48 49	45 46	48 49	45 46	49 51	46 47	50 51	46 47	-	-	-	-	-		
1634	NCA02	1	300545	6248387	Residential	58	53	P	48	45	48	46	50	46	50	47						- 1	
1634 1635	NCA02 NCA02	2	300545 300522	6248387 6248594	Residential Residential	58 56	53 51	P	50 51	47 48	50 51	47 48	51 52	48 49	52 53	48 49	-	-	-	-	-		
1635	NCA02	2	300522	6248594	Residential	56	51	P	52	48 49 47	52	48 49 47	53	50	54	50						- 1	
1636		1 2				58 58	51	P	49 51	47 48	50 51	47	51 52	48 50	52 53	48	-	-	-	-	-		
1636	NCA02 NCA02	1	300533 300544	6248579 6248557	Residential Residential	57	52	P	49	46	49	47	50	47	51	50 48						- 1	
1637	NCA02 NCA02	2	300544 300550	6248557 6248535	Residential	57 57	52	P	50 49	48 47	50 49	48 47	52	49 48	52 51	49 48	-	-	-	-	-		
1638	NCA02	2	300550	6248535	Residential Residential	57	52	P	50	48	50	48	52	49	51	49						- 1	
1639	NCA02 NCA02	1 2	300557 300557	6248517 6248517	Residential Residential	57 57	52 52	P	49 50	47 48	49 51	47 48	51 52	48 49	51 52	48 49	-	-	-	-	-		
1640	NCA02	1	300572	6248539	Residential	57	52	P	49	46	49	46	50	47	51	47						- 1	
1640	NCA02	2		6248539	Residential	57	52	P	51 51	48 48	51 52	48 48	52	49 49	53	49	-	-	-	-	-		
1641 1641	NCA02 NCA02	2	300596 300598	6248548 6248548	Residential Residential	57	52	P	52	49	52	49	54	50	54	50						- 1	
1642	NCA02 NCA02	1 2	300620 300620	6248543 6248543	Residential Residential	57 57	52	P	51 52	48 49	51 52	48 49	52	49 50	53 54	49 50	-	-	-	-	-		
1643	NCA02	1	300638	6248531	Residential	57	52	P	49	47	49	47	53 51	48	51	48						- 1	
1643	NCA02 NCA02	2	300638 300627	6248531 6248426	Residential Residential	57 58	52	P	50 50	48 47	50 50	48 47	52 51	49 48	52 52	49 48	-	-	-	-	-		
	NCA02 NCA02	2	300627	6248426 6248426	Residential Residential	58	53	P	51	48	50	49	53	50	53	50						- 1	
					_																		

										At Openi	Pred ing (2026	cted Not	e Level	(dBA) uture De	nign (202	(5)		IB(A)		dative			for
										Build		riid		Suild		alid							Consider ation of
																							Mitigatio
1645	NCA02 NCA02	1 0	300584	6248412 6248412	Residential	58 58	53 53	P	49 50	47 47	49 50	47 48	50 51	48 48	51 52	48 48	-	-	-	-	-	-	-
1646	NCA02	1	300502	6248416	Residential Residential	58	53	P	49		49	47	51	48	51	47	-	-	-	-	-	- 1	
1646	NCA02 NCA02	2	300602 300576	6248416 6248441	Residential Residential	58 57	53 52	P	51 50	48	51 50	48 48	52 51	49 48	52 52	49 48	-	-	-	-	-	-	-
1647	NCA02	2	300576	6248441	Residential	57	52	Р	51	48	51	49	52	50	53	50			-	-		- 1	
1648 1648	NCA02 NCA02	1 2	300620 300620	6248447 6248447	Residential Residential	58 58	53	P	50 51	48 49	51 51	48 49	52	49 50	52	49 50		-	-	-	- 1	- 1	-
		1		6248466	Residential	58	53	Р	50	48	50	48	52	49	52	49	-	-	-	-	-	-	-
1649 1650	NCA02 NCA02	1	300518 300574	6248466 6248458	Residential Residential	58 57	53	P	51 50	49 48	51 50	49 48	52	50 49	53 52	50 49	-	-	-	-	-		
1650	NCA02	2	300574	6248458 6248477	Residential	57	52	Р	51	48	51	48 47	52	50	53	49 48	-	-	-	-	-	-	-
1651	NCA02 NCA02	2		6248477	Residential Residential	57	52	P	51	48	50 51	48	51 52	48 49	52 53	49	-	-	-	-	-	- 1	-
1652 1652	NCA02 NCA02	1 0	300600 300600	6248491 6248491	Residential Residential	57 57	52 52	P	51 52	48 49	51 52	48 49	52 53	49 50	52 53	49 50	-	-	-	-	-	-	-
1653	NCA02	1	300620	6248488	Residential	58	53	P	48	45	48	45	49	46	50	46							
1653 1654	NCA02 NCA02	2	300620 300664	6248488 6248479	Residential Residential	58 58	53 53	P	51 50	49 48	51 50	49 48	53	50 49	53	50 49	-	-	-	-	-	-	-
	NCA02	2	300664	6248479	Residential	58	53	Р	51	49	51	49	53	50	53	50							
1655 1655	NCA02 NCA02	1 2	300673	6248452 6248452	Residential Residential	58 58	53 53	P	50 51	47 49	50 51	48 49	51 53	49 50	52 53	49 50	-	-	-	-	-		-
1656	NCA02	1	300699	6248460		58	53	Р	50	48	50	48	52	49	52	49	-	-	-	-		-	-
1656 1658	NCA02 NCA02	1	300699 300705	6248460 6248503	Residential Residential	58 58	53 53	P	52 53	49 50	52 53	49 50	53 54	50 51	54 55	50 51	-	-	-	-	-		
1658	NCA02	2	300705	6248503	Residential	58	53	Р	54	51	54	51	55	52	56	52	-	-	-	-	-	-	-
1659 1659	NCA02 NCA02	2	300729 300729	6248493 6248493	Residential Residential	58 58	53 53	P	52 54	45 47	52 54	45 47	53 55	46 48	53 55	46 48	-	-	-	-	-	-	
1660	NCA02	1 0	300722	6248459	Residential	58 58	53	P	46	43	46	43 46	47	44	48	48 44 47		-	-	-	-	-	-
1660 1661	NCA02 NCA02	1	300722 300744	6248459 6248459	Residential Residential	58	53	P	50 47	46 45	50 47	45	49	46	49	46	-	-	-	-	-	- 1	
1661 1662	NCA02 NCA02	2	300744 300760	6248459 6248442	Residential Residential	58 58	53 53	P	49	46 43	49 50	47 43	51	48 44	51 51	48 44	-	-	-	-	-	-	
1662	NCA02	2	300760	6248442	Residential	58	53	P	52	45	52	45	50 53	46	53	47							
1663	NCA02 NCA02	1	300767 300662	6248463 6248394	Residential Residential	59 58	54 53	P	49 50	44 48	49 50	44 48	50 52	45 49	51 52	45 49	-	-	-	-	-	-	
1677	NCA02	2	300662	6248394	Residential	58	53	P	51	49	51	49	53	50	53	50							
1678	NCA02	1 9	300684 300684	6248405 6248405		58	53	P	51 52	49	51 52	49 50	52	50 50	53	50	-	-	-	-	-	-	
1678 1679	NCA02 NCA02	1	300705		Residential Residential	58	53	P	50	49 48	50	48	52	49	52	49	-	-	-	-	-	- 1	
1679 1680	NCA02 NCA02	2	300705 300845	6248408 6248387	Residential Residential	58 58	53 53	P	51 50	49 48	52 51	49 48	53	50 49	53 52	50 49	-	-	-	-	-	-	
1680	NCA02	2	300845	6248387	Residential	58	53	P	51	49	51	49	52 53	50	53	49 50 48							
1681	NCA02 NCA02	1 2	300627 300627	6248376 6248376	Residential Residential	58 58	53 53	P	50 51	47 48	50 51	47 48	52 52	48 49	52 53	48 49	-	-	-	-	-	-	-
1682	NCA02	1	300652	6248354	Residential	50	54 54	P	49	46	49	46	50	47	51	47	-	-	-	-	-	- 1	
1682		2	300652	6248354 6248363	Residential	50	54	P	51 49	48 46	51 49	48 47	53	49 47	53	49 48	-	-	-	-	-	-	-
1684 1684	NCA02 NCA02	2	300568 300568	6248383	Residential Residential	50	54 54	P	51	48	51	48	52	49	53	49	-	-	-	-	-	- 1	
1685 1685	NCA02 NCA02	1 0	300687 300687	6248370 6248370	Residential Residential	59 59	54 54	P	48 51	45 48	48 51	45 48	49	46 49	50 53	46 49	-	-	-	-	-	-	-
1686	NCA02	1	300713	6248367	Residential	59	54	P	49	47	49	47	51	48	51	48	-	-	-	-	-	- 1	
1686	NCA02 NCA02	2	300713	6248367 6248399	Residential Residential	50 50	54 54	P	51 49	49 47	51 49	49 47	53 51	50 48	53 51	50 48	-	-	-	-	-	-	-
1688	NCA02	2	300725	6248399	Residential	50	54	P	51	48	51	49	52	49	53	50	-	-	-	-	-	- 1	
1689		1 0	300743	6248387 6248387	Residential	50	54	P	48 50	46 48	49 50	46	50	47	50	47	-	-	-	-	-	-	-
1689 1690	NCA02 NCA02	1	300743 300754	6248371	Residential Residential	59	54 54	P	49	46	49	48 47	52	49	52	49 47	-	-	-	-	-	- 1	-
1690	NCA02 NCA02	2	300754	6248371 6248338	Residential Residential	59	54 54	P	51	48 47	51 49	48 47	52	50 48	53	49 48	-	-	-	-	-	-	-
1691	NCA02	2	300632 300632	6248336	Residential	59 59	54	P	49 51			48	51	49	53	49	-	-	-	-	-	-	
1692	NCA02 NCA02	1 2	300628	6248319 6248319	Residential Residential	50 50	54 54	Р	50 51	48	50	48 49	52 53	49 50	52 53	49 50	-	-	-	-	-	-	-
1693	NCA02	1	300608	6248358	Residential	59	54	P	50	47	50	47	51	48	52	48	-	-	-	-	-	- 1	
1693 1694	NCA02 NCA02	2	300508 300501	6248358 6248331	Residential	50	54 53	P	51 50	48 47	51	48 47	52 51	49 48	53	49 48	-	-	-	-	-	-	-
1694	NCA02	2	300601	6248331	Residential Residential	58	53	P	51	48	50 51	48	52	49	53	49	-	-	-	-	-	- 1	
1695	NCA02 NCA02	1	300600	6248308	Residential	59 59	54 54	P	50	47 48	50	48 48	52	49 49	52	48	-	-	-	-	-	-	-
1697	NCA02	2	300599 300599	6248286 6248286	Residential Residential	59	54	P	50 51 50	48	50 51	48	52	50	53	49 50 48	-	-	-	-	-	- 1	
1699	NCA02 NCA02	1 0	300598 300598	6248266 6248266	Residential	59 59	54 54	P	50 51	47	50	48 48	51 52	49 50	52 53	48	-	-	-	-	-	-	-
1721	NCA02	1	300726	6248350	Residential Residential	59	54	P	49	47	49	47	51	48	51	50 48	-	-	-	-	-	- 1	
1721 1828	NCA02 NCA02	2	300726 300841	6248350 6248559	Residential Residential	50	54	P	50	48 47	50	48 47	52 51	49 48	52	49 48	-	-	-	-	-	-	
1828	NCA02	2	300841	6248559	Residential	56 56	51	P	50 51	48	50 51	48	51 53	49	53	49							
1829 1829	NCA02 NCA02	1 9	300843 300843	6248578 6248578	Residential Residential	55	50	P	49 53	46 46	49 53	46 46	50	47	51	47 47	-	-	-	-	-	-	
1830	NC402	î	300839 300839	6248597 6248597	Residential	55	50	Р	51 53	48 50	51	48	53	49	53	49 51							
1830	NCA02 NCA02	2	300839 300833	6248597 6248614	Residential Residential	55 55	50 50	P		50 49	53	50 49	54 53	51 50	54 53	51	-	-	-	-	- 1		
1831	NCA02	2	300833	6248614	Residential	55	50	Р	53	50	53	50	55	51	55	50 51							
1832 1832	NCA02 NCA02	1 2	300831 300831	6248630 6248630	Residential Residential	55 55	50	P	53 55	45 48	53 55	45 49	54 56	46 50	54 56	47 50	-	-	-	-	- 1		
	NCA02	î	300887	6248601	Residential	55	50	Р	50	44	51	45	52		52	46							
1873 1878	NCA02 NCA02	2	300887 300882	6248601 6248619	Residential Residential	55 55	50	P	53 52	46 46	53 52	47 46	54 54	47	54 53	48 47	-	-	-	-	- 1		
1878	NCA02	2	300882	6248619	Residential	55	50	Р	56	50 48	56	50	57	51	57	51							
1879	NCA02	1 2	300873	6248637 6248637	Residential Residential	55 55	50	P	51		51	48	52	49 50	52 58	49 50	-	-	-	-	- 1		
1880	NCA02	î	300901	6248643	Residential	55	50	Р	57	51	57	51	58	52	58	52							
1880 1881	NCA02 NCA02	1	300901 300891	6248643 6248658	Residential Residential	55 55	50	P	60 58	52 51	60 58	52 51	61 59	53 52	61 59	54 53	-	-	-	-	-	- 1	-
1881	NCA02	2	300891	6248658	Residential	55	50	Р	60	52	60	53	61	53	61	54						- 1	-
1883 1884	NCA02 NCA02	1	300870 300876	6248658 6248673	Residential Residential	55 55	50	P	54 57	48 50	54 56	48 50	55 58	49 51	55 57	49 51	-	- 1	-	-	- 1		
1884	NCA02	2	300876	6248673	Residential	55	50	Р	58	52	58	52	59	53	50	53							
1885	NCA02	1 2				55 55	50	P	51	46	51	46	52	47 49	53 55	47	-	- 1	-	-	- 1		
1886	NCA02	î	300824 300832	6248685 6248684	Residential Residential	55	50	Р	53 54	49	53 54	49	55	50	55	49 50							
1886 1896	NCA02 NCA02	2	300832 300915	6248684 6248697	Residential Residential	55 55	50	P	56 55	51 48	56 55	51 48	57 56	52 49	57 56	52 49	-	- 1	-	-	- 1		
1896	NCA02	2	300915	6248697		55	50	Р	59	52	59	52	60	53	60	53							
1897 1897	NCA02 NCA02	1 2	300903 300903	6248707 6248707	Residential Residential	55 55	50	P	53 57	47 51	53 57	47 51	54 58	48 52	54 58	48 52	-	-	-	-	- 1		
1898	NCA02	î	300935	6248730	Residential	55	50	Р	59	51	59	51	60	52	60	52							
1898 1899	NCA02 NCA02	2	300935 300922	6248730 6248740	Residential Residential	55 55	50	P	61 59	52 51	60 59	53 51	62 60	53 52	61	54	-	-	-	-	- 1		
1899	NCA02	2	300922		Residential Residential	55	50	Р	60	53	60	53	61	54	61	52 54							
1900 1901	NCA02 NCA02	1	300911 300887	6248726 6248711	Residential Residential	55 55	50	P	50 55	45 50	51 54	45 50	52 56	46 51	52 56	46 51	-	-	-	-	- 1		
1902	NCA02	1	300889	6248726		55	50	Р	54	50	54	50	55	51	55	51			-	-			
1903	NCA02 NCA02	1 2	300905 300905	6248745 6248745	Residential Residential	55 55	50	P	58 59	49 51	58 59	49 51	59	50	59 60	50 52	-	-	-	-	- 1		
1903	NCA02	î	300886	6248745	Residential	55	50	Р	54	50	54	50	56	51	55	51							

										At Open	Predi ing (2026	cted Nois)	e Level	(dBA) uture De	nign (202	(5)		IB(A)		dative			for
										Suld	Bi	alid	No t	Suild		aild		_					Consider ation of
																							Mitigatio n
1904 1905	NCA02 NCA02	2	300886	6248745 6248764	Residential Residential	55 55	50 50	P	57 57	52 50	57 57	52 50	58 58	53 51	58 58	53 51	-	-	-	-	-	-	-
1905	NCA02	2				55	50	Р	59	52 47	59		60	53	60	53			-	-		- 1	
1906 1906	NCA02 NCA02	1 2	300846 300846	6248718 6248718	Residential Residential	55 55	50 50	P	56 58	47 50	56 58	47 50	57 59	48 51	57 59	48 51	-		-	-		- 1	
1907	NCA02	1	300845	6248701	Residential	55	50	Р	56	46	56	46	57	47	56	48	-	-	-	-	-	-	-
1907 1908	NCA02 NCA02	1	300845 300784	6248701 6248692	Residential Residential	55 55	50	P	58 57	48 52	58 57	49 52	59 58	50 53	59 58	50 53	-	-	-	-	-	-	
	NCA02	2	300784	6248692	Residential	55	50	Р	58	52	58	52	59	53	59	53	-	-	-	-	-	-	-
1909 1909	NCA02 NCA02	2	300802 300802	6248696 6248696	Residential Residential	55	50	P	56 57	52 52	56 57	52 52	57	53	57	53 53	-	-	-	-	-	- 1	-
1910	NCA02 NCA02	1 0	300813 300813	6248716 6248716	Residential	55 55	50	P	54 57	51 50	54 57	51 50	56	52 51	56 58	52 51	-	-	-	-	-	-	-
1911	NCA02	1	300766	6248691	Residential Residential	55	50	P	56	51	56	51	58	52	58	52							
1911	NCA02 NCA02	2	300766 300750	6248691 6248690	Residential Residential	55 55	50	P	57 55	52 50	57 55	52 49	59 56	53 51	59 56	53 51	-	-	-	-	-	-	-
1912	NCA02	2	300750	6248690	Residential	55	50	Р	57	52	57	52	58	53	58	53							
1913 1913	NCA02 NCA02	1 2	300727 300727	6248700	Residential Residential	55 55	50	P	55 56	51 52	55 56	51 52	56	52 53	56 58	52 53	-	-	-	-	-		-
1914	NCA02	1	300808	6248700 6248737	Residential	55	50	Р	55	50	55	49	56	51	56	51	-	-	-	-		-	-
1914 1915	NCA02 NCA02	1	300808 300789	6248737 6248744	Residential Residential	55 55	50	P	58 53	52 50	58 53	52 49	59	53 51	59	53 50	-	-	-	-	-		
1915	NCA02	2	300789	6248744 6248758		55	50	Р	56	52	56	52	57	53 50	57	53	-	-	-	-	-	-	-
1916	NCA02 NCA02	2	300795 300795	6248758	Residential Residential	55 55	50	P	53 56	49 51	53 56	49 51	57	52	55 57	50 52	-	-	-	-	-	- 1	-
1917	NCA02 NCA02	1 2	300805 300805	6248783 6248783	Residential Residential	55 55	50 50	P	55 57	49 51	55 57	49 51	57 58	50 52	56 58	50 52	-	-	-	-	-	-	-
1918	NCA02	1	300820	6248778	Residential	55	50	P	55	49 51	55	49	56	50	56	50	-	-	-	-	-	- 1	
1918	NCA02 NCA02	2	300820	6248778	Residential Residential	55	50	P	57	51	57 54	51 45	59	52 46	59	52 47	-	-	-	-	-	-	-
1919 1919	NCA02	2	300842 300842	6248736 6248736	Residential	55	50	Р	54 58	45 52	58	52	60	53	59	53							
1920 1920	NCA02 NCA02	1 2	300846 300846	6248754 6248754	Residential Residential	55 55	50	P	53 58	47 52	53 58	47 52	54 59	48 53	54 59	48 53	-	-	-	-	-	-	-
1921	NCA02	1		6248773	Residential	55	50	Р	56	50	56	49	57	51	57	51							
1922	NCA02 NCA02	1	300840 300751	6248778 6248748	Residential Residential	55 55	50 50	P	58 51	50 47	56 52	49	57 53	51 48	57 53	51 48	-		-	-		- 1	
1923	NCA02	2	300751	6248748	Residential	55	50	Р	55	50	55	50	56	51	56	51							
1924 1925	NCA02 NCA02	1	300756 300734	6248768 6248756	Residential Residential	55 55	50	P	52 53	45 47	52 53	46 47	53 54	46 48	53 54	47 48	-		-	-		- 1	
1925	NCA02 NCA02	2	300734		Residential	55	50	Р	56	47 51	55	51	57	52	57	52							
1926 1927	NCA02 NCA02	1	300723 300768	6248767 6248790	Residential Residential	55 55	50	P	52 55	48 49	52 55	47 48	54 56	48 50	53 56	48 50	-	- 1	-	-	- 1		
1927	NCA02	2	300768	6248790	Residential	55	50	Р	57	51	57	51	58	52	58	52							
1928 1928	NCA02 NCA02	1 2	300750 300750	6248797 6248797	Residential Residential	55 55	50 50	P	55 57	49 51	55 57	49 51	56 58	50 52	56 58	50 52	-	- 1	-	-	- 1		
1929	NCA02	î	300733	6248801	Residential	55	50	Р	55	49	55 57	49	56	50	56	50							
1929 1930	NCA02 NCA02	2	300733 300712	6248801 6248781	Residential Residential	55	50	P	57 52	51 48	57 52	51 47	58	52 49	58	52 48	-	-	-	-	-	-	-
1930	NCA02	2		6248781		55	50	Р	55	50	55	50	57	51	56	51							
1931	NCA02 NCA02	1 2	300898 300898	6248794 6248794	Residential Residential	55	50	P	52 55	47 50	52 55	47 50	53	48 51	53	48 51	-	-	-	-	-	-	-
1932	NCA02	î	300719	6248817	Residential	55	50	Р	54	48		48	55	49	55	49							
1932	NCA02 NCA02	2	300719	6248817 6248817	Residential Residential	55 55	50	P	56 53	50 48	56 53	50 48	57 54	51 49	57 55	51 49	-	-	-	-	-	-	-
1933	NCA02	2	300698	6248817	Residential	55	50	Р	55	50	55	50	56	51	56	51							
1934 1934	NCA02 NCA02	1 2	300686	6248812 6248812	Residential	55	50	P	53 55	49 51	53 55	48 50	54	50	54	50 51	-	-	-	-	-	-	-
		1	300686 300697	6248722	Residential Residential	55	50	P	56		56	51	57	52	57	52							
1935 1936	NCA02 NCA02	2	300697 300684	6248722 6248734	Residential Residential	55	50	P	57 56	52 51	57 58	52 51	58	53	58	53 52	-	-	-	-	-	-	-
1936	NCA02	2	300684	6248734	Residential	55	50	P	57		57	52	58	53	58	53	-	-	-	-	-	- 1	
1937	NCA02 NCA02	1	300673	6248750 6248765	Residential Residential	55 55	50 50	P	55 55	51 50	55 55	51 50	56 56	52 51	56 56	52 51	-	-	-	-	-	-	-
1938	NCA02	2	300660	6248765	Residential	55	50	Р	57	52	57	52	58	53	58	53							
1939 1939	NCA02 NCA02	1 2	300653 300653	6248784 6248784	Residential Residential	55	50	P	54 57	49 51	54 57	49 51	55	50	55	50 52	-	-	-	-	-	-	-
1940	NCA02	î	300844	6248798	Residential	55	50	Р	54		54		55	48	55								
1940 1941	NCA02 NCA02	2	300844 300842	6248798 6248819	Residential Residential	55	50	P	56 53	49 48	58 53	50 47	57	51 49	57	51 48	-	-	-	-	-	-	-
1941	NCA02	2	300842	6248819	Residential	55	50	Р	55	50 48	55	50	57	51	56	51							
1942	NCA02 NCA02	1 2		6248827 6248827	Residential Residential	55 55	50	P	53 55	48 50	53 55	48 50	54 57	49 51	54 57	49 51	-	-	-	-	-	-	-
1943	NCA02	î	300597	6248838	Residential	55	50	Р	54	50	54	50	55	51	56	51							
1943 1945	NCA02 NCA02	2	300597 300627	6248838 6248872	Residential Residential	55 55	50	P	55 52	51 50	55 52	51 49	56 54	52 51	57 54	52 50	-	-	-	-	- 1		
1945	NCA02	2	300627	6248872	Residential	55	50	Р				50	55	52	56	52							
1946 1947	NCA02 NCA02	1	300844 300843	6248885 6248871	Residential Residential	55	50	P	52 50	48 46	53 50	49 46	54 51	50 48	54 51	50 47	- 1	- 1	-	-	- 1		
1947	NC402	2	300843 300860	6248871 6248861	Residential	55	50	Р	53 51	50 45	53	49	55	51	54	50	-	-	-	-	-	-	-
1948	NCA02 NCA02	2	300660	6248861	Residential Residential	55 55	50	P			51 54	45 49	52 55	46 50	52 55		-	-	-	-	-	- 1	
1949	NCA02	1	300679	6248857	Residential	55	50	Р	52	48	51	47	53	49	53	50 48	-	-	-	-	-	-	-
1950 1950	NCA02 NCA02	2	300697 300697	6248857 6248857	Residential Residential	55 55	50	P	51 54	46 47	51 54	46 47	53 55	47 48	53 55	47 48	-	-	-	-	-	- 1	
1951	NCA02	1	300630	6248890	Residential	55	50	Р	54	50		50	55	51	56	51	-	-	-	-	-	-	-
1952 1952	NCA02 NCA02	2	300654 300654	6248893 6248893	Residential Residential	55 55	50	P	54 55	51 51	54 55	50 51	55 56	52 53	55 56	51 52	-	-	-	-	-	- 1	
1953	NCA02 NCA02	1	300590	6248884	Residential	55	50	Р	52	44	52	44	53	45	53	45	-	-	-	-	-	-	-
1953	NCA02	1	300690	6248884	Residential Residential	55 55	50	P	54		54 53	47 46	55 54	48 47	55 54	48	-	-	-	-	-	- 1	
1955	NCA02	1	300660	6248911	Residential	55	50	Р	54	51	54	50	55	52	56	52	-	-	-	-	-	-	-
1955 1956	NCA02 NCA02	1	300660 300662	6248911 6248926	Residential Residential	55 55	50	P	55 55	51 51	55 55	51 51	57 58	52 53	57 58	52 52	-	-	-	-	-	-	
1957	NCA02	1	300670	6248942	Residential	55	50	Р	55	52	55	52	57	53	57	53	-	-	-	-	-	-	-
1958 1958	NCA02 NCA02	2	300699 300699	6248918 6248918	Residential Residential	55 55	50	P	54 56	45 48	54 56	46 48	55 57	46 49	55 57	47 50	-	-	-	-	-	- 1	-
1959	NCA02	1	300700	6248938	Residential	55	50	Р	54	46	54	47	55	47	55	48	-	-	-	-	-	-	-
	NCA02	2	300707 300707	6248953 6248953		55 55	50	P	56 58		56 58	50 52	57 60	51 54	57 59	51 53	-	-	-	-	-	- 1	-
1960 1961	NCA02	1	300675	6248957	Residential Residential	55	50	Р	58 56	53 52	58 56	52	58	53	58	53 53	-	-	-	-	-	-	-
1997 1997	NCA02 NCA02	2	300622 300622	6249032 6249032	Residential Residential	55 55	50	P	60	54 55	60	54 56	61 63	55 58	61 63	55 57	-	-	-	-	-	- 1	
1998	NCA02	1	300610	6249053		55	50	Р	59	52	59	52	60	54	60	53	-	-	-	-	-	-	-
1998	NCA02 NCA02	1	300610 300605	6249053 6249070	Residential Residential	55 55	50	P	61 59	55 54	61 59	55 53	62	56 55	62	56 54	-	-	-	-	-	- 1	
1999	NCA02	2	300605	6249070	Residential	55	50	Р	61	56	61	55	62	57	62	57	-	-	-	-	-	-	-
	NCA02 NCA02	+	300879 300702	6248995 6248997	Residential Residential	55 55	50	P	55 56	52 51	55 58	52 51	58 57	53 52	58 57	53 52	-	-	-	-	-	- 1	-
2001 2001	NCA02	2	300702	6248997	Residential Residential	55	50	Р	59	54	58	54	60	55	60	55	-	-	-	-	-	-	-
2002 2002	NCA02 NCA02	2	300719	6248992 6248992	Residential Residential	55 55	50	P	55 58	47 49	55 58	47 50	56 59	48 51	56 59	48 51	-	-	-	-	-	- 1	
2003	NCA02		300735	6249002		55	50	Р	53	48	53	48	54	49	54	49						- 1	-
2003 2004	NCA02 NCA02	2	300735 300755	6249002 6249012	Residential Residential	55 55	50	P	57 56	51 50	57 56	51 51	58 57	52 52	58 57	52 52	-	-	-	-	-	- 1	
2004	NCA02	2	300755	6249012	Residential	55	50	Р	58	52	58	52	59	53	59	54	-	-	-	-		-	-

No. No. No											At Openi	Preding (2026	cted Nois	e Level	(dBA) uture De	sign (203	6)		fB(A)		dative			Eligible for
Section Sect											Sulid		ild		Suild		iild							Consider ation of
March Marc																								Mitigatio
200 100	2005	NCA02	2	300743 300743	6249022	Residential Residential	55	50 50	P	58	50 52	58 58	50 52	57 59	53	59	51 53	-	-	-	-	-		-
1985 1985	2006		1 2	300725		Residential	55	50	P	55	48	55	48	56	49	56	49	-	-	-	-	-	-	-
19	2007	NCA02	1	300715	6249042	Residential	55	50	P	56	50	56	50	57	51	57	51							
Section 1			1				55 55	50	P				52 47	59 56		59 56		-	-	-	-	-	- 1	-
201 1.00 1	2008	NCA02	2		6249012	Residential	55	50	P	58			50	59	50	59		-	-	-	-	-	-	-
201 196	2009	NCA02	2	300674	6249030	Residential	55	50	Р	60	52	60	52		53		53		-	-	-	-	-	-
201 1.00 1	2011	NCA02	1	300703	6249059	Residential	55	50	P	55	47	55	48	56	48	56	49	-	-	-	-	-	- 1	-
200 10 10 10 10 10 10 10	2011	NCA02	2	300703	6249059		55 55	50	P	57		57			51	58		- 1	- 1	- 1	-	- 1	- 1	-
Section Column	2012		2	300599	6249072	Residential	55	50	Р	58			51		52		52		-	-	-	-	-	-
250 1400 1		NCA02	2	300658		Residential	55	50	P	60	52	60	52	61	53		52	-	- 1	-	-	- 1	- 1	
250 1400 1	2014	NCA02	1 2	300653	6249078 6249078	Residential Residential	55 55	50	P	56 50	49	58 50	49 52	57 61			50	-	-	-	-	-		
254 1	2015	NCA02	1	300691	6249090	Residential		50	Р	56	49	56	49	57	50	57	50		-	-	-	-	-	-
200 1	2016	NCA02		300684	6249104		55	50	P	56	49	56	49	57	50	57	50	-	- 1	-				
Section Column			1	300684 300667	6249104 6249118	Residential Residential	55 55	50	P	56				59 57		59 57	52 51	-	-	-	-	-		
201 202	2017	NCA02	2	300667	6249118	Residential	55	50	P	58	51	58	51	59	52	59	52	-	-	-	-	-	-	-
250 1400 2	2018	NCA02	2	300849	6249093	Residential		50	P	60	55	60	54			61	55	-	- 1	-				
Mathematics	2019	NCA02	1 2	300651	6249122	Residential Residential		50	P	59	53	59	53	60	54		54	-	-	-	-	-		
Section Column	2020	NCA02	1 0	300600			55	50	P	60	54	60			55	61	55		-	-	-	-	-	-
250 260 3	2021	NCA02	1	300591	6249166	Residential	55	50	P	60	52	59	52	61	53	60	53				-			
250 1400 1		NCA02 NCA02	1	300591 300587	6249166 6249185	Residental Residental	55 55	50	P	61	54	61	54	62 63	55 56	62 62	55 56	-	-	-	-	-	- 1	
Section Control Cont	2022	NCA02	2	300587	6249185	Residential	55	50	P	63	57	63	57 64	64	58	64	58	-	-	-	-	-	-	-
254 14 200 1	2023	NCA02	2	300626	6249197	Residential	55	50	P	64	55	64	55	65	56	65	56							
250 1.00 1	2024	NCA02	1 2			Residential	55 55	50	P		53				54		54	-	-	-	-	-	- 1	
250 1.00 1	2025	NCA02	1 2	300843	6249170	Residential	55	50	P					60		59	52	-	-	-	-	-	-	-
250 1400 2		NCA02	1	300660	6249166	Residential	55	50	P	57	48	57	49	58	49	58	50							
250 1400 2	2026		1			Residential Residential	55 55	50	P		53 57	60						-	-	-	-	-		
250 1400 2	2027	NCA02	2	300663	6249197			50	P	69	60	69	60	70	61	70	61	-	-	-	-	-	-	-
250 250	2028	NCA02	2	300631	6249218	Residential	55	50	P	69	61	69	61	70	62	70	62	-	- 1	-	-	- 1	- 1	
200 200	2029	NCA02	1 2	300694 300694			55 55	50	P		58 61							- 1	- 1	- 1	-	- 1	- 1	
251 1400 1	2030	NCA02	1	300684	6249162	Residential	55	50	Р	58	49	58	49	59	50	59			-	-	-	-	-	-
250 1400 1	2031		1		6249153	Residential		50	P	60		60	52	61		61	53	-	- 1	-	-	- 1	- 1	
Fig. 10	2031	NCA02 NCA02		300702	6249153 6249158	Residential Residential	55 55	50	P	63	55 56	63	55 58	64	58 57	64	56 57	-	-	-	-	-		-
Section Control Cont	2032	NCA02	2	300729	6249158	Residential	55	50	Р	70	60	69	61	71	61	70	62		-	-	-	-	-	-
25.50 Color 1.00 Color		NCA02	2	300713			55	50	P	59	48 51	50		60			52	-	-	-	-	-	- 1	-
Section Control Cont		NCA02	1 2		6249108 6249108	Residential	55 55	50	P	56	50	56	50 52	57 59		57	51	- 1	- 1	- 1	-	- 1	- 1	-
250 250	2035	NCA02	1		6249116	Residential	55	50	Р	57	50	57	50	59	51	58	51		-	-	-		-	-
250 1400 1	2036	NCA02	2	300735	6249092	Residential	55	50	P	56	49	56	49	57	50	57	50	-	-	-	-	-	- 1	-
250 250	2037	NCA02	1				55	50	P			62			55		55	-	-	-	-	-	-	-
250 250 2	2038		2	300769	6249113	Residential	55	50	Р	67			50			68	60		-	-	-		- 1	
250 250 1	2039	NCA02 NCA02	2	300777	6249099 6249099	Residential Residential	55 55	50	P	64	55 57	64	55 57	65	58 58	64	56 58	-	-	-	-	-		
25-11 1-15	2040	NCA02	1		6249078	Residential		50	P	54	48	54		55			40		-	-	-	-	-	-
25-24 1-25	2041	NCA02	1	300759	6249068	Residential		50	P	53	47	53	47		48	54	48		- 1	-	-	- 1	- 1	
254 254 25 25 25 25 25 2	2042	NCA02 NCA02	1 2		6249086 6249086		55 55	50	P		56 57	64				65 67		-	-	-	-	-		
Section Column	2043	NCA02	1 0	300773	6249055	Residential	55	50	P	53	48	53	48		49		49	-	-	-	-	-	-	-
250.	2043	NCA02	1	300773	6249041	Residential	55	50	P	54	47	54	47	55	48	57 55	48							
The color of the	2045	NCA02	1	300806	6249079	Residential Residential		50	P	65	56		56		50 57	58 65	51 57	-	-	-	-	-	- 1	
2544 CAU 2	2045	NCA02	2	300806	6249079	Residential	55	50	P	67	58	67	58	68	50	67	59	-	-	-	-	-	-	-
Section Columbia	2046	NCA02	2	300820	6249077	Residential	55	50	P	67	58	67	58	68	50	68	60							
Section Conference Confer		NCA02	2				55 55	50	P		49	52		53 56	50 52	53 56		-	1	-	-	-	- 1	
The content of the		NCA02	1 2	300805	6249029	Residential	55	50	P		48	54	48	55		55	49	-	-	-	-	-	-	-
250 1400 1 2500 2500 Panished 5 5 5 5 5 5 5 5 5	2049	NCA02	1	300818	6249037	Residential	55	50	P	54	48	54	47	55	49	55	48							
251 Media 2 2 South Good Teached 8 8 8 9 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2051	NCA02	1	300841	6249071	Residential Residential	55 55	50	P	66	57	66	57	67	58	67	58	-	1	-	-	-	- 1	
250.0 Carlo 2	2051	NCA02	2	300841	6249071	Residential		50	P	69	60	69	60	70	61	69	61	-	-	-	-	-	-	-
2544 4542 1 20030 65621 Flashedt 5 5 7 1 5 5 7 6 7 7 7 7 7 7 7 7	2052	NCA02	2	300854	6249062	Residential	55	50	P	68			58	69	58 59	68	59	-	-	-	-			
2544 4542 1 20030 65621 Flashedt 5 5 7 1 5 5 7 6 7 7 7 7 7 7 7 7	2053	NCA02 NCA02	1 2	300861	6249048 6249048	Residential	55 55	50	P	63	54	63	54	64	55 57	64	55 57			-	-			
250 250 1 250	2054		1	300858		Residential	55	50	P	61	51	61	51	62	52	61		-	-	-	-	-		-
250 1450 1	2055	NCA02		300898	6249030		55 55	50	P	59	51	59	51	60		60	52		1	-		- 1		
Section Column	2056 2057		1	300908 300911		Residential Residential	55 55	50 50	P		57 52	66					58 54			-	-			
259 X-242 2 20022 3002	2057	NCA02	2	300911	6249018	Residential	55	50	P	65	56	65	56	66	57	65	57							
250 250 2	2058	NC402	2	300929	6249017	Residental Residental	55	50	P	68	55 59	68	50	69	36 60	69		-						
200 1.402 1 2009 2.4029 Resident 5 5 7 5 5 5 5 5 5 5	2059	NCA02	1 2	300945 300945	6249003	Residential Residential	55	50	P	65	55 50	65	56 50	66	57 60		57	-						
252 252 1 2522 2 2522 2 2522 2 2522 2	2060	NCA02	1	300958	6248988	Residential	55	50	P	64	55	64	55	65	56	64	56	-	-	-	-	-		-
254 Media 2 20000 Catalon Franchista 63 63 7 64 64 65 64 65 7 7 7 7 7 7 7 7 7	2062	NCA02	1	300982	6248964	Residential	55	50	P	64	54		55	64	55	64	56	-						
254 254 1 200 1 20	2062	NCA02	2	300982	6248964	Residential	55	50	P		58	67	58			68	59	-						
265 NAZIO 1 1 20101 040822 Pendendal 5 5 50 P 6 5 15 65 5 60 9 6 50 6 7 6 5 6 6 5 7	2064	NCA02	1		6248935	Residential	55	50	Р	64	54	64	55		56	65	56							
2008 ZACI2 1 30102 C44913 Residental 55 50 P 65 95 65 97 66 57 67 57 67 67 67 6	2065	NCA02	1	301019	6248922	Residential	55	50	P	65	55	65	56		56	65	57	-	1	-	-	-	- 1	
2007 NCM02 2 301045 8048099 Residential 55 50 P 71 61 71 61 72 62 71 62	2066	NCA02	1	301029	6248913	Residential	55	50	P	65	56	65	56	66	57	66	57	-	-	-	-	-	-	-
	2067	NCA02	2	301045	6248898	Residential	55	50	P	71	61	71	61		62		62							
100000000000000000000000000000000000000			1 2			Residential Residential	55 55	50	P	66 70	56 59	66 70	56 60	67 70	57 61	67 70	57 61	-	-		-		- 1	

No. No. No											At Openi	Predi ing (2026	icted Nois	e Level	(dBA) uture De	nign (202	(5)		IB(A)		dative mit			for
1.											Sulid	Bi	ulid	No t	Suild		aild		_					Consider ation of
March Marc																								Mitigatio n
March Marc	2069	NCA02	1 2	301049	6248864	Residential	55	50	P	65	55	65	56	66	56	66	57	-	-	-	-	-	-	-
201 1.50 1			- 1				55		Р	60		60	50	61		61	52			-	-		- 1	
200 100	2070	NCA02 NCA02		300998 301004	6248836 6248851	Residential Residential	55 55	50	P	61	52 51	61	52 51	62	53 52	62	53 52	-		-	-		- 1	
200 100	2071	NCA02	2	301004	6248851	Residential	55	50	Р	61	52	61	52	62	53	62	53		-	-	-	-	-	-
15		NCA02 NCA02	1 2				55 55	50	P			58 58		57		57 59		-	-	-	-	-		
200 100			- 1	300969	6248864	Residential	55	50	Р	56	48	56	48	57	49	56		-	-	-	-	-	-	-
200 100	2074	NCA02	1	300999	6248885	Residental Residental	55	50	P	59		59	50	60	51	60	51	-	-	-	-	-	- 1	-
200 1.00 1		NCA02	1		6248897	Residential		50	P		50	57	50	58		58	51	-	-	-	-	-	-	-
200 200	2077	NCA02	2	300938	6248890		55	50	P	59	51	59	52	60	52		53							
279 1500 1	2078	NCA02	1 2	300958	6248875	Residential	55	50	P	56	48	56	48	57	49	56	49	-	-	-	-	-		-
Section 1	2079	NCA02	î	300965	6248908	Residential	55	50	Р	57	50	57	50	58	51	58	51							
Section 1	2080		1 2	300951	6248922	Residential	55 55	50	P	57	49		49 52	58 61	50	58	50	-	-	-	-	-		
200 100			- 1	300941	6248935	Residential	55	50	Р	57	50		50	58	51	58	51		-	-	-	-	-	-
200 100	2081	NCA02 NCA02	1	300941		Residential Residential	55 55	50	P	58	52 50	58						-	-	-	-	-		
250 1	2082	NCA02	2	300931	6248947			50	Р	60	52	60	52		53		54	-	-	-	-	-	-	-
Section Proceedings Proc	2084	NCA02	1	300914	6248917		55	50	P	56	48	56	48	57	49	56	49	-	-	-	-	-	- 1	-
200 1.00 1	2085	NCA02	1 0				55	50	P		49	56		57		57	50		-	-	-	-	-	-
Section Proceedings Proc			1				55	50	P					57		57		-	-	-	-	-	- 1	
200 Column Colu		NCA02	2	300890		Residential	55	50	P	60	52	60	52	61	53	61	53	-	-	-	-	-	-	-
200 Col.	2088	NCA02	i	300886	6248955	Residential	55	50	Р	56	49	56	49	57			50							
200 Col.		NCA02	2	300866	6248955	Residential Residential	55	50	P	58	49		50		50	59	51	-	-	-	-	- 1		
2009 1,000	2090	NCA02	1	300902	6248968	Residential	55	50	P	58	51	58	51		52	59	52							
200 100	2091	NCA02	1				55	50	P		51	58 50	51 51	59		59	52	-	-	-	-	- 1		
250 1	2092	NCA02	2	300872	6248983	Residential	55	50	P	61	53	61	53	62	54	62	54							
200 1.00 1	2093	NCA02	1 2	300854	6248988 6248989		55	50	P	58	50	58	51	59 61	51	59		-	-	-	-	- 1		
2004 1.00 2.00	2093	NCA02	1	300838		Residential	55	50	P	56	50	56	49	57	51	57	51	-	-	-	-	-	- 1	
250 100		NCA02	2	300838	6248991	Residential	55	50	P			58	52	59				-	-	-	-	-	-	
200 Cot	2095	NCA02	2	300852	6248957	Residential		50	Р	58	51	58	51	59	52	50	52			-	-			
200 1.00 1	2096	NCA02	1 2	300839	6248958	Residential	55	50	P	55	49	55	49	56	50	56	50	-	-	-	-	-	-	-
200 Column Colu			1				55	50	P									-	-	-	-	-	- 1	
200 Column Colu	2097	NCA02	2	300821		Residential	56	50	P		52	58	52	59	53	59	53	-	-	-	-	-	-	-
1902 1600 1		NCA02	1	300807			55	50	P	56		56	50	57		57	51	-	-	-	-	-	- 1	
1902 1600 1	2100	NCA02	1	300807	6248955	Residential	56	50	P	54	49	54	49	56		55	50	-	-	-	-	-	-	-
185 186 1	2101	NCA02	2	300790	6248982	Residential		50	P	58			53	60	54	59	54	-	-	-	-	-	- 1	
Mathematics	2102	NCA02	- 1	300790	6248949	Residential	55	50	Р	55	50	55	50	57	51	56	51	-	-	-	-	-	-	-
186 186			-				55	50	P					57				-	-	-	-	-	-	
186 186			2	300761	6248962	Residential	55	50	Р	59	54	59		60	55			-	-	-	-	-	-	-
200 1.00 1			2				55	50	P			56	52	55	54	58	53	-	-	-	-	-	-	
April Columb Co	2106	NCA02	- 1	300776	6248939	Residential	55	50	Р	55	49	55	49	56	50	56		-	-	-	-	-	-	-
200 1.00 1	2107	NCA02	1	300748	6248928	Residential	55	50	P	53	50	58	50	59	50	59	51	-	-	-	-	-	-	
April Columb Co	2107	NCA02	2	300748	6248928	Residential	55	50	Р	57	47	57	48	58	49	58	49		-	-	-	-	-	-
1985 1985	2108	NCA02 NCA02		300744	6248889		55	50	P	57	52	56	49 51	58	53	58	52	-	-	-	-	-	-	
130 150 1	2109	NCA02	- 1	300763	6248883	Residential	55	50	Р	54	47	53	47	55	48		48		-	-	-	-	-	-
200 1.500 2.		NCA02	1	300742		Residental Residental	55	50	P					57	48	57		-	-	-	-	-	-	
13 14 15 15 15 15 15 15 15	2110	NCA02	2	300742	6248889	Residential	55	50	Р	54	46	54	47	55	47	55	48		-	-	-	-	-	-
1971 1972 1973 1974 1976 1975	2111	NC402	2	300753	6248850	Residential	55	50	P	54		54	48	52	49	52		-	-	-	-	-	-	
2713 Col. 2714 Col. 2715 Col.	2112	NCA02	- 1	300766	6248841	Residential	55	50	Р	51	46	51		53			47		-	-	-	-	-	-
2014 1.500 2	2112	NCA02 NCA02	1	300786	6248841	Residental Residental		50	P	52	49	52	49	53	48		50 48	-	-	-	-	-	-	
214 1500 2	2113	NCA02	2	300784	6248840		55	50	P	54	49	54	49		50		50	-	-	-	-	-	-	-
2013 Col. Col.		NCA02	2	300797	6248836	Residential	55 55	50	P	53	48	53		55	49		49	-	-	-	-	-	-	
2014 1.500 1. 00010 0.	2115	NCA02	1 0	300814	6248838	Residential	55	50	P	52	44	52	44	53	45		45	-	-	-	-	-	-	-
2011 Cot	2115	NC402	1	300814	6248838	Residental Residental	55	50	P	55		55 54	48	55	49	56	40	-				-		
2018	2116	NCA02	2	300783	6248878	Residential	55	50	P	58	51	57	51	59		58	52	-	-	-	-	-	-	-
2018	2118	NCA02	1	300811	6248908	Residential	55	50	P	55	50	55	50	56	51	56	50	-						
170 170	2118	NCA02	2	300811	6248908	Residential	55	50	P	58	52	58	53	59	54	59	54	-	-	-	-	-	-	-
271 1.502 1 200		NCA02	1	300840	6248916	Residential	55	50	P	56			50	57	51	57		-						
1922 1922 1922 1923	2121	NCA02	1 0	300854	6248911	Residential	55	50	P	55	48	55	48	56	49	56	49	-	-	-	-	-	-	-
1752 1762 2	2121	NCA02 NCA02	1	300854	6248904		55	50	P	58 56	49	58 58	49	59	50	57	51	-				-		
2723 Col. 2	2122	NCA02	2	300867	6248904	Residential	55	50	P	58	52	58	52	59			53	-	-	-	-	-	-	-
2014	2123	NCA02	2	300810	6248880	Residential	55	50	P	55	46	55	47	53	48	56	48	-				-		
255 1.50 1	2124	NCA02	1 0	300815	6248874	Residential		50	P	52	47	52	47	53	48		48	-	-	-	-	-	-	-
275 1.500 2	2125	NCA02		300827	6248887	Residential	55	50	P	53	46	53	46		47	57	47	-				-		
200 1,000	2125	NCA02	2	300827	6248887	Residential	55	50	Р	57	50	57	50	58	51	58	51	-	-	-	-	-	-	-
272 Col.		NCA02 NCA02	2			Residential	55 55	50	P	53 57			48 52	54 58	49 53	54 58		-	-	-	-	-	- 1	-
250 100 2		NCA02	1		6248870		55	50	Р	54	49	54	49	56	50	55	50		-	-	-	-	-	-
250 100 2	2128	NCA02 NCA02	+	300879 300887	6248889	Residential Residential	55 55	50	P	56 54	49	56 55	49	57 58		57 55	51 48	-	-	-	-	-	- 1	-
211 M. CAZ 1 1 2013 (2435) Rapidel 5 5 5 7 0 1 4 5 5 4 5 6 4 1 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2			2	300887	6248874	Residential		50	Р	57	50		50	58	51		51		-	-	-	-	-	-
2123 X-X-22 1 300511 64481 Residential 5 50 P 02 47 52 47 54 48	2130	NCA02 NCA02	+	300864	6248851 6248834		55 55	50	P	54 53	48	54 53	48	55 55	50 49	55 55	50 49	-	-	-	-	-	- 1	-
2012 1.500 2	2132	NCA02	- 1	300851	6248818	Residential	55	50	Р	52	47	52	47	54	48	54	48							
233 M-N20 2 30019 G-64850 Readeded 5 5 50 P 3 51 50 51 58 55 6 2 5			2			Residential	55	50	P		51	58	51	58		57 54		-	- 1	-	-	- 1		
215 KeV2 2 2 5000 64441 Fashinda 50 50 FP 0 31 52 51 52 50 52 50 52 51 52 51 51 52 51 51 52 51 51 51 51 51 51 51 51 51 51 51 51 51		NCA02	2		6248820	Residential	55	50	Р	57		56		58	52	58	52							
235 NAZI 1 30004 C8880 Resoluted 55 30 P 03 40 53 40 54 40 94 40	2134	NCA02	1 2	300890	6248816 6248814	Residential Residential	55	50	P	54 57	48	54	48	55 58	49	55	49	-	- 1	-	-	- 1		
2338 NA-022 2 3000198 6248056 Residential 55 50 IP 57 50 57 50 58 51 57 50		NCA02	î	300904	6248809	Residential		50	Р				48	54	49		40							
2137 NCA02 1 500012 624847 Residential 55 50 P 56 49 57 50 57 50	2136 2136	NCA02	1 2	300898	6248856 6248869	Residential Residential	55	50	P	54 57	47	54		55 58	48	55	48	-	- 1	-	-	- 1		
2137 NCA02 2 300912 6248847 Residential 55 50 P 58 51 58 51 59 52 59 52	2137	NCA02	î	300912	6248847	Residential	55	50	Р	56	49	56	49	57	50	57	50							
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2137	NCA02	2	300912	6248847	Residential	55	50	P	58	51	58	51	59 57	52 48	59	52	-	- 1	-	-	- 1		
	2130	munu2		June 1	- SETUDINE	TAXABLE IN THE PARTY OF THE PAR	-	-											_					

130 MAGN 2 2007	Const attor D N Missg
15.00 15.0	D N Missa
15 16 16 16 16 16 16 16	
15 16 16 16 16 16 16 16	
150 150	
Part	
10.00 1.00	
150 150	
Fig. Col.	
Part Column Part	
2015 1,000 2,000	
2019 1,000 2,000	
Section Proceedings Proc	
Section Column	
Section Column	
Section Column	
2012 Col.	
200 1.40 1.00 1	
201	
Math. Math	
March Marc	
Math. Math	
Math. Math	
172 1640 1 1 17575 2 16592 Resident 1 1 1 1 2 2 2 2 2 2	. Y
March Marc	Y
## 400 1 2002 200	. Y
## 44 Act Act	Y
## 15 1 1 1 1 1 1 1 1 1	. Y
451 4500 2 2 05072 50507 Resident 50 50 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Y
## detail 2	. Y
419 4500 1 2000	Y
Columb	. Y
## 450 2 2000 2017 Resident 0 0 0 0 0 0 0 0 0	- Y
488 540 3 20081 540 7 Resident 5 5 5 7 7 7 7 7 7 7	. Y
469 450 1 92141 34060 Rambold 0 0 0 0 0 0 0 0 0	- Y
461 M. 2020 2 96171 George Resident 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. Y
462 400 1 1 9010 4027	- Y
Columb	. Y
April Columbia C	- Y
According Acco	. Y
460 CAD 1 26772 Choose Paneleded 9 8 9 9 9 9 9 10 40 9 9 10 10 10 10 10 10	. Y
460 450 1 1 20000 1 20000 1 20000 1 20000 1 2000 1 2000 1 2000 1 2000 1 2000 1	. Y
460 140 1 2000 2000 Tendented 5 5 7 6 3 5 5 6 5 5 7 7 7 1	Y
Sect Col. Col.	. Y
465 467 1 2000 2000 Telephone 5 6 7 1 4 5 6 5 6 6 6 7 7 7 7 7 7 1 1 1 1	Y
460 440 1 9600 5041 Residuel 8 8 9 1 6 4 6 5 8 4 6 5 V V V 1 90 440 1 1 9600 5040 Residuel 8 8 9 1 6 4 6 5 5 6 4 6 5 V V V 1 91 40 40 40 40 40 40 40 4	. Y
469 4.00 1 1 2002	Y
401	. Y
493 4500 1 1 26001 GS041 Flashold 5 8 8 P 81 40 40 5 8 8 0 1 1 1 2 V V V V V V V V V V V V V V V V	Y
493 N202 1 1 SERIE SECTO Functional 9 S P C 2 S 1 G 3 S E S G S C V V V V V V V V V V V V V V V V V V	. Y
451 4501 2 301 1 5	Y
495 Kold 1 Poblik Group Resident 5 5 7 7 7 7 7 7 7 7	. Y
Section Control Cont	Y
Second Columbia	. Y
150 1544 2 2011 25000 Telephote 9 9 9 0 0 4 4 5 7 8 6 5 7 7 7 7 7 7 7 7 7	Y
DEA Col. C	. Y
1943 AAM 2 29102 624025 Commond	Y .
3864 MCAG4 1 900245 6249687 Residential 60 55 P 60 62 60 62 60 62 70 63 Y - Y Y 3864 MCAG4 2 300245 6249687 Residential 60 55 P 71 65 72 64 72 65 73 66 Y - Y Y Y 3865 MCAG4 1 30025 6249687 Residential 55 50 P 60 65 65 86 65 86 85 87 Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
3364 NCA04 2 900245 624667 Residential 60 55 P 71 65 72 64 72 65 73 66 Y - Y Y 3365 NCA04 1 90093 6240925 Residential 60 55 60 P 60 56 65 58 61 56 65 58 Y Y Y Y	Y
	Y Y Y
	Y - Y
	Y - Y
3868 NCA04 1 200952 6340905 Residential 57 52 P 58 54 61 55 59 54 62 56 Y - Y -	Y
3868 NCA04 2 200952 6240965 Residential 57 52 P 50 54 61 56 60 55 63 57 Y Y Y Y	. Y
3869 NCA04 2 299997 6249999 Residential 57 52 P 59 55 62 56 60 56 63 57 Y Y Y Y	Y
3870 NCA04 1 299840 6250018 Residential 58 51 P 56 50 56 51 58 55 59 53	
3871 NCA04 1 300182 6250017 Residential 55 50 P 59 55 63 58 60 55 63 57 Y Y Y Y 3871 NCA04 2 300182 6250017 Residential 55 50 P 59 55 63 57 60 56 64 58 Y - Y Y	. Y
3876 NCA04 1 290712 6250029 Residential 55 50 P 53 48 55 50 54 49 57 51 Y 3876 NCA04 2 290712 6250029 Residential 55 50 P 54 50 57 52 55 51 59 53 Y	. Y
3877 NCA04 1 299590 6250143 Residential 55 50 P 53 49 55 51 55 51 57 52 Y	. Y
380 NCA04 1 290457 6249587 Residential 59 54 P 68 61 68 61 68 61 69 62 - Y Y Y 381 NCA04 1 290510 6249537 Residential 69 55 P 68 61 70 64 69 61 71 65 Y Y Y Y	Y Y Y
3882 NCA04 1 300604 6249800 Rexidential 55 50 P 67 63 65 63 68 64 67 64 Y Y	Y
3974 NCA04 1 300568 625081 Residential 55 50 P 62 58 64 59 63 59 65 60 Y Y Y Y Y 3974 NCA04 2 300568 625081 Residential 55 50 P 64 60 65 60 65 60 66 61 Y Y Y Y Y	. Y
3975 NCA04 1 30855 625025 Residential 55 50 P 65 61 -32 -29 66 61 -32 -29	
4187 NCA04 1 290199 6250145 Residential 55 50 P 51 46 54 48 52 47 55 49 4187 NCA04 2 290199 6250145 Residential 55 50 P 51 44 54 47 51 44 58 49 Y	
4189 NCA04 1 299211 6250004 Residential 55 50 P 50 46 53 47 51 48 55 48	
4191 NCA04 1 290150 6549994 Residential 55 50 P 54 47 56 50 54 47 88 51 Y Y 4191 NCA04 2 290150 6549994 Residential 55 50 P 54 48 57 51 55 48 99 52 Y Y	. Y
4192 NCA04 1 299171 6249995 Residential 55 50 P 51 48 54 48 52 46 58 49 Y	Y
4193 NCA04 1 290993 6249922 Residential 55 50 P 54 48 57 51 55 48 59 52 Y Y 4194 NCA04 1 290976 6249950 Residential 55 50 P 53 47 58 50 54 47 58 51 Y Y	. Y

										At Openi	PT 60 ing (2026)	e Level	(dib.A) uture De	sign (203	5)							for
10										Build		ulid				ild				_			Consider ation of
																							Mitigatio
4104	NCA04	2	200074	6249950	Residential	55	50	D.	55	48	57	51	55	48	59	52	Y	Y					Y
4195	NCA04	î	299033	6249975	Residential	55	50	Р	53	47	56	49	54	47	57	51	Ÿ	Ý	-	-	-	-	Ÿ
4195	NCA04	2	299033	6249975	Residential	55	50	P	54	48	56	50	55	48	58	52	Y	Y	-	-	-	-	Y
4196 4196	NCA04 NCA04	2	299034 299034	6250023 6250023	Residential Residential	55 55	50	P	49 50	44 45	52 53	46 47	50 51	45 46	53 55	47 49	-	-	-	-	-		-
4197	NCA04	1	299000	6250004	Residential	55	50	Р	51	45	54	48	52	46	56	49	Y	-	-	-	-		Y
4197	NCA04	2	299000	6250004	Residential	55	50	Р	52	47	55	49	53	47	57	50	Y	-	-	-	-		Y
4198 4198	NCA04 NCA04	1 0	299058	6250058 6250058	Residential	55	50	P	49 51	44 45	53 54	47 48	50	44 45	55	48	Ŷ	-	-	-	-	-	-
4199		1	299058 299038	6250092	Residential Residential	55	50	P	48	43	50	46	49	43	52	49 46	-	-	-	-	-	- 1	-
4220	NCA04 NCA04	- 1	298866 298866	6250082 6250082	Residential Residential	55	50	Р	51 52	45	54 55	48	52	45	56	49	Y	-		-	-		Y
4220	NCA04	2	298888 298793	6250082	Residential	55	50	Р	52	46	55	49	52	46 47	57	50	Y	-	-	-	-	-	Y
	NCA04	- 1		6250007 6250007	Residential Residential	55 55	50	P	52	46 46	54 55	49	53	46	56	50 50	Y	-	-	-	-	-	Y
4224	NCA04	1	298815	6249956		55	50	Р	53	47	55	49	53	47	57	51	Ý	Ý	-	-	-		Y
4226	NCA04	- 1	298687	6249910	Residential	55	50	Р	53	47	55	49	53	48	57	50	Y	-	-	-	-		Y
4226 4227	NCA04 NCA04	2	298687 298702	6249910 6249890	Residential Residential	55	50	P	54	48 48	57	51 50	55	49 49	58 58	52	Y	Y	-	-	-	-	Y
	NCA04	1	298609	6249884	Residental	55	50	P	54 54	49	56 55	50	54	50	56	52 51		- 1	-	- 1	-	- 1	
4228	NCA04	2	298609	6249864	Residential	55	50	Р	51	45	54	48	51	46	56	49 54	Y	-	-	-	-	-	Y
4264	NCA04	- 1	299055	6249703		56	51	Р	58		59	53	58	51	61	54	Y	Y	Y	- 1	- 1	-	Y
4265 4265	NCA04 NCA04	- 1	299138 299138	6249610 6249610	Residential Residential	57	52	P	64 66	58 59	64 65	58 59	65	58	67	60	-	Y	Y	Y	Y	Ü	Y
4266 4267	NC404	1	299064	6249625 6249559	Residential Residential	56	51	Р	59	52	60	54	59	52	62	55	Y	Ý	Ý	-	-	-	Y
4267	NCA04	1	299064 299103	6249559	Residential	58	53	P	66	60	66	60	67	60		55 61		Y	Y	Y	Y	Y	Y
4267	NCA04 NCA04	2	299103 299060	6249559 6249501	Residential Residential	58 59	53	P	68	61 62	67 69	61 63	69 70	61	68 70	62 64	-	-	Y	Y	Y	Y	Y
4269	NCA04	1	299019	6249457		59	54	Р	70	63	70	63	70	63	71	64	- 1	Y	Ý	Ý	Y	Ý	Y
4269	NCA04	2	299019	6249457	Residential	59	54	Р	71	65	71	65	72	65	72	66		-	Y	Y	Y	Y	Y
4270 4272	NCA04 NCA04	- 1	298958 298897	6249475 6249389	Residential Other (Educational)	57	52	P	62 68	56	64 69	58 66	63 68	56	68	59 67	Y	Y	Y	Y	Y	-	Y
4273	NCA04	-	298897	6249389	Other (Educational) Other (Educational)	50		н	68	65 65	69	66	68	65	70 70	67	Y	-	Y		Y		Y
4274	NCA04	1	298873	6249368	Other (Educational)	50		Н	68	65	69	67	69	65	70	68	Y	-	Y		Y	-	Y
4275	NCA04	1		6249385	Other (Educational)	50		Н		70	73	71	74	70	74	72 71	Y	-	Y	-	Y		Y
4276 4277	NCA04 NCA04	-	298883 298819	6249342 6249318	Other (Educational) Residential	50	51	H P	73 66	70 60	73 66	70 61	73 66	70 60	67	71 62	-	-	Y	v	Y	-	Y
4278	NCA04	1		6249311	Residential	56	51	Р	68	61	69	63	69	61	70	64		Y	Y	Y	Y	Y	Y
4278	NCA04	2	298829	6249311	Residential	56	51	Р	70	63	69 70	64	70	63	71	65		-	Υ	Y	Y	Y	Y
4279	NCA04 NCA04	2	298741 298741	6249398 6249398	Residential	55 55	50	P	63 65	57 60	64 66	58 61	63	57 60	66	59 61	Y	Y	Y	Y	-	-	Y
4280	NCA04	1	298741	6249398 6249457	Residential Residential	55	50	P	64	59	66	60	65 64	59	66	60	Y	Y	Y	Y			Y
4280	NCA04	2	298698	6249457	Residential	55	50	Р	65	60	66	61	65	60	67	61	Y	Y	Y	Y	-	-	Y
4281	NCA04	1	298623	6249392	Residential	55	50	Р	60	53	62	56	61	54	64	57	Y	Y	Y	Y	-	-	Y
4282 4282	NCA04 NCA04	- 1	298579 298579	6249473 6249473	Residential Residential	55	50	P	53 58	48 53	55 59	50 54	58	48 53	60	51 54	Y	Y	-	-	-	-	Y
4285	NCA04	î	298549	6249562	Residential	55	50	Р	55	50		51	55	50	57	51	Ÿ	-	-	-	-		Ÿ
4285	NCA04	2		6249562	Residential	55	50	Р	56		58 57	52	56	51	58	53	Y	-	-	-	-		Y
4287 4288	NCA04 NCA04	1	298720 298743	6249538 6249542	Residential Residential	55	50	P	63	57 55	64 62	59 56	63	58	65	59	Y	Y	Y	Y	-	-	Y
4289	NCA04	-	298699	6249588	Residential	55	50	P	60	55	61	55	60	56	61	56	Ý	Y	Y	-	-	- 1	Y
4289	NCA04	2	298699 298699	6249588	Residential	55	50	P	62	56	63	58	61	57	63	56 58		Y	Y	Y	-	-	Y
4291	NCA04 NCA04	2		6249622 6249622	Residential Residential	55	50	P	58 60	53 55	60	54 56	58	53	60	55	Y	Y	Y	Y	-		Y
4291	NCA04	1	298682 298630	6249622	Residental	55	50	P	57	52	59	54	60 57	55 52	62	54	÷	Y	Y	- 1	-	- 1	Y
4292	NCA04	2	298630	6249677	Residential	55	50	Р	59	54	60	55	59	54	61	55	Y	Ÿ	Ÿ	Y	-		Y
4295		- 1	298584	6249788	Residential	55	50	Р	52	47		49	53	48	56	50	Y	- 1	-	- 1	-	-	Y
4296 4299	NCA04 NCA04	- 1	298568 298539	6249243 6249221	Residential Residential	55	50	P	63	56 56	64 64	58 58	63 63	56 56	66 66	59 59	Y	Y	Y	Y	-	-	Y
4299	NCA04	2	298539	6249221	Residential	55	50	Р	63	56 57	65	58	64	56	66	60	Y	Ÿ	Ÿ	Ÿ	-	-	Y
4300	NCA04	1	298639	6249163	Residential	55	50	P	65	57	66	59	65	58	67	61	Y	Y	Y	Y	-	-	Y
4301	NCA04 NCA04	1	298651 298498	6249150 6249145	Residential Residential	55	50	P	68	61 55	68 62	62 56	63	61 55	69 64	63 57	Y	Y	Y	-	-		Y
4302	NCA04	2	298498	6249145	Residential	55	50	Р	63			57	63	56	64	58	Ý	Ý	-	-	-		Y
4303	NCA04	- 1	298409	6249077	Residential	55	50	Р	60	53	60	54	61	53	62	58 55		Y	-	-	-		Y
	NCA04 NCA04	1	298433 298320	6249030 6249002	Residential Residential	55	50	P	64 64	56 57	64 64	57 58	65 65	57 57	65 65	59 59	Y	Y	-	-	-	-	Y
4306	NCA04	2	298320	6249002	Residental	55	50	P	61	53	61	54	62	54	62	56	-	Y	-	-	-	- 1	Y
4307	NCA04	- 1	298332	6249018	Residential	55	50	P	63	56	63	57	64	58	64	58		Y	-	-	-	-	Y
4308 4308	NCA04	1 0	298334	6249034 6249034	Residential	55	50	P	58 63	51		52 57	59 64	51	59	53	-	Y	-	-	-		Y
4309	NCA04 NCA04	1	298334 298244	6249013	Residential Residential	56	50	P	69	56 62	63 69	63	70	62	64 70	64	- 1	Y	-	- 1	-	- 1	Y
4309	NCA04 NCA04	2	298244 298298	6249013 6249150	Residential Residential	55	50	P	71	64	71	65 54	72	64	72	66		Y	-	-	-	-	Y
4310	NCA04	1	298298 298298	6249150 6249150	Residential Residential	55 55	50	P	61	53 54	61	54 55	61 62	53 54	62	56	-	Y	-		-		Y
	NCA04	1	298298 298274	6249150	Residential Residential	55	50	P	60	54	60	53	60	52	61	55		Y					Y
4312	NCA04	1	298360	6249153	Residential	55	50	Р	62	55	62	56	63	55	63	57	-	Ý	-		-	-	Y
4313	NCA04	- 1	298362	6249195	Residential	55	50	Р	59	51	60	53	59	52	61	54	Y	Y	Υ	-	-	-	Y
4314 4316	NCA04 NCA04	1	298395 298392	6249200 6249302	Residential Residential	55 55	50	P	62 59	54 52	62 60	58 54	62 60	55 52	63 62	57 55	Y	Y	Y		-		Y
4316	NCA04	2	298392	6249302	Residential	55	50	Р	60	53	61		61	53	63	56	Ý	Ý	Ÿ				Y
4318	NCA04	- 1	298403	6249344	Residential	55	50	Р	53	46	55	49	54	46	57	50	Y	Y	-	-	-	-	Y
4318 4319	NCA04 NCA04	2	298403	6249344 6249377	Residential Residential	55	50	P	55 53	48 46	58 56	51 50	55	49	59	53	Y	Y	-		-		Y
4320	NCA04	i	298418 298450	6249477		55	50	Р	50	44	53	47	51	44	55	48	- 1						
4320	NC404	2		6249477	Residential Residential	55	50	Р	52 52	45	54	48	52	45	56	49 50	Y	-	-	-	-	-	Y
4321	NCA04 NCA04	1	298355 298195	6249505 6249194	Residential Residential	55 55	50	P	52 59	45 52	55 59	48 53	53	45 52	57 60	50 54	Y	Y	-	-	-	- 1	Y
4331	NCA04	2	298195	6249194	Residential	55	50	Р	60	52	60	54	60	52	61	55	Y	Ÿ	-		1		Y
4332	NCA04	- 1	298127	6249185		55	50	Р	60	53	61	54	61	53	62	55	Y	Y	-	-	-		Y
4333 4335	NCA04 NCA04	1	298207 298164	6249165 6249266	Residential Residential	55 55	50	P	59 61	51 54	59 62	52 55	59 62	51 54	63	54 57	·	Y	- V	-	-	-	Y
4335	NCA04	2	298164 298164	6249266	Residental Residental	55	50	P	61	54	63	56	62	54	64	57	Y	Y	Y	Y		- 1	Y
4337	NCA04	- 1	298057	6249315	Residential	55	50	Р	60	53	62	55	61	53	63	56	Y	Y	Ÿ	-	-	-	Y
4337	NCA04	2	298057	6249315	Residential	55	50	P	61	53	62	56	61	54	64	57	Y	Y	Y	Y	-	-	Y
4338 4339	NCA04 NCA04	-	298079 298027	6249322 6249320	Residential Residential	55	50	P	58 60	51 53	59 62	53 55	59 61	53	64	54 57	Y	Y	Y	Y			Y
4339 4417	NCA04 NCA04	1	298027 297905		Residential	56	50	Р	58	50	60	53	58	50	62	55	Y	Y	Y	Y	-	-	Y
4417 4418	NCA04	2	297905	6249289	Residential	55	50	P	59 58	51	61	54 53	60	51	63	56 54	Y	Y	Y	Y	-		Y
4418	NCA04 NCA04	2	297856 297856	6249274 6249274	Residential Residential	55 55	50	P	59	51 52	60	54	60	51 52	61	56	Y	Y	Y	Ý	-	- 1	Y
4419	NCA04	1	297742	6249282	Residential	55	50	Р	56	48	58	51	56	48	60	53	Y	Y	Ÿ		-	-	Y
4421	NCA04	1	297825	6249131		55	50	P	65	58		60	88	58	68	61	Y	Y	Y		-		Y
4422 4422	NCA04 NCA04	2	297742 297742	6249158 6249158	Residential Residential	55	50	P	65	57 58	66	59 60	65 66	57 58	67 68	61	Y	Y	Y	Y	-		Y
4423	NCA04	î	297680	6249138	Residential	55	50	Р	65	57	66	59	65	57	67	61	Y	Y	Y	Ÿ	-		Y
	NCA04	2	297680	6249122	Residential	55	50	Р	66	58		60	66	58	68	62	Y	Y	Y	Y	Y		Y
4424 4424	NCA04 NCA04	1 2	297622 297622	6249111 6249111	Residential Residential	55	50	P	63 66	56 58	65 67	58 60	64	56	67 69	60	Y	Y	Y	Y	- v	-	Y
4434	NCA04	1	297536	6249037	Residential	55	50	P	67	60	68	62	68	60	70	63	Y	Y	Y	Y	Y	- 1	Y
4435	NCA04	1	297451	6249000	Residential	56	50	Р	67 69	60 62	68 70	64	70	62	72		Y	Y	Y		Ÿ	Y	Y
4436 4437	NCA04	1	297498	6249308	Residential	55	50	P	57 57	50 49	61	54 54	57	49 49	63	55 58	Y	Y	Y	Y	-		Y
4438	NCA04 NCA04	1	297489	6249305 6249415	Residential Residential	55 55	50	P	57		61 61	54	57	49	63 63	56 55	Y	Y	Y	Y	-	- 1	Y
4438	NCA04	2	297489	6249415	Residential	55	50	Р	59	51	62	55	59	51	64	56	Y	Y	Y	Y	-	-	Y
4575	NCA04	- 1	297283	6249469	Residential	55	50	Р	56	48	60	53	56	48	62	54	Y	Y	Υ		-		Y

> 2 dB/A) Completive Eligible

										At Open	PT 600 ing (2026	CSEC NO.	T T	uture Di	nign (20	16)		dB(A)		fative			for
10										Build				Suild		alid							Consider stion of
4577	NCA04	- 1	207200	6249406	Residential	55	50		56	48	60	53	56	48	62	54	Y	Y	Y				n .
		1	297357	6249375	Residential	55	50	P	55	47	60	52		47		54	Y	Y	Y	Ÿ	-	- 1	Y
4579	NCA04	- 1	297298	6249340	Residential	55 55	50 50	P	58	49	62	55	58	49	64	56	Y	Y	Y	Y	-		Y
4579 4580	NCA04 NCA04	2	297298	6249340 6249288	Residential Residential	55	50	P	59 57	50 48	63	55	58	50 48	65 63	57 55	Y	Y	Y	Y	-	-	Y
4580 4580	NCA04	2	297262 297262	6249288	Residental	55 55	50	P	57	48	62	54 55	58	48	63	55	Y	Y	Y	Y	-	- :	Y
	NCA04	- 1	297197	6249239	Residential	55	50	Р	60	51	64	56 57	59	51	66	58	Y	Ÿ	Y	Y	Y		Y
	NCA04	2		6249239	Residential	55	50	P	61			57	61	52	67	59	Y	Y	Y	Y	Y		Y
4583	NCA04 NCA04	1 0	297116 297116	6249216 6249216	Residential Residential	55 55	50	P	65 66	54 56	67 68	58 59	64 65	54 58	68	61	Y	Y	Y	Y	Y	-	Y
4584	NCA04	1	297291	6249216	Residental	55	50	P	68	59	70	62	67	50	71	64	Y	Y	Y	Ÿ	Y	Ý	Y
4584	NCA04 NCA04	2	297291	6249014	Residential Residential	55	50	P	69	60	70 71	63	69	60	72	65	Y	Y	Y	Y	Y	Y	Y
	NCA04	- 1	297373		Residential	55	50	Р	67	60	69	62	68	60	71	64	Y	Y	Y	Y	Y	Y	Y
4585	NCA04 NCA04	2	297373	6249003 6249039	Residential Commercial	55	50	P	69	61 54	70 -32	63 -29	69	61 54	72 -32	65 -29	Y	Y	Y	Y	Y	Y	Y
4586	NCA04	2	297110	6249039	Commercial			Р	67	56	-32	-29	65	56	-32	-29	-		-	-	-		
4587	NCA04	- 1		6249019	Commercial		-	P	63	52	-32	-29	61	52	-32	-29	-	-	-	-	-		-
4588	NCA04 NCA04	1 0	297044	6249262 6249262	Residential Residential	55 55	50 50	P	64	52 55	65	56 58	62 64	53 55	66	57 59	Y	Y	Y	Y	-	-	Y
4504	NCA04	1	297218	6249377	Residential	55	50	P	56	47	60	52	55	46	61	53	Ÿ	Y	Y	-	-	- 1	Y
		- 1	296917					P	56		-32	-29	56	47	-32	-29	-		-	-	-		-
4595	NCA04 NCA04	2	296917	6249012	Garage		50	Р	58	49	-32	-29	57	49	-32	-29		-	-		-		
4596	NCA04	2	296960	6249162 6249162	Residential Residential	55 55	50	P	56 58	48	67	59 61	58	50	69 70	61 62	Ÿ	Y	Y	Ÿ	Y	Y	Y
4598	NCA04 NCA04	- 1	296960 296990	6249123	Residential Residential	55 55	50	Р	58	51 50	68 69	61 61	57	49	71	63	Y	Ÿ	Y	Y	Y	Y	Y
4598	NCA04	2	296990	6249123	Residential	55	50	P	59	51	70		59	50 51	72	64	Y	Y	Y	Y	Y	Y	Y
4599	NCA04 NCA04	2	296915	6249201 6249201	Residential Residential	55 55	50	P	62	51 53	65 67	56 58	61 62	51	66	57 59	Y	Y	Y	Y	Y	-	Y
4600	NCA04	î	296869	6249256	Residential	55	50	Р	56	48	65	57	55	47	67	59	Y	Ÿ	Y	Y	Y		Y
4601	NCA04	- 1	296843	6249279		55	50	Р	55	47	64	56	54	46	66	58	Ÿ	Y	Y	Ý	Ÿ	-	Y
4602	NCA04 NCA04	- 1	296807 296757	6249306 6249374	Residential Residential	55 55	50	P	55 66	47 54	65	57 55	55 64	47 54	67	59 56	Y	Y	Y	Y	Y	-	Y
4608	NCA04	1	296757 296694	6249403	Residential Residential	55	50	P	62	50	64	54	61	51	64	55	Y	Y	Y	Y			Y
4611	NCA04 NCA04	1	296943	6249318		55	50	Р	64	52	64		62	52	64	55	Y	Y	-		-		Y
4612	NCA04 NCA04	1	296962	6249367	Residential	55	50	P	64	52 54	65	55 56	62 64	53	65	56	Y	Y	Y	Y	-		Y
		2	296962 296950	6249367 6249464	Residential Residential	55 55	50	P	65	54	66		64 59	54	68	58	Y	Y	Y	Y	-	- 1	Y
4613	NCA04	2	296950	6249464	Residential	55	50	Р	62	50 51	63 64	54	60	51	64	56	Y	Y	Y	Y			Y
4695	NCA04	- 1	296695	6248946	Residential	55	50	Р			65		52	43	68	59	Y	Y	Y	Y	Y	- 1	Y
4695	NCA04 NCA04	2	296695	6248946 6248965	Residential Residential	55 55	50	P	56 54	47	67	59 59	55 53	46 44	69	61	Y	Y	Y	Y	Y	Y	Y
4696 4696		2	296651 296651	6248965	Residental Residental	55	50	P	54	44	67	60	53	44	70	61	Y	Y	Y	Y	Y	Y	Y
4698	NCA04	- 1	296567	6248937	Residential	55	50	P	70	62	68	62	69	61	68	63	Y	Y	Y	Y	-		Y
4701	NCA04	- 1	296628	6248826	Residential	55	50	P	69	62	68	62	68	60	69	63	Y	Y	-	-	-		Y
4701 4702	NCA04 NCA04	1	296528 296556	6248826 6248829	Residential Residential	55 55	50	P	70 69	63 62	70 68	64	70 68	62	70 69	65 63	Y	Y	-	-	Y	- :	Y
		1		6248921	Residential	55	50	Р	69	62	68	62	69	61	68	63	Y	Ý	Y	Y	-		Ÿ
5571	NCA04 NCA04	- 1	296166 296133	6248967 6248995	Residential	55	50	Р	60	52	62 61	55 53	59	51	63	56	Y	Y	Y	Y	-		Y
5572	NCA04	1	296133 295876	6248995	Residential	55 55	50	P	53 59	45 52	60	53 53	53 59	45 51	63	55	Y	Y	Y	Y	-	-	Y
5576	NCA04 NCA04	1	296032	6248797	Residential Residential	55	50	P	67	60	66	60	66	50	66	61	Y	Y	Y	-	-	- 1	Y
5576	NCA04	2	296032		Residential	55	50	Р	68	61	67	62	68	60	68	62	Y	Ÿ		-	-		Y
5577	NCA04 NCA04	1 2	296121	6248811 6248811	Residential Residential	55 55	50 50	Р	68 70	61 62	67 69	61 63	68	60	68	62 64	-	Y	-	-	-	-	Y
	NCA04	1	296121	6248811	Residental Residental	55	50	P	69	62	68	62	68	60	68	63	-	Y	-	-	-	- :	Y
5579	NCA04	1	296278	6248715	Residential	55	50	Р	62		63		62	54	64	58	Y	Ý	Y	Y	-		Ÿ
5579	NCA04	2	296278	6248715	Residential	55	50	P	63	56	64	57	63	55	65	59	Y	Y	Y	Y	-		Y
5586	NCA04	1 2	296358 296358	6248650 6248650	Residential Residential	55	50	P	59 59	51 52	61	54	58	50 51	62	55	Y	Y	Y	Y	-		Y
8012	NCA04 NCA04	1		6248806		60	-	Р	62	55	64	54 57	62	54	65	59	Ý		Y	-	-		Y
8013	NCA04 NCA05	- 1	297485	6249429	Other (Outdoor Passive) Other (Outdoor Active)	55		Р	54	47	58	51	55	47	60	52	Y	-	Y		-		Y
0002	NCA05 NCA05	1	298323	6248068	Other (Outdoor Active) Other (Outdoor Active)	60	-	P	49 45	43	53 50	47	50 46	44 42	55 52	48 45	-	-	-	-	-	-	-
0056	NCA05	2	298146	6247979	Other (Outdoor Active)	60	-	P	48	41	53	46	48	41	55	47		- 1	-		-	- 1	
0072	NCA05	1	298236	6248051	Other (Outdoor Active)	60		Р	46	41	51	45	47	42	53	46	-	-	-	-	-		-
0438	NCA05	- 1	298115	6247977	Other (Outdoor Active)	60	-	Р	47	40	52	45	47	41	55	47	-	-	-	-	-	-	-
	NCA05 NCA05	- 1	298134	6248001 6248006		60	-	P	45 45	40	49 49	43 43	46	41	51 51	44 45	-	-	-	-	-	-	-
	NCA05	1	298815			55		Р			62		57	50	65	57	Y		Y	-	Y		Y
8011	NCA05	- 1	298815	6247598	Other (Outdoor Passive)	55		P	56	50	62	56	57	50	65	57	Y	-	Y	-	Y		Y
8011	NCA05	- 1	298815 298815	6247598	Other (Outdoor Passive)	55 55	-	P	56 56	50 50	62	56	57	50 50	65	57	Y	-	Y	-	Y		Y
4816	NCA05 NCA06	1	295948	6247598 6249494	Other (Outdoor Passive) Garage	-		Р	51	40	62 -32	56 -29	50	40	-32	-29	-		-	-	-		
		2	295948	6249494	Garage Residential			Р	52	41	-32	-29	51	42	-32	-29	-	-	-		-		-
4817	NCA06 NCA06	- 1	295912	6249499 6249554	Residential	55	50	P	51 50	40 39	-32 -32	-29 -29	51 49	41 39	-32 -32	-29 -29	-	-	-	-	-	-	
4820	NCA06	1	295933	6249584	Residential Residential	55 55	50 50	P	51	40	-32	-29	50	41	-32	-29	1						
4821	NCA06	- 1	295968	6249576	Garage	-		Р	48	39	-32	-29	48	39	-32	-29	-	-	-	-	-		-
	NCA06 NCA06	- 1	295974 295852	6249561 6249553	Garage Residential	- 55	- 50	P	51 52	40	-32 -32	-29 -29	50 51	41	-32 -32	-29 -29	-	-	-	-	-	-	
4824	NCA06	1	295852 295844	6249553	Residential Residential	55	50	P	50	41	-32	-29 -29	50	41	-32	-29	1						
		- 1		6248865		55	50	Р	70	62	68		71	61	70	64	-	Y	-	-	-	-	Y
5542	NCA06 NCA06	1	295707	6248867	Other (Public Building)	50		н	71 72	86	69	66	71 73	66	71 73	68	-	-	-	-	-		
5542	NCA06	1		6248867 6248850	Other (Public Building) Other (Outdoor Active)	50 60		P		68 56	70 62	68 56	65	67 55		58	-	1		-	-		
5544	NCA06 NCA06	1	295628 295849	6248929	Residential	55	50	Р	72	56 65	62 71	56 65	73	64	65 72	66	Y	Y	Y	Y	-		Y
5544	NCA06	2	295849	6248929	Residential	55	50	Р	74	67	72	67	74	88	74	68	Y	Y	Υ	Y	-	-	Y
5546 5546	NCA06 NCA06	2	295719	6248984 6248984	Residential Residential	55 55	50	P	68	58 60	65	58 60	67 69	57 59	67 68	61	Y	Y	Y	-	-	- 1	Y
5547	NCA06	î	295676	6248977	Residential	55	50	Р	70	62	67	62	71	61	70	63	Y	Ÿ	Y	-	-		Y
5548	NCA06	- 1	295474	6249169	Residential	55	50	Р	60	52	60	53	61	52	61	54	Ÿ	Y	-	-	-	-	Y
	NCA06 NCA06	2	295474 295493	6249169 6249229	Residential Residential	55 55	50 50	P	62 56	53 47	61 59	54 51	62 56	53 48	63	55 52	Y	Y	Y	-	-		Y
5551	NCA06	1	295493 295513	6249229	Residential Residential	55	50	P	56	44	58 58	51	53	48	60	52	Y	Y	Y				Y
5551	NCA06 NCA06	2	295513	6249375		55	50	Р	54	45	60		54	45	63	55	Y	Y	Y	Y	-		Y
5552	NCA06 NCA06	1	295520 295517	6249443 6249549	Residential	55	50	P	53	44	59	52 52	53	44	61	54	Y	Y	Y	-	-		Y
		2	295517	6249549	Residential Residential	55 55	50	P	52	43	60		52	44	62	54	Y	Y	Y	Ý	-	- 1	Y
5556	NCA06	î	295539	6249636	Residential	55	50	Р	57	47	63	55	56	48	65	57	Y	Ÿ	Y	Y	Y		Y
5559	NCA06	- 1	295825	6249413	Residential	55	50	Р	55 57	47	68		66	57	72	63	Ÿ	Y	Y	Ý	Ÿ	Y	Y
5560	NCA06 NCA06	1 2	295795	6249152 6249152	Residential Residential	55 55	50	P	57 58	50 51	61 63	54 55	68	58 60	70 71	61	Y	Y	Y	Y	-	-	Y
5561	NCA06	1	295795	6249152	Residental Residental	55	50	P	58	50	62	55	70	60	71	62	Y	Y	Y	Y			Y
5563	NCA06	- 1	295808	6249269	Residential	55	50	Р	55	48	64		67	58	70	61	Ý	Y	Y	Ý	Y		Y
5563	NCA06	2	295808	6249269	Residential	55	50	P	57	49	65	57	69	59	71	63	Y	Y	Y	Y	Y		Y
5584 5588	NCA06 NCA06	1	295893 295882	6249316 6249209	Residential Residential	55 55	50	P	52 52	46	61 57	53 50	68	60 58	71 69	62	Y	Y	Y	Y	Y	Y	Y
		2	295882	6249209		55	50	Р	54	46 47	59	52	70	60	71	62	Y	Ÿ	Y	Y	Y		Y
5567	NCA06 NCA06	- 1	295877	6249155	Residential	56	50	Р	52	46	58 57	49 49	68	58	623	60	Y	Y	Υ	Y	-	-	Y
5568	NCA06 NCA06	- 1	295863	6249087 6249053	Residential Residential	55 55	50	P	53 54	46 46	57 60	49 53	68	59 58	69	60	Y	Y	Y	Y	-	-	Y
5589	NCA06	2	295844	6249053	Residential	55	50	Р	55	48	62	54	69	60	69 71	62	Y	Ÿ	Y	Y	1		Y
8014	NCA06	1	295556	6248856	Other (Outdoor Active)	60		Р	64	57	63	57	65	55	65	58	-	-	-	-	-	-	-
0478	NCA07 NCA07	- 1	294243	6250299 6250660	Residential Garage	55	46	P	44 50	34 38	55 -32	47 .29	44	34	57	49	Y	Y	-	Y	-	-	Y
1291	ALAUT	1 1	294000	ex30060	Garage			P	50	35	-32	-23	40	36	-32	-28	-	-	-		-		

											Prodi	cted Nois	ie I evel	(dBA)									Eligible
										At Openi					sign (203			B(A)		dative			for
										Suild	Bu	ild	No t	Suild	Eu	ild							ation of
																							Mitigatio
1291	NCA07	2	294860	6250660	Gerage			Р	50	39	-32	-29	49	39	-32	-29				-			-
1292	NCA07	- 1	294853	6250623	Garage			Р	46	37	-32	-29	47	38	-32	-29	-	-	-	-		-	-
1292	NCA07	2	294853 291336	6250623	Garage	-	-	P	47	38	-32	-29	47	37 32	-32	-29	-	-	-	-	-		-
1378	NCA07 NCA07	2	291336 291336	6250783 6250783	Garage Garage	-	-	P	44	31	-32 -32	-29	44	32	-32 -32	-29 -29	-	-	-	-	-	-	-
1379	NCA07	1	291364	6250790	Garage			Р	45	32	-32	-29	45	33	-32	-29	-	- 1	-	-	-	- 1	
1380	NCA07	- 1	291369	6250812	Garage			Р	46	37	-32	-29	47	38	-32	-29	-	-	-	-		-	-
1381	NCA07	1	291359	6250844	Garage		-	P	46	37	-32	-29	47	35	-32	-29	-	-	-	-	-		-
4825 4831	NCA07 NCA07	1	295413 294082	6250325 6250512	Garage Residential	54	44	P	52 43	41 32	-32 60	-29 52	51 42	42 32	-32 62	-29 54	Ÿ	- V	· v	· v	-		Y
4831	NCA07	2	294082	6250512	Residential	55	45	Р	44	33	60	53	43	33	63	54	Ý	Ý	Ý	Ý	-	- 1	Y
4833	NCA07	- 1	294703	6250950	Residential	55	50	Р	48	39	64	57	48	38	67	59	Y	Y	Y	Y	Y	-	Y
4833	NCA07	2	294703	6250950	Residential	55	49	P	46 47	38	65	58	47	37	68	60	Y	Y	Y	Y	Y	Y	Y
4834	NCA07	1 2	294721	6251017 6251017	Residential Residential	55 55	49 50	P	48	37	60	52 54	47	37 38	62	54 55	Y	Y	Y	Y			Y
4835	NCA07	1	294721	6250117	Residental	55	49	P	47	37	57	50	46	37	60	51	Ÿ	Y	Y	-	-		Y
4837	NCA07	- 1	294785	6251132	Residential	55	50	P	48	39	57	50	48	39	59	51	Y	Y	-	-	-		Y
4838	NCA07	- 1	294892	6251157	Residential	55	50	Р	51	41	57	49	50	42	59	51	Y	Y	-			-	Y
4840 4841	NCA07 NCA07	1 1	294951	6251150 6251145	Residential Residential	55 55	50	P	51 51	41	57 58	49	50 50	42	59	51 49	Y	Y	-	-	-	-	Y
4841	NCA07	2	295061	6251145	Residential	55	50	P	51	42	58	48 50	50	41	60	52	Y	Y	Y	-	-	- 1	Y
4842	NCA07	1	295047	6251126	Residential	55	50	Р	49	40	57	49	48	40	59	50	Y	Y	-	-	-		Y
4843	NCA07	- 1	295000	6251091	Residential	55	50	Р	54	45	58	50	53	45	60	51	Y	Y	Y	-		-	Y
4843	NCA07 NCA07	2	295000	6251091 6251211	Residential Residential	55 55	50 47	P	54 45	45 37	59 65	51 57	53	45 35	61	52 59	Y	Y	Y	Y	- Y		Y
5142	NCA07	1	294131	6250701	Residential Garage	55	47	P	43	37	-32	-29	48	35	-32	-29	Y	Y	Y	Y	Y	-	Y
5143	NCA07	1	291387	6250696	Residential	55	46	Р	45	35	-32	-29	46	34	-32	-29	-	- 1	-	-	-	- 1	
5144	NCA07	- 1	291407	6250685	Residential	50	42	Р	38	26	-32	-29	38	26	-32	-29	-	-	-	-		-	-
5144	NCA07	2	291407	6250685	Residential	55	43	P	44	31	-32	-29	44	32	-32	-29	-	-	-	-	-		-
5145	NCA07	1 1	291455 291218	6250678	Residential Garage	54	42	P	42	30	-32 -32	-29 -29	42	30	-32 -32	-29 -29	-	-	-	-	-		-
5147	NCA07	1	291218	6250404	Garage		-	P	46	35	-32	-29	46	34	-32	-29	-	-	-	-	-		-
5149	NCA07	- 1	291097	6250357	Residential	55	50	Р	48	39	59	49	49	38	62	50	Y	Y	Y	-		-	Y
5151	NCA07	- 1	291298	6250282	Residential	55	46	P	45	34	-32	-29	46	34	-32	-29	-	-	-	-	-		-
5152 5153	NCA07 NCA07	1 1	291313 290701	6250287 6250217	Garage Residential	- 55	48	P	45 47	34 37	-32 55	-29 48	46 48	34 36	-32 58	-29 49	Ÿ	- Y	-	-		-	-
5153	NCA07	2	290701	6250217	Residential	55	50	P	49	39	56	48	50	38	59	50	Ÿ	Y	-		- 1		Y
5167	NCA07	- 1	291419	6250208	Residential	55	50	Р	52	42	63	52	52	40	66	52	Y	Y	Y	-	Y	-	Y
5170	NCA07	- 1	293161	6250509	Residential	53	43	P	42	31	57	50	41	31	59	51	Y	Y	Y	Y			Y
5170 6026	NCA07 NCA07	2	293161 292227	6250509	Residential Residential	54	43	P	42	32	58 56	50 48	42	31	60 58	52 50	Y	Y	Y	Y	-	-	Y
6026	NCA07	- 1	292378	6251805 6251791	Residential	55 54	44	P	43	33	56	48	43	32 31	58	50	Y	Y	Y	Ÿ	-	-	Y
6034	NCA07	1	292558	6251818	Residential	53	42	Р	41	31	57	49	42	30	59	51	Ý	Ý	Ý	Ý	-	- 1	Y
6035	NCA07	- 1	292577	6251861	Residential	53	42	P	41	32	56	49	42	30	59	50	Ÿ	Y	Ÿ	Y		-	Ý
0637	NCA09	1	289849	6251240	Garage	-	-	P	58	45	-32	-29	58	46	-32	-29	-	-	-	-	-		-
1097	NCA09 NCA09	1 1	289845 289904	6251258 6251579	Garage Residential	55	50	P	51 61	38 47	-32 64	-29 55	51 61	39 49	-32 65	-29 58	Ÿ	- Y	- V	· v	-		·
4884	NCA09	1	289977	6251640	Residential	55	50	P	58	44	62	53	58	46	63	55	Ÿ	Y	Y	Ý	-	-	Y
4884	NCA09	2	289977	6251640	Residential	55	50	P	60	46	63	54	60	47	64	56	Y	Y	Y	Y		-	Y
4887	NCA09	1 0	289957	6251717	Residential	55	50	P	68	54	68	56	68	56	68	60	Y	Y	Y	Y	-		Y
4887	NCA09	2	289957	6251717 6251751	Residential Residential	55 55	50	P	70	56 52	70	58 55	70 66	58 54	69	61	Y	Y	Y	Y			Y
4916	NCA09	1	289708	6251907	Residental	55	50	P	56	43	61	52	56	44	62	55	Ÿ	Y	Y	Ÿ	-		Y
4916	NCA09	2	289708	6251907	Residential	55	50	Р	57	44	61	53	57	45	62	55	Y	Y	Ÿ	Ÿ		-	Y
4918	NCA09	-1	289282	6251621	Residential	55	50	P	55	42	65	58	55	43	67	60	Y	Y	Υ	Y	Y	-	Y
5128	NCA09 NCA09	1 1	289006 289085	6250929 6250946	Residential Residential	55 55	50 50	P	51 56	42	57 61	50 52	51 56	42 44	59 62	52 55	Y	Y	- V	· v	-	-	Y
5129	NCA09	2	289085	6250946	Residental	55	50	P	54	41	60	53	54	42	62	55	Ÿ	Y	Y	Ÿ	-		Y
5137	NCA09	- 1	289463	6250776	Residential	55	50	Р	64	50	64	53	64	51	64	56	Ÿ	Ÿ	Ÿ			-	Y
5138	NCA09	-1	289625	6251228	Residential	55	50	Р	61	47	-32	-29	61	49	-32	-29	-	-	-			-	-
5139 5139	NCA09 NCA09	1 2	289897 289897	6251241 6251241	Garage Garage	_	-	P	55 58	41	-32 -32	-29 -29	55 58	42 46	-32 -32	-29 -29	-	-	-	-	-	-	-
5140	NCA09	1	289728	6251241	Garage			P	53	39	-32	-29	53	41	-32	-29	-	-		-	-	- 1	-
5141	NCA09	1	289721	6251256	Garage			P	59	45	-32	-29	59	46	-32	-29	-	-	-	-			
5765	NCA09	- 1	289405	6251049	Residential	55	50	Р	64	49	64	54	63	51	65	57	Y	Y	Y	Y		-	Y
5022	NCA10	1	287045	6251118 6250792	Garage		-	P	63	58	-32	-29	64	58	-32	-29	- 1	- 1	-	-	-	- 1	-
5064	NCA10 NCA10	1	287090 287082	6250792 6250865	Residential Residential	55 55	50 50	P	77 54	72 49	76 56	73 51	78 56	72 49	77 57	73 52	-	Y	-	-	-		Ŷ
							50	P	60	56		-29	62	56	-32	-29							

Predicted operational road traffic noise levels

No mitigation scenario – (triggered receivers only) – Option 2

												December	ted Nois	-	(AID A)					_				
											At Openis				(GBA) uture De:	Same Carrier				Committee	Out Limit			
										No.		ng (2026			otore De: Build	agai (2036 Ru	o) iiid			Cumana	ove Limit			Eligible for
		Easting	Northing		Name	Address																		Consideration of Mitigation
																								or minganior
	_																							
NCA01	- 1			Other (Place of Worship)		32 - 40 Kosovich Place, Cecil Park 2178	50	50	H	56	57	57	57	58	58	59	58	Y	Ÿ	Y	-		-	Y
NCA01 NCA01	1	300913	6250280 6250280	Residential Residential	Nca01.Res.3969.01 Nca01.Res.3970.01	112 - 128 Walgrove Road, Cecil Park 2178 112 - 128 Walgrove Road, Cecil Park 2178	55	50	P	61	59	64	61	63	59	66	62			Y	-	ν	_	Y
NCAD3	-		6250264	Residential	Nca03.Res.0813.01	1143 - 1147 Mamre Road, Kemps Creek 2178	55 55	50 50	P	68 50	65 40	70 57	67 49	69 49	66 40	72 59	68 51	Y	Y	Y	-	Y	_	Y
NCA03	-	295910	6250592	Residential	Nca03.Res 1272.01	1107 - 1115 Mamre Road, Kemps Creek 2178	55	50	Р	61	49	61	51	59	49	61	52	Y	Ÿ	-	-	-	-	Y
NCA03	1	296644	6250592	Residential	Nca03.Res.1272.01 Nca03.Res.4609.01	1107 - 1115 Mamre Road, Kemps Creek 2178 1239 - 1245 Mamre Road, Kemps Creek 2178	55	50	P	65	49 54	66	55	59	49 54	66	56	Y	Y			-	-	Y
NCA03	-	296627	6249514	Residential	Nca03.Res.4609.01	1239 - 1245 Marrie Road, Kemps Creek 2178	55	50	Р	64	52	64	53	62	52	64	55	Y	-	, ,			-	Y
NCA03	- 1	297024	6249538	Residential	Nca03.Res.4614.01	1258 Marrie Road, Mount Vernon 2178	55	50	Р	58	47	61	53	57	47	62	54	Y	Ÿ	Y	-	-	-	Y
NCA03	- 1	296972	6249591	Residential	Nca03.Res.4615.01	1242 - 1256 Mamre Road, Mount Vernon 2178	55	50	P	59	48	62	53	58	48	63	55	Y	Ÿ	v	- V	-	-	T V
NCA03	-	296947		Residential	Nca03.Res.4616.01	1242 - 1256 Mamre Road, Mount Vernon 2178	55	50	P	59	48	62	53	58	49	63	55	Y	Ÿ	·	V	_	-	
NCA03	- 1	296898	6249676	Residential	Nca03.Res.4619.01	1234 Marrie Road, Mount Vernon 2178	55	50	P	58	40	61	52	57	49	62	54	Y	Ÿ	Y	-		-	T V
NCA03	- 1		6249765	Residential	Noa03 Res 4685 01	1210-1216 Mamre Road, Mount Vernon 2178	55	50	P	64	52	65	55	62	53	65	56	Y	Ÿ	Y	Y		-	Y
NCA03	- 1	296663	6249737	Residential	Nca03.Res.4686.01	1218-1224 Mamre Road, Mount Vernon 2178	55	50	P	64	53	65	55	63	53	65	57	Y	Ÿ	Y	Y	_	-	Y
NCA03	1	296744	6249605	Residential	Noa03 Res 4689 01	1236 - 1240 Mamre Road Mount Verron 2178	55	50	P	64	52	65	55	63	53	65	56	Y	Ÿ	Y	Y	- 1	-	Y
NCA03	1	296761	6249003	Residential	Nca03.Res.4669.01	1236 - 1230 Marrie Road, Mount Vernon 2178	55	50	P	61	50	63	54	60	50	64	55	Y	Ÿ	Y	Y	-		Y
NCA03	1	296750	6249700	Residential	Nca03.Res 4691.01	1226 - 1232 Marrie Road, Mount Vernon 2178	55	50	Р	60	49	62	53	59	49	63	55	Y	Ÿ	Y	Y		-	Y
NCA03	1		6249716	Residential	Noa03 Res 4693 01	1205 - 1217 Mamre Road, Kemps Creek 2178	55	50	P	64	52	65	53	62	52	64	55	Y	Ÿ	Y	Y	- 1	-	Y
NCA03	1	296293	6249918	Residential	Nca03.Res.4706.01	1179 - 1189 Mamre Road, Kemps Creek 2178	55	50	P	62	50	63	52	61	51	62	53	Y	Ÿ	Y				Y
NCA03	- 1	295799	6250678	Residential	Nca03.Res.4799.01	1097 - 1099 Mamre Road, Kemps Creek 2178	55	50	P	57	45	59	49	56	46	59	51	Y	Ÿ	-		-	-	Y
NCA03	1	295729		Residential	Noa03 Res 4800 01	1097 - 1099 Mamre Road, Kemps Creek 2178	55	50	P	49	39	59	51	48	39	61	53	Y	Ÿ	Y		-	-	Y
NCA03	1	295785	6250657	Residential	Nca03.Res.4801.01	1097 - 1099 Mamre Road, Kemps Creek 2178	55	50	P	48	38	57	49	48	39	59	51	Y	Ÿ				-	Y
NCA03	- 1	295829	6250622	Residential	Nca03.Res.4802.01	1101 - 1105 Mamre Road, Kernes Creek 2178	55	50	P	55	44	59	51	54	44	61	52	Y	Ÿ	Y	-	-	-	Y
NCA03	- 1	295890	6250662	Residential	Noa03 Res 4803 01	1101 - 1105 Mamre Road, Kemps Creek 2178	55	50	P	49	39	57	50	48	39	59	51	Y	Ÿ	-	-			Y
NCA03	- 1	295895	6250637	Residential	Nrafi3 Res 4804 01	1101 - 1105 Mamre Road, Kemps Creek 2178	55	50	P	64	52	65	54	62	52	64	55	Y	Ÿ	Y	-	-	-	Y
NCA03	- 1	295930	6250581	Residential	Nra03 Res 4805 01	1107 - 1115 Mamre Road, Kemps Creek 2178	55	50	Р	51	40	57	49	50	40	58	50	Y	-	-				Y
NCA03	- 1	295923	6250457	Residential	Nca03.Res.4806.01	1117 Marrie Road, Kemps Creek 2178	55	50	P	49	39	58	51	48	39	61	52	Y	Y	v	-			v
NCA03	- 1	296000	6250417	Residential	Nca03.Res.4807.01	1127 - 1133 Mamre Road, Kemps Creek 2178	55	50	P	61	49	62	51	59	49	61	52	Y	Ÿ	Y	-	-	-	Y
NCA03	- 1	296012	6250399	Residential	Nca03.Res.4808.01	1127 - 1133 Mamre Road, Kemps Creek 2178	55	50	Р	60	48	61	51	58	48	61	52	Y	Y	Y				Y
NCA03	- 1	296020	6250385	Residential	Nca03.Res.4809.01	1127 - 1133 Mamre Road, Kemps Creek 2178	55	50	Р	59	48	60	49	58	48	60	51	Y	Ÿ	-			-	Y
NCA03	- 1	296033		Residential	Nca03.Res.4810.01	1135 - 1141 Mamre Road, Kemps Creek 2178	55	50	P	61	49	62	51	60	50	61	52	Y	Y					Y
NCA03	- 1	296047	6250330	Residential	Nrafi3 Res 4811 fi1	1135 - 1141 Mamre Road, Kernes Creek 2178	55	50	Р	63	51	64	53	62	52	63	54	Y	Y			_		Y
NCA03	- 1	296081	6250241	Residential	Nca03.Res.4812.01	1149 - 1155 Mamre Road, Kemps Creek 2178	55	50	P	61	49	62	51	59	49	61	52	Y	Ÿ	-	-	-		Y
NCA03	- 1	296116	6250212	Residential	Nca03.Res.4813.01	1149 - 1155 Mamre Road, Kemps Creek 2178	55	50	Р	62	51	63	53	61	51	63	54	Y	Y	Y				Y
NCA03	- 1	296168	6250143	Residential	Nca03.Res.4814.01	1157 - 1161 Mamre Road, Kemps Creek 2178	55	50	Р	64	52	65	54	62	52	64	55	Y	Y	Y	-	-	-	Y
NCA03	- 1	296240	6250026	Residential	Nca03.Res.4815.01	1169 - 1177 Mamre Road, Kemps Creek 2178	55	50	Р	63	52	64	53	62	52	64	55	Y	Y	Y	Y	-	-	Y
NCA04	- 1	298897	6249389	Other (Educational)	Nca04.Oed.4272.01	2089 - 2109 Elizabeth Drive. Cecil Park 2178	50		н	68	65	69	66	68	65	70	67	Y		Y		Y		Y
NCA04	- 1	298882	6249375	Other (Educational)	Nca04.Oed.4273.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178	50	-	н	68	65	69	66	68	65	70	67	Y	-	Y	-	Y	-	Y
NCA04	- 1	298873	6249368	Other (Educational)	Nca04.Oed.4274.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178	50		н	68	65	69	67	69	65	70	68	Y		Y		Y		Y
NCA04	- 1	298919	6249365	Other (Educational)	Nca04.Oed.4275.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178	50	-	н	73	70	73	71	74	70	74	72	Y	-	Y	-	Y	-	Y
NCA04	- 1	298883	6249342	Other (Educational)	Nca04.Oed.4276.01	2089 - 2109 Elizabeth Drive, Cecil Park 2178	50	-	н	73	70	73	70	73	70	74	71	-	-	Y	-	Y	-	Y
NCA04	- 1	296908	6248806	Other (Outdoor Active)	Nca04.Ooa.8012.01	1490 Elizabeth Drive Cecil Park 2178	60	-	Р	62	55	64	57	62	54	65	59	Y	-	Y	-	-	-	Y
NCA04	- 1	297485	6249429	Other (Outdoor Passive)	Nca04.Oop.8013.01	316-318 Mount Vernon Road Mount Vernon 2178	55	-	P	54	47	58	51	55	47	60	52	Y	-	Y	-	-	-	Y
NCA04	- 1	299075	6249765	Residential	Nca04.Res.0161.01	1183-1185 Elizabeth Drive Cecil Park 2178	55	50	Р	54	48	57	51	55	48	59	52	Y	Y	-	-			Y
NCA04	- 1	296155	6249009	Residential	Nca04.Res.0219.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178	55	50	Р	52	43	62	55	53	44	65	56	Y	Ÿ	Y	Y	-	-	Y
NCA04	- 1	299131	6249722	Residential	Nca04.Res.0461.01	1183-1185 Elizabeth Drive Cecil Park 2178	56	51	Р	59	52	60	53	59	52	61	55	Y	Y	Y	-	-	-	Y
NCA04	- 1	300114	6249951	Residential	Nca04.Res.1180.01	18 Cecil Road, Cecil Park 2178	55	50	Р	58	54	63	56	59	55	63	57	Y	Y	Y	Y			Y
NCA04	- 1	296034	6248971	Residential	Nca04.Res.1484.01	1413 - 1415 Elizabeth Drive, Kemps Creek 2178	55	50	Р	61	54	63	56	61	53	64	57	Y	Ÿ	Y	Y		-	Y
NCA04	- 1	300245	6249667	Residential	Nca04.Res.3864.01	1111 - 1141 Elizabeth Drive, Cecil Park 2178	60	55	Р	69	62	69	62	69	62	70	63	Y	-	Y	Y	Y	Y	Y
NCA04	- 1	300093	6249925	Residential	Nca04.Res.3865.01	18 Cecil Road, Cecil Park 2178	55	50	Р	60	56	65	58	61	56	65	58	Y	Y	Y	Y	Υ	-	Y
NCA04	- 1	299974	6249868	Residential	Nca04.Res.3866.01	28 Cecil Road, Cecil Park 2178	58	53	Р	61	56	64	58	62	57	65	59	Y	Y	Y	Y	Y	-	Y
NCA04	- 1	299952	6249965	Residential	Nca04.Res.3868.01	30-36 Cecil Road, Cecil Park 2178	57	52	Р	58	54	61	55	59	54	62	56	Y	-	Y	-		-	Y
NCA04	- 1	299997	6249999	Residential	Nca04.Res.3869.01	38 - 42 Cecil Road, Cecil Park 2178	57	52	P	59	54	61	55	60	55	62	56	Y	Y	Y		-	-	Y
NCA04	- 1	300182	6250017	Residential	Nca04.Res.3871.01	20 - 22 Cecil Road, Cecil Park 2178	55	50	Р	59	55	63	56	60	55	63	57	Y	Y	Y	Y	-	-	Y
NCA04	- 1	299712	6250029	Residential	Nca04.Res.3876.01	99 - 117 Cecil Road, Cecil Park 2178	55	50	Р	53	48	55	50	54	49	57	51	Y	-	-	-		-	Y
NCA04	- 1	299590	6250143	Residential	Nca04.Res.3877.01	119 - 127 Cecil Road, Cecil Park 2178	55	50	Р	53	49	55	51	55	51	57	52	Y	-	-			-	Y
NCA04	- 1	299457	6249587	Residential	Nca04.Res.3880.01	1183-1185 Elizabeth Drive Cecil Park 2178	59	54	Р	68	61	68	61	68	61	69	62	-	-	Y	Y	Y	Y	Y
NCA04	- 1	299610	6249537	Residential	Nca04.Res.3881.01	1183-1185 Elizabeth Drive Cecil Park 2178	60	55	Р	68	61	70	64	69	61	71	65	Y	Y	Y	Y	Υ	Υ	Y
NCA04	- 1	300604	6249809	Residential	Nca04.Res.3882.01	37 - 73 Wallgrove Road, Cecil Park 2178	55	50	Р	67	63	65	63	68	64	67	64	-		Υ	Y		-	Y
NCA04	- 1	300586	6250081	Residential	Nca04.Res.3974.01	97 - 123 Wallgrove Road, Cecil Park 2178	55	50	Р	62	58	64	59	63	59	65	60	Y	Y	Y	Y			Y
		299150	6249964	Residential	Nrafi4 Res 4191 ft1	43 - 45 Brolen Way, Cecil Park 2178	55	50	Р	54	47	56	50	54	47	58	51	Y	Y					Y
NCA04 NCA04	1		6249995	Residential	Nca04.Res.4192.01	43 - 45 Brolen Way, Cecil Park 2178																		

						NCG	NCG Criteria						icted Not						(D/A)					
											At Openi Build		i) uild		uture De: Build	ign (203	5)	Inch		Cumulat	tive Limit			Eligible for
		Easting	Northing		Name	Address			Period	No	Suld		uild	No	Suid	Bu	iid		_					Consideration
																				D				of Mitigation
NCA04	1	299093	6249922	Residential	Nca04.Res.4193.01	47 - 49 Brolen Way, Cecil Park 2178	55	50	Р	54	48	57	51	55	48	59	52	Υ	Y			-	-	Υ
NCA04	- 1	299076	6249950	Residential	Nca04.Res.4194.01	47 - 49 Brolen Way, Cecil Park 2178	55	50	Р	53	47	56	50	54	47	58	51	Y	Y		-	-		Y
NCA04	- 1	299033	6249975	Residential	Nca04.Res.4195.01	51 - 53 Brolen Way, Cecil Park 2178	55	50	P	53	47	56	49	54	47	57	51	Y	Y	-	-			Y
NCA04	- 1	299000	6250004	Residential	Nca04.Res.4197.01	55 - 57 Brolen Way, Cecil Park 2178	55	50	P	51	45	54	48	52	46	56	49	Y	-		-		-	Y
NCA04	- 1	298866	6250082	Residential	Nca04.Res.4220.01	11 Rigney Close, Cecil Park 2178	55		Р	51	45	54	48	52	45	56	49	Y	-		-	-	-	Y
NCA04	- 1	298793		Residential	Nca04.Res.4223.01	9 - 10 Rigney Close, Cecil Park 2178	55		P	52	46	54	49	53	47	56	50	Y	-		-	-	-	Y
NCA04	- 1		6249956	Residential	Nca04.Res.4224.01	9 - 10 Rigney Close, Cecil Park 2178	55	50	P	53	47	55	49	53	47	57	51	Y	Y					Υ
NCA04	- 1	298687		Residential	Nca04.Res.4226.01	5 - 6 Rigney Close, Cecil Park 2178	55	50	Р	53	47	55	49	53	48	57	50	Y		-	-	-	-	Y
NCA04	- 1		6249890	Residential	Nca04.Res.4227.01	5 - 6 Rigney Close, Cecil Park 2178	55		Р	54	48	56	50	55	49	58	52	Y	Y	-	_	-	-	Y
NCA04 NCA04	- 1	299055		Residential	Nca04.Res.4264.01	2061 - 2063 Elizabeth Drive, Cecil Park 2178	56	51	Р	58	51	59	53	58	51	61	54	Y	Y	Y	-		لنسا	Y
NCA04 NCA04	1	299138	6249610 6249625	Residential Residential	Nca04.Res.4265.01 Nca04.Res.4266.01	2055 - 2059 Elizabeth Drive, Cecil Park 2178 2065 - 2071 Elizabeth Drive, Cecil Park 2178	57		Р	64	58	64	58	65		66	59	-	Υ	Y	Y	Y	لنا.	Y
NCA04	1		6249559	Residential	Nca04.Res.4266.01 Nca04.Res.4267.01	2065 - 2071 Elizabeth Drive, Cecil Park 2178 2065 - 2071 Elizabeth Drive, Cecil Park 2178	56	51	Р	59	52	60	54	59	52	62	55	Υ	Y	Y	- Y	·	- Y	Y
NCA04	1		6249509	Residential	Nca04.Res.4267.01 Nca04.Res.4268.01	2015 - 2071 Elizabeth Drive, Cecil Park 2178 2073 - 2081 Elizabeth Drive, Cecil Park 2178	58 59	53 54	P	66 69	60 62	66	60	67 70	60 62	67 70	61 64	-	Y	Y	Y	Y	Y	Y
NCAD4	1		6249457	Residential	Nca04.Res.4268.01 Nca04.Res.4269.01													-	Ÿ	Y	Y	Y	Y	Y
NCA04	-		6249457	Residential	Nca04.Res.4269.01 Nca04.Res.4270.01	2073 - 2081 Elizabeth Drive, Cecil Park 2178 2083 - 2087 Elizabeth Drive, Cecil Park 2178	59 57	54 52	P	70 62	63 56	70 64	63 58	70 63	63 56	71 66	64 59	Y	Y	Y	Y	Y	Y	Y
NCAD4	1		6249475	Residential	Nca04.Res.4270.01 Nca04.Res.4277.01	2083 - 2087 Elizabeth Drive, Ceol Park 2178 1 - 7 Duff Road, Ceol Park 2178	56	52	P	66	60	66	61	66	60	67	62	-	-	Y	Y	Y		V
NCA04	- 1	298829	6249318	Residential	Nca04.Res.4278.01	1 - 7 Duff Road, Cecil Park 2178	56	51	P	68	61	69	63	69	61	70	62	-	Ÿ	Y	Y	Y	Y	Y
NCA04	1		6249398	Residential	Nca04.Res.4279.01	9 - 17 Duff Road, Cecil Park 2178	55		P	63	57	64		63	57	66	59	Y	Ÿ	v	Y		-	Y
NCA04	1	298898	6249457	Residential	Nca04 Res 4280 01	19 - 27 Duff Road, Cecil Park 2178	55	50	P	64	59	65	60	64	59	66	60	Y	Ÿ	v	V		-	Y Y
NCA04	1		6249392	Residential	Nca04.Res.4281.01	29 - 35 Duff Road, Cecil Park 2178	55		P	60	53	62	56	61	54	64	57	Y	Y	Y	Y	-	-	Y
NCA04	1		6249473	Residential	Nca04.Res.4282.01	37 - 45 Duff Road, Cecil Park 2178	55	50	P	53	48	55	50	54	48	57	51	Y	Ÿ	-	-	-		Y
NCA04	- 1		6249562	Residential	Nca04.Res.4285.01	47 - 55 Duff Road, Cecil Park 2178	55	50	P	55	50	56	51	55	50	57	51	Ŷ	-	-		-	-	Y
NCAR4	- 1		6249538	Residential	Nca04.Res.4287.01	20 - 38 Duff Road, Cecil Park 2178	55		P	63	57	64		63				Y	Y	Y	Y			Y
NCA04	1		6249542	Residential	Nca04.Res.4288.01	20 - 38 Duff Road, Cecil Park 2178	55	50	Р	60	55	62	56	61	55	63	57	Y	Y	Y	Y			Y
NCA04	1		6249566	Residential	Nca04.Res.4289.01	40-46 Duff Road, Cecil Park 2178	55	50	Р	60	55	61	55	60	55	61	56	Y	Y	Y		-		Y
NCA04	- 1	298662	6249622	Residential	Nca04.Res.4291.01	48-56 Duff Road, Cecil Park 2178	55	50	Р	58	53	60	54	58	53	60	55	Y	Y	Y	Y	-		Y
NCA04	- 1	298630	6249677	Residential	Nca04.Res.4292.01	58 - 76 Duff Road, Cecil Park 2178	55	50	Р	57	52	59	54	57	52	60	54	Y	Y	Y		-	-	Y
NCA04	- 1	298564	6249788	Residential	Nca04.Res.4295.01	2 Rigney Close, Ceol Park 2178	55	50	Р	52	47	54	49	53	48	56	50	Y	-			-	-	Y
NCA04	- 1	298568	6249243	Residential	Nca04.Res.4296.01	2131 Elizabeth Drive, Cecil Park 2178	55	50	Р	63	56	64	58	63	56	66	59	Y	Y	Y	Y	-		Y
NCA04	- 1	298539		Residential	Nca04.Res.4299.01	2169 - 2177 Elizabeth Drive, Cecil Park 2178	55	50	P	63	56	64	58	63	56	66	59	Y	Y	Y	Y	-	-	Y
NCA04	- 1		6249163	Residential	Nca04.Res.4300.01	2131 Elizabeth Drive, Cecil Park 2178	55	50	P	65	57	66	59	65	58	67	61	Y	Y	Y	Y		-	Y
NCA04	- 1		6249150	Residential	Nca04.Res.4301.01	2131 Elizabeth Drive, Cecil Park 2178	55	50	Р	68	61	68	62	69	61	69	63	Y	Y	Y	-		-	Y
NCA04	- 1		6249145	Residential	Nca04.Res.4302.01	2179 Elizabeth Drive, Cecil Park 2178	55		P	62	55	62		63			57	Y	Y		-	-	-	Y
NCA04	- 1	298409		Residential	Nca04.Res.4303.01	2197 - 2201 Elizabeth Drive, Cecil Park 2178	55	50	Р	60	53	60	54	61	53	62	55	-	Y					Υ
NCA04	- 1		6249030	Residential	Nca04.Res.4304.01	2203 - 2211 Elizabeth Drive, Cecil Park 2178	55	50	Р	64	56	64	57	65	57	65	59	Y	Υ	-	_		لنسا	Y
NCA04	- 1	298320		Residential	Nca04.Res.4306.01	2213 Elizabeth Drive, Cecil Park 2178	55	50	Р	64	57	64	58	65	57	65	59	-	Y	-	_		لنسا	Y
NCA04	- 1	298332	6249018	Residential	Nca04.Res.4307.01	2213 Elizabeth Drive, Cecil Park 2178	55	50	Р	63	56	63	57	64	56	64	58	-	Υ	-	_	-	-	Y
NCA04 NCA04	- 1		6249034	Residential	Nca04.Res.4308.01	2213 Elizabeth Drive, Cecil Park 2178	55		Р	58	51	58	52	59	51	59	53	-	Y	-	_	-	-	Y
	- 1	298244		Residential	Nca04.Res.4309.01	2229 Elizabeth Drive, Cecil Park 2178	55	50	Р	69	62	69	63	70	62	70	64	-	Y	-	_	-	-	Y
NCA04	1	298298		Residential	Nca04.Res.4310.01		55	50	P	61	53	61	54	61	53	62	56	-		-	-	-	-	Y
NCA04 NCA04	1		6249158 6249153	Residential Residential	Nca04.Res.4311.01 Nca04.Res.4312.01	2219 Elizabeth Drive, Cecil Park 2178	55 55	50 50	P	60 62	52 55	60	53 56	60 63	52 55	61 63	55 57	-	Y	-	-	-	-	Y
NCA04	1		6249153 6249195	Residential	Nca04.Res.4312.01 Nca04.Res.4313.01	2219 Elizabeth Drive, Cecil Park 2178 2219 Elizabeth Drive, Cecil Park 2178	55		P	59	51	60		59			54	Y	Y	· Y	-	-	-	Y
NCA04	1	298395		Residential	Nca04.Res.4313.01 Nca04.Res.4314.01	2219 Elizabeth Drive, Cecil Park 2178 2197 - 2201 Elizabeth Drive, Cecil Park 2178	55	50	P	62	54	62	56	62	55	63	57	Y	Y	Y			-	V
NCA04	1		6249200	Residential	Nca04.Res.4316.01	2159 - 2201 Etzabeth Drive, Cecil Park 2178	55	50	P	59	52	60	54	60	52	62	55	Y	Y	Y	-	-	-	Y
NCA04	1		6249302	Residential	Nca04.Res.4318.01	2149 Elizabeth Drive, Cecil Park 2178	55	50	P	53	46	55	49	54	46	57	50	Y	Ÿ	-	-		-	Y
NCA04	1	298418		Residential	Nca04.Res.4319.01	2149 Elizabeth Drive, Cecil Park 2178	55	50	P	53	46	56	50	54	46	58	51	Y	Y	-	-	-	-	Y
NCA04	1		6249505	Residential	Noa04 Res 4321 01	25 - 27 Warana Road, Cecil Park 2178	55		P	52	45	55	48	53	45	57	50	Y	Ÿ	_		-	-	Y
NCA04	1	298195		Residential	Nca04.Res.4331.01	2235 Elizabeth Drive. Cecil Park 2178	55	50	P	59	52	59	53	60	52	60	54	-	Ÿ				-	Y
NCA04	1		6249185	Residential	Nca04.Res.4332.01	2245 - 2249 Elizabeth Drive. Ceoil Park 2178	55	50	P	60	53	61	54	61	53	62	55	Y	Ÿ			-	-	Y
NCA04	1		6249165	Residential	Nca04.Res.4333.01	2235 Elizabeth Drive. Cecil Park 2178	55		P	59	51	59	52	59	51	60	54	-	Y	_	-		-	Y
NCA04	- 1		6249266	Residential	Nca04.Res.4335.01	2251 - 2253 Elizabeth Drive, Cecil Park 2178	55		Р	61	54	62	55	62	54	63	57	Y	Y	Y	-	-	-	Y
NCA04	- 1	298057	6249315	Residential	Nca04.Res.4337.01	2255-22771 Elizabeth Drive, Cecil Park 2178	55		P	60	53	62		61			56	Y	Y	Y	-	-	-	Y
NCA04	- 1		6249322	Residential	Nca04.Res.4338.01	2255-22771 Elizabeth Drive, Ceoil Park 2178	55	50	Р	58	51	59	53	59	51	61	54	Y	Y	Y	-	-	-	Y
NCA04	- 1	298027	6249320	Residential	Nca04.Res.4339.01	2265-22771 Elizabeth Drive, Cecil Park 2178	55	50	Р	60	53	62	55	61	53	64	57	Y	Y	Y	Y	-	-	Y
NCA04	- 1	297905	6249289	Residential	Nca04.Res.4417.01	1227 - 1229 Elizabeth Drive, Mount Vernon 2178	55		Р	58	50	60	53	58	50	62	55	Y	Y	Y	Y	-	-	Y
NCA04	- 1	297856	6249274	Residential	Nca04.Res.4418.01	1231A Elizabeth Drive, Mount Vernon 2178	55	50	Р	58	51	60	53	59	51	61	54	Y	Y	Y	-	-	-	Y
NCA04	- 1		6249282	Residential	Nca04.Res.4419.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178	55	50	Р	56	48	58	51	56	48	60	53	Y	Y	Y	-	-	-	Y
NCA04	1	297825		Residential	Nca04.Res.4421.01	1231 - 1237 Elizabeth Drive, Mount Vernon 2178	55 55	50	Р	65	58	66	60	66	58	68	61	Y	Y	Y	-	-	-	Y
NCA04			6249158	Residential	Nca04.Res.4422.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178		50	Р	65	57	66			57	67	61	Y	Y	Y	Y			

						NCO		Criteria					Predicted Noise Level (dBA) g (2026) Future Design (2036)					> 2 di						
											At Openin							Incre		Cumulat	rive Limit			Eligible for
		Easting	Northing		Name	Address			Period	No E	Build	Bu	old	No E	Build	Bu	id							Consideration
																								of Mitigation
NCA04	- 1	297660	6249122	Residential	Nca04.Res.4423.01	1247 - 1253 Elizabeth Drive, Mount Vernon 2178	55	50	Р	65	57	66	59	65	57	67	61	Y	Y	Y	Y	-	-	Y
NCA04	- 1	297622	6249111	Residential	Nca04.Res.4424.01	1255 - 1261 Elizabeth Drive, Mount Vernon 2178	55	50	Р	63	56	65	58	64	56	67	60	Y	Y	Y	Y	-	-	Y
NCA04	- 1	297536	6249037	Residential	Nca04.Res.4434.01	1263 - 1269 Elizabeth Drive, Mount Vernon 2178	55	50	Р	67	60	68	62	68	60	70	63	Y	Y	Y	Y	Y	-	Y
NCA04	- 1	297451	6249000	Residential	Nca04.Res.4435.01	1271 - 1277 Elizabeth Drive, Mount Vernon 2178	55	50	Р	69	62	70	64	70	62	72	65	Y	Y	Υ		Y	Y	Y
NCA04	- 1	297498	6249308	Residential	Nca04.Res.4436.01	320 Mount Vernon Road, Mount Vernon 2178	55	50	Р	57	50	61	54	57	49	63	55	Y	Y	Y	Y	-	-	Y
NCA04	- 1	297475	6249305	Residential	Nca04.Res.4437.01	320 Mount Vernon Road, Mount Vernon 2178	55	50	Р	57	49	61	54	57	49	63	56	Y	Y	Υ	Y	-	-	Y
NCA04	- 1	297489	6249415	Residential	Nca04.Res.4438.01	316 Mount Vernon Road, Mount Vernon 2178	55	50	Р	57	49	61	54	57	49	63	55	Y	Y	Y	Y		-	Y
NCA04	- 1	297283	6249469	Residential	Nca04.Res.4575.01	309 - 319 Mount Vernon Road, Mount Vernon 2178	55	50	Р	56	48	60	53	56	48	62	54	Y	Ÿ	Y		-	_	Y
NCA04	- 1		6249406	Residential	Nca04.Res.4577.01	316 Mount Vernon Road, Mount Vernon 2178	55		P	56	48	60	53	56	48	62	54	Y	Y	Y				V
NCA04	- 1		6249375		Nca04 Res 4578 01	324 Mount Vernon Road, Mount Vernon 2178	55	50	P	55	47	60	52	55	47	62	54	Ÿ	Ÿ	v	Y			Y
NCAR4	- 1		6249340	Residential	Noa04 Res 4579 01	326 - 332 Mount Vernon Road, Mount Vernon 2178	55		P	58	49	62	55	58	49	64	56	Y	Ÿ	Ÿ	v			·
NCA04	- 1		6249288	Residential	Nca04.Res.4580.01	334 - 338 Mount Vernon Road, Mount Vernon 2178	55	50	P	57	48	62	54	56	48	63	55	Ÿ	Ÿ	v	Y			v
NCA04	- 1		6249239	Residential	Nca04.Res.4582.01	340 - 344 Mount Vernon Road, Mount Vernon 2178	55	50	P	60	51	64	56	59	51	66	58	Y	Ÿ	Y	Y	Y		·
NCAR4	- 1		6249216		Noa04 Res 4583 01	346 - 356 Mount Vernon Road, Mount Vernon 2178		50	P	65	54	67		64	54		60	Y	Ÿ	Y	Y	Y		Y
NCA04	- 1		6249014	Residential	Noa04 Res 4584 01	1306 Mamre Road, Mount Vernon 2178	55	50	P	68	59	70	62	67	59	71	64	Ÿ	Ÿ	·	- V	Y	Y	Y
NCA04	- 1		6249014	Residential	Nca04.Res.4585.01	1279 Elizabeth Drive, Mount Vernon 2178	55		P	68	60	70 69	62	68	60	71	64	Y	Y	Y	Y	Y	Y	Ý
NCA04	1		6249003	Residential	Nca04.Res.4585.01	1279 Elizabeth Urive, Mount Vernon 2178 343 Mount Vernon Road. Mount Vernon 2178	55	50	P	64	52	65	56	62	53	66	57	Y	Y	T V	Y	-	_	, ,
NCA04	1		6249262	Residential	Nca04.Res.4594.01	321 - 333 Mount Vernon Road, Mount Vernon 2178	55		P	56	47	60	52	55	46	61	53	Y	Y	Y	-			Y
NCA04	1		6249377		Nca04.Res.4594.01 Nca04.Res.4596.01	321 - 333 Mount Vernon Road, Mount Vernon 2178 1285 - 1291 Mamre Road, Kemps Creek 2178	55		P	56	48	67	52	55	46	69	61	Y	Y	Y	- Y		- Y	, v
NCA04	- 1		6249162		Nca04.Res.4596.01															Y		Y		- 1
NCA04	1				Nca04.Res.4598.01 Nca04.Res.4599.01	1293A Mamre Road, Kemps Creek 2178	55	50	P	58	50	69	61	57	49	71	63	Y	Y	Y	Y	Y	Υ	Y
NCA04 NCA04	1	296915 296869	6249201 6249256	Residential Residential	Nca04.Res.4599.01 Nca04.Res.4600.01	1277 - 1283 Mamre Road, Kemps Creek 2178 1269 - 1275 Mamre Road, Kemps Creek 2178	55	50	P	62	51	65	56	61	51	66	57	Y	Y	Y	Y		_	Y
	- 1						55	50	Р	56	48	65	57	55	47	67	59			Y		Y	_	Y
NCA04	- 1		6249279	Residential	Nca04.Res.4601.01	1269 - 1275 Mamre Road, Kemps Creek 2178	55		Р	55	47	64	56	54	46	66	58	Y	Y	Y	Y	Y	-	Y
NCA04	- 1		6249306		Nca04.Res.4602.01	1261 - 1267 Mamre Road, Kemps Creek 2178	55		Р	55	47	65	57	55	47	67	59	Y	Y	Y	Y	Y		Y
NCA04	1		6249374	Residential	Nca04.Res.4603.01	1255-1259 Mamre Road, Kemps Creek 2178	55	50	Р	66	54	66	55	64	54	66	56	Y	Y	Υ	Y			Y
NCA04	1		6249403		Nca04.Res.4608.01	1247 Marrie Road, Kemps Creek 2178	55		Р	62	50	64		61	51	64	55	Y	Y	Y	Y			Y
NCA04	- 1		6249318		Nca04.Res.4611.01	1266-1272 Mamre Road, Mount Vernon 2178	55		P	64	52	64	53	62	52	64	55	Y	Y	_		-		Y
NCA04	- 1	296962			Nca04.Res.4612.01	1266-1272 Mamre Road, Mount Vernon 2178	55	50	Р	64	52	65	55	62	53	65	56	Y	Y	Y	Y			Y
NCA04	- 1		6249464	Residential	Nca04.Res.4613.01	1260 - 1264 Mamre Road, Mount Vernon 2178	55		P	61	50	63	53	59	50	63	55	Y	Y	Y	Y			Y
NCA04	- 1		6248946	Residential	Nca04.Res.4695.01	1341 - 1347 Elizabeth Drive, Kemps Creek 2178	55	50	P	52	43	65	58	52	43	68	59	Y	Y	Y	Y	Y		Y
NCA04	- 1		6248965	Residential	Nca04.Res.4696.01	1349 - 1355 Elizabeth Drive, Kemps Creek 2178	55		P	54	44	66	59	53	44	69	61	Y	Y	Y	Y	Y	Y	Y
NCA04	- 1		6248937	Residential	Nca04.Res.4698.01	1357 - 1371 Elizabeth Drive, Kemps Creek 2178	55		P	70	62	68	62	69	61	68	63	Y	Y	Y	Y		-	Y
NCA04	- 1		6248826	Residential	Nca04.Res.4701.01	1560 Elizabeth Drive, Cecil Park 2178	55		Р	69	62	68	62	68	60	69	63	-	Y	-				Y
NCA04	- 1		6248829		Nca04.Res.4702.01		55		Р	69	62	68		68	60	69	63	-	Y	-	-		-	Y
NCA04	- 1		6248921	Residential	Nca04.Res.5570.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178	55	50	Р	69	62	68	62	69	61	68	63	Y	Y	Y	Y	-		Y
NCA04	- 1		6248967	Residential	Nca04.Res.5571.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178	55		P	60	52	62	55	59	51	63	56	Y	Y	Y	Y	-	-	Y
NCA04	- 1		6248995		Nca04.Res.5572.01	1383 - 1411 Elizabeth Drive, Kemps Creek 2178	55		Р	53	45	61	53	53	45	63	55	Y	Y	Y	Y			Y
NCA04	- 1	295876	6248738	Residential	Nca04.Res.5575.01	617 Devonshire Road, Kemps Creek 2178	55	50	Р	59	52	60	53	59	51	61	55	Y	Y	Y	-	-		Y
NCA04	- 1		6248797		Nca04.Res.5576.01	1630 Elizabeth Drive, Kemps Creek 2178	55	50	Р	67	60	66	60	66	59	66	61	Y	Y	Υ	-	-	_	Y
NCA04	- 1	296121	6248811	Residential	Nca04.Res.5577.01	1610 Elizabeth Drive, Kemps Creek 2178	55	50	Р	68	61	67	61	68	60	68	62	-	Y	-	-	-	-	Y
NCA04	1		6248809	Residential	Nca04.Res.5578.01	1600 Elizabeth Drive, Kemps Creek 2178	55		Р	69	62	68	62	68	60	68	63	- 1	Y	-	-	-	-	Y
NCA04	1	296278	6248715	Residential	Nca04.Res.5579.01	1590 Elizabeth Drive, Kemps Creek 2178	55		Р	62	55	63	57	62	54	64	58	Y	Y	Y	Y	-	-	Y
NCA04	- 1		6248650	Residential	Nca04.Res.5586.01	1572 Elizabeth Drive, Cecil Park 2178	55	50	Р	59	51	61	54	58	50	62	55	Y	Y	Υ	Y	-	-	Y
NCA05	- 1			Other (Outdoor Passive)		Western Sydney Parklands, Cecil Hills 2171	55		Р	56	50	62	56	57	50	65	57	Y	-	Y	-	Y	-	Y
NCA05	1	298815	6247596	Other (Outdoor Passive)	Nca05.Oop.8011.01	Western Sydney Parklands, Cecil Hills 2171	55	-	Р	56	50	62	56	57	50	65	57	Y	-	Y		Y	-	Y
NCA05	- 1	298815	6247596	Other (Outdoor Passive)	Nca05.Oop.8011.01	Western Sydney Parklands, Cecil Hills 2171	55	- 1	Р	56	50	62	56	57	50	65	57	Y	-	Υ	-	Y		Y
NCA05	- 1	298815	6247596			Western Sydney Parklands, Cecil Hills 2171	55	-	Р	56	50	62	56	57	50	65	57	Y	-	Y	-	Y	-	Y
NCA06	- 1	295765	6248865	Residential	Nca06.Res.5541.01	1640 Elizabeth Drive, Kemps Creek 2178	55	50	Р	70	62	68	62	71	61	70	64	-	Y	-	-	-	-	Y
NCA06	- 1	295849	6248929	Residential	Nca06.Res.5544.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178	55		Р	72	65	71	65	73	64	72	66	Y	Y	Y	Y	-		Y
NCA06	- 1	295719	6248984	Residential	Nca06.Res.5546.01	51 Salisbury Avenue, Kemps Creek 2178	55	50	Р	66	58	64	58	67	57	67	60	Y	Y	Y		-	-	Y
NCA06	1		6248977	Residential	Nca06.Res.5547.01	51 Salisbury Avenue, Kemps Creek 2178	55		P	70	62	67	62	71	61	70	63	Y	Ÿ	Y		-		Y
NCAR6	- 1		6249169		Nca06.Res.5548.01	442-449 Clifton Avenue, Kemps Creek 2178	55		P	60	52	60		61	52	61	54	Y	Y					Y
NCA06	1		6249229	Residential	Nca06.Res.5550.01	434-441 Clifton Avenue, Kemps Creek 2178	55	50	P	56	47	59	51	56	48	60	52	Y	Ÿ	Y				Y
NCA06	- 1		6249375		Nca06.Res.5551.01	422-433 Clifton Avenue, Kemps Creek 2178	55		P	52	44	58	51	53	44	60	52	Y	Ÿ	Y		-		Y
NCAR6	- 1		6249443	Residential	Nca06.Res.5552.01	410 Clifton Avenue, Kemps Creek 2178	55	50	P	53	44	59	52	53	44	61	54	Ÿ	Ÿ	v				v
NCAR6	- 1		6249549		Nca06.Res.5553.01	395 - 409 Clifton Avenue, Kemps Creek 2178	55	50	P	52	43	60	52	52	44	62	54	Y	Ÿ	v			-	Ý
NCAD6	- 1		6249636	Residential	Nca06.Res.5556.01	395 - 409 Cilifon Avenue, Kemps Creek 2178	55	50	Р	57	47	63	55	56	48	65	57	Y	Y	Y	- Y	Y		Ý
NCAD6	- 1		6249413	Residential	Nca06.Res.5559.01	13 - 23 Salisbury Avenue, Kemps Creek 2178	55	50	P	55	47	68	55 61	56	48 57	72	63	Y	Y	Y	Y	Y	- Y	, ,
			6249413		Nca06.Res 5560.01	41 - 49 Salisbury Avenue, Kemps Creek 2178	55		P	57	50		54	68	58	70		Y	Y	Y	Y	- 1	Y	Y
NICARE												61					61							
NCA06	1			Posidertial	Nos06 Per 5561 01				- 0		50	60		70				w						
NCA06 NCA06 NCA06	1 1	295813	6249216 6249269	Residential Residential	Noa06.Res.5561.01 Noa06.Res.5563.01	41 - 49 Salisbury Avenue, Kemps Creek 2178 33-39 Salisbury Avenue, Kemps Creek 2178	55 55	50	P P	57 55	50 48	62 64	55	70 67	60	71 70	62 61	Y	Y	Y	Y	- Y	-	Y

Predicted Noise Level (dRA)

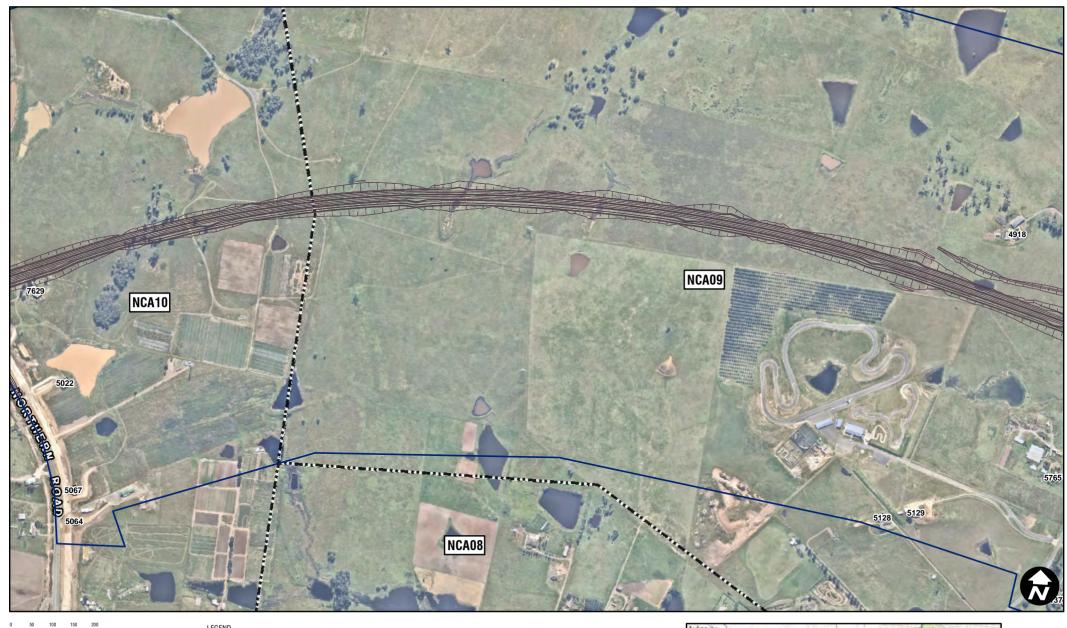
						NCG.	NCG Criteria	Criteria							dicted Noise Level (dBA) 26) Future Design (2036)									
											At Openi							> 2 d		Cumulat	ive Limit			Eligible for
		Easting	Northing		Name	Address				No I	Build	Bi	áld	No	Build	Bu	ild							Consideration
																								of Mitigation
NCA06	- 1	205902	6249316	Residential	Nca06.Res.5564.01	26 - 32 Salisbury Avenue, Kemps Creek 2178	55	50	D	52	46	61	52	60	60	71	62	v	v	Y	v	Y	v	Y
NCA06	- 1		6249209	Residential	Nca06.Res.5566.01	34-42 Salisbury Avenue, Kemps Creek 2178	55		P	52	46	57	50	68	58	69	60	Y	Ÿ	Y	Y	Y	_	Y
NCA06	- 1		6249155	Residential	Nca06.Res.5567.01	44 - 56 Salisbury Avenue, Kemps Creek 2178	55	50	P	52	46	56	49	68	58	69	60	v	÷	v	V	-		Y Y
NCAR6	- 1		6249087	Residential	Nca06 Res 5568 01	44 - 56 Salishury Avenue, Kemns Creek 2178	55		P	53	46	57	49	68	59	69	60	Y	Ÿ	·	- 1	_	-	Y
NCAD6	-	295844	6249067	Residential	Nca06 Res 5569 01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178	55	50	P	54	46	60	53	68	58	69	61	- T	-	Y.	- T	_	_	- T
NCAD7	-		6250299	Residential	Nca07.Res.0478.01	146 Clifton Avenue, Kemps Creek 2178	55	46	P	44	34	55	47	44	34	57	49	Y	Y	,	- T	-	_	T V
NCAD7	-	294082	6250299	Residential	Nca07.Res.4831.01	146 Clifton Avenue, Kemps Creek 2178	54	44	P	43	32	60	52	42	32	62	54	Y	Y	-	- 1	_	_	- 1
NCAD7	1		6250950	Residential	Nca07.Res.4833.01	203 - 229 Clifton Avenue, Kemps Creek 2178	55	50	P	48	32	64	57	42	38	62	59	Y	Y	Y	Y	Y	-	Y
																				- 1	- 1	_	_	- 1
NCA07	- 1	294721	6251017 6250117	Residential Residential	Nca07.Res.4834.01 Nca07.Res.4835.01	203 - 229 Clifton Avenue, Kemps Creek 2178 1541A Elizabeth Drive, Kemps Creek 2178	55		Р	47	37	60	52	47	37	62	54	Y	Y	Y	Y	_	-	Y
	-1						55	49	Р	47	37	57	50	46	37	60	51	Y	Y	Y	-	-	-	Y
NCA07 NCA07	-1	294892	6251132 6251157	Residential	Nca07.Res.4837.01 Nca07.Res.4838.01	230 - 234 Clifton Avenue, Kemps Creek 2178 230 - 234 Clifton Avenue, Kemps Creek 2178	55	50	Р	48	39 41	57	50	48	39	59	51	Y	Y	-	-	_	-	Y
	-1						55		Р	51		57	49	50	42	59	51	Y	Y	-	-	-	-	Y
NCA07	- 1	294951	6251150	Residential	Nca07.Res.4840.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	Р	51	41	57	49	50	42	59	51	Y	Y	-	-	-	-	Y
NCA07	- 1		6251145		Nca07.Res.4841.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	Р	51	40	56	48	50	41	57	49	Y	Y	-	_	_	_	Y
NCA07	- 1		6251126	Residential	Nca07.Res.4842.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	Р	49	40	57	49	48	40	59	50	Y	Y	_	-	_	_	Y
NCA07	- 1		6251091	Residential	Nca07.Res.4843.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55		Р	54	45	58	50	53	45	60	51	Y	Y	Y	-	-	_	Y
NCA07	- 1		6251211	Residential	Nca07.Res.4844.01	885A Marme Road, Kemps Creek 2178	55	47	Р	45	37	65	57	46	35	67	59	Y	Y	Y	Y	Y	_	Y
NCA07	- 1		6250357	Residential	Nca07.Res.5149.01	Mogarvie Smith Farm, 1793 - 1951 Elizabeth Drive, Badgerys Creek 2555		50	Р	48	39	59	49	49	38	62	50	Y	Y	Y	-	-	-	Y
NCA07	1		6250217	Residential	Nca07.Res.5153.01	Unit 15, 1953 Elizabeth Drive, Badgerys Creek 2555	55	48	Р	47	37	55	48	48	36	58	49	Y	Y	-	Y	_		Y
NCA07	- 1	291419	6250206	Residential	Nca07.Res.5167.01	Mcgarvie Smith Farm, 1793 - 1951 Elizabeth Drive, Badgerys Creek 2555		50	P	52	42	63	52	52	40	66	52	Y	Y	Y	-	Y	-	Y
NCA07	- 1		6250509	Residential	Nca07.Res.5170.01	1669 Elizabeth Drive, Badgerys Creek 2555	53		P	42	31	57	50	41	31	59	51	Y	Y	Y	Y		-	Y
NCA07	- 1	292227	6251805	Residential	Nca07.Res.6026.01	16 Farmingdale Court Luddenham 2745	55	44	Р	43	33	56	48	43	32	58	50	Y	Y	Y	Y	-		Y
NCA07	- 1	292378	6251791	Residential	Nca07.Res.6027.01	22 Farmingdale Court Luddenham 2745	54	43	Р	42	33	56	49	43	31	59	51	Y	Y	Y	Y	-		Y
NCA07	- 1	292558	6251818	Residential	Nca07.Res.6034.01	11 Farmingdale Court Luddenham 2745	53	42	Р	41	31	57	49	42	30	59	51	Y	Y	Y	Y	-	-	Y
NCA07	- 1	292577	6251861	Residential	Nca07.Res.6035.01		53	42	Р	41	32	56	49	42	30	59	50	Y	Y	Y	Y		-	Y
NCA09	- 1	289904	6251579	Residential	Nca09.Res.4882.01	734 Luddenham Road, Luddenham 2745	55	50	Р	61	47	64	55	61	49	65	58	Y	Y	Y	Y	-	-	Y
NCA09	- 1	289977	6251640	Residential	Nca09.Res.4884.01	734 Luddenham Road, Luddenham 2745	55	50	Р	58	44	62	53	58	46	63	55	Y	Y	Y	Y	-	-	Y
NCA09	- 1	289957	6251717	Residential	Nca09.Res.4887.01	710 - 732 Luddenham Road, Luddenham 2745	55	50	Р	68	54	68	56	68	56	68	60	Y	Y	Y	Y	-	-	Y
NCA09	- 1	290001	6251751	Residential	Nca09.Res.4889.01	710 - 732 Luddenham Road, Luddenham 2745	55	50	Р	66	52	66	55	66	54	66	58	Y	Y	Y	Y	-	-	Y
NCA09	- 1	289706	6251907	Residential	Nca09.Res.4916.01	713 - 733 Luddenham Road, Luddenham 2745	55	50	Р	56	43	61	52	56	44	62	55	Y	Y	Y	Y	-		Y
NCA09	- 1	289282	6251621	Residential	Nca09.Res.4918.01	765 Luddenham Road, Luddenham 2745	55	50	Р	55	42	65	58	55	43	67	60	Y	Y	Y	Y	Y	-	Y
NCA09	- 1	289006	6250929	Residential	Nca09.Res.5128.01	851 Luddenham Road, Luddenham 2745	55	50	Р	51	42	57	50	51	42	59	52	Y	Y	-	-	-	-	Y
NCA09	1	289085	6250946	Residential	Nca09.Res.5129.01	821-849 Luddenham Road, Luddenham 2745	55	50	P	56	43	61	52	56	44	62	55	Y	Y	Y	Y	-	-	Y
NCA09	- 1	289463	6250776	Residential	Nca09.Res.5137.01	812 - 844 Luddenham Road, Luddenham 2745	55		Р	64	50	64	53	64	51	64	56	Y	Y	Y	-	-	_	Y
NCA09	- 1	289405	6251049	Residential	Nca09.Res.5765.01	777 - 819 Luddenham Road, Luddenham 2745	55	50	Р	64	49	64	54	63	51	65	57	Y	Y	v	Y	-		v
NCA10	- 1	287082	6250865	Residential	Nca10.Res.5067.01	2830 - 2844 The Northern Road . Luddenham 2745	55		Р	54	49	56	51	56	49	57	52		Y	-		-	_	Y
NCA01	2			Other (Place of Worship)		32 - 40 Kosovich Place, Ceril Park 2178	50		н	57	58	58	58	59	59	60	59	Y		Y				Y
NCA01	2	300913		Residential	Nca01.Res.3969.01	112 - 128 Wallgrove Road, Cecil Park 2178	55	50	P	68	65	69	66	69	66	71	67	Y	Y	Y	-	Y	_	Y
NCA03	2		6249514	Residential	Nca03.Res.4609.01	1239 - 1245 Mamre Road, Kemps Creek 2178	55	50	P	67	55	67	57	65	55	67	58	Y	Y	Y	Y	_		v
NCA03	2		6249538	Residential	Nca03.Res.4614.01	1258 Mamre Road, Mount Vernon 2178	55	50	P	59	48	62	54	58	48	63	55	Y	Ÿ	v	- V	_		·
NCA03	2		6249591	Residential	Noa03 Res 4615 01	1242 - 1256 Mamre Road, Mount Vernon 2178	55		P	60	49	63	54	58	49	64	55	Y	Ÿ	Y	Y	-	-	V V
NCA03	2	296947	6249619	Residential	Nca03.Res.4616.01	1242 - 1256 Marrie Road, Mount Vernon 2178	55		P	60	49	63	54	58	49	64	55	v	÷	v	v		-	v
NCA03	2	296898	6249619	Residential	Nca03.Res.4619.01	1234 Marrie Road, Mount Verron 2178	55	50	P	59	48	61	53	58	48	62	54	Y	Ÿ	Y		-		Y
NCA03	2		62496765	Residential	Nca03.Res.4685.01	1210-1216 Mamre Road, Mount Vernon 2178	55		P	65	54	67	56	64	54	66	57	v	Y	v	v			Y
NCA03	2	296653	6249765	Residential	Nca03.Res.4685.01	1210-1216 Mamre Road, Mount Vernon 2178 1218-1224 Mamre Road, Mount Vernon 2178	55		P	65	54	67	56	64	54	66	57	Y	Y	Y	Y	-	-	Y
NCA03	2	296761	6249737	Residential	Nca03.Res.4686.01 Nca03.Res.4691.01	1216 - 1232 Mamre Road, Mount Vernon 2178	55 55	50 50	P	65	54 51	67	56 55	64 61	54 51	65 65	57 56	Y	T	Y	Y	-	-	Y
NCAD3	2		6249708	Residential			55		P		52						54	Y	Y	Y	Y	_	-	Y
					Nca03.Res.4706.01	1179 - 1189 Mamre Road, Kemps Creek 2178		50		63		64	53	62	52	63		Y		Y	Y	_	-	Y Y
NCA03	2	295799	6250678	Residential	Nca03.Res.4799.01	1097 - 1099 Mamre Road, Kemps Creek 2178	55	50	Р	59	47	61	51	57	47	62	53	Y	Y	Y	-	-		Y
NCA03	2		6250662		Nca03.Res.4803.01 Nca03.Res.4813.01	1101 - 1105 Mamre Road, Kemps Creek 2178	55		Р	51	41	59	51	50	41	61	52	Y	Y	Y	-	-	_	1
NCA03	2		6250212	Residential		1149 - 1155 Mamre Road, Kemps Creek 2178	55	50	Р	65	53	65	54	63	53	65	55	Y	Y	Y	Y	-	-	Ý
NCA04	2		6249951	Residential	Nca04.Res.1180.01	18 Cecil Road, Cecil Park 2178	55	50	Р	60	55	64	57	61	56	64	58	Υ	_	Υ	Y	-		Υ
NCA04	2		6249667	Residential	Nca04.Res.3864.01	1111 - 1141 Elizabeth Drive, Cecil Park 2178	60		Р	71	65	72	64	72	65	73	66	Y	_	Y	Y	Y	Y	Ý
NCA04	2	300093	6249925	Residential	Nca04.Res.3865.01	18 Cecil Road, Cecil Park 2178	55		P	61	56	65	58	62	57	66	59	Y	Y	Y	Y	Y	-	Y
NCA04	2		6249868	Residential	Nca04.Res.3866.01	28 Cecil Road, Cecil Park 2178	58		Р	62	56	65	58	63	57	66	59	Y	Y	Y	Y	Y	-	Y
NCA04	2	299952	6249965	Residential	Nca04.Res.3868.01	30-36 Cecil Road, Cecil Park 2178	57	52	Р	59	54	61	56	60	55	63	57	Y	Y	Y	Y			Y
NCA04	2		6249999	Residential	Nca04.Res.3869.01	38 - 42 Cecil Road, Cecil Park 2178	57	52	Р	59	55	62	56	60	56	63	57	Y	Y	Υ	Y	-	-	Y
NCA04	2		6250017	Residential	Nca04.Res.3871.01	20 - 22 Cecil Road, Cecil Park 2178	55	50	Р	59	55	63	57	60	56	64	58	Y	-	Y	Y	-		Y
NCA04	2	299712	6250029	Residential	Nca04.Res.3876.01	99 - 117 Cecil Road, Cecil Park 2178	55	50	Р	54	50	57	52	55	51	59	53	Y	-	-			-	Y
NCA04	2	300586	6250081	Residential	Nca04.Res.3974.01	97 - 123 Waligrove Road, Cecil Park 2178	55		P	64	60	65	60	65	60	66	61	Y	Y	Y	Y	-	-	Y
NCA04	2	299199	6250145	Residential	Nca04.Res.4187.01	35 - 37 Brolen Way, Cecil Park 2178	55	50	Р	51	44	54	47	51	44	56	49	Y	-	-		-	-	Y
NCA04	2	299150	6249964	Residential	Nca04.Res.4191.01	43 - 45 Brolen Way, Cecil Park 2178	55		Р	54	48	57	51	55	48	59	52	Y	Y	-	-	-	-	Y

Predicted Noise Level (dRA)

											Predicted Noise I				(dBA)				2 dB(A)					
												ng (2026)				sign (2031)		dB(A) lease	Cumulat	rive Limit			Eliaible for
NCA		Easting	Northing		Name	Address				No I	Build	Bı	ild	No	Build	Bu	id							Consideration
																								of Mitigation
NCA04	2	299076	6249950	Residential	Nca04.Res.4194.01	47 - 49 Brolen Way, Cecil Park 2178	55	50	Р	55	48	57	51	55	48	59	52	Y	Y	_		-	-	Y
NCA04	2	299033		Residential	Nca04.Res.4195.01	51 - 53 Brolen Way, Cecil Park 2178	55	50	Р	54	48	56	50	55		58	52	Y	Y			-	-	Y
NCA04	2	299000	6250004	Residential	Nca04.Res.4197.01	55 - 57 Brolen Way, Cecil Park 2178	55	50	Р	52	47	55	49	53	47	57	50	Y				-	-	Y
NCA04	2		6250058	Residential	Nca04.Res.4198.01	59 - 61 Brolen Way. Cecil Park 2178	55	50	P	51	45	54	48	52	45	56	49	Y						Y
NCA04	2		6250082	Residential	Nca04.Res.4220.01	11 Rigney Close, Cecil Park 2178	55	50	Р	52	46	55	49	52	46	57	50	Y	-	-	-	-	-	Y
NCA04	2	298793	6250007	Residential	Nca04.Res.4223.01	9 - 10 Rigney Close, Cecil Park 2178	55	50	Р	52	46	55	49	53	46	57	50	Y	Y	-	-	-		Y
NCA04	2	298687	6249910	Residential	Nca04.Res.4226.01	5 - 6 Rigney Close, Cecil Park 2178	55	50	Р	54	48	57	51	55	49	58	52	Y	Y	-	-	-	-	Y
NCA04	2	298609	6249864	Residential	Nca04.Res.4228.01	92 - 106 Duff Road, Ceol Park 2178	55	50	Р	51	45	54	48	51	46	56	49	Y	-	-	-	-	-	Y
NCA04	2	299138	6249610	Residential	Nca04.Res.4265.01	2055 - 2059 Elizabeth Drive, Cecil Park 2178	57	52	Р	66	59	65	59	66	59	67	60	-	Y	Y	Y	Y	Y	Y
NCA04	2	299103	6249559	Residential	Nca04.Res.4267.01	2065 - 2071 Elizabeth Drive, Ceoil Park 2178	58	53	Р	68	61	67	61	69	61	68	62	-		Y	Y	Y	Y	Y
NCA04	2	299019	6249457	Residential	Nca04.Res.4269.01	2073 - 2081 Elizabeth Drive, Cecil Park 2178	59	54	Р	71	65	71	65	72	65	72	66	-	-	Y	Y	Y	Y	Y
NCA04	2	298829	6249311	Residential	Nca04.Res.4278.01	1 - 7 Duff Road, Cecil Park 2178	56	51	Р	70	63	70	64	70	63	71	65	-	-	Y	Y	Y	Y	Y
NCA04	2	298741	6249398	Residential	Nca04.Res.4279.01	9 - 17 Duff Road, Cecil Park 2178	55	50	P	65	60	66	61	65	60	67	61	Y	Y	Y	Y	-	-	Y
NCA04	2		6249457	Residential	Nca04.Res.4280.01	19 - 27 Duff Road, Cecil Park 2178	55	50	P	65	60	66	61	65	60	67	61	Y	Y	Y	Y	-	-	Y
NCA04	2	298579		Residential	Nca04.Res.4282.01	37 - 45 Duff Road, Cecil Park 2178	55	50	Р	58	53	59	54	58	53	60	54	Y	Y	Y	-	-		Y
NCA04	2	298549		Residential	Nca04.Res.4285.01	47 - 55 Duff Road, Cecil Park 2178	55	50	Р	56	51	57	52	56	51	58	53	Y	-	-	-			Y
NCA04	2	298699	6249566	Residential	Nca04.Res.4289.01	40-46 Duff Road, Cecil Park 2178	55	50	Р	62	56	63	58	61	57	63	58	Y	Y	Y	Y		-	Y
NCA04	2	298662	6249622	Residential	Nca04.Res.4291.01	48-56 Duff Road, Cecil Park 2178	55	50	Р	60	55	61	56	60	55	62	57	Υ	Y	Υ	-	-	-	Y
NCA04	2		6249677	Residential	Nca04.Res.4292.01	58 - 76 Duff Road, Cecil Park 2178	55			59	54	60	55	59		61	55	Y	Y	Y	Y		-	Y
NCA04	2	298539	6249221	Residential	Nca04.Res.4299.01	2169 - 2177 Elizabeth Drive, Cecil Park 2178	55	50	Р	63	56	65	58	64	56	66	60	Y	Y	Y	Y		_	Y
NCA04	2	298498	6249145	Residential	Nca04.Res.4302.01	2179 Elizabeth Drive, Cecil Park 2178	55	50	Р	63	55	63	57	63		64	58	Y	Y	-	-	-	-	Y
NCA04	2		6249002	Residential	Nca04.Res.4306.01	2213 Elizabeth Drive, Cecil Park 2178	55	50	Р	61	53	61	54	62	54	62	56	-	Y	-	-	-		Y
NCA04	2	298334		Residential	Nca04.Res.4308.01	2213 Elizabeth Drive, Cecil Park 2178	55	50	Р	63	56	63	57	64	56	64	58	-	Y	-	-	-	-	Y
NCA04	2		6249013	Residential	Nca04.Res.4309.01	2229 Elizabeth Drive, Cecil Park 2178	55		Р	71	64	71	65			72	66	-	Y		-	-	-	Y
NCA04	2		6249150	Residential	Nca04.Res.4310.01		55	50	P	61	54	61	55	62	54	63	56	-	Y	-	-	-		Y
NCA04	2	298392		Residential	Nca04.Res.4316.01	2159 Elizabeth Drive, Cecil Park 2178	55	50	Р	60	53	61	55	61	53	63	56	Y	Y	Y	-	-	لستسا	Y
NCA04	2		6249344	Residential	Nca04.Res.4318.01	2149 Elizabeth Drive, Cecil Park 2178	55	50	Р	55	48	58	51	56	49	59	53	Y	Y		-	-	لستسا	Y
NCA04	2	298450	6249477	Residential	Nca04.Res.4320.01	15 - 20 Warana Road, Cecil Park 2178	55	50	Р	52	45	54	48	52	45	56	49	Υ	-	-	-	-	-	Y
NCA04 NCA04	2		6249194	Residential Residential	Nca04.Res.4331.01	2235 Elizabeth Drive, Cecil Park 2178	55			60	52	60	54	60		61	55	Y	Y	-	-	-	-	Y
	2				Nca04.Res.4335.01	2251 - 2253 Elizabeth Drive, Ceoil Park 2178	55	50	Р	61	54	63	56	62	54	64	57	Y	Y	Y	Y	-	لنب	Y
NCA04 NCA04	2	298057	6249315	Residential Residential	Nca04.Res.4337.01 Nca04.Res.4417.01	2255-22771 Elizabeth Drive, Cecil Park 2178 1227 - 1229 Elizabeth Drive, Mount Vernon 2178	55	50	Р	61	53	62	56	61		64	57	Y	Y			_	-	Y
NCA04	2	297905		Residential	Nca04.Res.4417.01 Nca04.Res.4418.01	1227 - 1229 Eizabeth Drive, Mount Vernon 2178 1231A Elizabeth Drive, Mount Vernon 2178	55 55	50 50	P	59 59	51 52	61 61	54 54	60 60	51 52	63 62	56 56	Y	Y	Y	Y	-	لنب	Y
NCA04																						-	-	Y
NCA04	2	2977660	6249158	Residential Residential	Nca04.Res.4422.01 Nca04.Res.4423.01	1239 - 1245 Elizabeth Drive, Mount Vernon 2178 1247 - 1253 Elizabeth Drive, Mount Vernon 2178	55	50	P	66	58	67	60	66		68	61	Y	Y	Y	Y	ν	-	Y
NCA04	2	297622		Residential	Nca04.Res.4424.01	1255 - 1253 Etzabeth Drive, Mount Vernon 2178	55	50 50	P	66	58	67 67	60	66	58	68	62	Y	Y	Y	Y	Y	_	Y
NCA04	2	297622	6249111	Residential	Nca04.Res.4424.01 Nca04.Res.4438.01	1255 - 1251 Elizabeth Drive, Mount Vernon 2178 316 Mount Vernon Road. Mount Vernon 2178	55 55	50	P	66 59	58 51	62	60 55	66 59	58 51	69 64	62 56	Y	Y	Y	Y	Y	_	Y
NCA04	2		6249415	Residential	Nca04.Res.4438.01 Nca04.Res.4579.01	326 - 332 Mount Vernon Road, Mount Vernon 2178	55	50	P	59	50	63	55	58	50	65	57	Y	Y	Y	Y	-	-	Y
NCA04	2		6249288	Residential	Nca04.Res.4579.01	334 - 338 Mount Vernon Road, Mount Vernon 2178	55	50	P	58	49	63	55	58		64	56	Y	Ÿ	, r	Y	-		- T
NCA04	2	297197		Residential	Nca04.Res.4582.01	340 - 344 Mount Vernon Road, Mount Vernon 2178	55	50	P	61	53	65	57	61		67	59	Y	Y	Y	Y	Y	_	Y
NCA04	2	297116		Residential	Nca04.Res.4583.01	346 - 356 Mount Vernon Road, Mount Vernon 2178	55	50	P	66	56	68	59	65	56	69	61	Y	Y	Y	Y	Y	-	Y
NCA04	2		6249216	Residential	Nca04.Res.4584.01	1306 Marme Road, Mount Vernon 2178	55	50	P	69	60	71	63	69	60	72	65	Y	Y	Y	Y	Y	Y	·
NCA04	2		6249014	Residential	Nca04.Res.4585.01	1279 Elizabeth Drive, Mount Vernon 2178	55	50	P	69	61	70	63	69	60	72	65	Y	Ÿ	Y	Y	Y	Y	Y
NCA04	2	297044		Residential	Nca04.Res.4588.01	343 Mount Vernon Road, Mount Vernon 2178	55	50	P	66	55	68	58	64		68	59	Y	Y	Y	Y	Y		Y
NCA04	2	296960		Residential	Nca04.Res.4596.01	1285 - 1291 Mamre Road, Kemps Creek 2178	55	50	P	58	51	68	61	58	50	70	62	Y	Ÿ	Y	Y	Y	Y	T Y
NCA04	2		6249123	Residential	Nca04.Res.4598.01	1293A Mamre Road, Kemps Creek 2178	55	50	P	59	51	70	62	59	50	72	64	Y	Ÿ	Y	Y	Y	Y	Y
NCA04	2		6249201	Residential	Nca04.Res.4599.01	1277 - 1283 Mamre Road, Kemps Creek 2178	55	50	P	64	53	67	58	62	53	67	59	Y	Ÿ	Y	Y	Y	-	Y
NCA04	2		6249367	Residential	Nca04.Res.4699.01	1266-1272 Mamre Road, Kemps Creek 2176	55	50	P	65	54	66	56	64	54	66	58	Y	Ÿ	Y	Y	-	-	Y
NCA04	2	296950		Residential	Nca04.Res.4613.01	1260 - 1264 Mamre Road, Mount Vernon 2178	55	50	P	62	51	64	54	60	51	64	56	Ÿ	Ÿ	Y	Y			Y
NCA04	2	296695		Residential	Nca04.Res.4695.01	1341 - 1347 Elizabeth Drive. Kemps Creek 2178	55	50	P	56	47	67	59	55	46	69	61	Y	Ÿ	Y	Y	Y	Y	Y
NCA04	2		6248965	Residential	Nca04.Res.4696.01	1349 - 1355 Elizabeth Drive, Kemps Creek 2178	55	50	P	54	44	67	60	53	44	70	61	Y	Ÿ	Y	Y	Ÿ	Y	Y
NCA04	2		6248826	Residential	Nca04.Res.4701.01	1560 Elizabeth Drive, Cecil Park 2178	55	50	P	70	63	70	64		62	70	65	Y	Ÿ			Y	-	Y
NCA04	2		6248797	Residential	Nca04.Res.5576.01	1630 Elizabeth Drive, Kemps Creek 2178	55	50	P	68	61	67	62	68	60	68	62	Y	Ÿ	1		-		Y
NCA04	2	296121		Residential	Nca04.Res.5577.01	1610 Elizabeth Drive. Kemps Creek 2178	55	50	P	70	62	69	63	69	61	69	64	-	Ÿ	-				Y
NCA04	2		6248715	Residential	Nca04.Res.5579.01	1590 Elizabeth Drive, Kemps Creek 2178	55	50	P	63	56	64	57	63	55	65	59	Y	Ÿ	Y	Y		-	Y
NCA04	2	296358	6248650	Residential	Nca04.Res.5586.01	1572 Elizabeth Drive. Cecil Park 2178	55	50	P	59	52	61	54	59	51	63	56	Ÿ	Ÿ	Y	Y			Y
NCA06	2		6248929	Residential	Nca06.Res.5544.01	1431 - 1433 Elizabeth Drive. Kemps Creek 2178	55	50	P	74	67	72	67	74	66	74	68	Y	Y	Y	Y	-	-	Y
NCA06	2		6248984	Residential	Nca06.Res.5546.01	51 Salisbury Avenue, Kemps Creek 2178	55	50	P	68	60	65	60	69	59	68	61	Y	Ÿ	Y				Y
NCA06	2	295474	6249169	Residential	Nca06.Res.5548.01	442-449 Clifton Avenue, Kemps Creek 2178	55	50	P	62	53	61	54	62	53	63	55	Ÿ	Ÿ	Y	-	-		Y
NCA06	2	295513	6249375	Residential	Nca06.Res.5551.01	422-433 Clifton Avenue, Kemps Creek 2178	55	50	Р	54	45	60	53	54	45	63	55	Y	Y	Y	Υ	-	-	Y
NCA06	2	295517	6249549	Residential	Nca06.Res.5553.01	395 - 409 Clifton Avenue, Kemps Creek 2178	55	50	P	53	45	62	54		45	64		Y	Y	Y	Y	-	-	Y
	_									_	_	_	_					_	_	_			_	

												Predi	cted Not	se Level	(dBA)									
							NCG				At Openi	ing (2026						Incr		Cumulat				
NCA			Northina		Name	Address			Period		Build			No E	Build									Consideration
NCA06	2		6249152		Nca06.Res.5560.01	41 - 49 Salisbury Avenue, Kemps Creek 2178	55	50	Р	58	51	63	55	69	60	71	62	Y	Y	Y	Y	-	-	Y
NCA06	2	295808	6249269	Residential	Nca06.Res.5563.01	33-39 Salisbury Avenue, Kemps Creek 2178	55	50	Р	57	49	65	57	69	59	71	63	Y	Y	Y	Y	Y	-	Y
NCA06	2	295882	6249209	Residential	Nca06.Res.5566.01	34-42 Salisbury Avenue, Kemps Creek 2178	55	50	Р	54	47	59	52	70	60	71	62	Y	Y	Y	Y	Y	-	Y
NCA06	2	295844	6249053	Residential	Nca06.Res.5569.01	1431 - 1433 Elizabeth Drive, Kemps Creek 2178	55	50	Р	55	48	62	54	69	60	71	62	Y	Y	Y	Y		-	Y
NCA07	2	294082	6250512	Residential	Nca07.Res.4831.01	146 Clifton Avenue, Kemps Creek 2178	55	45	Р	44	33	60	53	43	33	63	54	Y	Y	Y	Y	-	-	Y
NCA07	2		6250950		Nca07.Res.4833.01	203 - 229 Clifton Avenue, Kemps Creek 2178	55	49	Р	46	38	65	58	47	37	68	60	Y	Y	Y	Y	Y	Y	Y
NCA07	2	294721	6251017	Residential	Nca07.Res.4834.01	203 - 229 Clifton Avenue, Kemps Creek 2178	55	50	Р	48	38	61	54	48	38	64	55	Y	Y	Y	Y	-	-	Y
NCA07	2	295061	6251145	Residential	Nca07.Res.4841.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	Р	52	42	58	50	51	42	60	52	Y	Y	Y	-	-	-	Y
NCA07	2		6251091		Nca07.Res.4843.01	235 - 245 Clifton Avenue, Kemps Creek 2178	55	50	Р	54	45	59	51	53	45	61	52	Y	Y	Y	-	-	-	Y
NCA07	2	290701	6250217	Residential	Nca07.Res.5153.01	Unit 15, 1953 Elizabeth Drive, Badgerys Creek 2555	55	50	Р	49	39	56	48	50	38	59	50	Y	Y	-	-	-	-	Y
NCA07	2		6250509		Nca07.Res.5170.01	1669 Elizabeth Drive, Badgerys Creek 2555	54	43	Р	42	32	58	50	42	31	60	52	Y	Y	Y	Y	-	-	Y
NCA09	2	289977	6251640	Residential	Nca09.Res.4884.01	734 Luddenham Road, Luddenham 2745	55	50	Р	60	46	63	54	60	47	64	56	Y	Y	Y	Y	-	-	Y
NCA09	2	289957	6251717	Residential	Nca09.Res.4887.01	710 - 732 Luddenham Road, Luddenham 2745	55	50	P	70	56	70	58	70	58	69	61	Y	Y	Y	Y	-	-	Y
NCA09	2		6251907		Nca09.Res.4916.01	713 - 733 Luddenham Road, Luddenham 2745	55	50	Р	57	44	61	53	57	45	62	55	Y	Y	Y	Y	-	-	Y
NCA09	2	289085	6250946	Residential	Nca09.Res.5129.01	821-849 Luddenham Road, Luddenham 2745	55	50	Р	54	41	60	53	54	42	62	55	Y	Y	Y	Y	-	-	Y

Sensitive receivers for predicted operational road traffic noise levels



LEGEND

— Amended Project Option 1

— Amended Project Option 2

【☐ NCA

Operational Noise Study Area

☐ Buildings

Sensitive Receiver ID's





LEGEND

— Amended Project Option 1

— Amended Project Option 2

【☐ NCA

Operational Noise Study Area

☐ Buildings

Sensitive Receiver ID's





Operational Noise Study Area

☐ Buildings



0 50 100 150 200

LEGEND

— Amended Project Option 1

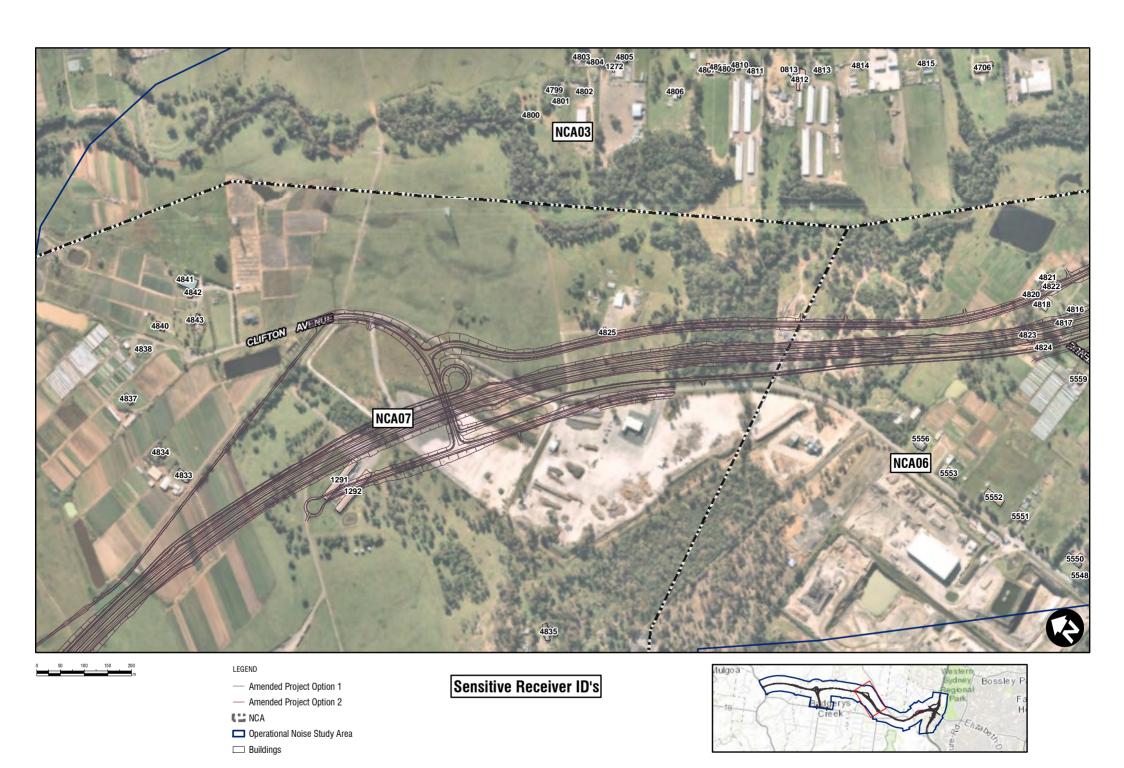
— Amended Project Option 2

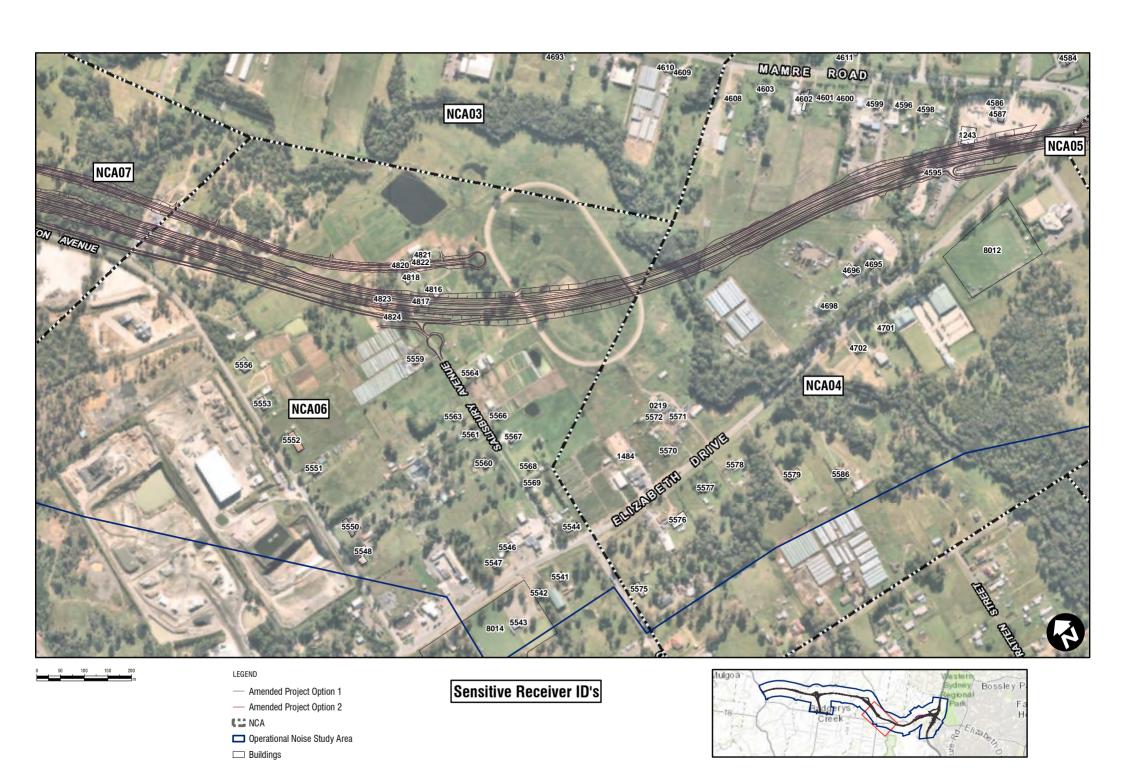
【☐ NCA

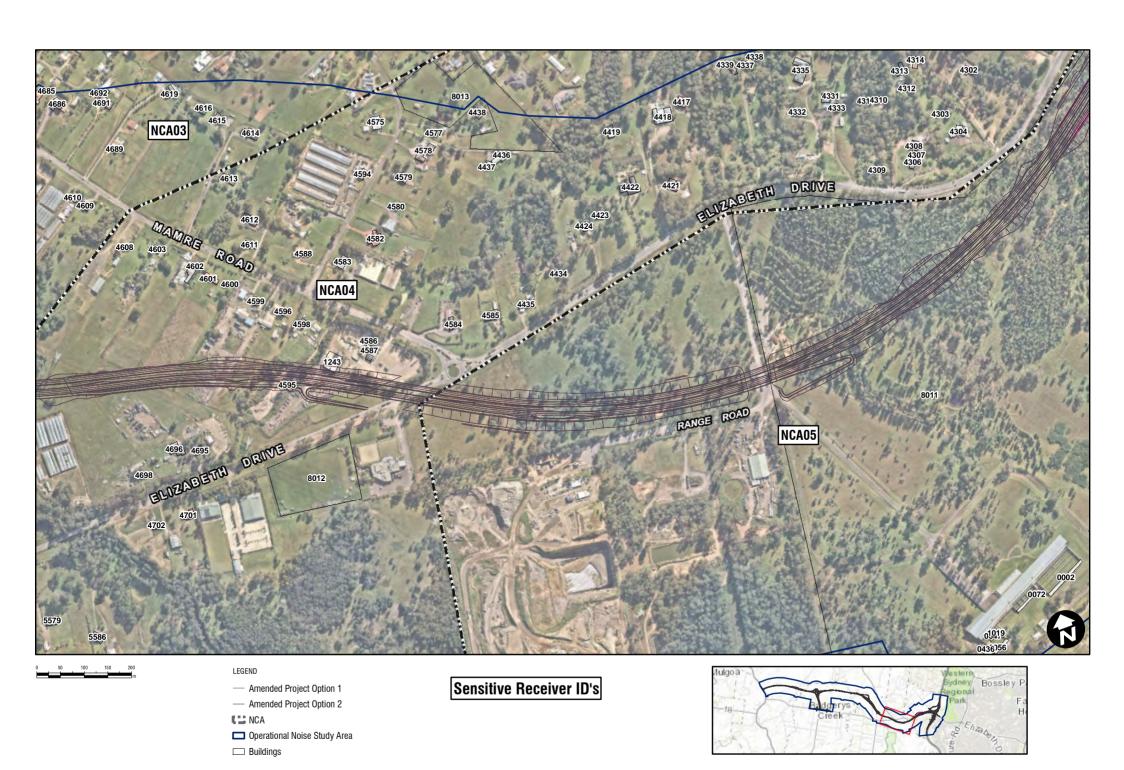
Operational Noise Study Area

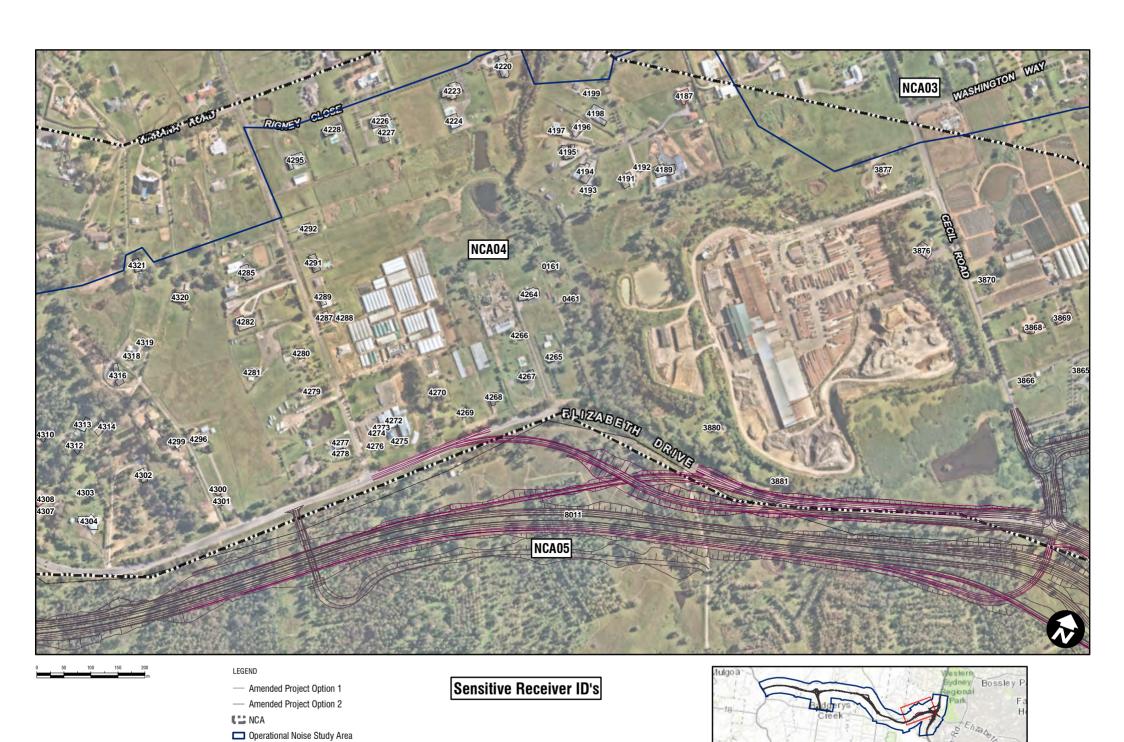
☐ Buildings



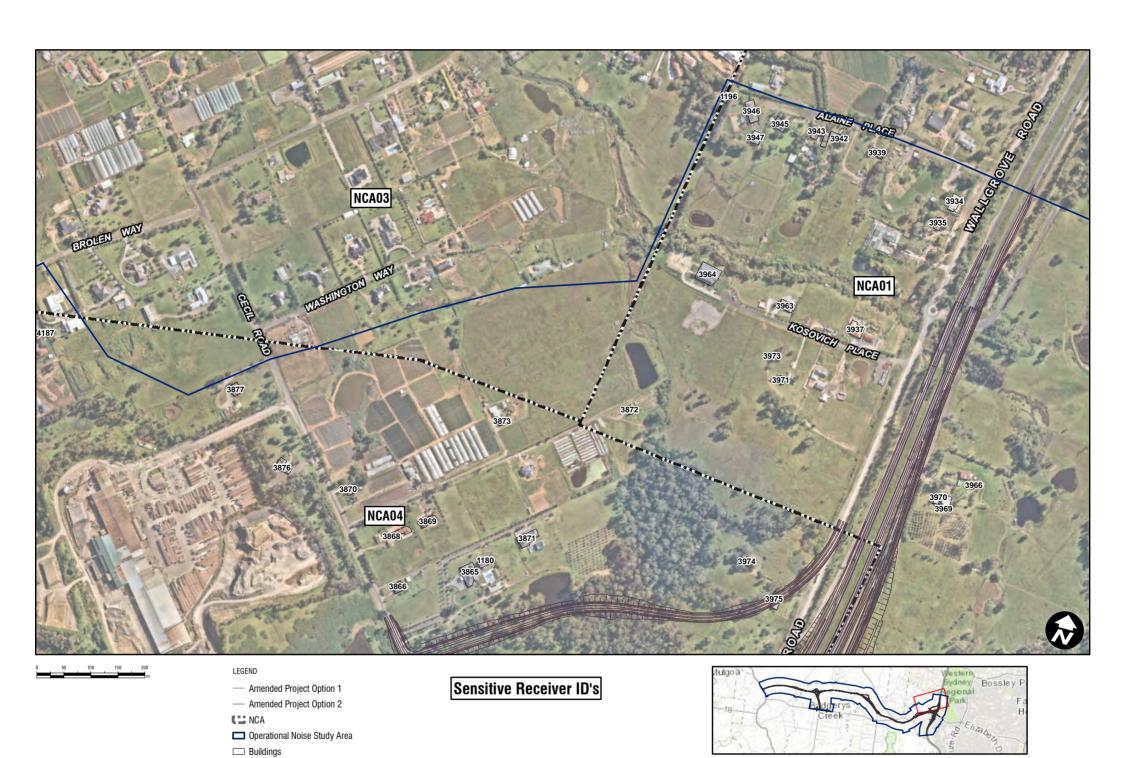








□ Buildings







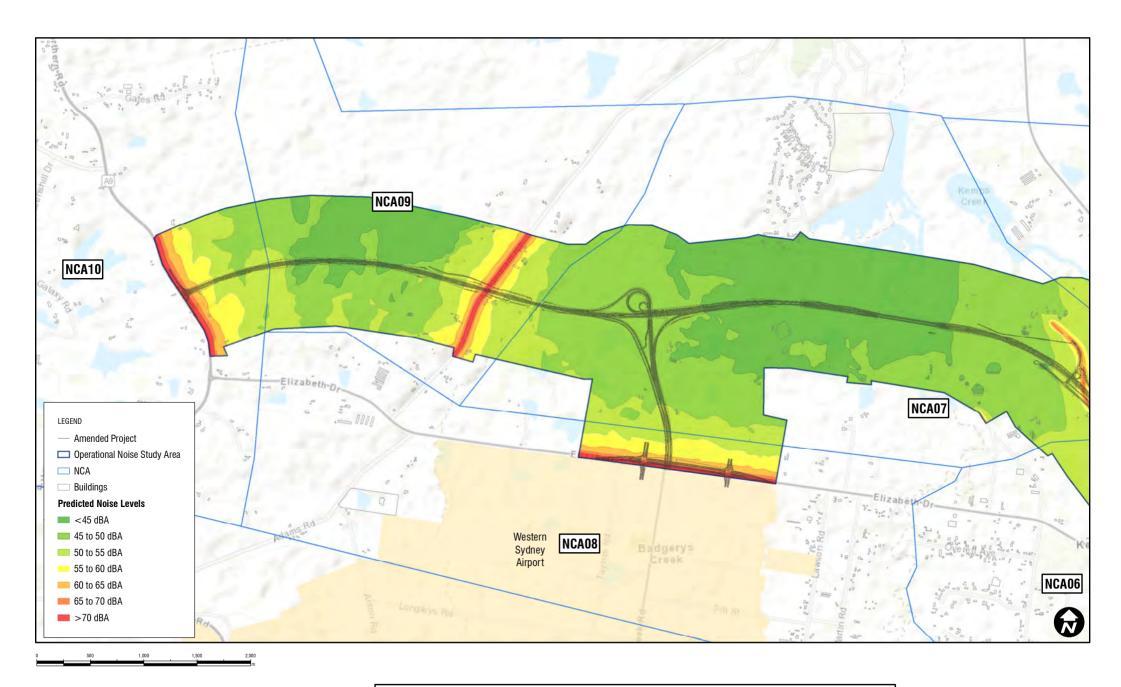


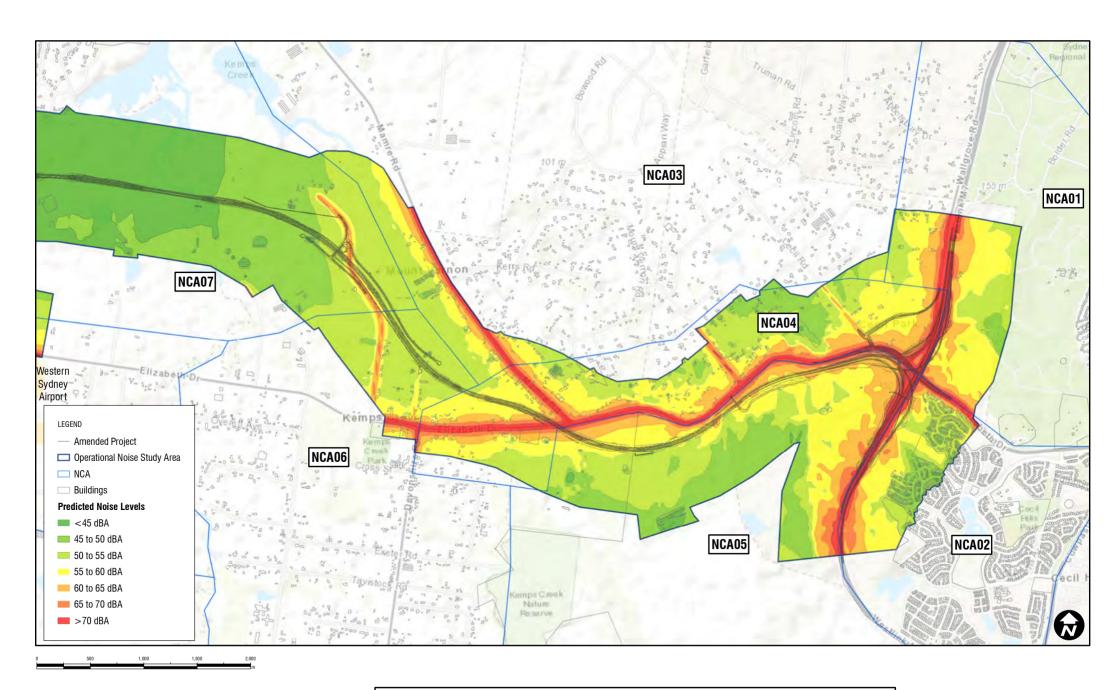




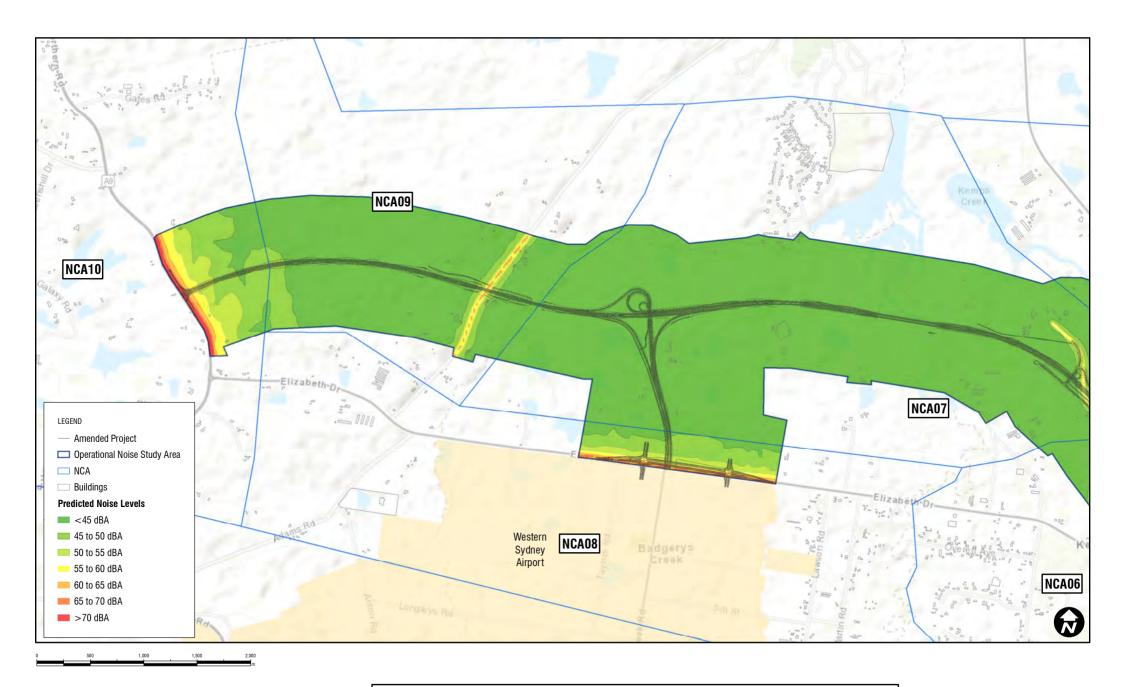


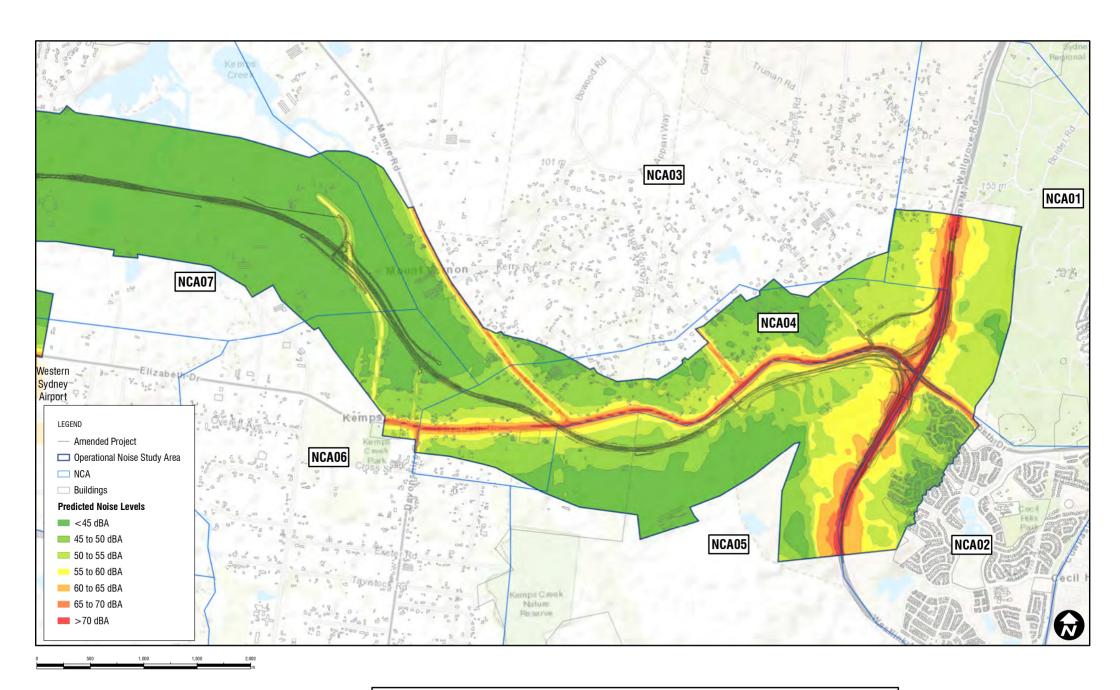
No Build, 2026, daytime (free field noise contours)



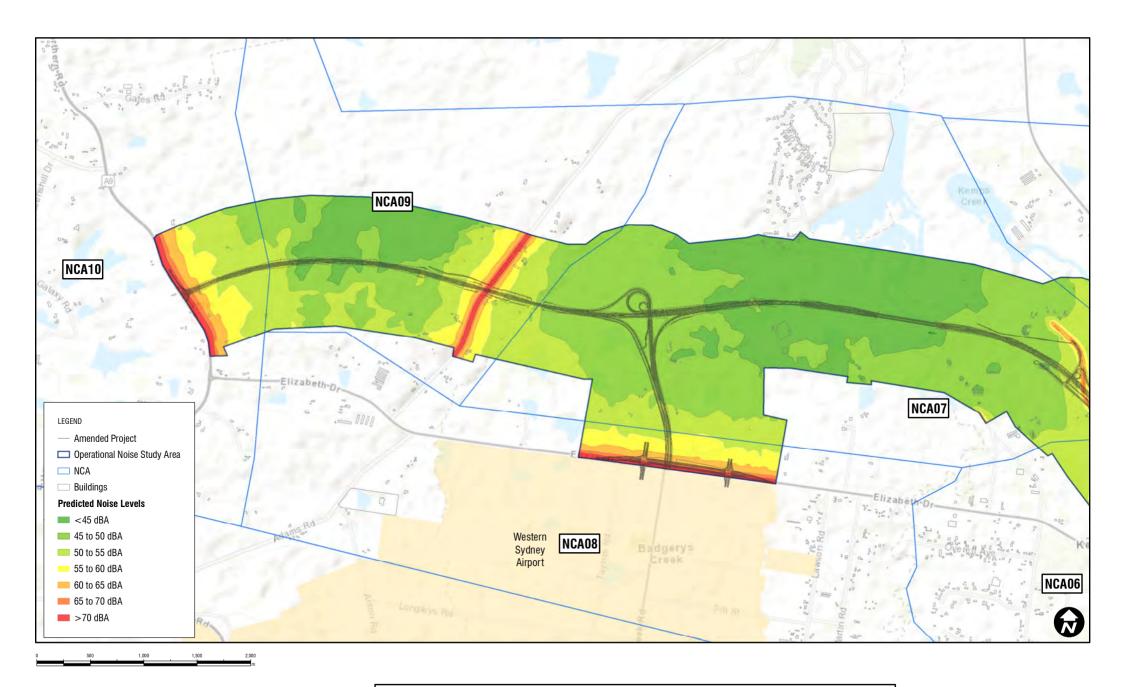


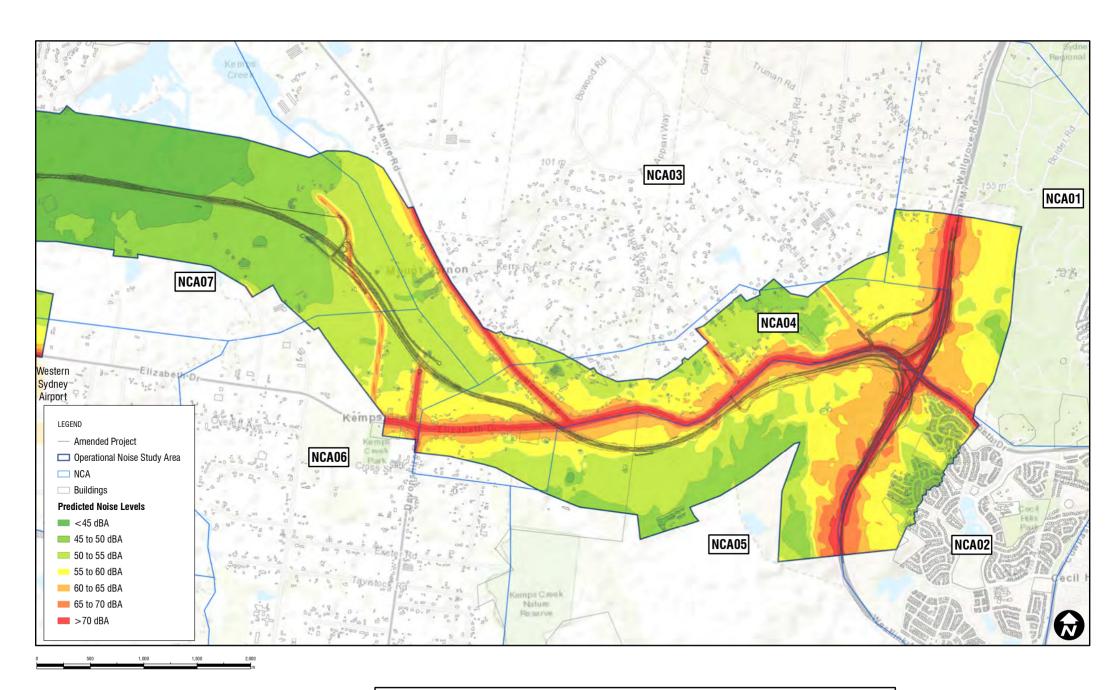
No Build, 2026, night-time (free field noise contours)



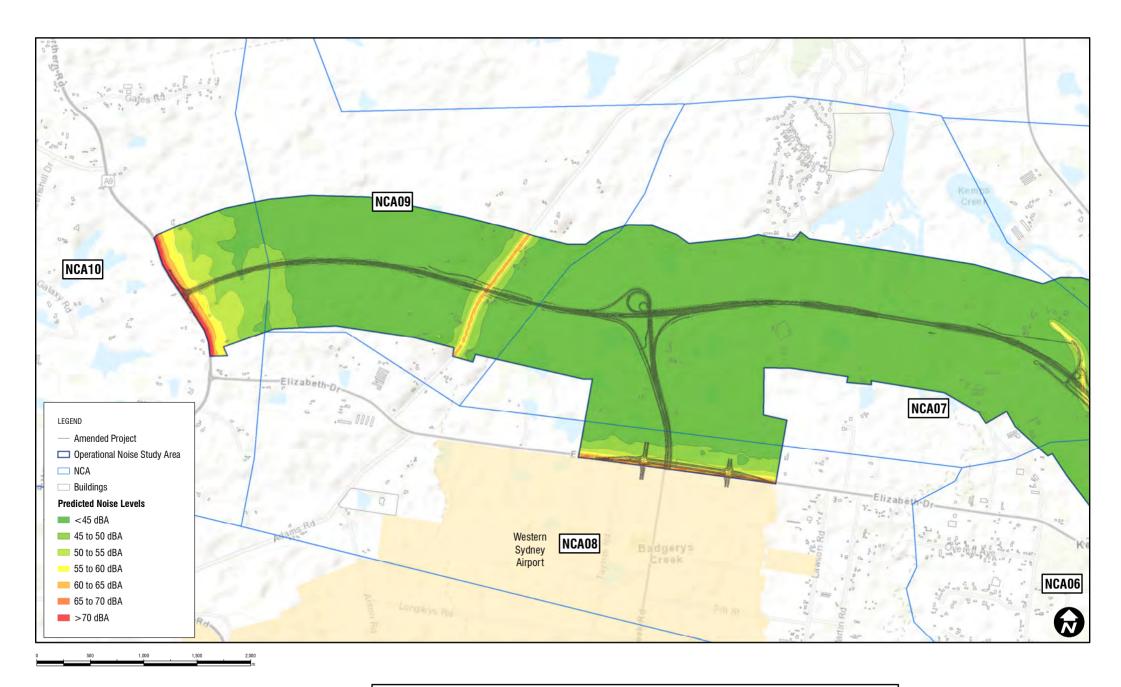


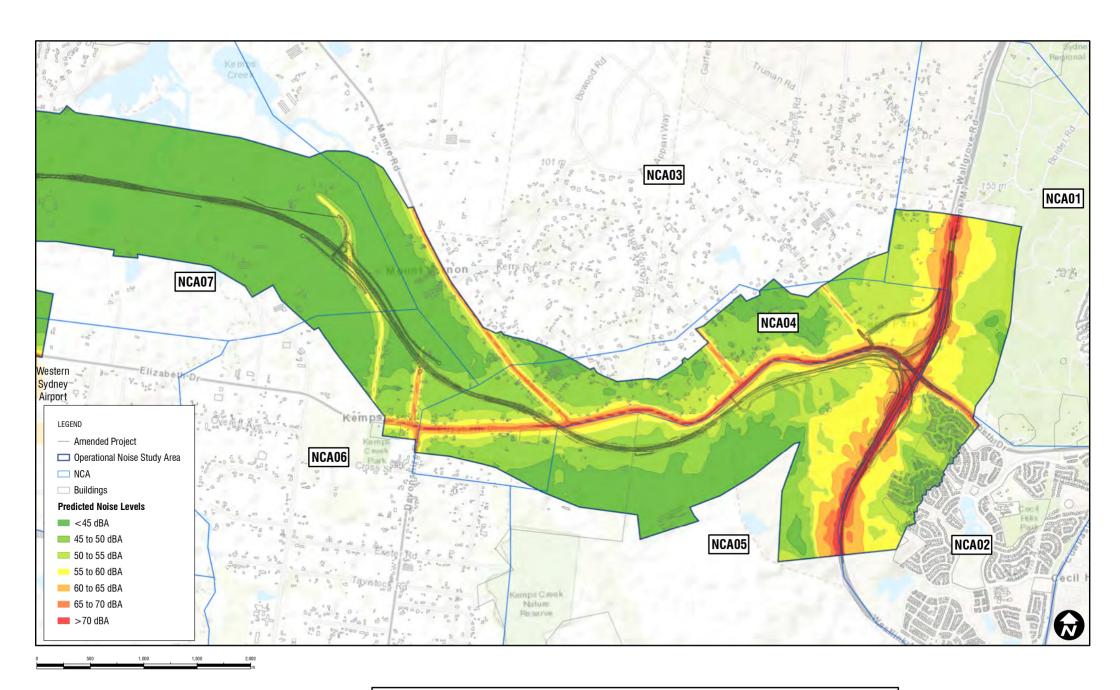
No Build, 2036, daytime (free field noise contours)



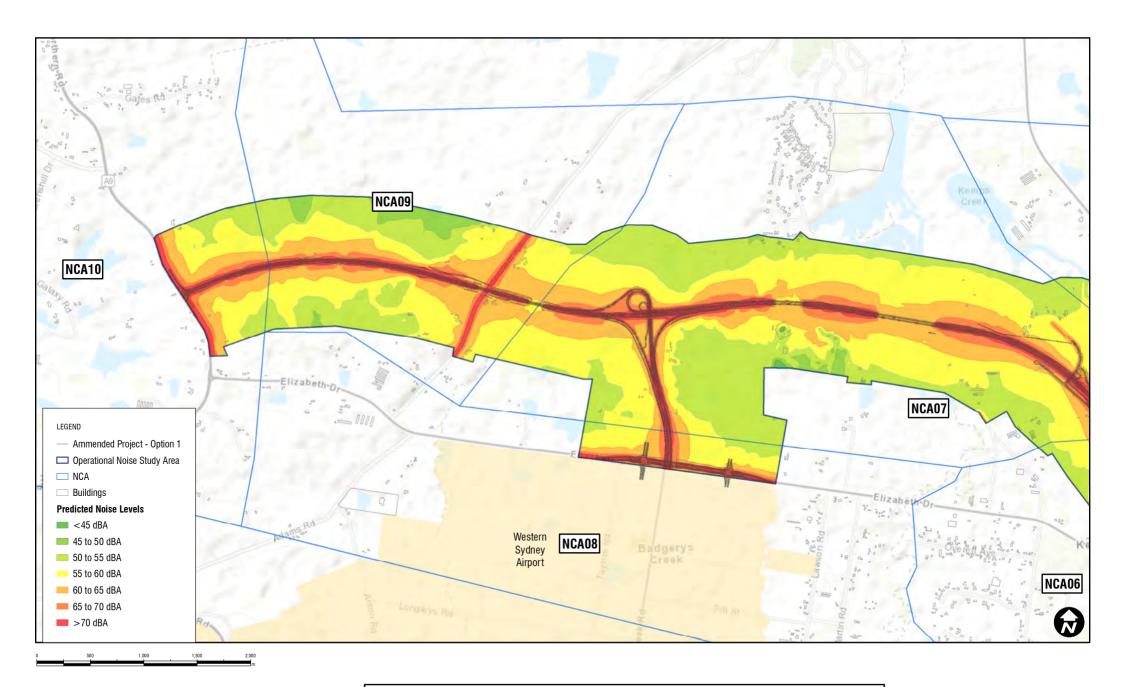


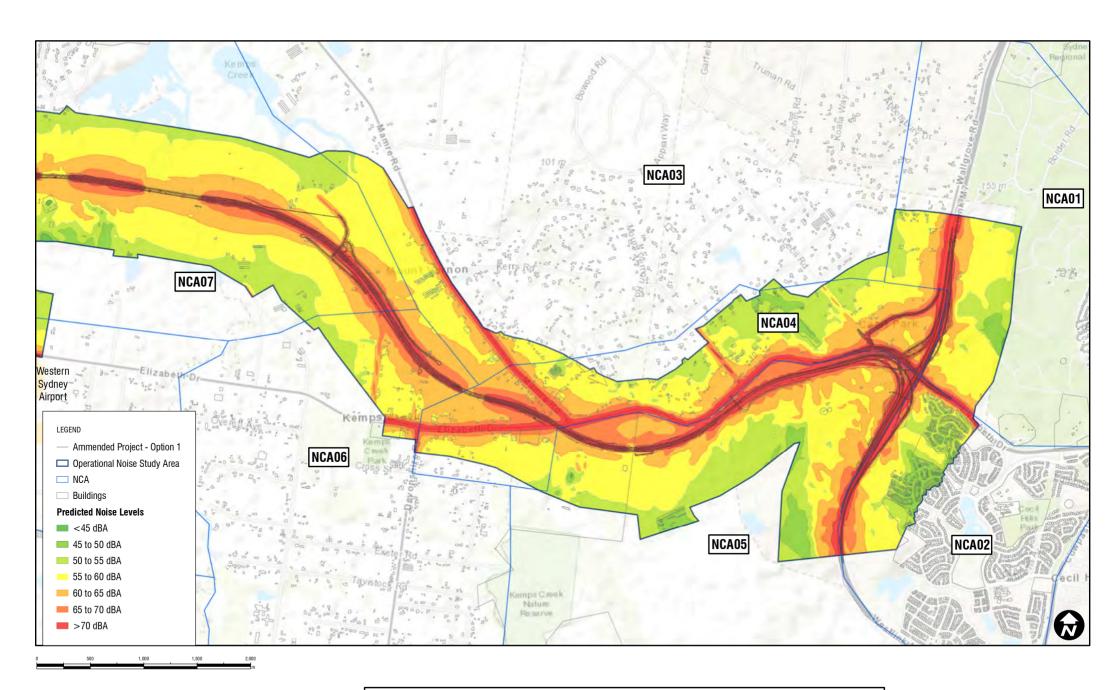
No Build, 2036, night-time (free field noise contours)



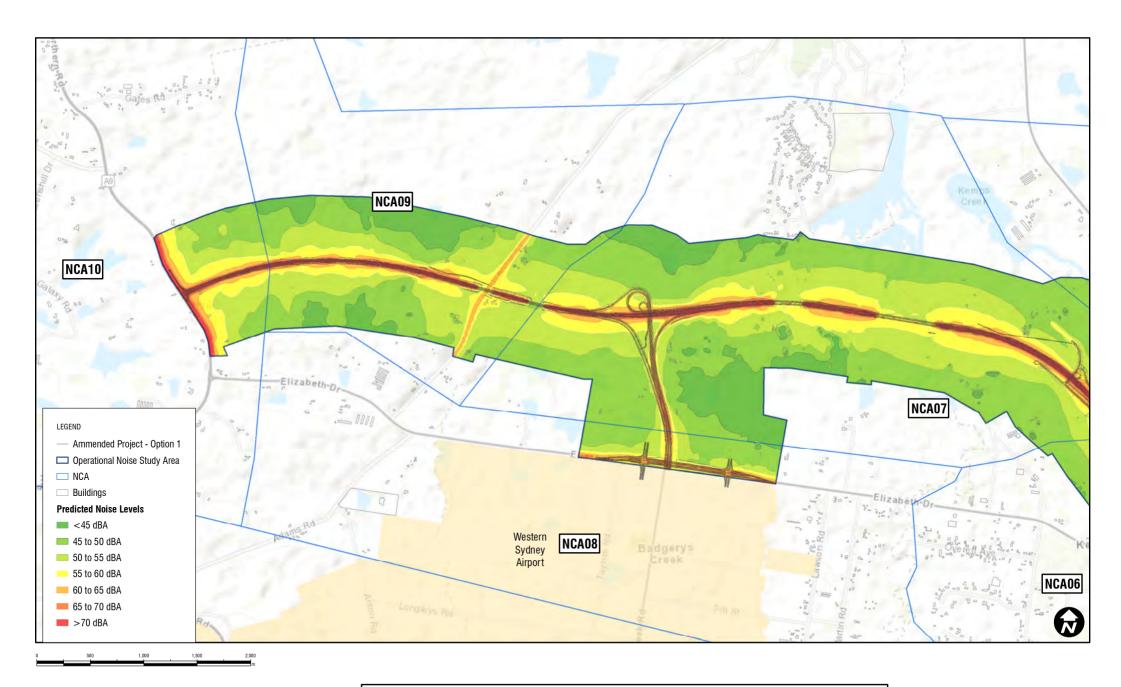


Build – Option 1, 2026, daytime (free field noise contours)

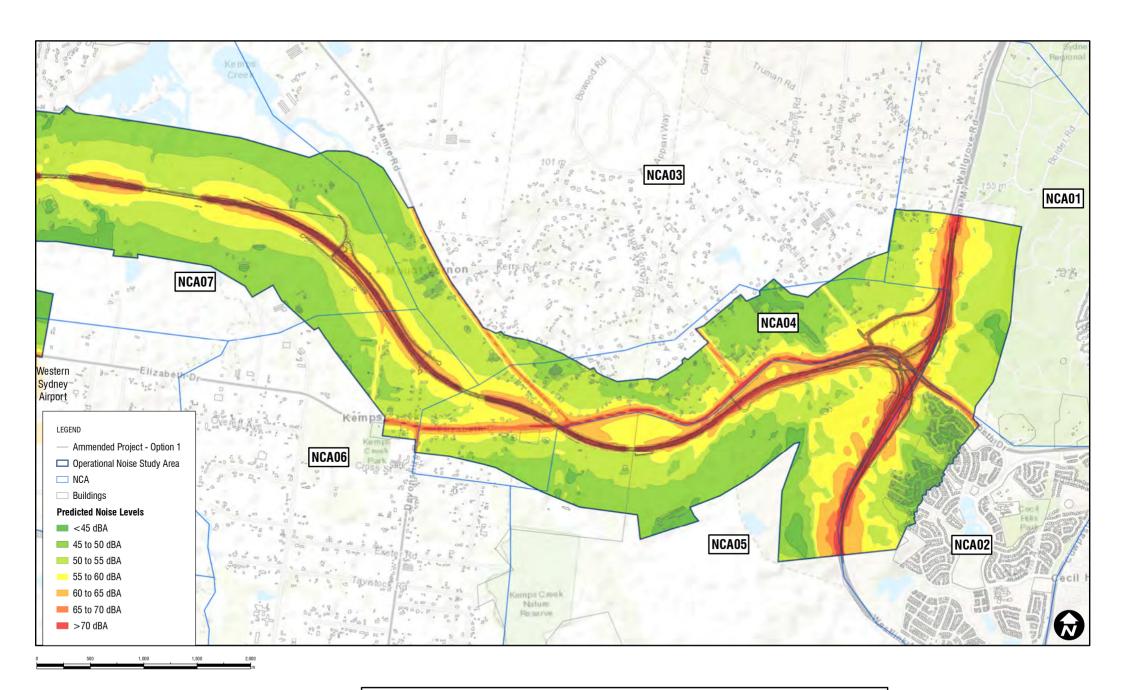




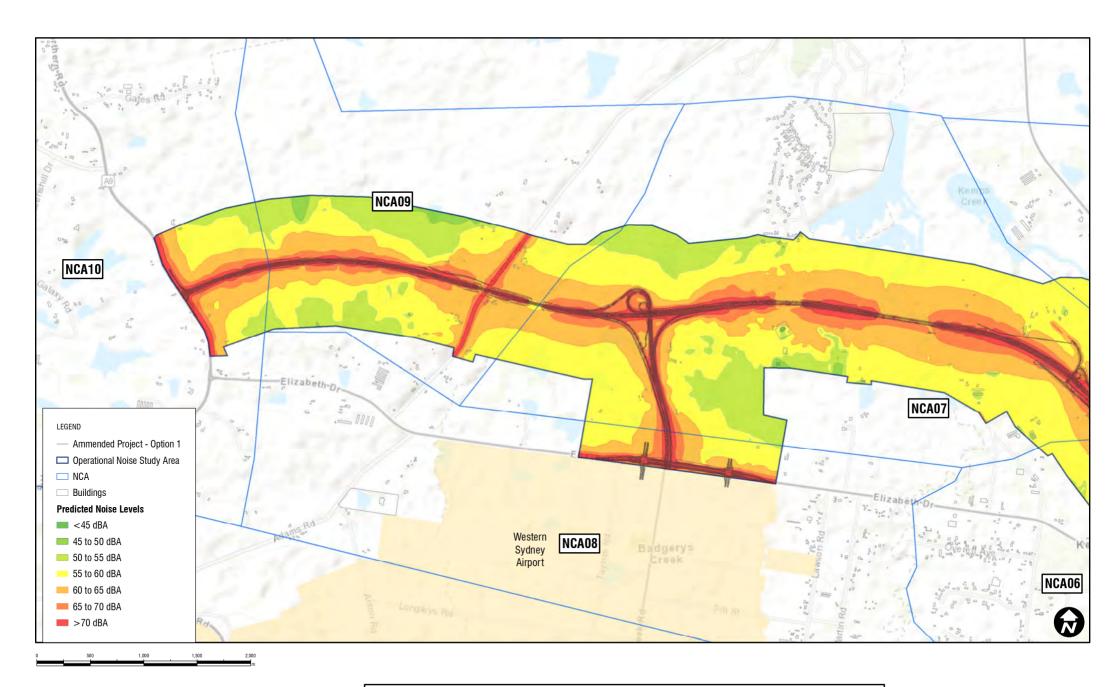
Build – Option 1, 2026, night-time (free field noise contours)

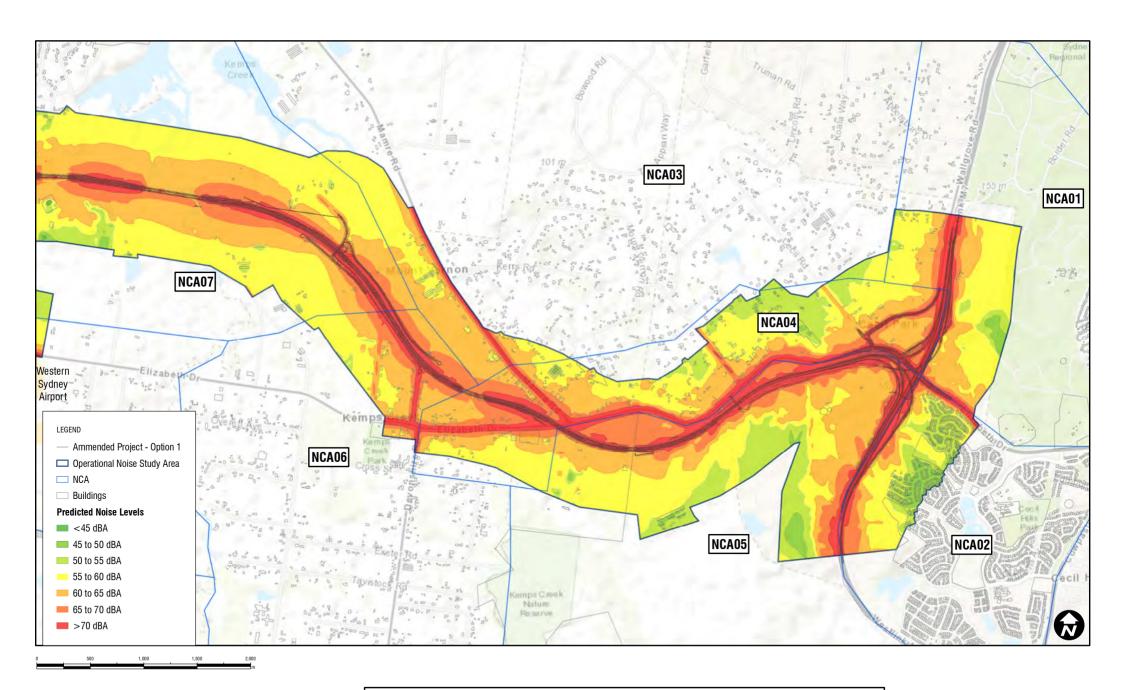


Predicted noise levels without mitigation - Option 1 2026 Night-time LAeq (9 hour)

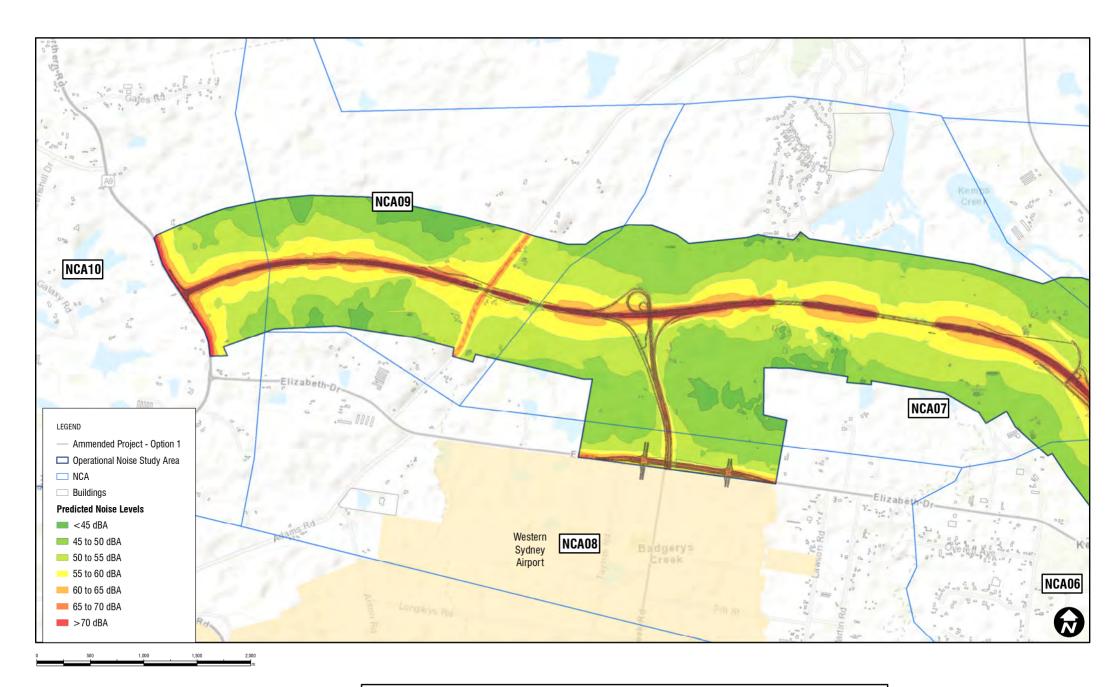


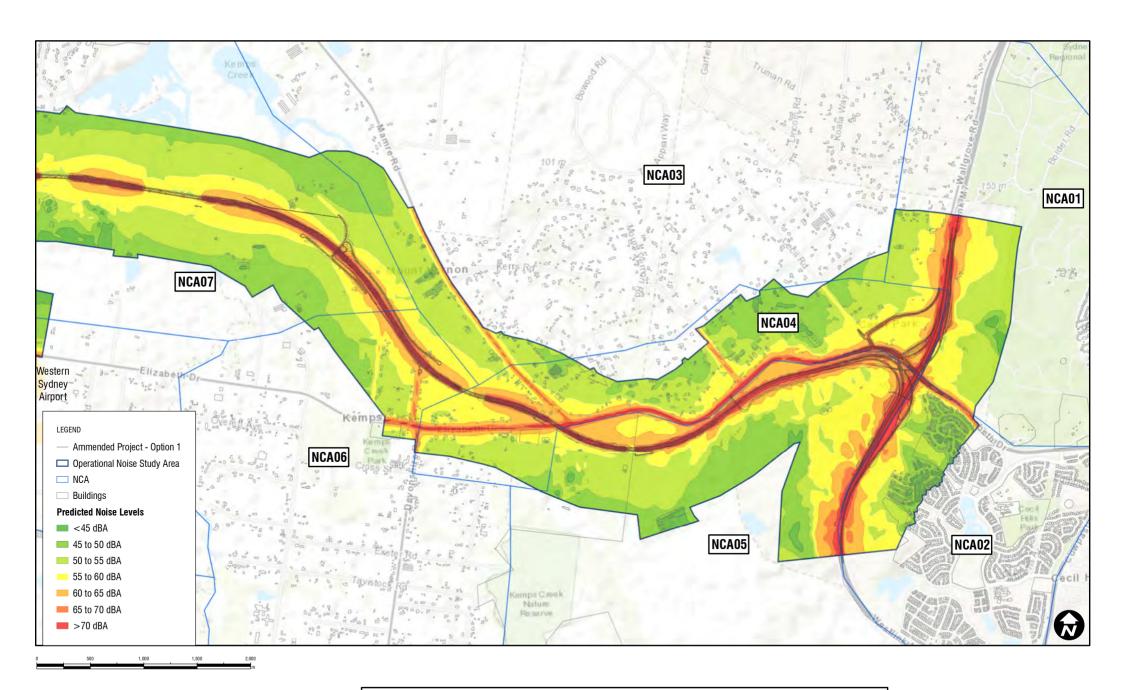
Build – Option 1, 2036, daytime (free field noise contours)



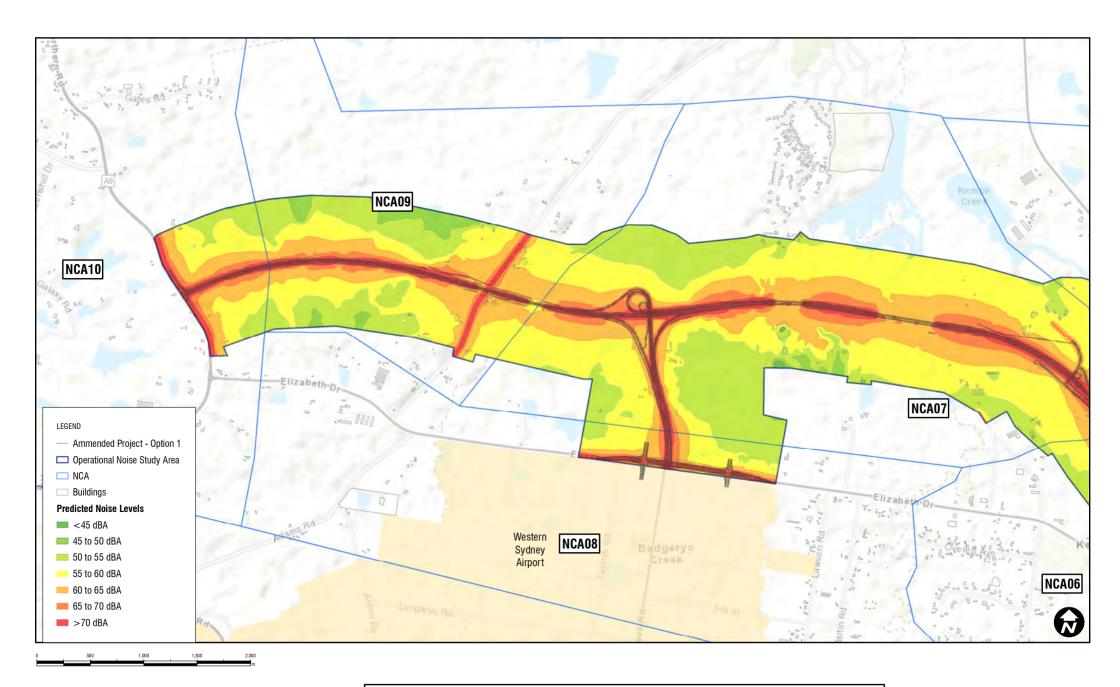


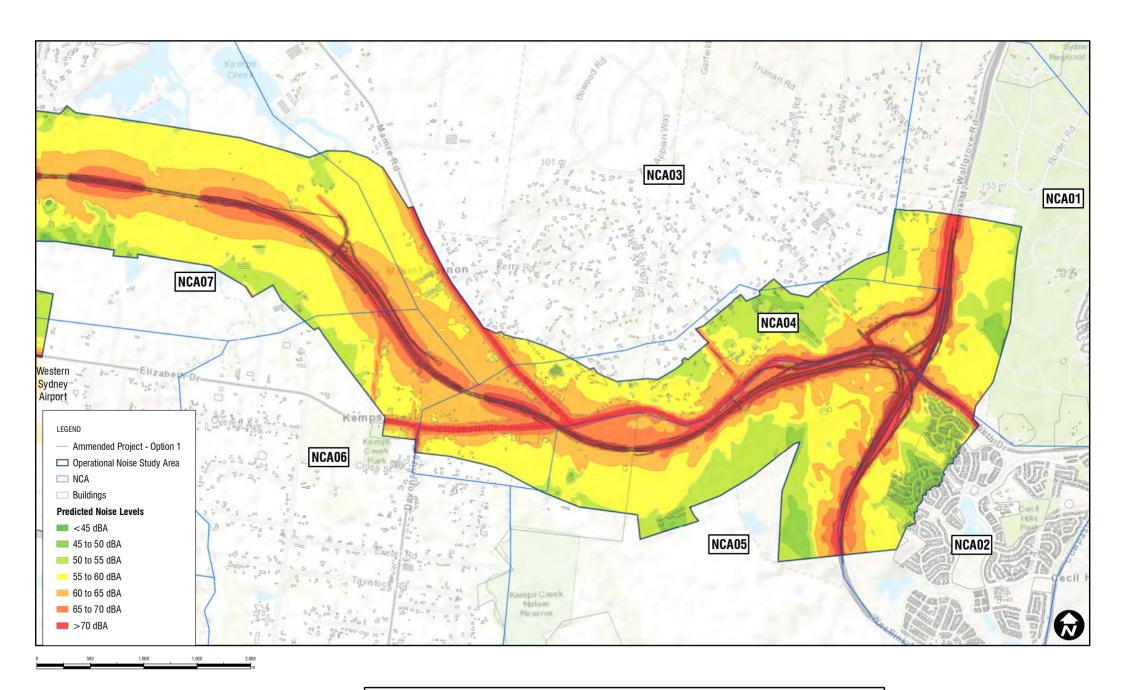
Build – Option 1, 2036, night-time (free field noise contours)





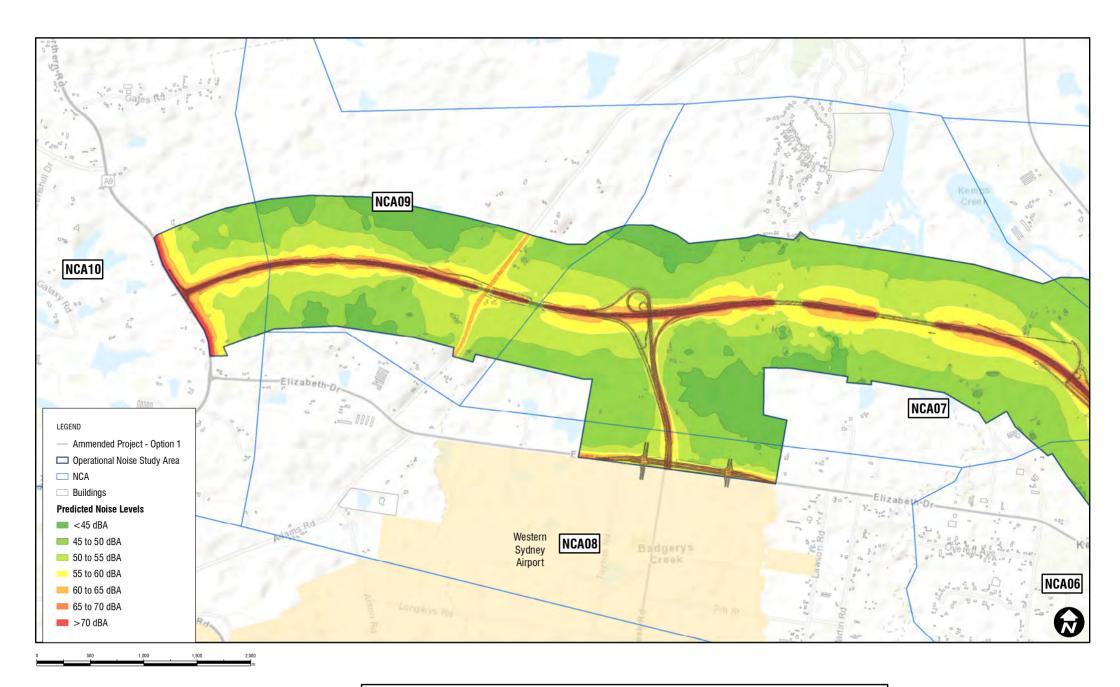
Build – Option 2, 2026, daytime (free field noise contours)



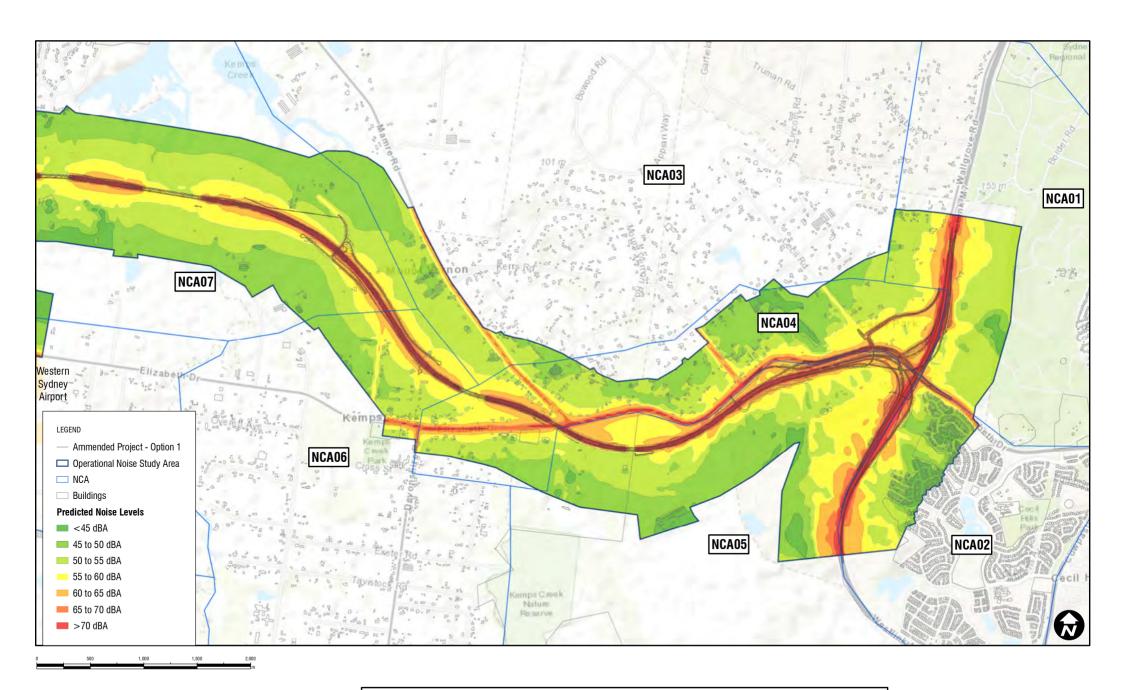


Predicted operational road traffic noise levels without mitigation

Build – Option 2, 2026, night-time (free field noise contours)

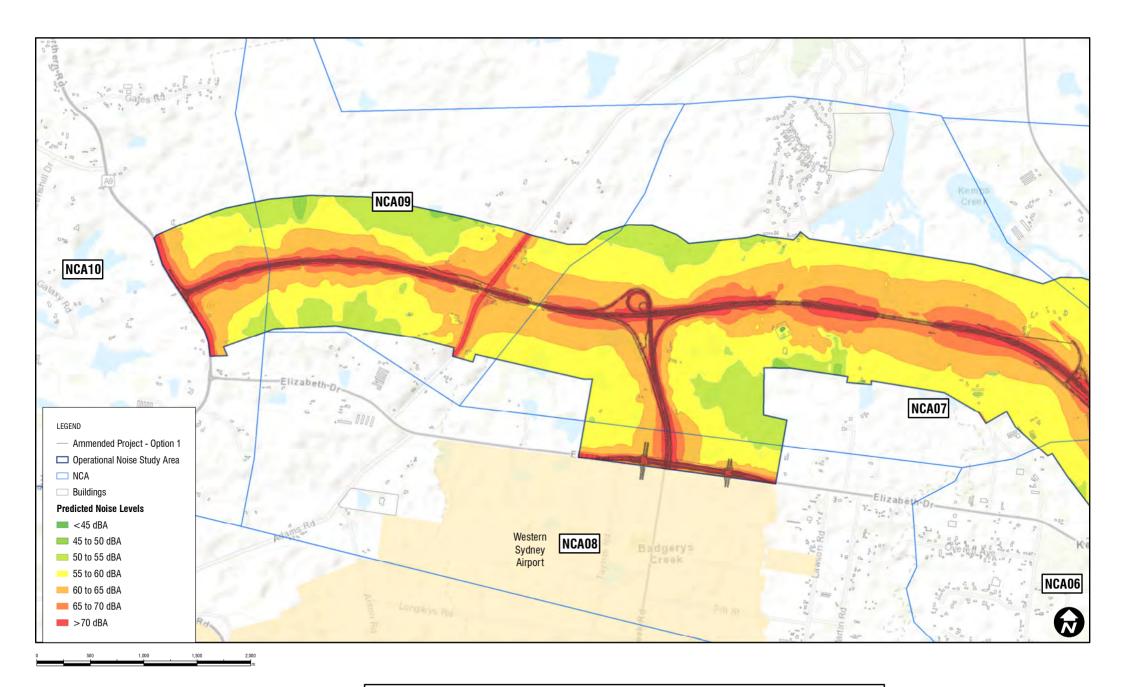


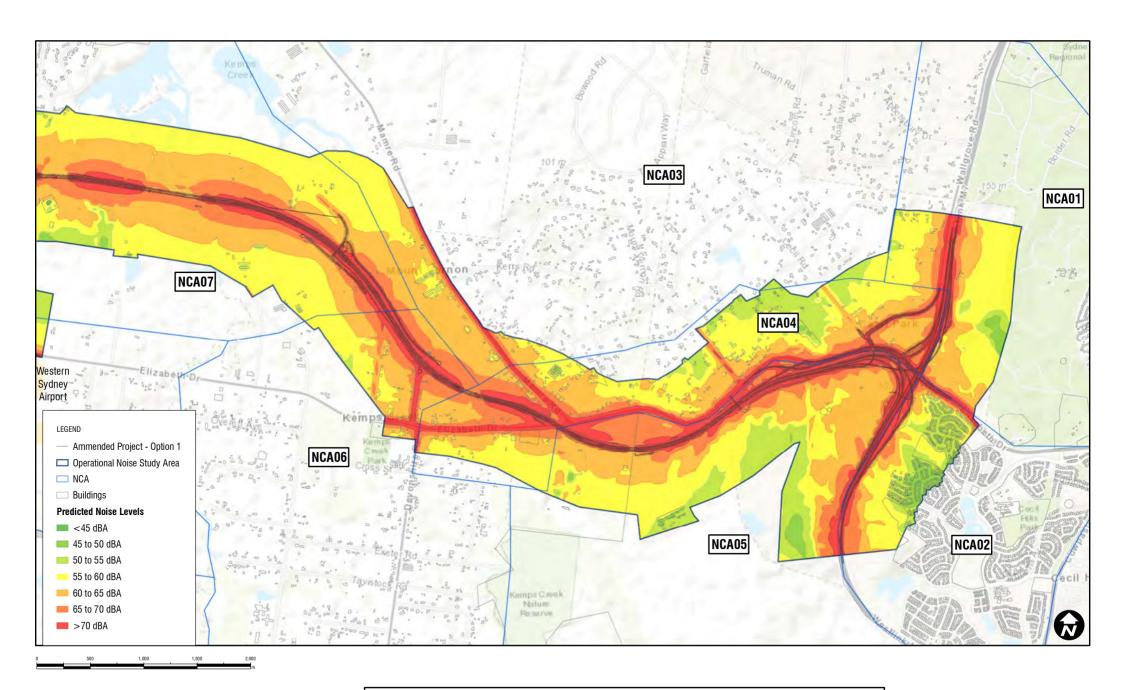
Predicted noise levels without mitigation - Option 2 2026 Night-time LAeq (9 hour)



Predicted operational road traffic noise levels without mitigation

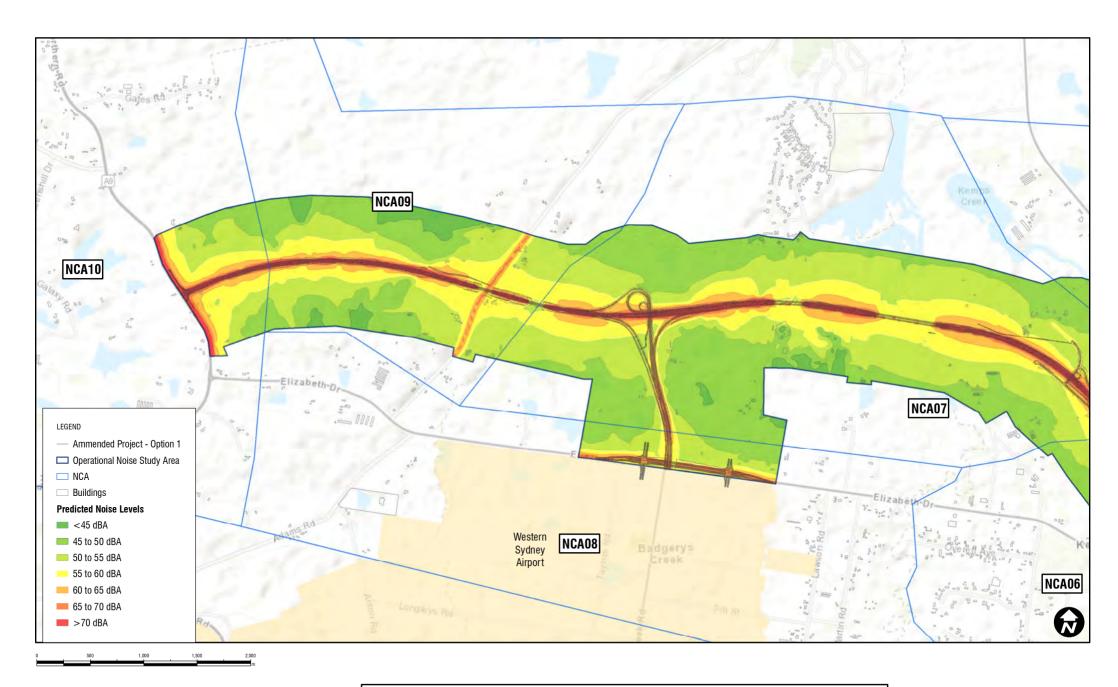
Build – Option 2, 2036, daytime (free field noise contours)

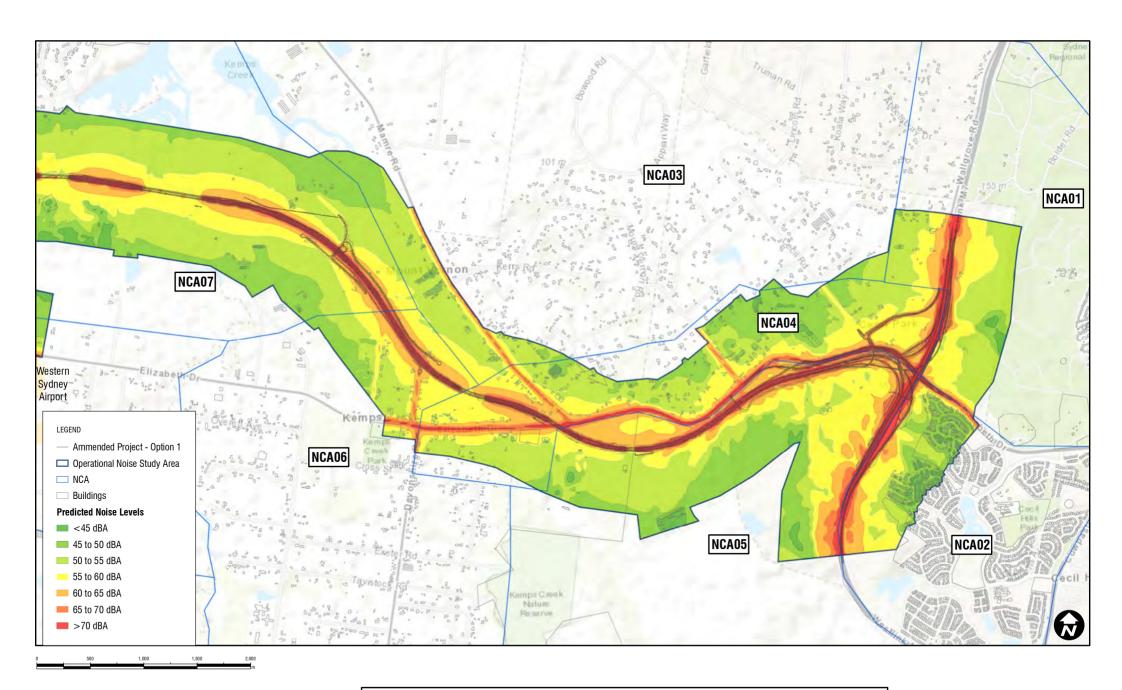




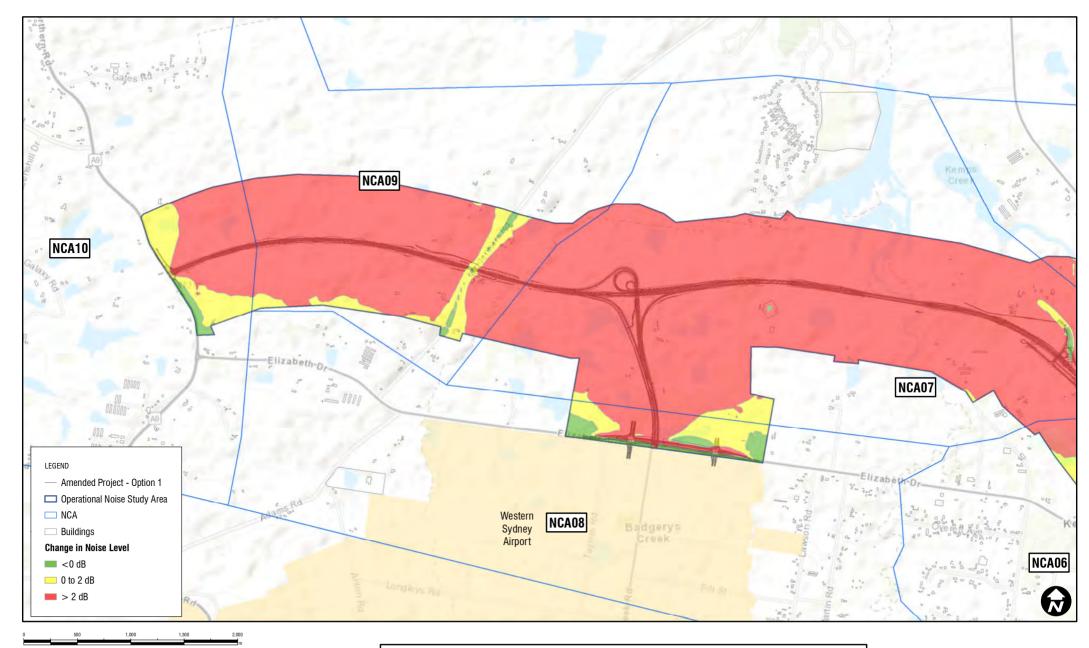
Predicted operational road traffic noise levels without mitigation

Build – Option 2, 2036, night-time (free field noise contours)

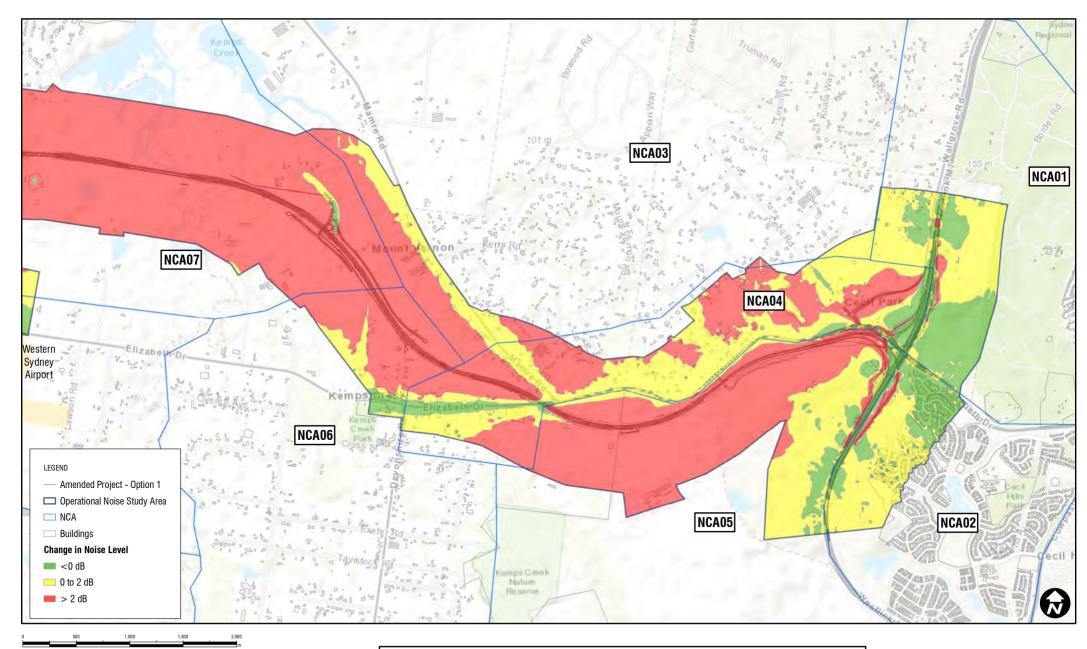




Build minus No Build - Option 1, 2026, daytime

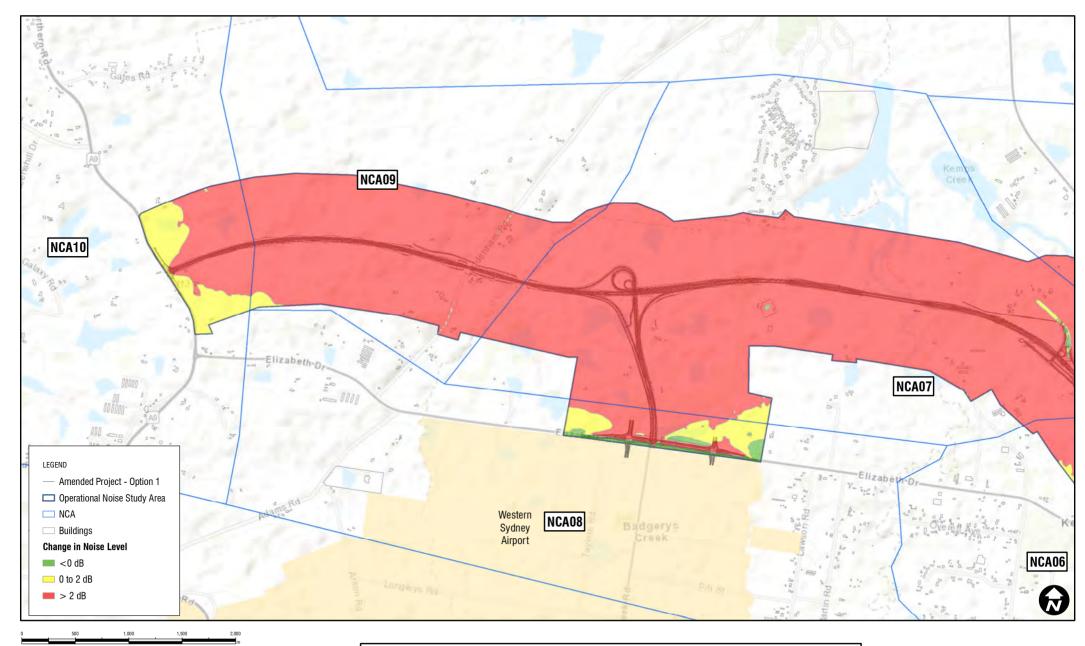


Predicted change in noise levels without mitigation - Option 1 2026 Daytime

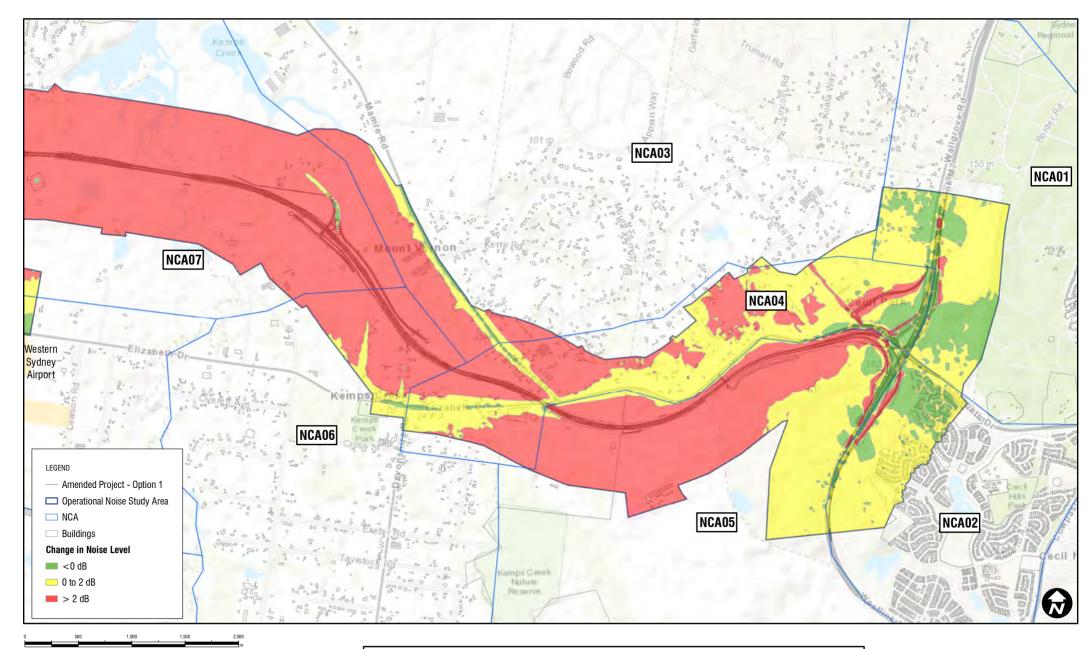


Predicted change in noise levels without mitigation - Option 1 2026 Daytime

Build minus No Build - Option 1, 2026, night-time

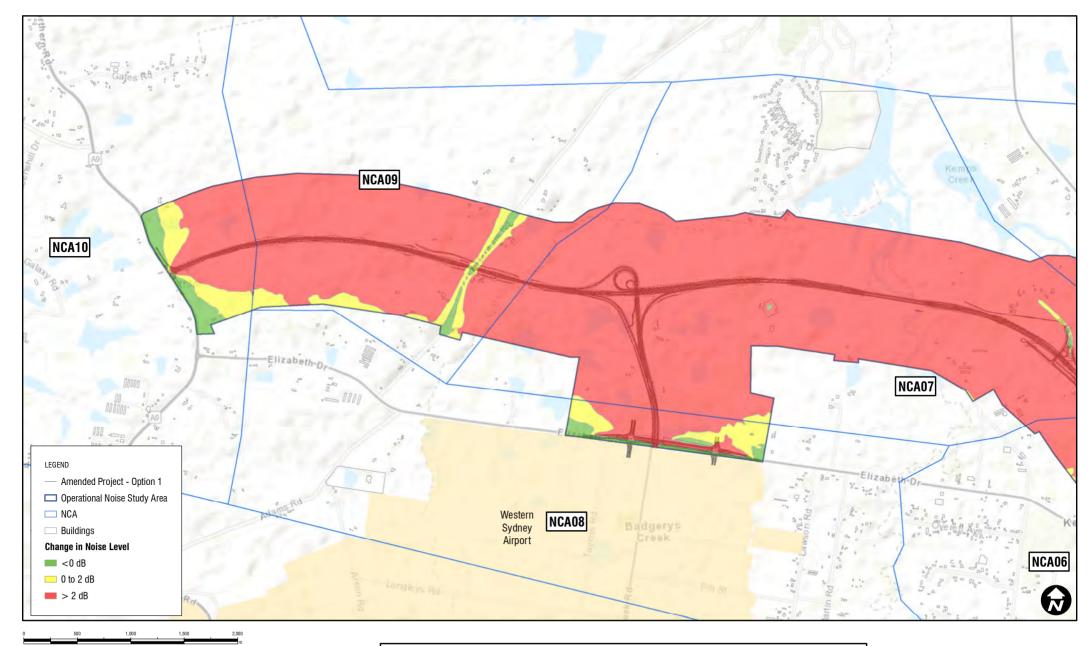


Predicted change in noise levels without mitigation - Option 1 2026 Night-time

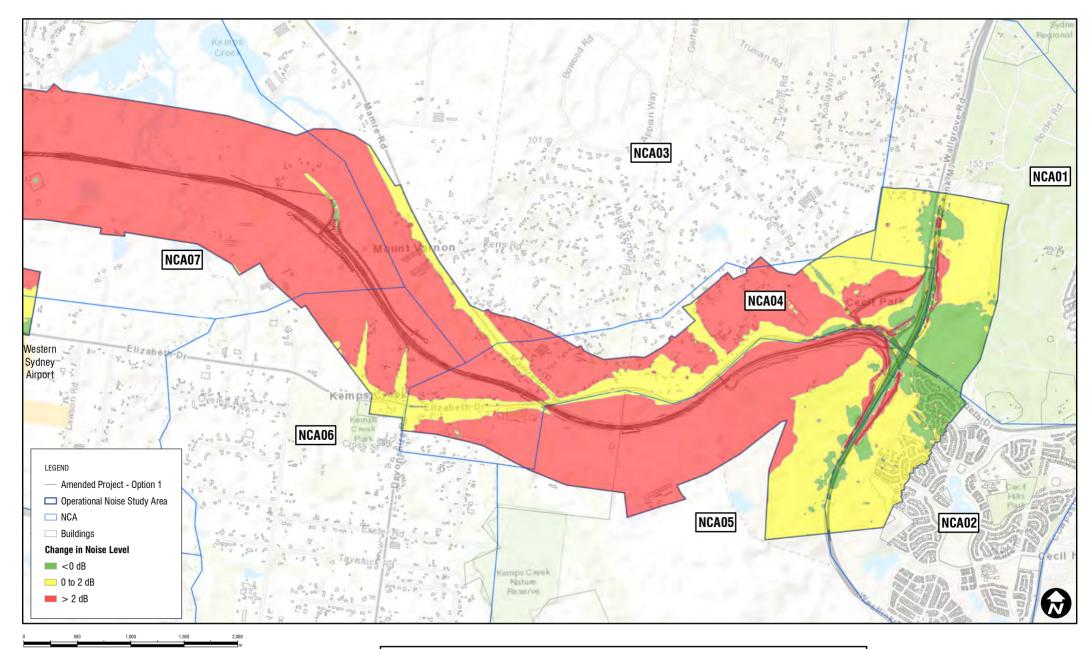


Predicted change in noise levels without mitigation - Option 1 2026 Night-time

Build minus No Build - Option 1, 2036, daytime

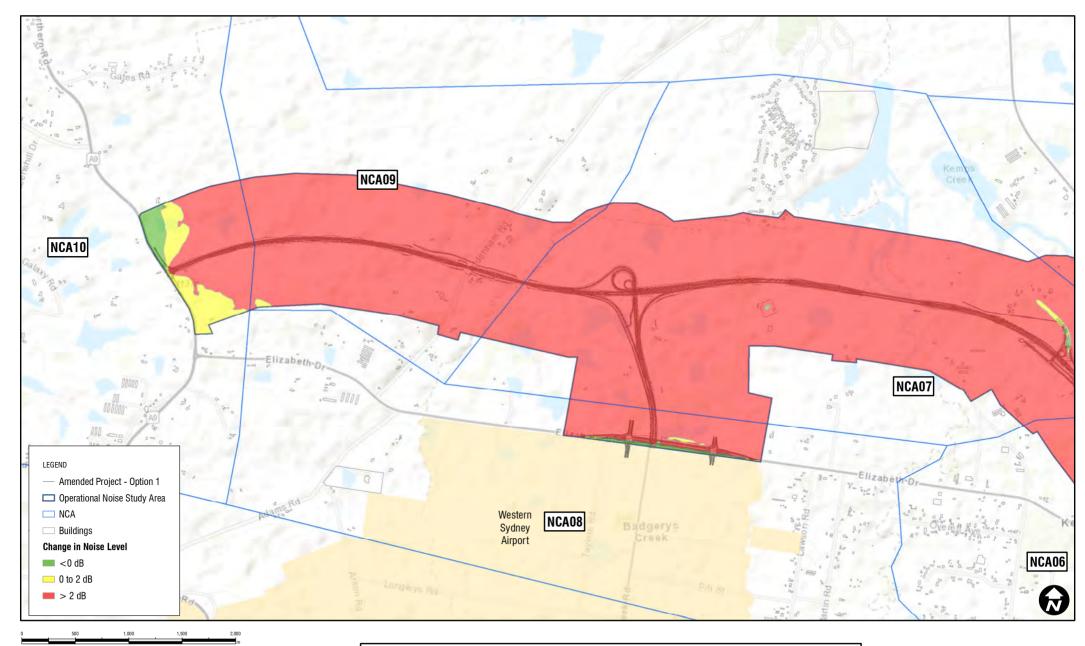


Predicted change in noise levels without mitigation - Option 1 2036 Daytime

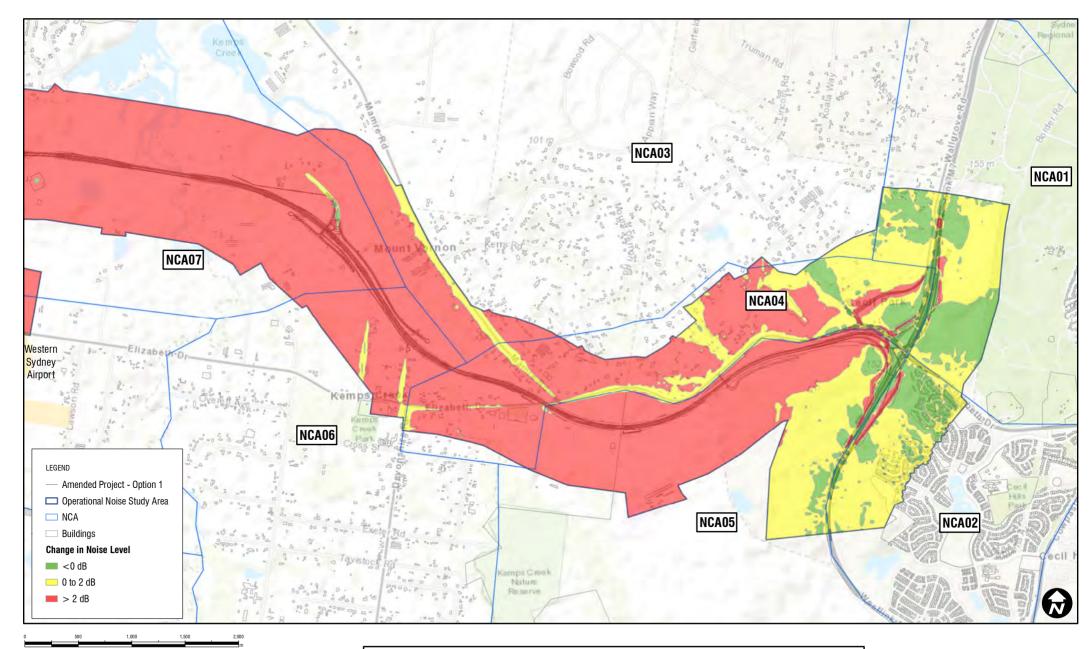


Predicted change in noise levels without mitigation - Option 1 2036 Daytime

Build minus No Build - Option 1, 2036, night-time

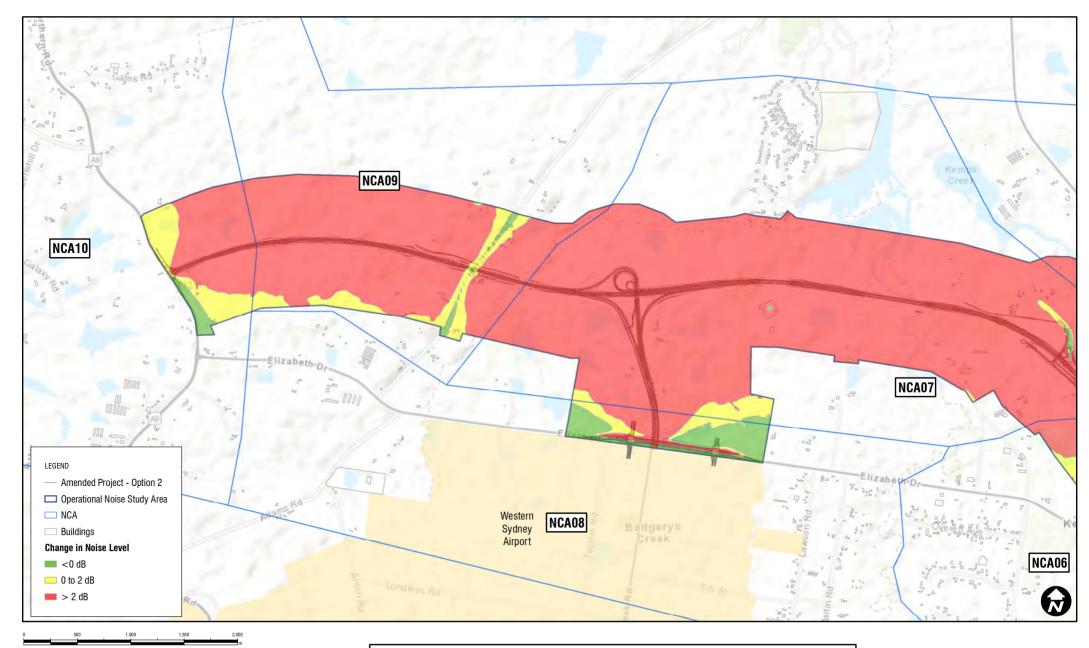


Predicted change in noise levels without mitigation - Option 1 2036 Night-time

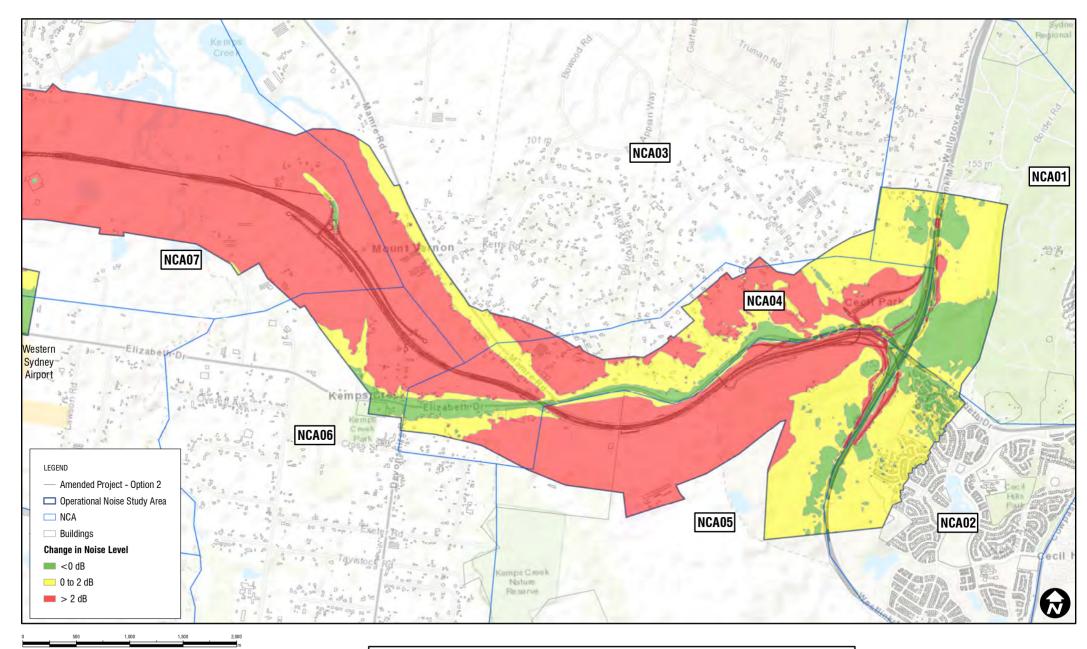


Predicted change in noise levels without mitigation - Option 1 2036 Night-time

Build minus No Build - Option 2, 2026, daytime

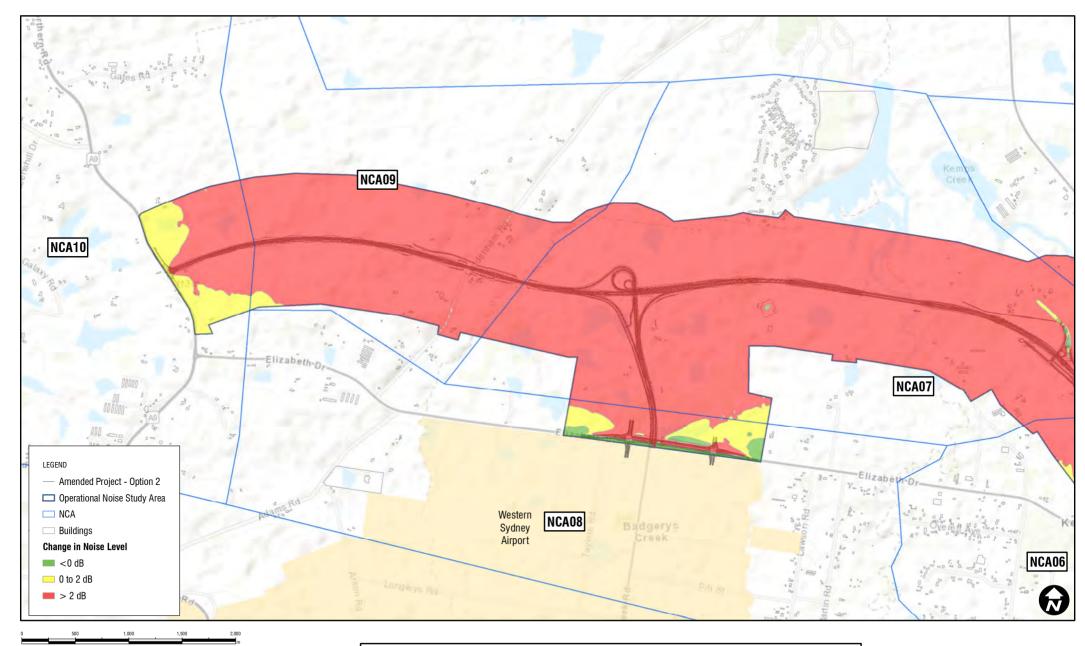


Predicted change in noise levels without mitigation - Option 2 2026 Daytime

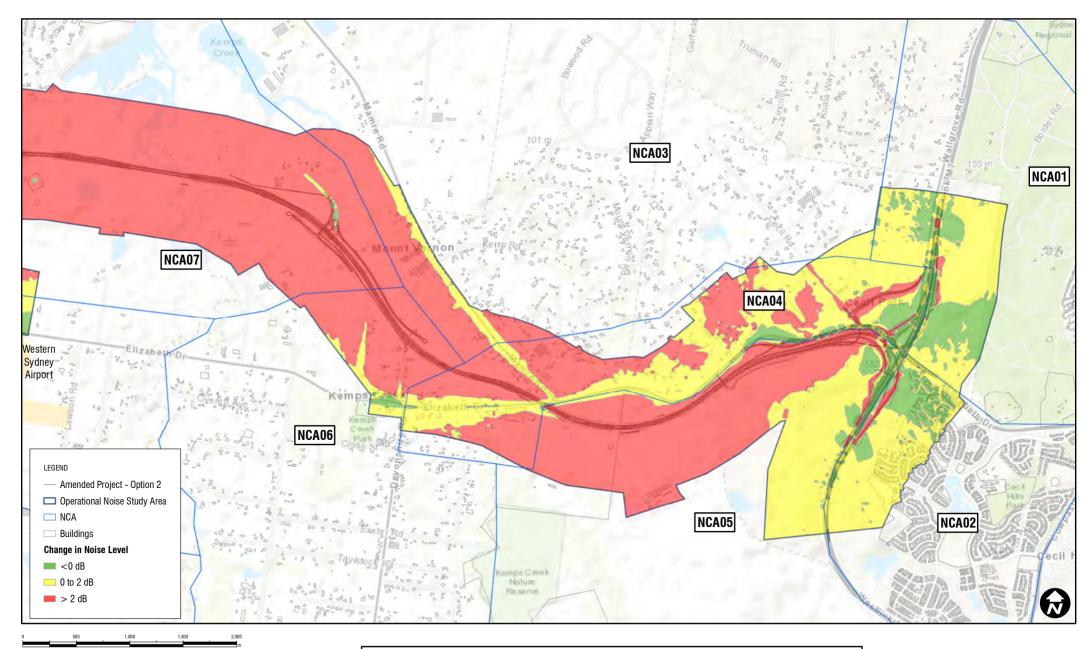


Predicted change in noise levels without mitigation - Option 2 2026 Daytime

Build minus No Build - Option 2, 2026, night-time

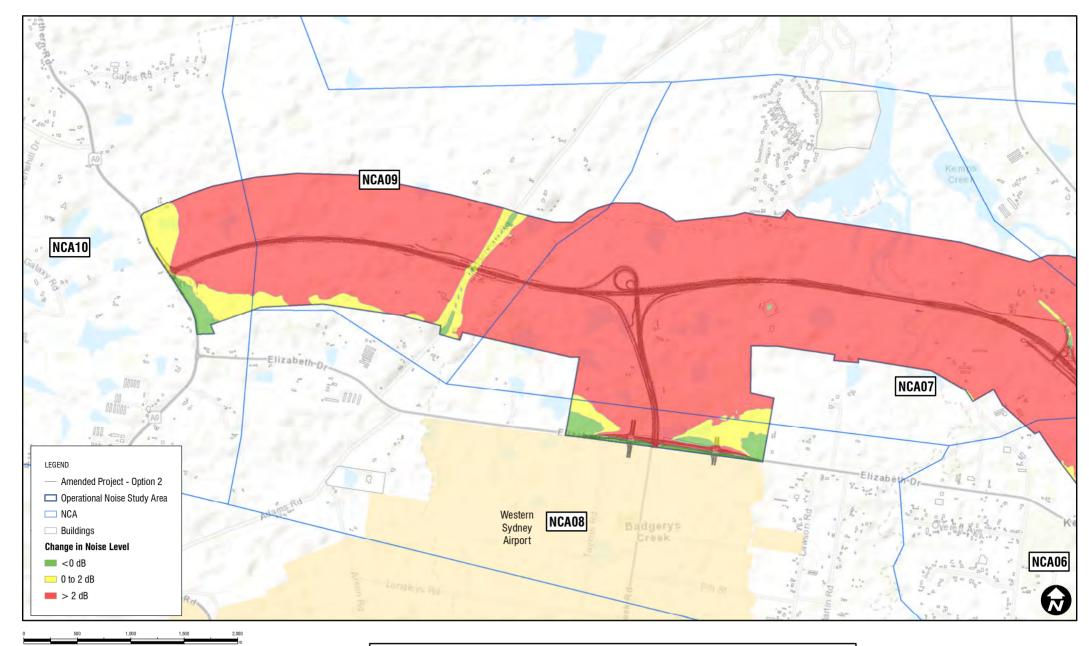


Predicted change in noise levels without mitigation - Option 2 2026 Night-time

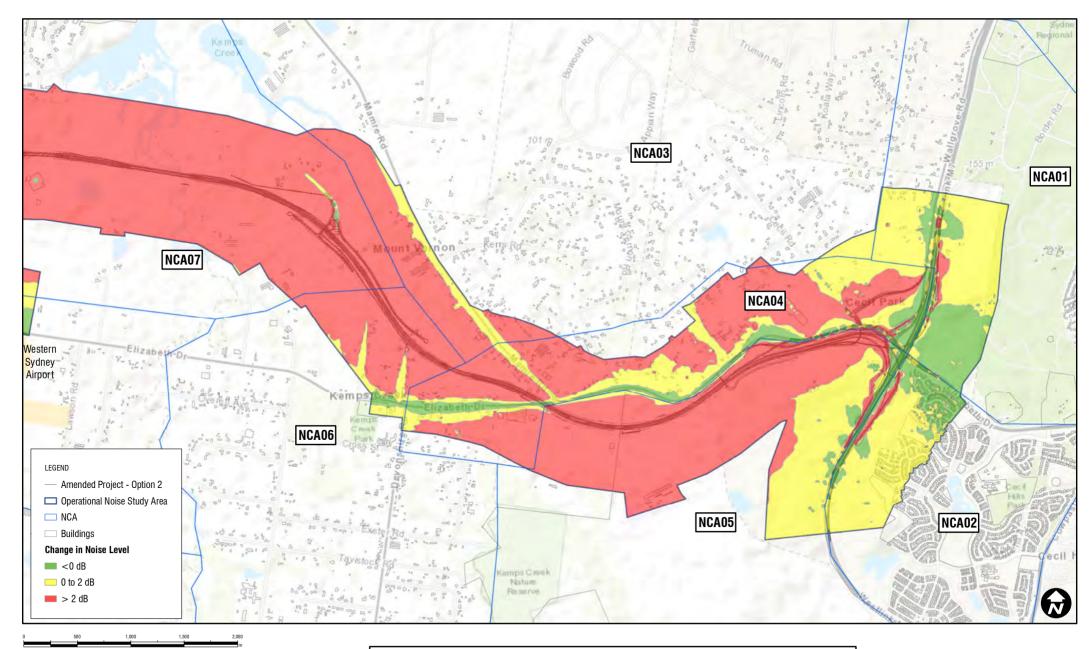


Predicted change in noise levels without mitigation - Option 2 2026 Night-time

Build minus No Build - Option 2, 2036, daytime

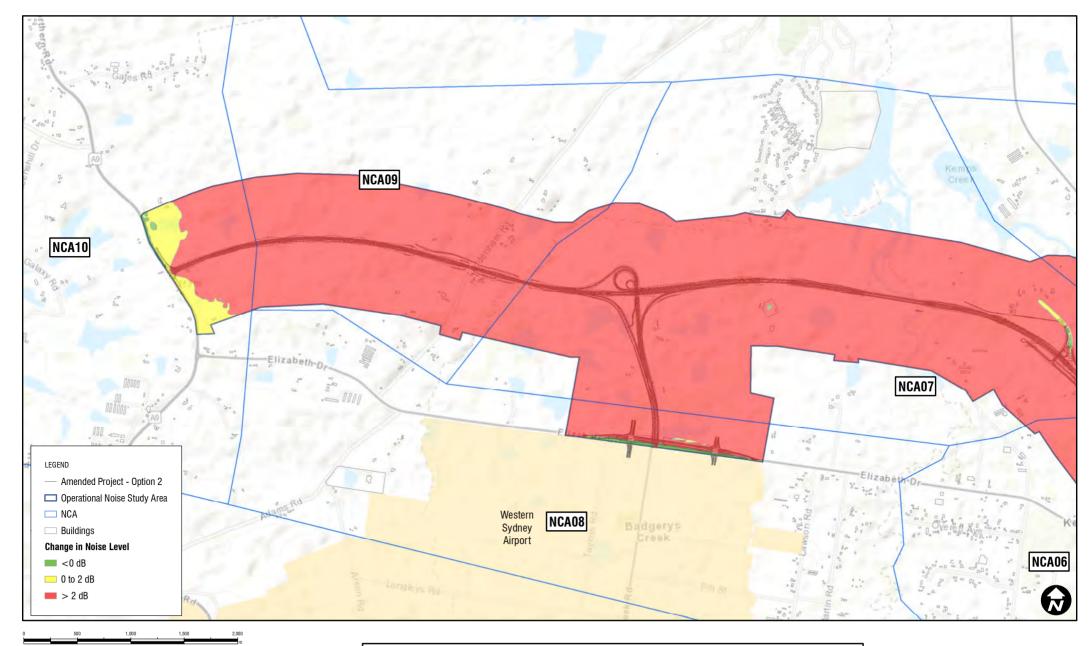


Predicted change in noise levels without mitigation - Option 2 2036 Daytime

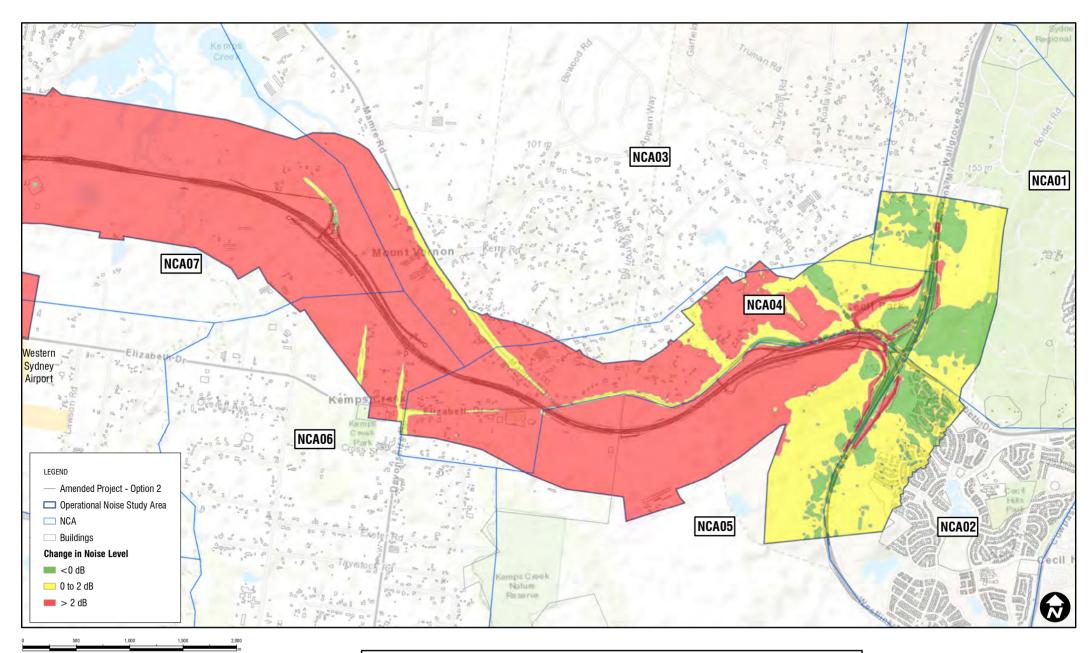


Predicted change in noise levels without mitigation - Option 2 2036 Daytime

Build minus No Build - Option 2, 2036, night-time



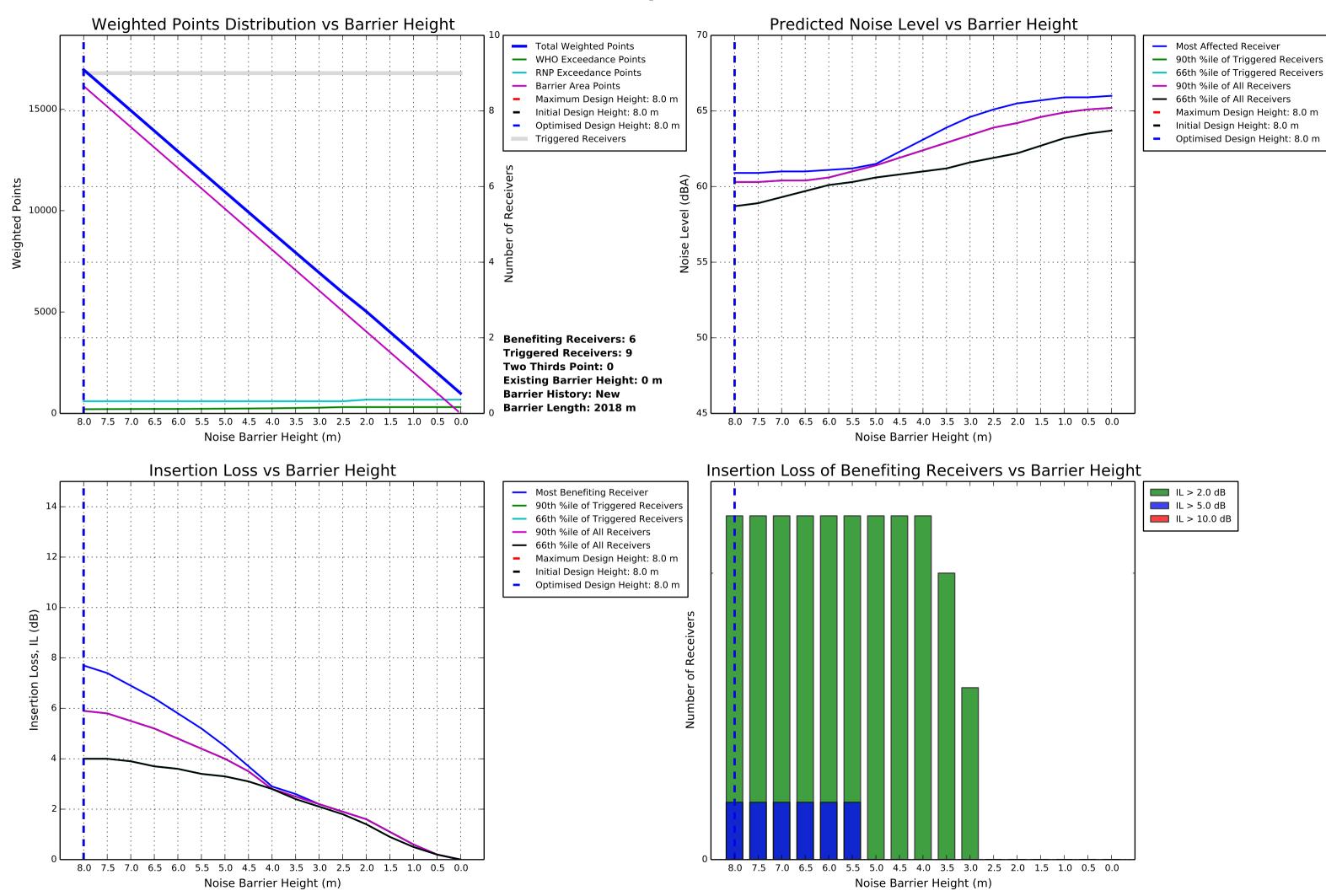
Predicted change in noise levels without mitigation - Option 2 2036 Night-time



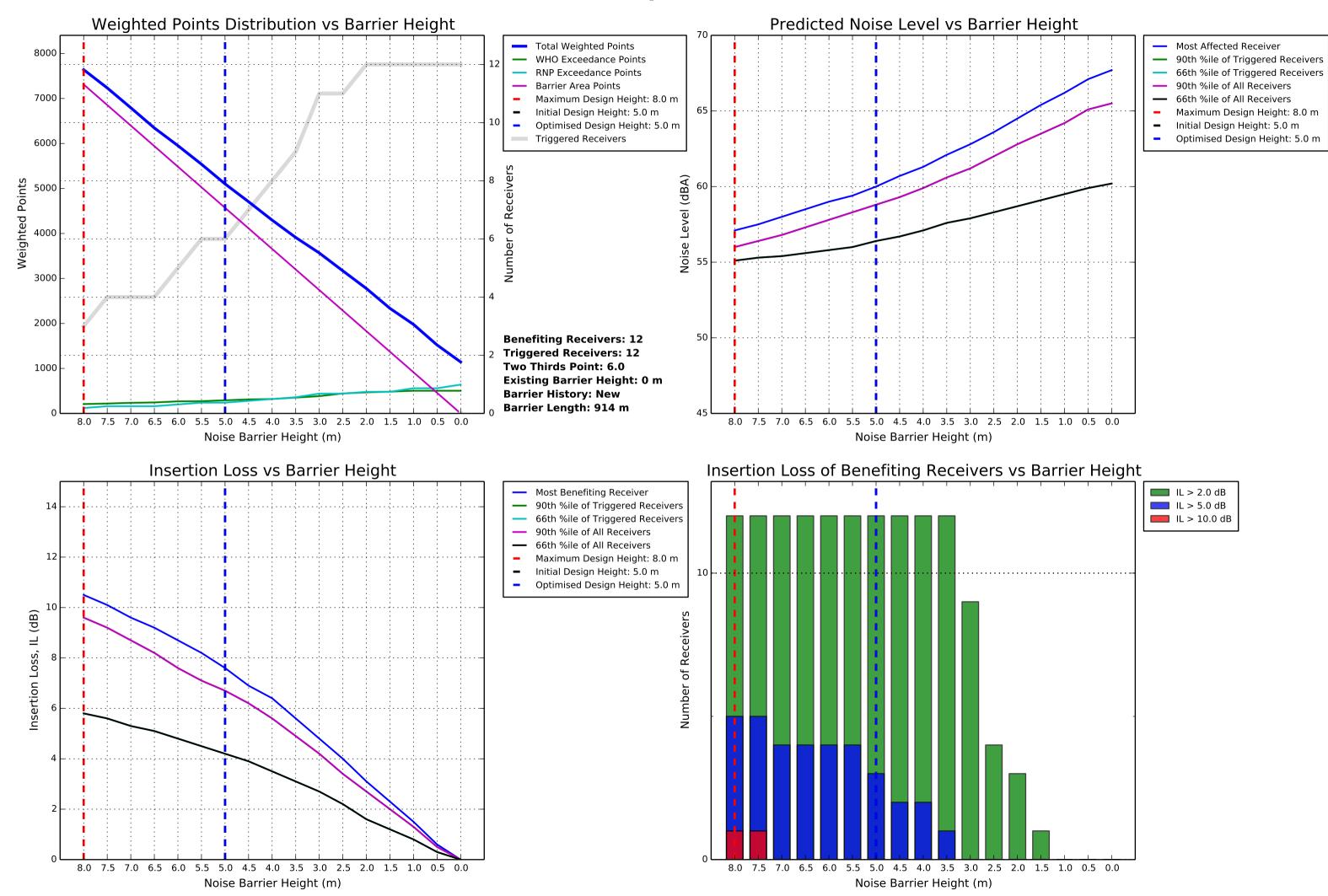
Predicted change in noise levels without mitigation - Option 2 2036 Night-time

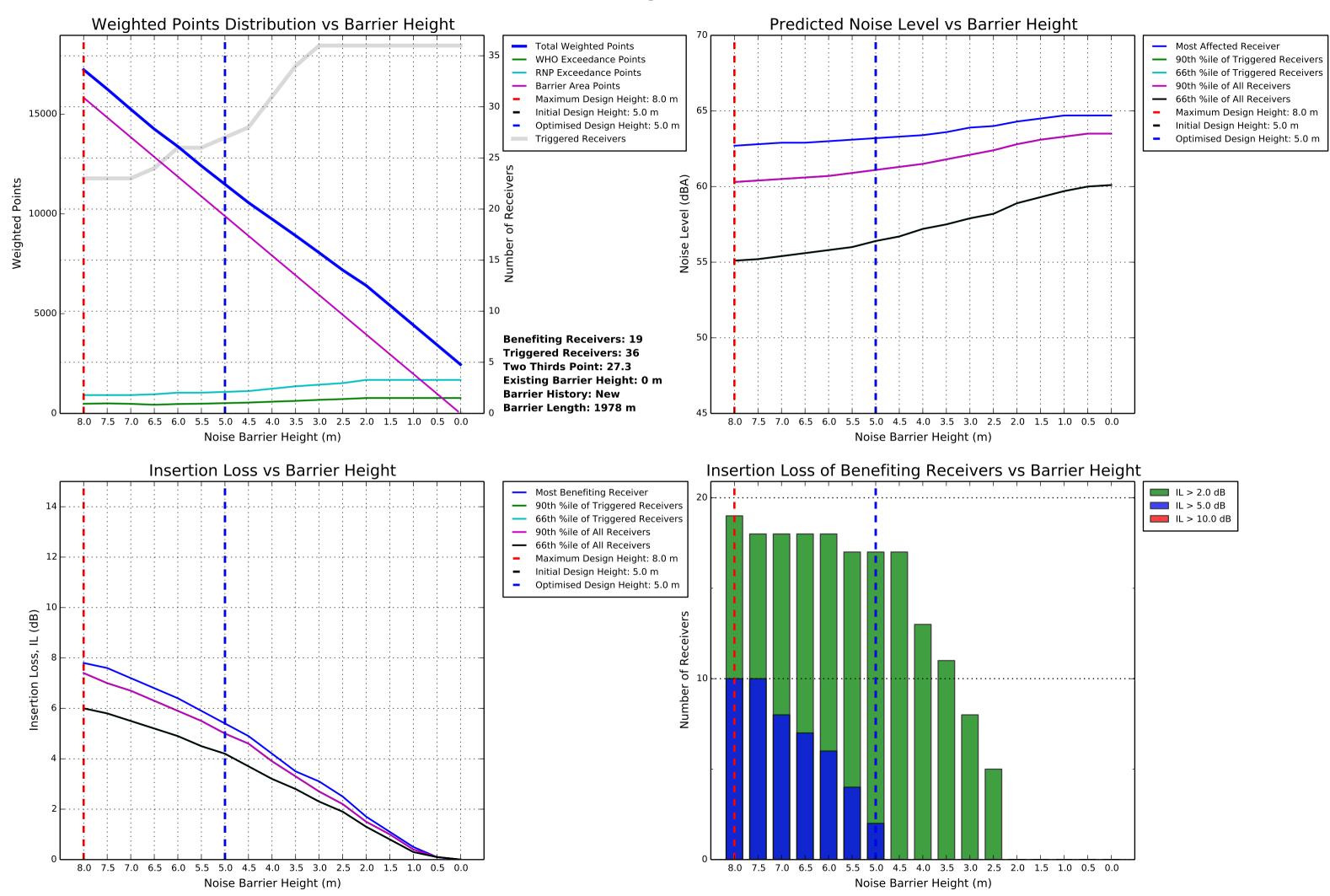
Noise barrier optimisation – Build – Option 1

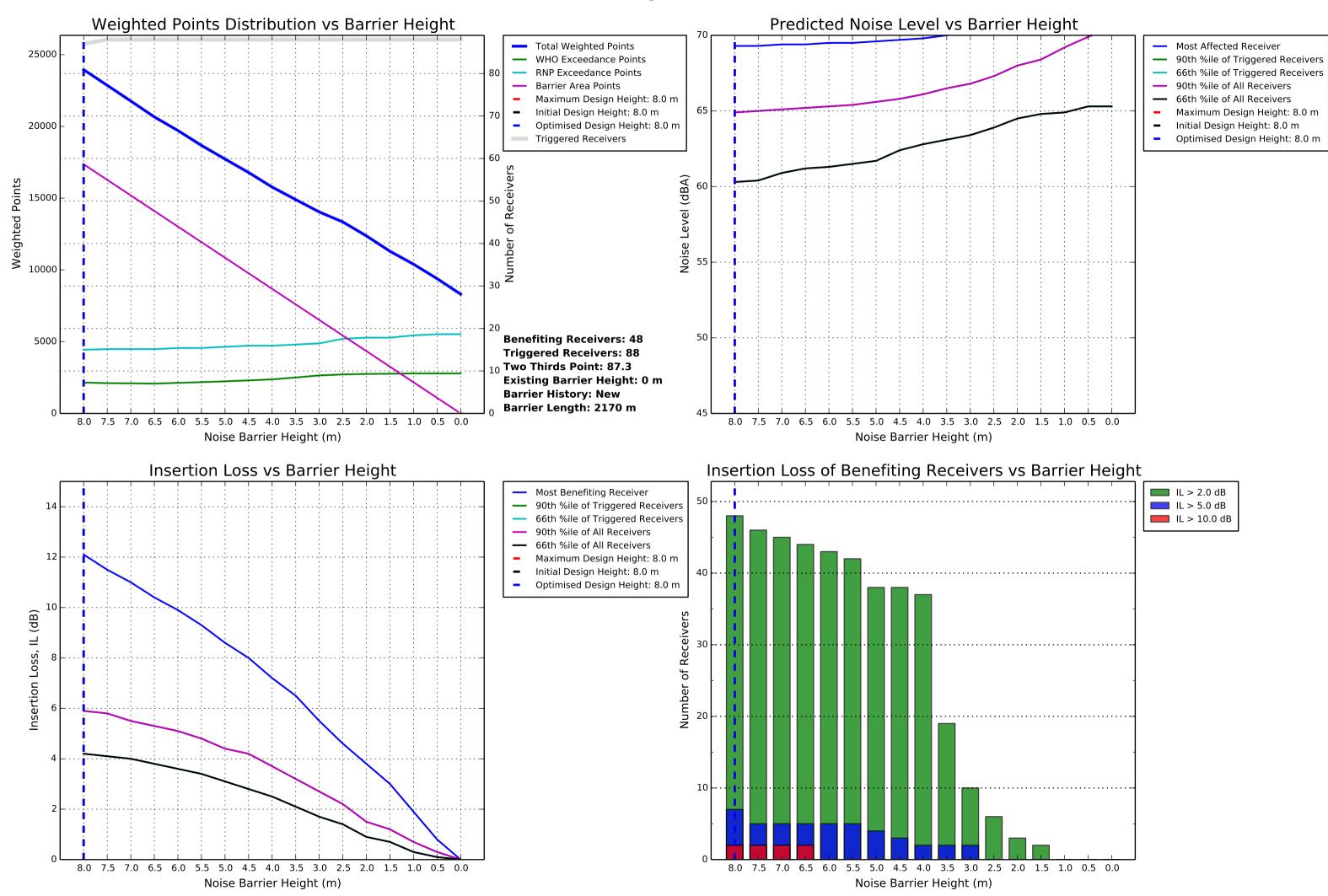
Noise Barrier Optimisation: NW01

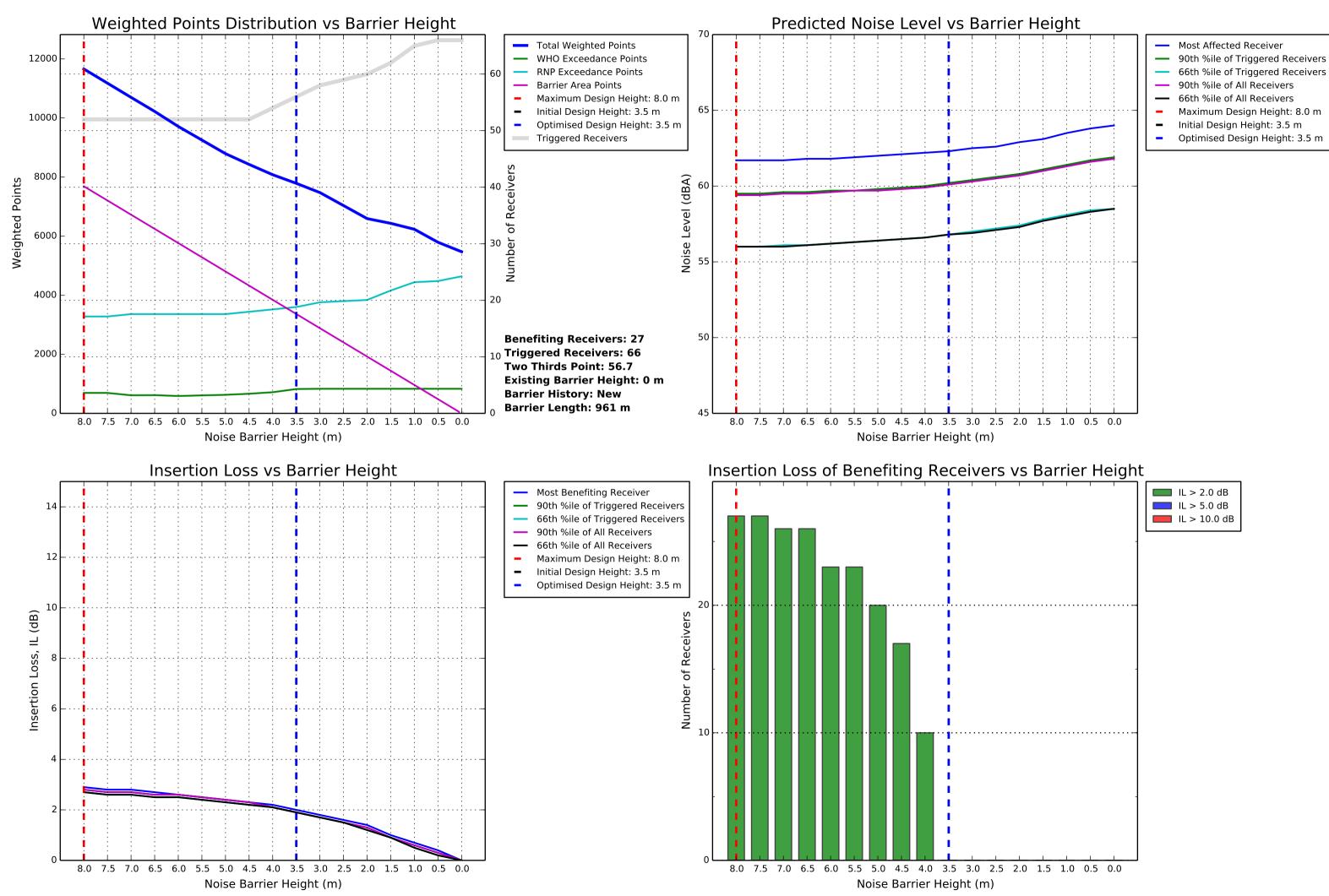


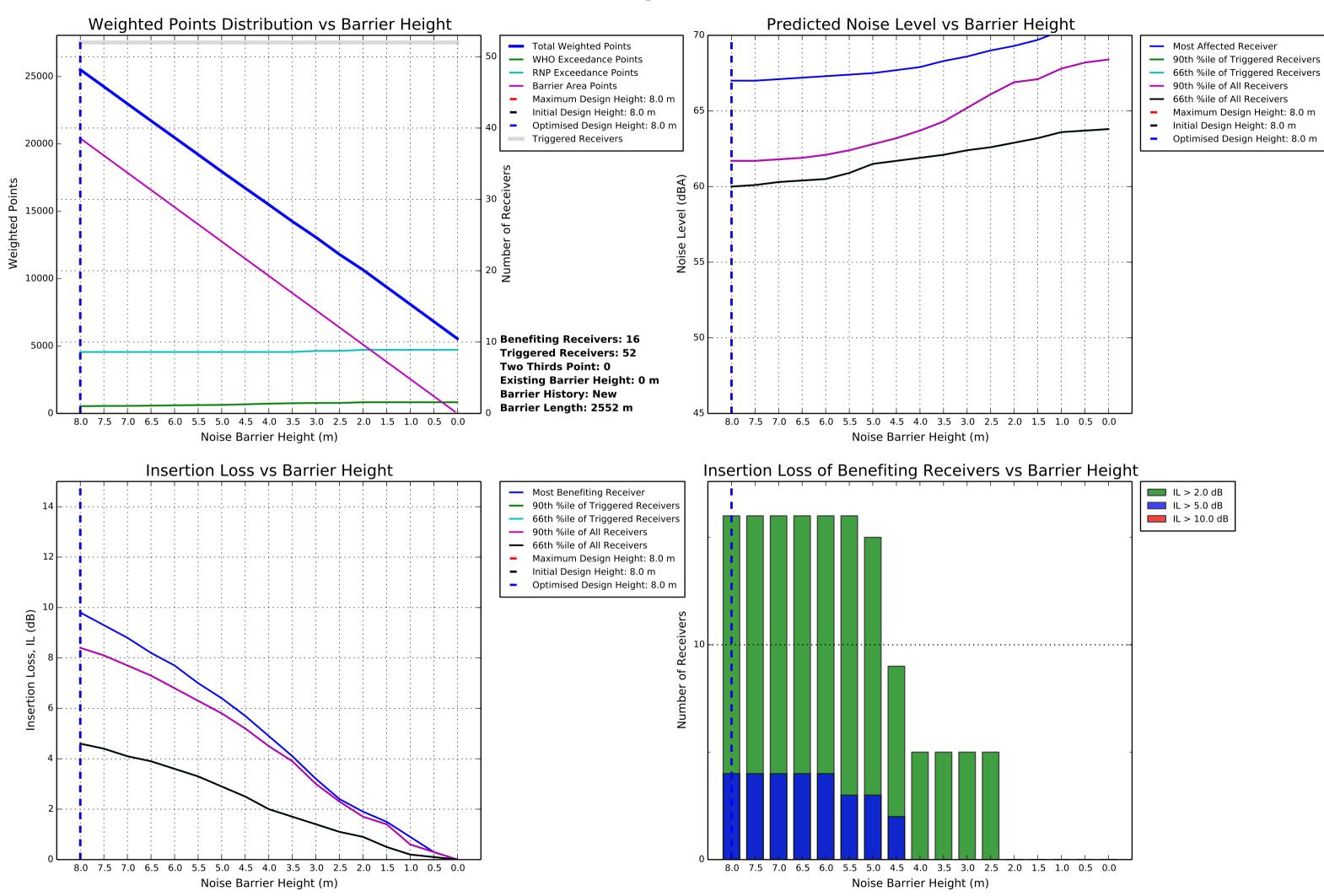
Noise Barrier Optimisation: NW02

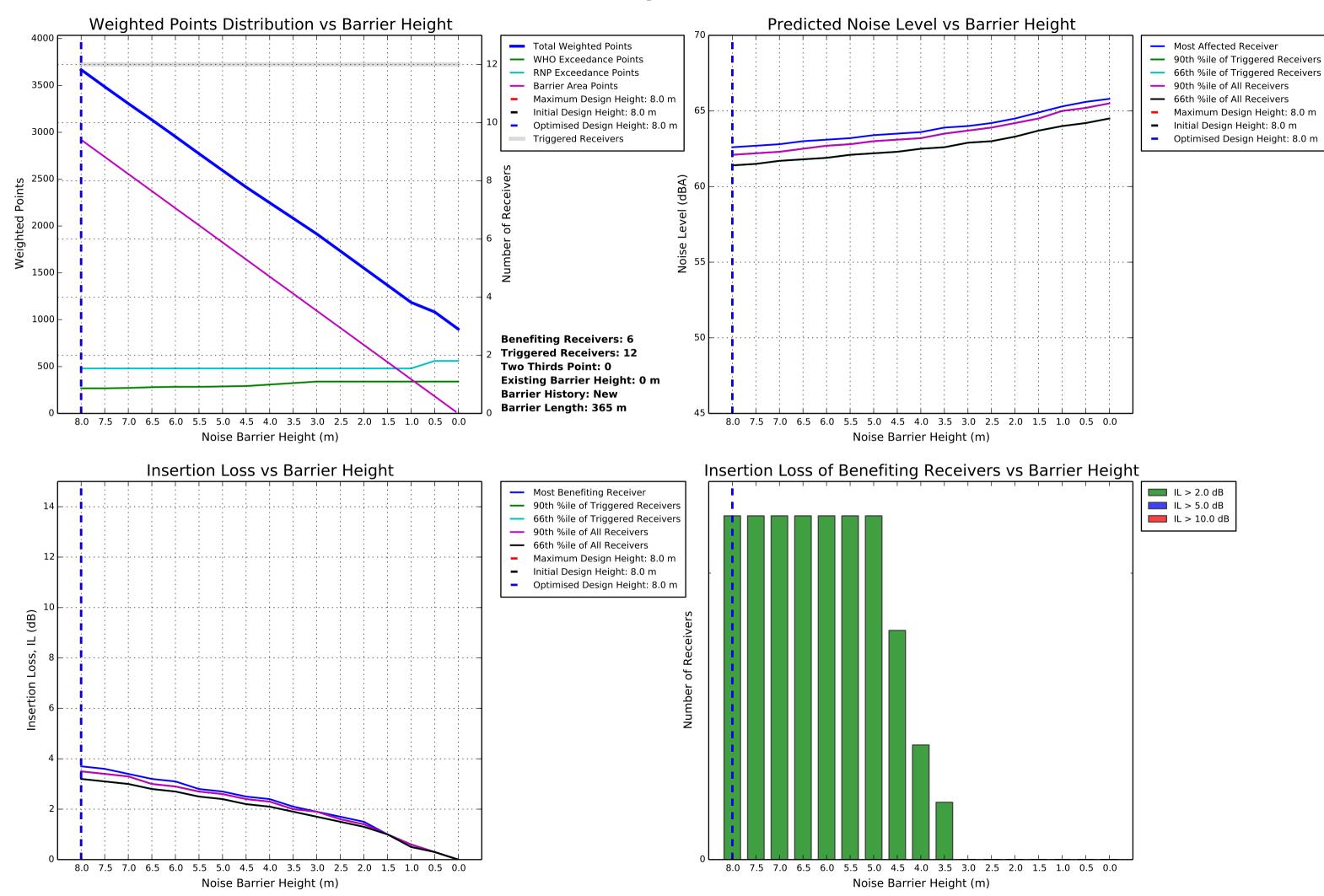


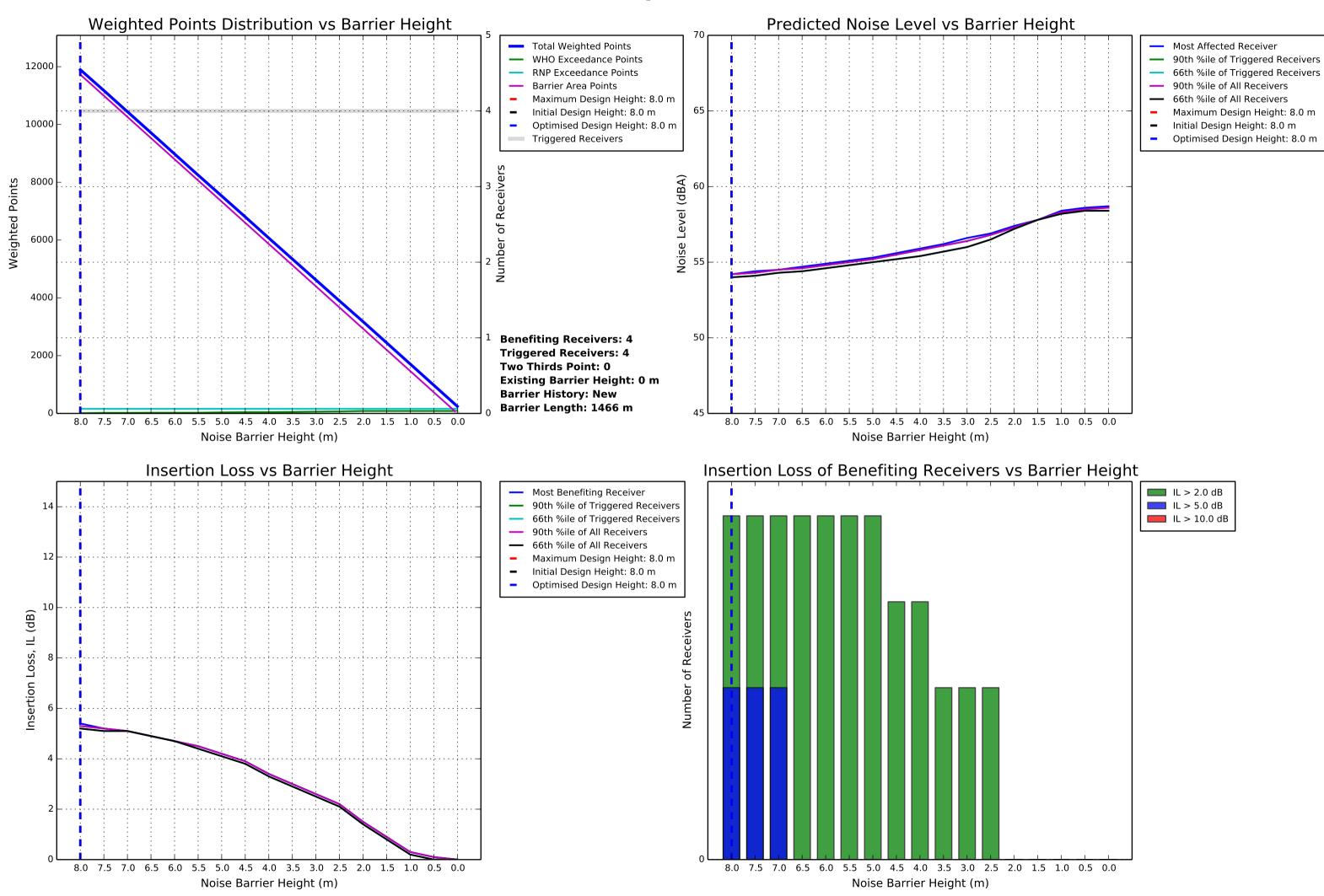












Noise barrier optimisation – Build – Option 2

