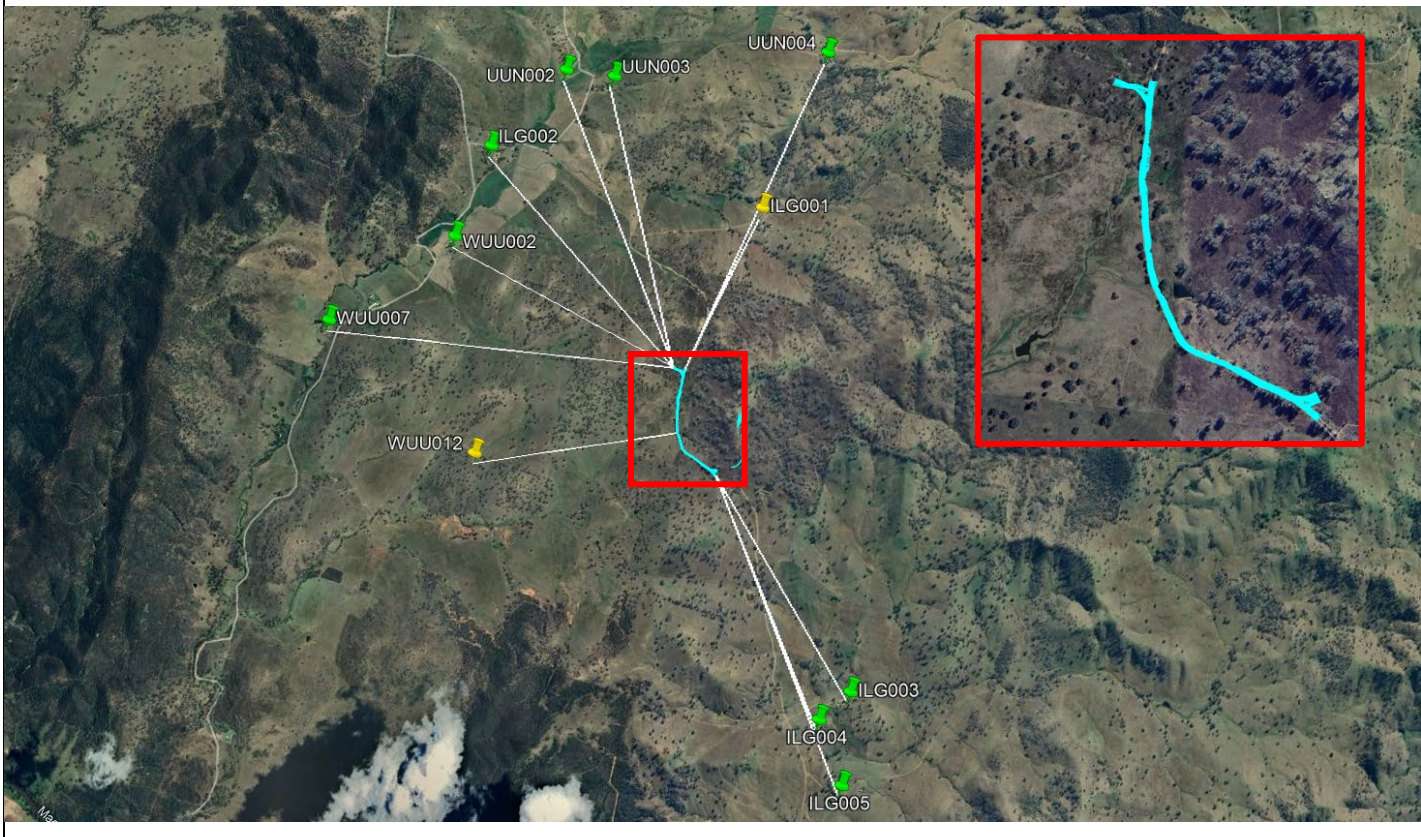


**OUT OF HOURS WORK APPROVAL REQUEST FORM**

NO:	NOTIFICATION DATE:	APPROVAL DATE:	PROJECT:	REVISION:
0003	15 SEPTEMBER 2024		UUNGULA WIND FARM	1

CONTACT NAME	POSITION	MOBILE NUMBER	EMAIL
Damian Soans-Ireland	Site Engineer	0450 209 726	<a href="mailto:d.soans-ireland@nacap.com.au">d.soans-ireland@nacap.com.au</a>
Cheyne Crosby	Deputy Construction Manager	0426 218 812	<a href="mailto:c.crosby@nacap.com.au">c.crosby@nacap.com.au</a>
Peter Stewart	LECH Manager	0438 621 006	<a href="mailto:p.stewart@nacap.com.au">p.stewart@nacap.com.au</a>

**DETAILS OF WORK:  
INCLUDE A MAP SHOWING LOCATION OF WORK EXTENT AND NEAREST SENSITIVE RECEIVERS**



**A. ACTIVITY – ILGINGERY ROAD UPGRADE WORKS**

<b>Purpose of Application</b>	Per Section 15.16 of Schedule 3 of the Agreement, planning		
<b>Location / chainages:</b>	Ilgingery Road		
<b>Proposed Start date:</b>	October 2024	<b>Proposed End date:</b>	23 December 2024
<b>Standard Hours permitted per the Planning Approval</b>	<ul style="list-style-type: none"> <li>Monday to Friday 07:00 to 18:00</li> <li>Saturday 08:00 to 13:00</li> </ul>		
<b>Proposed times outside of standard construction hours:</b>	<ul style="list-style-type: none"> <li>Saturday 13:00 – 18:00</li> <li>Sunday 08:00 – 18:00</li> </ul>		

<p><b>Description of works</b> – <b>Include plant and a description of the sequence of activities and how long each step might take</b></p>	<p>External road upgrade of Ilginery Road, involving clear and grub, earthworks, drainage, pavement and installation of traffic signage.</p> <p>Refer <b>Appendix A</b> for details on proposed plant and activity durations.</p>
<p><b>Justification - why does work need to occur outside of standard construction hours? (attach support information as required)</b></p>	<p>To mitigate the impact of the delays, particularly to the local community and road users, the Contractor is seeking approval to conduct activities on weekends to progress the works and reduce the program thus minimising the overall impact road upgrades of this nature create in local communities.</p> <p>Reducing the program also reduces the impacts of delays and disruption as a result of traffic control. Traffic control is required to be in place seven days per week to manage the worksites, there is no reprieve to traffic control impacts currently aside from reducing the overall program.</p>
<p><b>Traffic control measures required:</b></p>	<p>Traffic Management Plan, Onsite Traffic Management and Traffic Guidance Schemes</p>
<p><b>Lighting required:</b></p>	<p>No lighting will be required as no night works are proposed as part of the application.</p>
<p><b>Appendices</b></p>	<p>Appendix A – Out of Hours Work Recommendations                  Appendix B – Community Engagement Register and Supporting Documents                  Appendix C – Detailed Risk Assessment Register                  Appendix D – Detailed Location Maps for Sensitive Noise Receivers                  Appendix E – Noise Maps                  Appendix F – Sensitive Receivers Identified Where Sound May Exceed 40 Db                  Appendix G – Noise Mitigation Measures                  Appendix H – Other Supporting Documentation                  Appendix I – Referenced Policies Standards and Guidelines</p>

<p><b>B. APPROVAL PATHWAY</b></p>	
<p><b>Select OOHW Category as defined by SSD</b></p>	<p><b>SSD 6687</b></p>
	<p>Select <input type="checkbox"/> (a) activities that are inaudible at non-associated residences;</p>
	<p><input type="checkbox"/> (b) the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; or</p>
	<p><input type="checkbox"/> (c) emergency work to avoid the loss of life, property or to prevent material harm to the environment.</p>
	<p><b>Schedule 3 – General Requirements</b></p>
<p><input checked="" type="checkbox"/> (a) works as approved through the Working Outside of Construction Site Working Hours outlined in section 15.16 of the General Requirements</p>	

C. RISK ASSESSMENT	
<b>Rating Background Noise (RBL)</b>	<b>35 dB</b> (Source: Noise Policy for Industry ( <b>NPfI</b> ))
<b>Noise Management Levels (NML)</b>	RBL+ 5dB (Source: <b>NPfI</b> ) = <b>40 dB</b>
<b>Assessment summary</b>	<p>Assessment* of 11 sensitive noise receivers along Ilginery Road has identified potential for NML exceedance at 2 sensitive noise receivers, refer <b>Appendix C</b>.</p> <p>In summary:</p> <ul style="list-style-type: none"> <li>• 9 of the 11 sensitive noise receivers should not experience noise levels above NML</li> <li>• 2 of the 11 sensitive noise receivers will potentially experience an exceedance of 2-4dB</li> <li>• 1 of the 11 sensitive noise receivers is a deceased estate. This receiver location has been included in the assessment and shows no NML exceedance.</li> <li>• Area of work is contained by adjacent hills. Natural sound barriers were not considered in the assessment but will further reduce sound levels at sensitive noise receivers.</li> <li>• NML exceedances are primarily due to the Tree Prune and Removal works. These works will be completed over 2 weeks and during standard hours of work.</li> </ul> <p>It should be noted that all resident within a 6km radius of Ilginery Road have signed and returned forms stating they are content with the proposed additional work hours, Refer <b>Appendix B</b>.</p> <p>Given this, Contractor will endeavour to complete all works possible within standard hours and will utilise noise mitigation measures for task producing high levels of noise. Refer <b>Appendix A</b> for recommendations on suitability of plant and equipment for out of standard hours work.</p> <p>No sensitive receivers have been identified as potentially being subjected to sound levels that would be considered “highly noise affected - &gt;75dB ” in accordance with the Interim Construction Noise Guidelines (ICNG). Refer <b>Appendix E</b> for detailed noise maps.</p> <p>* Assessment undertaken in line with guidance provided by the ICNG and additional sources as noted in <b>Appendix I</b>.</p>
<b>Do the works result in highly noise affected levels at any receivers? (above 75dB(A) LAeq (15 minute))</b>	No receivers have been identified as “highly noise affected - >75dB”.

D. PROPOSED MITIGATION MEASURES, INCLUDING RESPITE AS REQUIRED	
Refer <b>Appendix G</b> for proposed mitigation measures.	

**F. COMMUNITY CONSULTATION**

**Outline consultation undertaken for the proposed OOHW:**

Contractor has contacted all the sensitive noise receivers identified in the noise assessment, refer **Appendix C**. These are sensitive noise receivers that may be affected by the out of hours works. Community consultation with these sensitive noise receivers has been undertaken in accordance with section 7.2.2 of the ICNG and the outcome from the consultation and supporting documentation are attached in **Appendix B**.

In summary:

- 10 of the 11 receivers were contacted. 1 receiver is a deceased estate but has been included in the noise assessment.
- All responses to the engagement were positive and signed forms are attached in **Appendix B**.
- All receivers are associated residents.

To ensure any concerns, queries or complaints are addressed in a quick and efficient manner a community liaison will be appointed if out of standard hours works are approved. A community meeting is also held regularly which can be utilised to address any issues.

Response to complaints will be in accordance with Section 5.3 of the Project Environmental Management Strategy (UWF-02-PLN-EMS-20230619-004) and Section 2.5 of the Environmental Management Plan - Public Road Upgrades (UWF-NACAP-CIV-PLN-0010)

A community complaint email has also been created to allow affected parties to email any issues. Email noted below:

[info@uungulawindfarm.com.au](mailto:info@uungulawindfarm.com.au)

**H. DETAILS OF NON-RESIDENTIAL SENSITIVE RECEIVERS (IF ANY) AND CORRESPONDING NMLS**

No non-residential sensitive receivers identified.

**I. ARE THERE ANY PROPERTIES AT RISK OF EXCEEDING THE SCREENING CRITERIA (CNVG MINIMUM DISTANCES FOR VIBRATION INTENSIVE PLANT SAFE WORKING DISTANCE FOR PLANT) FOR COSMETIC DAMAGE?**

No properties have been identified as at risk of exceeding the screening criteria for minimum safe working distance.

**APPENDIX A – OUT OF HOURS WORK RECOMMENDATIONS**

WORK GROUP	EXPECTED DURATION	EQUIPMENT	SWL, LA_eq	Activity total LA_eq, SWL	Recommendation for work outside of recommended standard hours
Tree Prune and Removal	14 Days (Approx): October	16T Excavator with harvester attachment and ripper	112	121	Noise impact <u>does not</u> exceed 75dB at receiver. Noise mitigation measure in <b>Appendix E</b> to be implemented.
		30T Excavator with harvester attachment and ripper	116		
		8T Excavator with rotating log grab	103		
		30T cube bogey tipper	110		
		400HP whole tree chipper (Bandit 20HD)	118		
		Spider Lift	95		
Clearing (Clear and Grub)	14 Days (Approx): October	Grader	104	110	Noise impact <u>does not</u> exceed 75dB at receiver. Noise mitigation measure in <b>Appendix E</b> to be implemented.
		20T Excavator	99		
		12T Tipper	101		
		13000L Watercart	101		
		Smooth Drum Roller	108		
Earthwork (subgrade prep)	1 Months: October-November	Grader	104	119	Noise impact <u>does not</u> exceed 75dB at receiver. Noise mitigation measure in <b>Appendix E</b> to be implemented.
		Dozer	114		
		13T Excavator	103		
		Scraper	115		
		815 Compactor	107		
		Smooth drum roller	108		
		2 x 13000L Watercart	101		
		Smooth Drum Roller	108		
Pavement Installation	2 Weeks: November -December	Grader	104	116	Noise impact <u>does not</u> exceed 75dB at receiver. Noise mitigation measure in <b>Appendix E</b> to be implemented.
		20T Excavator	113		
		12T Tipper	101		
		Truck and Trailer	108		
		13000L Watercart	101		
		Smooth Drum Roller	108		
Stormwater Drainage Installation	3 Weeks: October-November	20T Excavator	99	108	Noise impact <u>does not</u> exceed 75dB at receiver. Noise mitigation measure in <b>Appendix E</b> to be implemented.
		12T Tipper	101		
		Hand Tools	105		
		Skid Steer	104		

**NOTE:** It should be noted that multiple work groups will not operate concurrently at the same location as works are staged through construction. The above data is also reflective of work group equipment operating at the same time but equipment will be utilised intermittently. i.e. Grader will operate for 15 minutes then move aside while rollers operate for 10 minutes.

## APPENDIX B – COMMUNITY ENGAGEMENT REGISTER AND SUPPORTING DOCUMENTS

Orientation	House ID	Name	Surname	Phone	Address	Associated Resident	OOHW Status	Date	Comments
NE	ILG001	Lindsey & Dawn	Hough	02 6845 3623	111 Ilgingery Road, Wuuluman 2820	YES	Affirmative	1/09/2024	Signed
NW	ILG002	Chad & Louise	Taylor	0458 453 608	456 Wuuluman Road, Wuuluman 2820	YES	Affirmative	31/08/2024	Signed for all other properties.
SSE	ILG003	Chad & Louise	Taylor	0458 453 608	621 Ilgingery Road, Yarragal 2820	YES	Affirmative	31/08/2024	Signed for all other properties.
SSE	ILG004	Chad & Louise	Taylor	0458 453 608	621 Ilgingery Road, Yarragal 2820	YES	Affirmative	31/08/2024	Signed for all other properties.
SSE	ILG005	Ian & Ilka	Grattan	0438 770 797	Pine Park, 675 Ilgingery Road, Yarragal 2820	YES	Affirmative	2/09/2024	Signed
NW	UUN002	Chad & Louise	Taylor	0458 453 608	456 Wuuluman Road, Wuuluman 2820	YES	Affirmative	31/08/2024	Signed for all other properties.
NNW	UUN003	Chad & Louise	Taylor	0458 453 608	456 Wuuluman Road, Wuuluman 2820	YES	Affirmative	31/08/2024	Signed for all other properties.
NE	UUN004	Kevin	Heuston		<b>Deceased Estate</b>				
WNW	WUU002	Norm & Sharon	Johnston	0427 454 394	Oxley Park, 145 Yarragal Road, Wuuluman, NSW 2820	YES	Affirmative	2/09/2024	Signed
W	WUU007	Mark & Lesley	Wilson	0438 000 474 0438 415 185	Woodgrove Sanctuary, 236 Yarragal Road, Wuuluman 2820	YES	Affirmative	31/08/2024	Signed
W	WUU012	Pete	McIntosh	0418 825 774	Alma East Pty Ltd, 409 Yarragal Rd, Yarragal 2820	YES	Affirmative	1/09/2024	Agreed but not signed.



**Out Of Hours Work - Community/Resident Conversation Record**

<b>LANDHOLDER/OCCUPIER/RESIDENT:</b>	Chad & Louise Taylor
<b>ADDRESS:</b>	456 Wuuluman Road, Wuuluman 2820
<b>DATE:</b>	31/08/2024
<b>TIME:</b>	13:30

This conversation record serves to record consultation between representatives from Nacap Pty Ltd, Squadron Energy Pty Ltd and the nominated landholder/occupier/resident regarding proposed extended and out of hours works along Twelve Mile Road.

It is proposed that work hours for works on the Ilginy Road (ILGR) Upgrade be adjusted to be undertaken within the following windows until completed:

**Mon- Sat 7.00am to 6.00pm**



**Sun 7.30am to 6.00pm.**

This proposal to adjust the work hours is to enable accelerated completion of the ILGR upgrade in order to reduce the overall cumulative impact to residents during works and deliver a safer environment sooner for ILGR users and the local community.

The Landholder/Occupier/Resident in signing this agreement is acknowledging that the proposed work hours and any required management measures that may be required.

Whilst the hours of work will increase, the intensity and associated noise levels associated with the works are expected to remain consistent with the current works being undertaken. All reasonable and feasible efforts will be undertaken to minimise noise impacts and intrusiveness. The landholder/occupier/resident has been provided contact details in the event they seek to raise any concerns. Nacap and Squadron Energy agree to investigate and progress to resolution any complaints or concerns.

<b>Comment/Notes:</b>
Properties: ILG003, ILG004, ILG002, UUN002, UUN003.

<b>Landholder/Occupier/Resident</b>	<b>Signature:</b>
<b>Name:</b>	
Louise Taylor	
<b>Nacap/SQE Representative:</b>	
Peter Stewart	
<b>Date &amp; Time:</b>	31/08/2024 – 13:30





**Out Of Hours Work - Community/Resident Conversation Record**

<b>LANDHOLDER/OCCUPIER/RESIDENT:</b>	Mark & Lesley Wilson
<b>ADDRESS:</b>	Woodgrove Sanctuary, 236 Yarragal Road, Wuuluman 2820
<b>DATE:</b>	31/09/2024
<b>TIME:</b>	14.20

This conversation record serves to record consultation between representatives from Nacap Pty Ltd, Squadron Energy Pty Ltd and the nominated landholder/occupier/resident regarding proposed extended and out of hours works along Twelve Mile Road.

It is proposed that work hours for works on the Ilginyer Road (ILGR) Upgrade be adjusted to be undertaken within the following windows until completed:

**Mon- Sat 7.00am to 6.00pm**

**Sun 7.30am to 6.00pm.**

This proposal to adjust the work hours is to enable accelerated completion of the ILGR upgrade in order to reduce the overall cumulative impact to residents during works and deliver a safer environment sooner for ILGR users and the local community.

The Landholder/Occupier/Resident in signing this agreement is acknowledging that the proposed work hours and any required management measures that may be required.

Whilst the hours of work will increase, the intensity and associated noise levels associated with the works are expected to remain consistent with the current works being undertaken. All reasonable and feasible efforts will be undertaken to minimise noise impacts and intrusiveness. The landholder/occupier/resident has been provided contact details in the event they seek to raise any concerns. Nacap and Squadron Energy agree to investigate and progress to resolution any complaints or concerns.

<b>Comment/Notes:</b>
ID: WUU002

<b>Landholder/Occupier/Resident</b>	<b>Signature:</b>
<b>Name:</b>	
Mark & Lesley Wilson	<i>Mark Wilson</i>
<b>Nacap/SQE Representative:</b>	
Peter Stewart	<i>Peter Stewart</i>
<b>Date &amp; Time:</b>	31/09/2024 - 14.20





### Out Of Hours Work - Community/Resident Conversation Record

<b>LANDHOLDER/OCCUPIER/RESIDENT:</b>	Lindsey & Dawn Hough
<b>ADDRESS:</b>	111 Ilgingery Road, Wuuluman 2820
<b>DATE:</b>	1 /09/2024
<b>TIME:</b>	15.07

This conversation record serves to record consultation between representatives from Nacap Pty Ltd, Squadron Energy Pty Ltd and the nominated landholder/occupier/resident regarding proposed extended and out of hours works along Twelve Mile Road.

It is proposed that work hours for works on the Ilgingery Road (ILGR) Upgrade be adjusted to be undertaken within the following windows until completed:

**Mon- Sat 7.00am to 6.00pm**

**Sun 7.30am to 6.00pm.**

This proposal to adjust the work hours is to enable accelerated completion of the ILGR upgrade in order to reduce the overall cumulative impact to residents during works and deliver a safer environment sooner for ILGR users and the local community.

The Landholder/Occupier/Resident in signing this agreement is acknowledging that the proposed work hours and any required management measures that may be required.

Whilst the hours of work will increase, the intensity and associated noise levels associated with the works are expected to remain consistent with the current works being undertaken. All reasonable and feasible efforts will be undertaken to minimise noise impacts and intrusiveness. The landholder/occupier/resident has been provided contact details in the event they seek to raise any concerns. Nacap and Squadron Energy agree to investigate and progress to resolution any complaints or concerns.

<b>Comment/Notes:</b>
ID: ILG001

<b>Landholder/Occupier/Resident Name:</b>	<b>Signature:</b>
Lindsey & Dawn Hough	<i>L.Hough</i> <i>D.K.Hough</i>
<b>Nacap/SQE Representative:</b>	
Peter Stewart	<i>P.Stewart</i>
<b>Date &amp; Time:</b>	1/09/2024 - 15.07





**Out Of Hours Work - Community/Resident Conversation Record**

<b>LANDHOLDER/OCCUPIER/RESIDENT:</b>	<i>Norm Johnston</i>
<b>ADDRESS:</b> <del>147</del>	<i>145 Yarragal Rd Wueluman</i>
<b>DATE:</b>	<i>2/09/2024</i>
<b>TIME:</b>	<i>12-00</i>

This conversation record serves to record consultation between representatives from Nacap Pty Ltd, Squadron Energy Pty Ltd and the nominated landholder/occupier/resident regarding proposed extended and out of hours works along Twelve Mile Road.

It is proposed that work hours for works on the Ilginy Road (ILGR) Upgrade be adjusted to be undertaken within the following windows until completed:

**Mon- Sat 7.00am to 6.00pm**

**Sun 7.30am to 6.00pm.**

This proposal to adjust the work hours is to enable accelerated completion of the ILGR upgrade in order to reduce the overall cumulative impact to residents during works and deliver a safer environment sooner for ILGR users and the local community.

The Landholder/Occupier/Resident in signing this agreement is acknowledging that the proposed work hours and any required management measures that may be required.

Whilst the hours of work will increase, the intensity and associated noise levels associated with the works are expected to remain consistent with the current works being undertaken. All reasonable and feasible efforts will be undertaken to minimise noise impacts and intrusiveness. The landholder/occupier/resident has been provided contact details in the event they seek to raise any concerns. Nacap and Squadron Energy agree to investigate and progress to resolution any complaints or concerns.

<b>Comment/Notes:</b>
ID:

<b>Landholder/Occupier/Resident</b>	<b>Signature:</b>
<b>Name:</b>	
<i>Norm Johnston</i>	<i>N.B Johnston</i>
<b>Nacap/SQE Representative:</b>	
Peter Stewart	<i>[Signature]</i>
<b>Date &amp; Time:</b>	<i>2/09/2024 - 12-00</i>





## Out Of Hours Work - Community/Resident Conversation Record

<b>LANDHOLDER/OCCUPIER/RESIDENT:</b>	Ian & Ilka Grattan
<b>ADDRESS:</b>	Pine Park, 675 Igingery Road, Yarragal 2820
<b>DATE:</b>	2/09/2024
<b>TIME:</b>	18:00

This conversation record serves to record consultation between representatives from Nacap Pty Ltd, Squadron Energy Pty Ltd and the nominated landholder/occupier/resident regarding proposed extended and out of hours works along Twelve Mile Road.

It is proposed that work hours for works on the Igingery Road (ILGR) Upgrade be adjusted to be undertaken within the following windows until completed:

**Mon- Sat 7.00am to 6.00pm**



**Sun 7.30am to 6.00pm.**

This proposal to adjust the work hours is to enable accelerated completion of the ILGR upgrade in order to reduce the overall cumulative impact to residents during works and deliver a safer environment sooner for ILGR users and the local community.

The Landholder/Occupier/Resident in signing this agreement is acknowledging that the proposed work hours and any required management measures that may be required.

Whilst the hours of work will increase, the intensity and associated noise levels associated with the works are expected to remain consistent with the current works being undertaken. All reasonable and feasible efforts will be undertaken to minimise noise impacts and intrusiveness. The landholder/occupier/resident has been provided contact details in the event they seek to raise any concerns. Nacap and Squadron Energy agree to investigate and progress to resolution any complaints or concerns.

<b>Comment/Notes:</b>
ID: ILG005

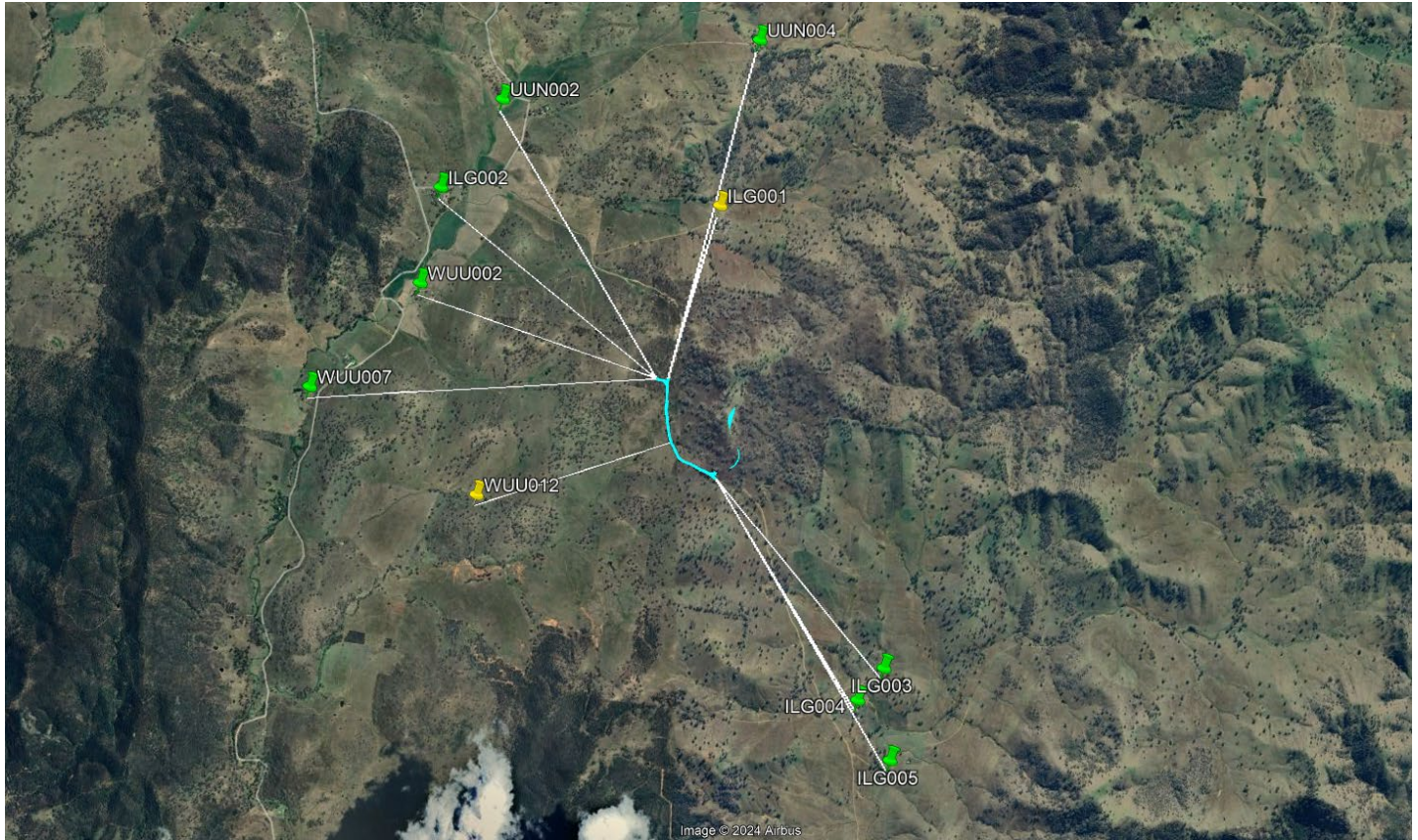
Landholder/Occupier/Resident	Signature:
<b>Name:</b> Ilka Grattan	
Nacap/SQE Representative:	
Peter Stewart	
<b>Date &amp; Time:</b>	2/09/2024 – 18:00



**APPENDIX C – DETAILED RISK ASSESSMENT REGISTER**  
**Grouped by “Property ID”**

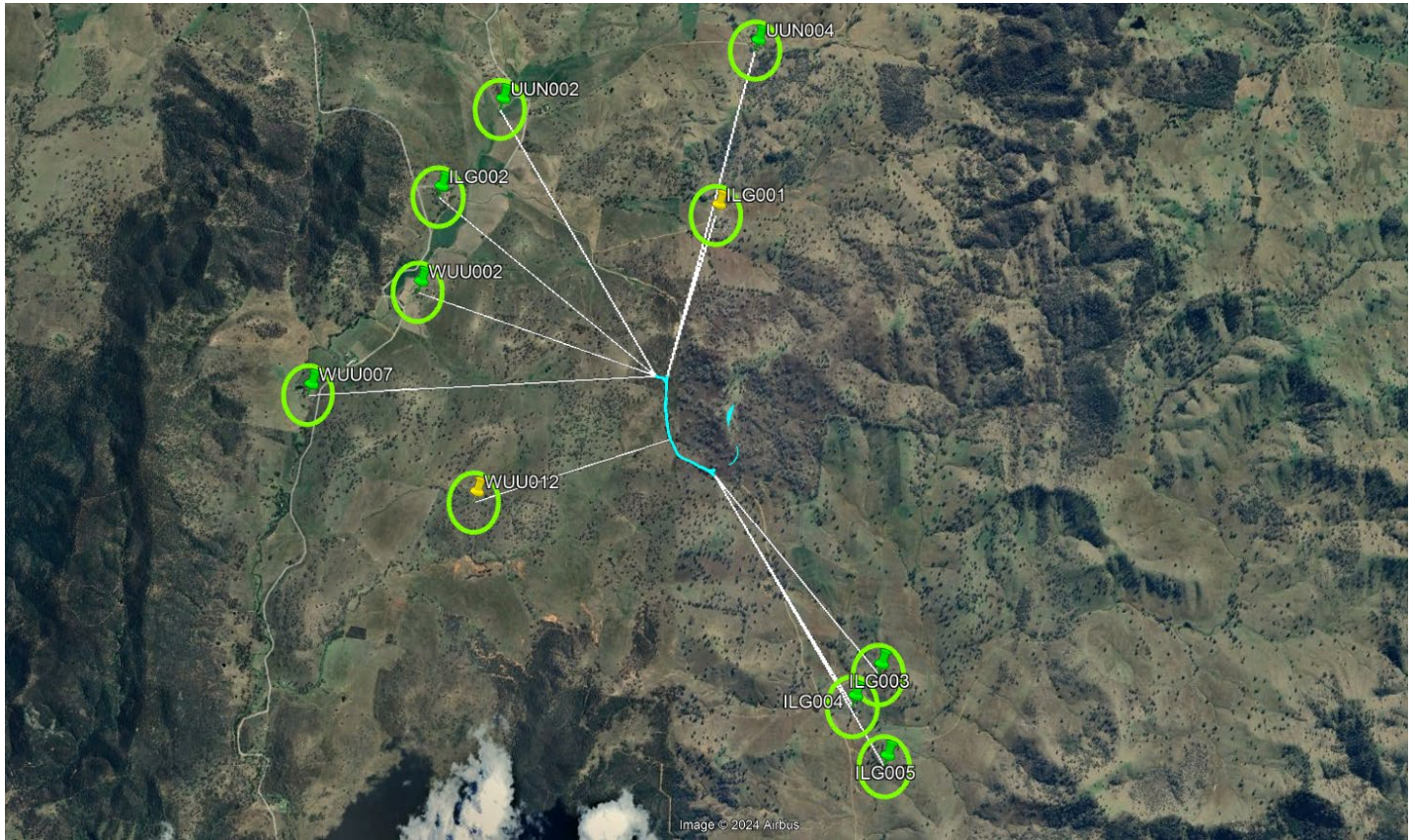
RECEIVER DETAILS				WORK GROUP					NOISE ASSESSMENT DETAILS							
Property ID	Associated	Easting	Northing	Tree Prune and Removal (121 dB(A))	Clear and Grub (99 dB(A))	Earthwork (subgrade prep) (119 dB(A))	Pavement Installation (116 dB(A))	Stormwater Drainage Installation (108 dB(A))	Distance to Illingery Road (m)	Separation to achieve 40dB (m)	Separation to achieve 50dB (m)	Separation to achieve 60dB (m)	Predicted noise at Receiver (dB)	NML Exceeded?	Noise Level Equivalent	Noise Management Level Exceedance Rating
				121	110	119	116	108		40	50	60				
ILG001	YES	698565	6397763	43.43	32.43	41.43	38.43	30.43	3017	4476.21	1415.50	447.62	43.43	YES	Refrigerator	Clearly Audible
ILG002	YES	696067	6397987	39.02	28.02	37.02	34.02	26.02	5013	4476.21	1415.50	447.62	39.02	No	Whisper	Noticeable
ILG003	YES	699929	6393647	39.82	28.82	37.82	34.82	26.82	4569	4476.21	1415.50	447.62	39.82	No	Whisper	Noticeable
ILG004	YES	699692	6393372	39.44	28.44	37.44	34.44	26.44	4775	4476.21	1415.50	447.62	39.44	No	Whisper	Noticeable
ILG005	YES	699964	6392840	37.52	26.52	35.52	32.52	24.52	5956	4476.21	1415.50	447.62	37.52	No	Whisper	Noticeable
UUN002	YES	696631	6398772	38.05	27.05	36.05	33.05	25.05	5600	4476.21	1415.50	447.62	38.05	No	Whisper	Noticeable
UUN003	YES	697072	6398768	38.65	27.65	36.65	33.65	25.65	5226	4476.21	1415.50	447.62	38.65	No	Whisper	Noticeable
UUN004	YES	698948	6399242	37.36	26.36	35.36	32.36	24.36	6065	4476.21	1415.50	447.62	37.36	No	Whisper	Noticeable
WUU002	YES	695870	6397135	39.85	28.85	37.85	34.85	26.85	4553	4476.21	1415.50	447.62	39.85	No	Whisper	Noticeable
WUU007	YES	694872	6396232	37.05	26.05	35.05	32.05	24.05	6286	4476.21	1415.50	447.62	37.05	No	Whisper	Noticeable
WUU012	YES	696356	6395242	41.71	30.71	39.71	36.71	28.71	3675	4476.21	1415.50	447.62	41.71	YES	Refrigerator	Clearly Audible

**APPENDIX D – DETAILED LOCATION MAPS FOR SENSITIVE NOISE RECEIVERS**



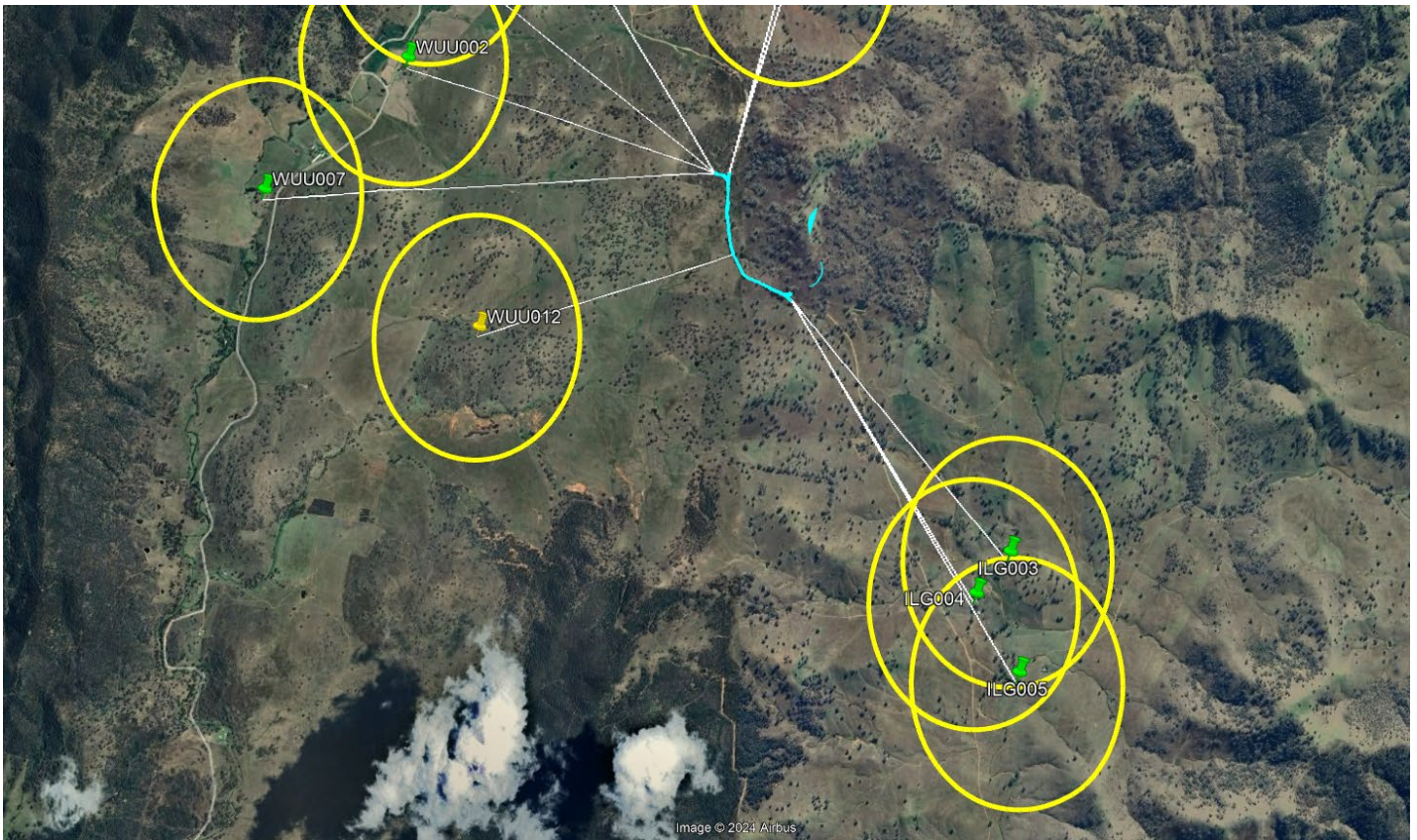
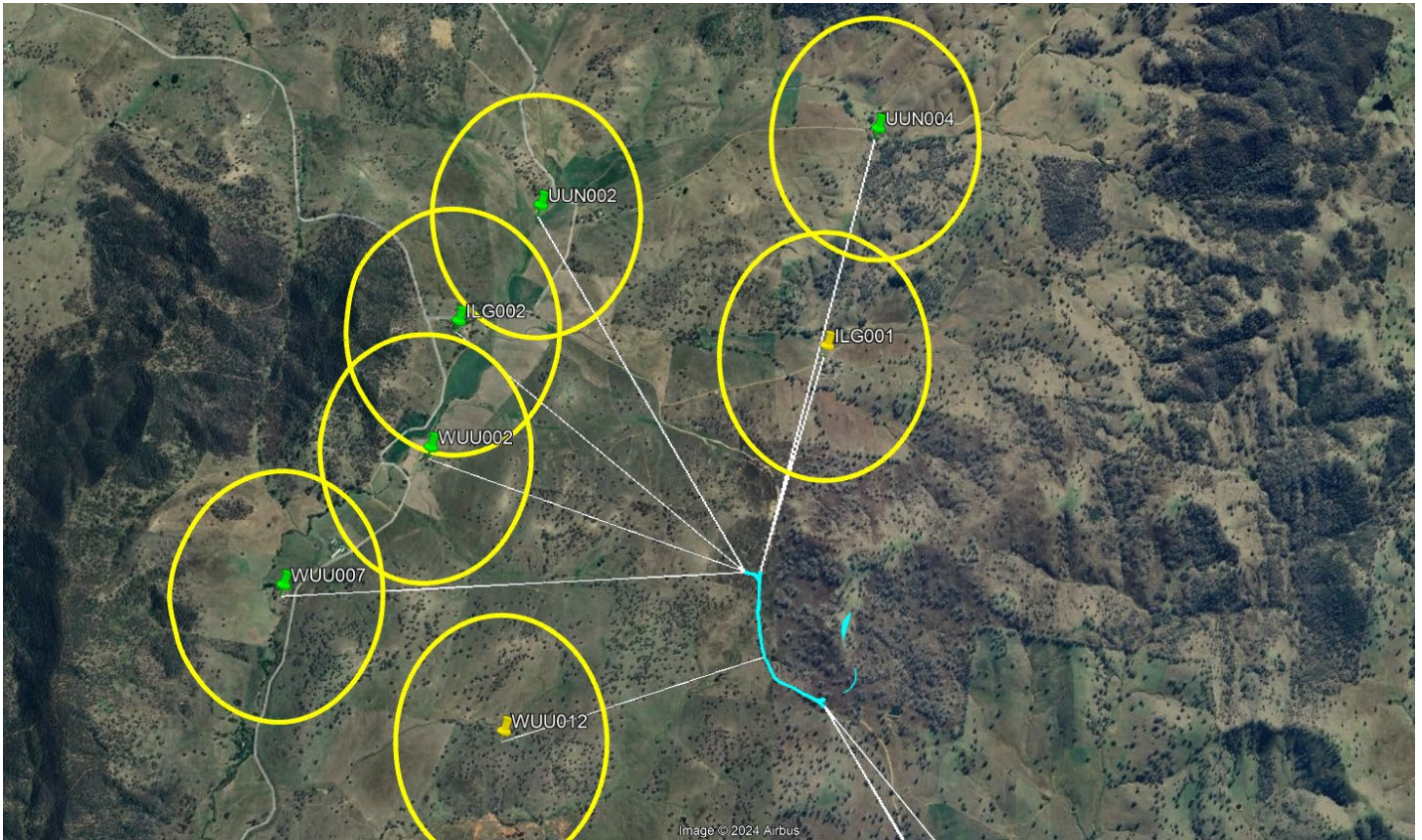
**APPENDIX E – NOISE MAPS**

SETBACK DISTANCE FROM RECEIVER TO ACHIEVE 60 dB



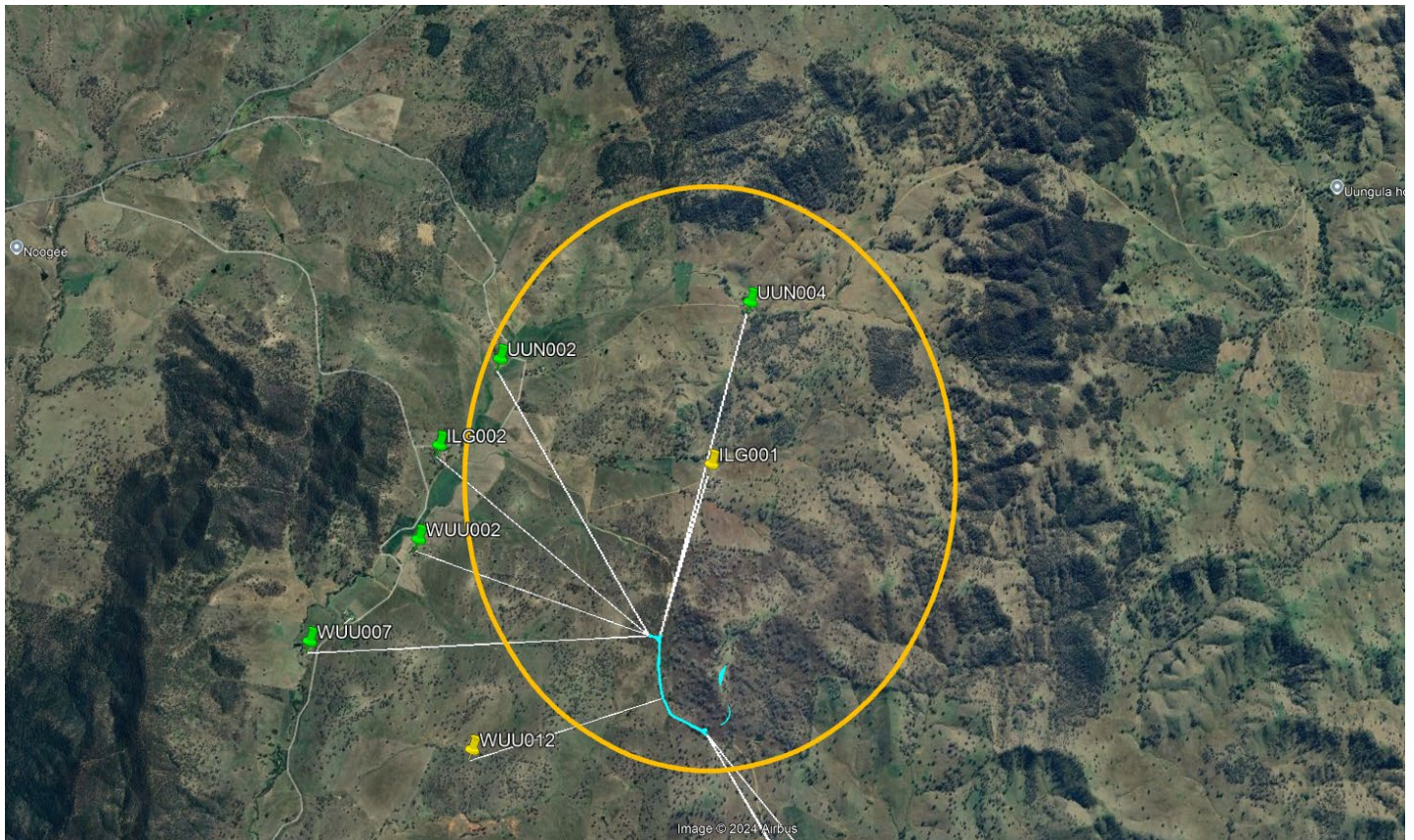
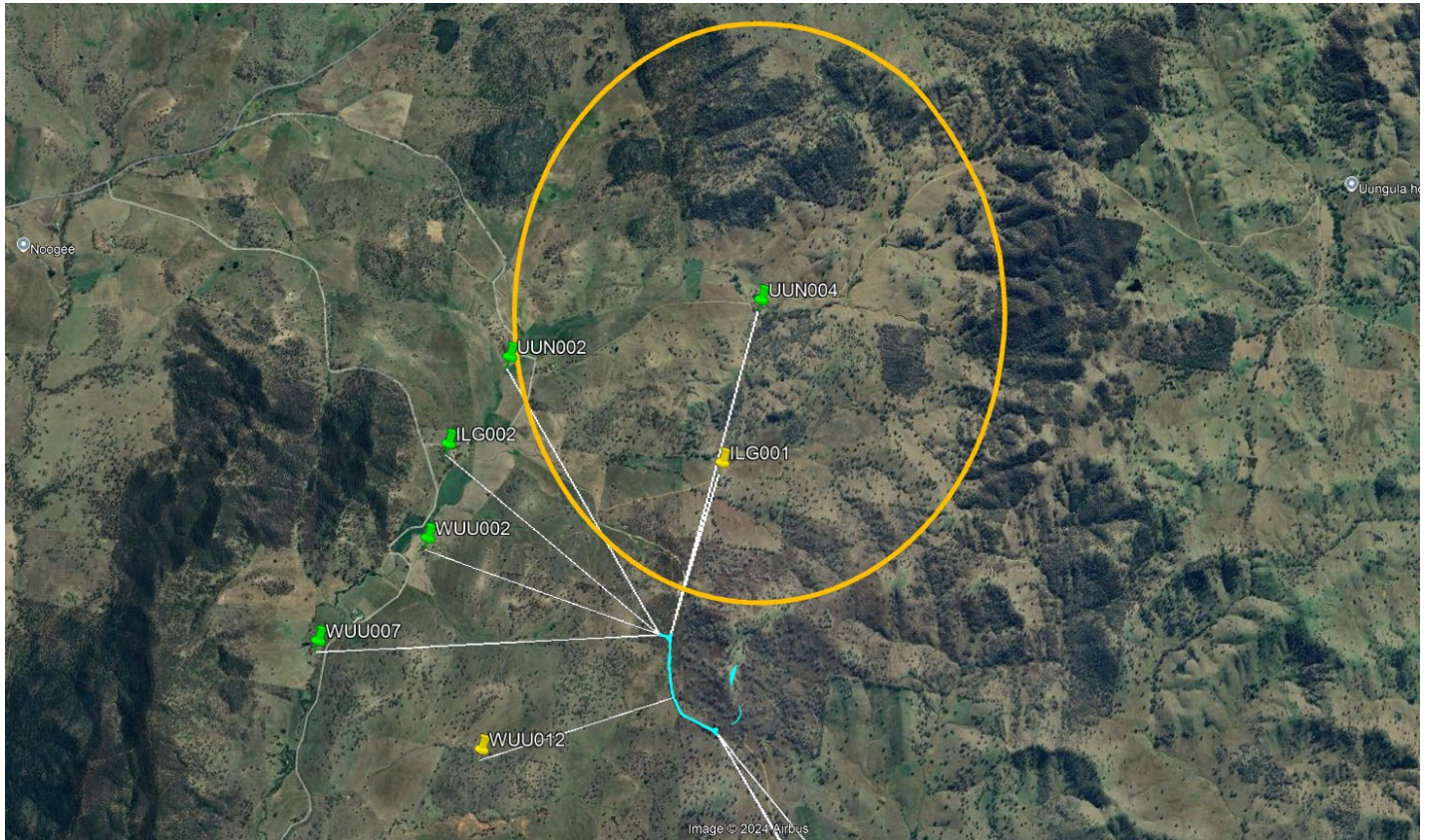
APPENDIX E – NOISE MAPS (CONT)

SETBACK DISTANCE FROM RECEIVER TO ACHIEVE 50 dB



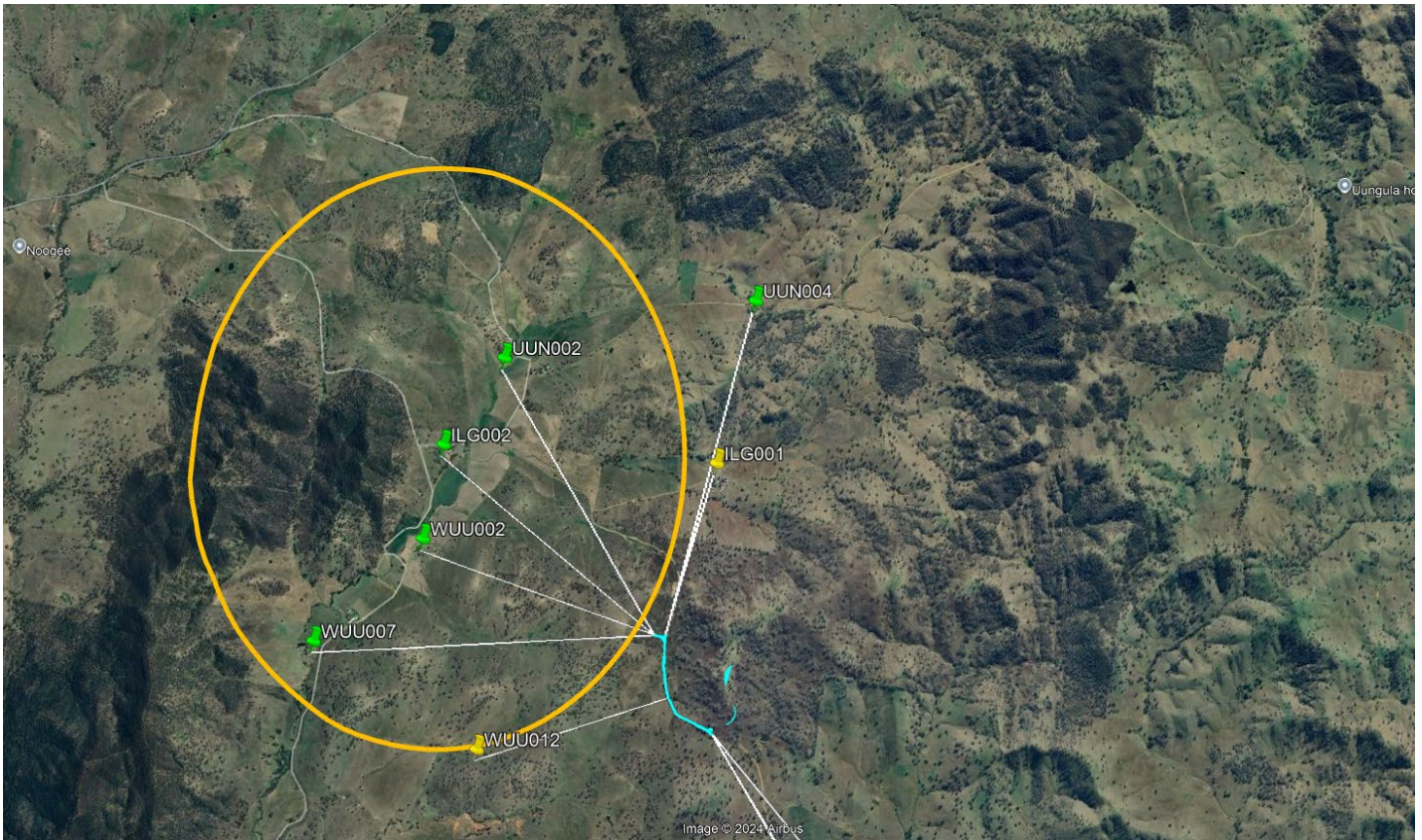
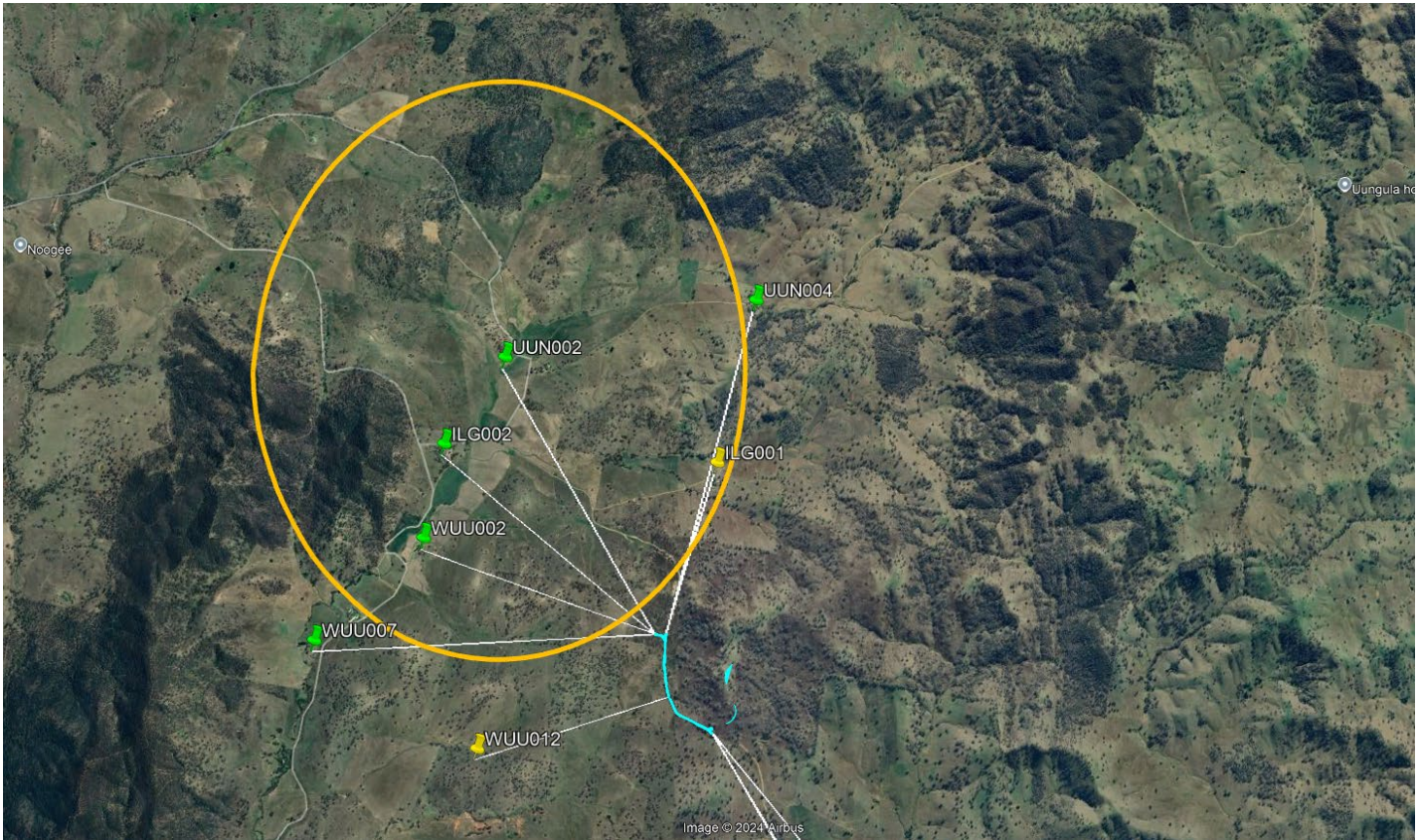
**APPENDIX E – NOISE MAPS (CONT)**

SETBACK DISTANCE FROM RECEIVER TO ACHIEVE < NML (40 dB)



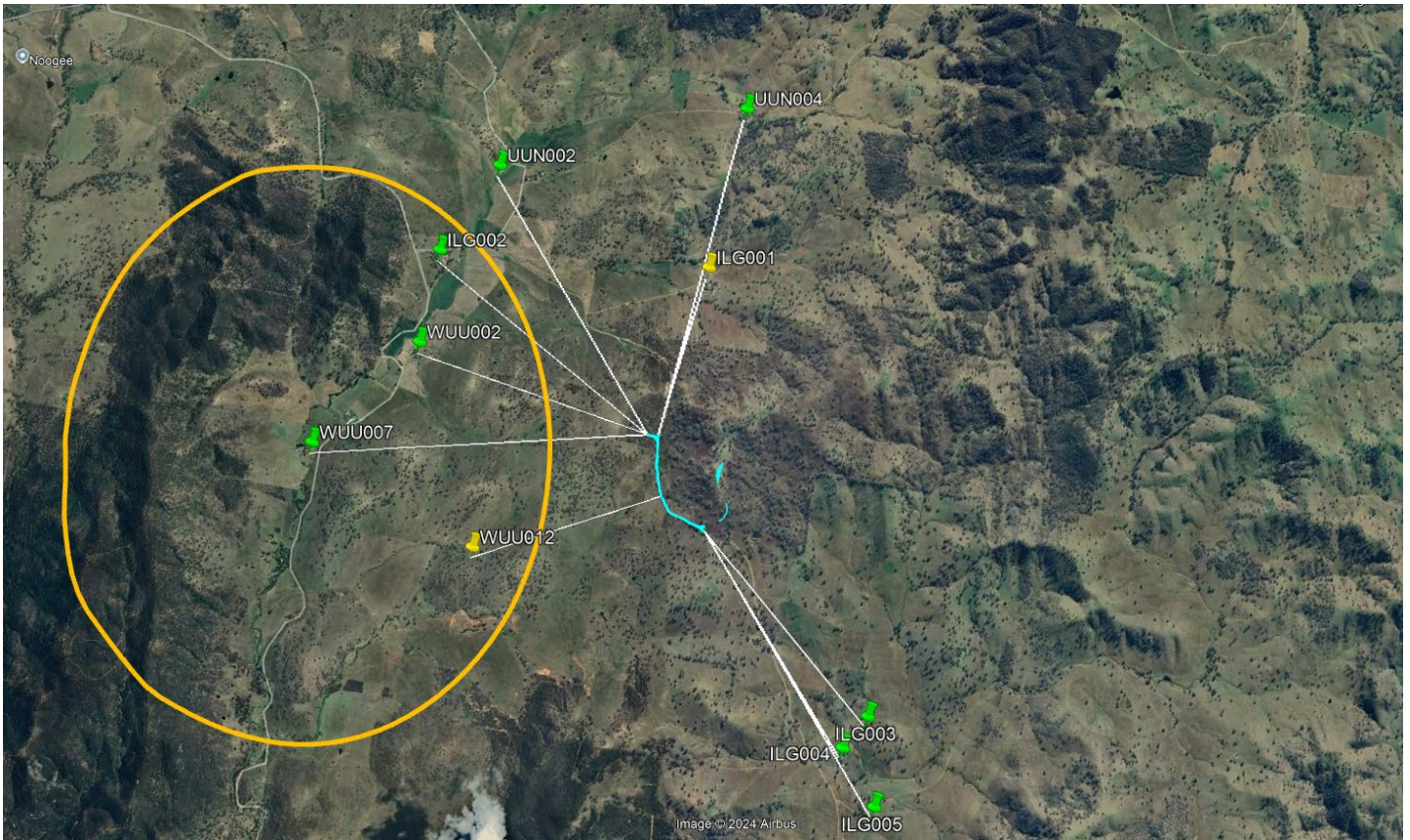
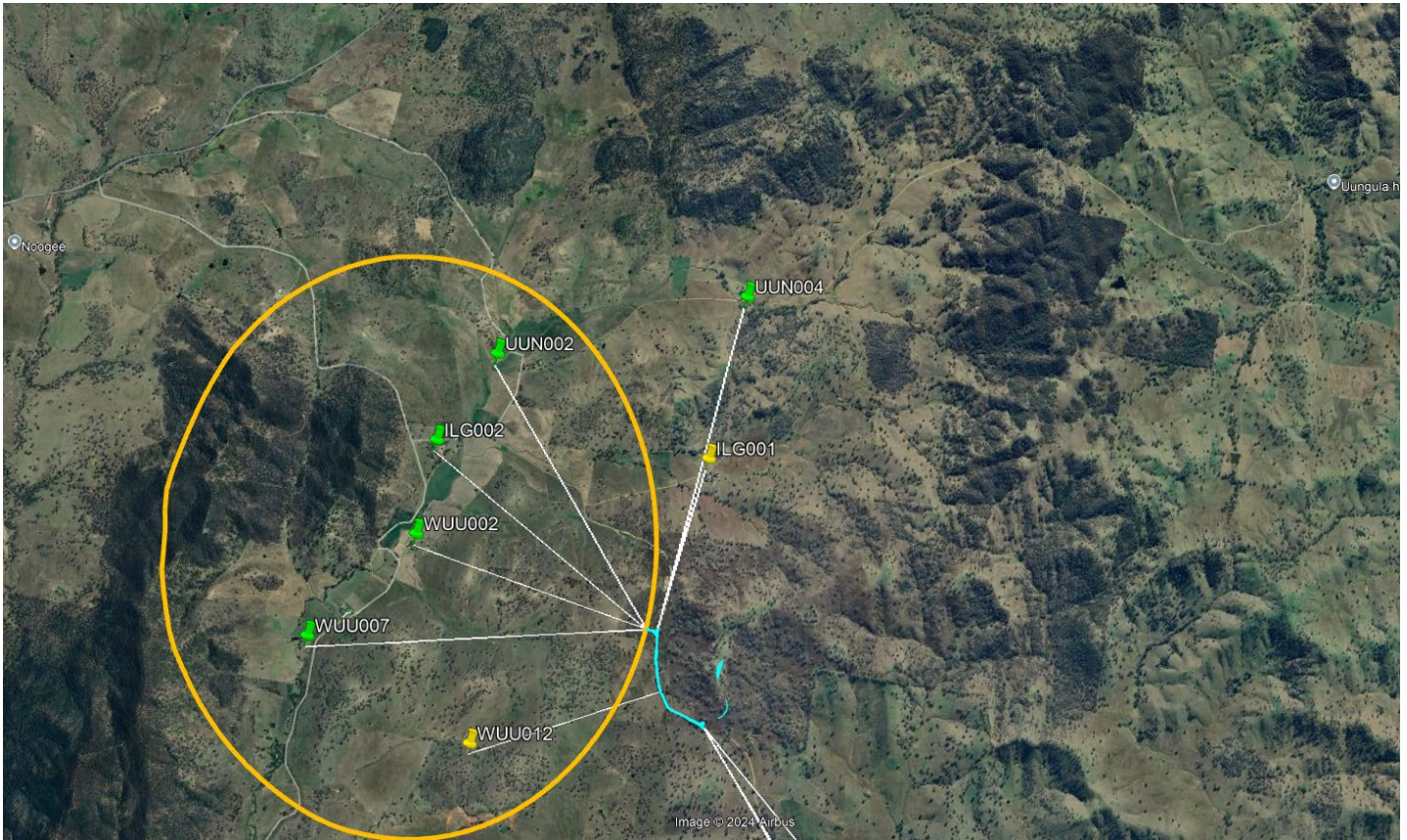
**APPENDIX E – NOISE MAPS (CONT)**

**SETBACK DISTANCE FROM RECEIVER TO ACHIEVE < NML (40 dB) (Cont)**



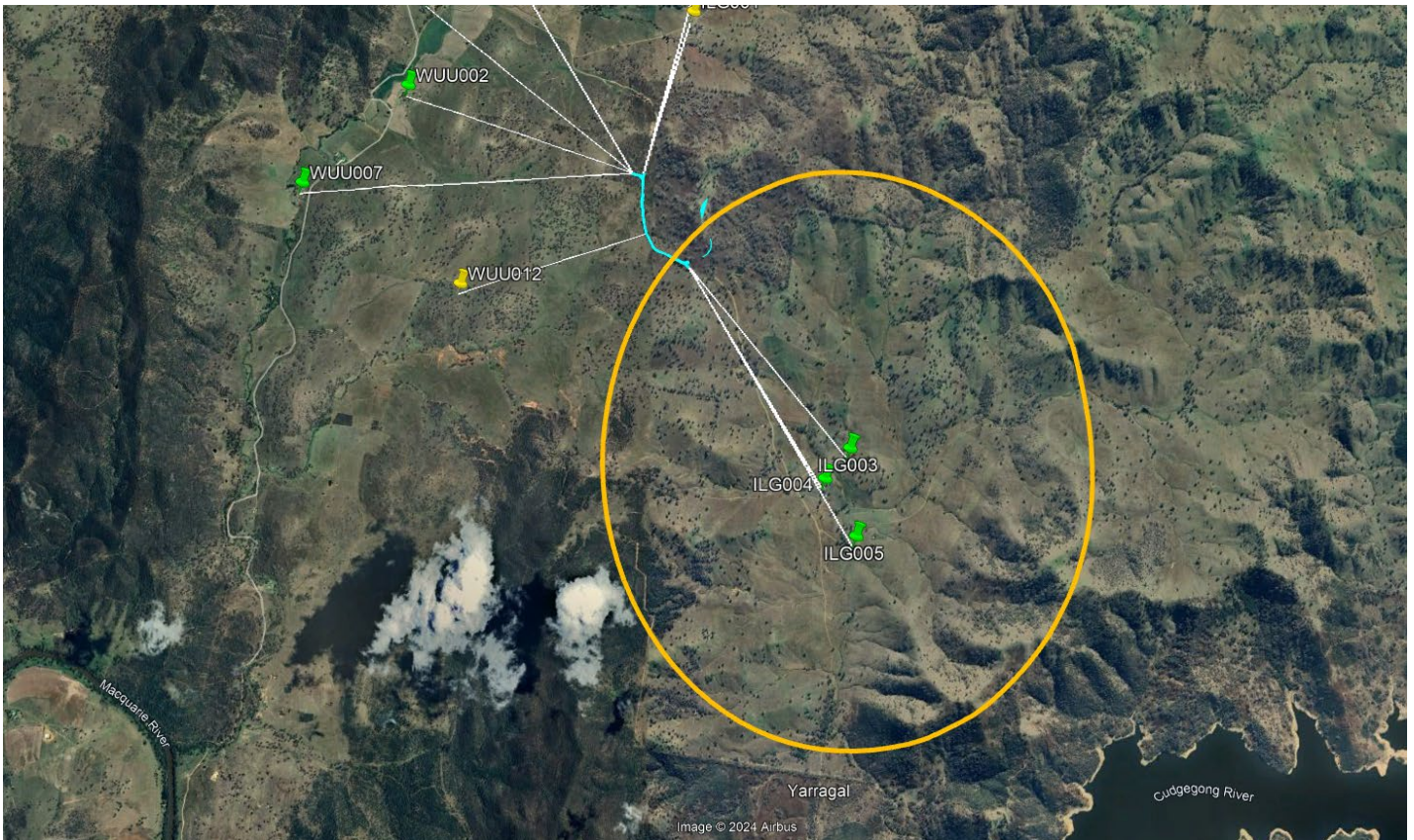
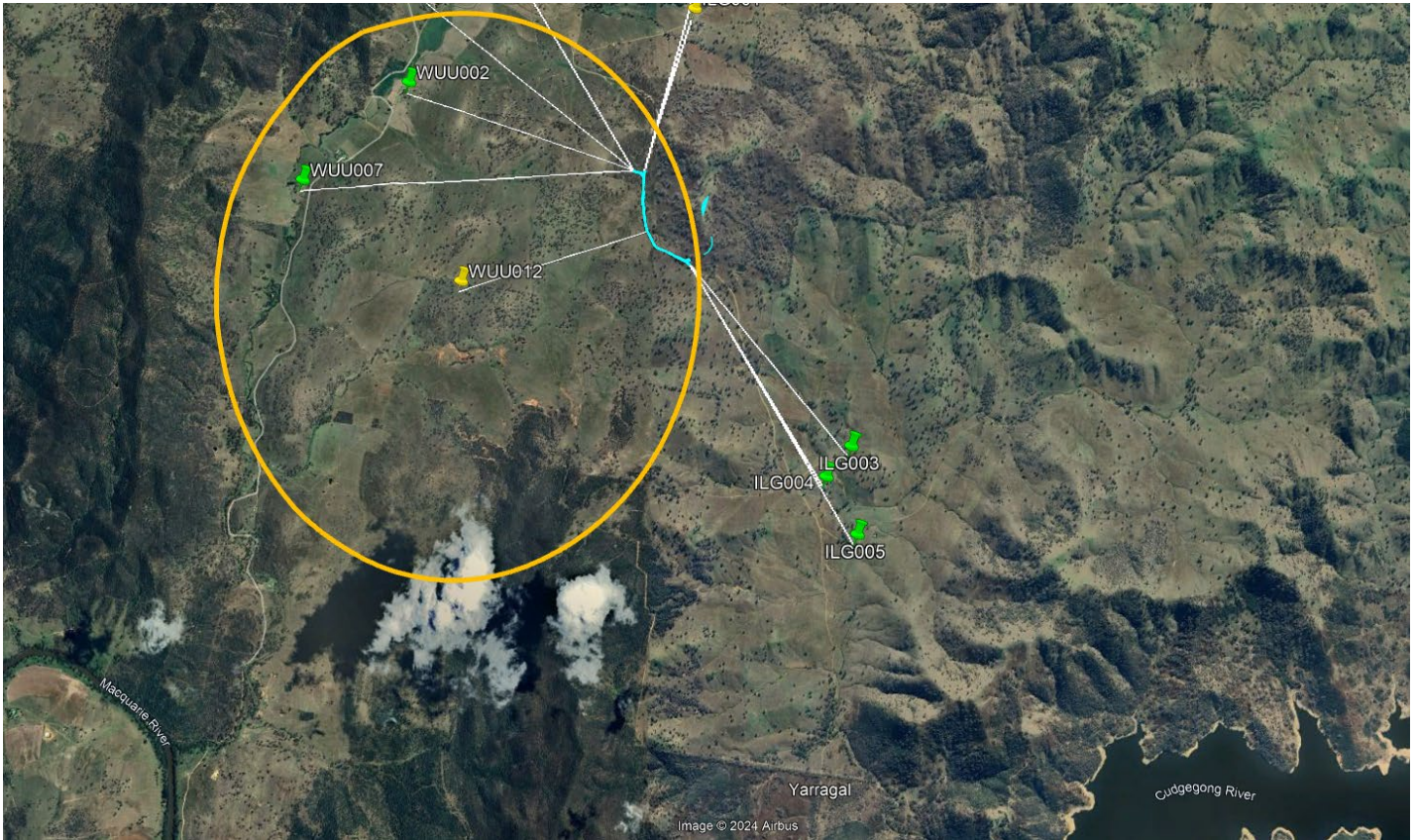
**APPENDIX E – NOISE MAPS (CONT)**

**SETBACK DISTANCE FROM RECEIVER TO ACHIEVE < NML (40 dB) (Cont)**



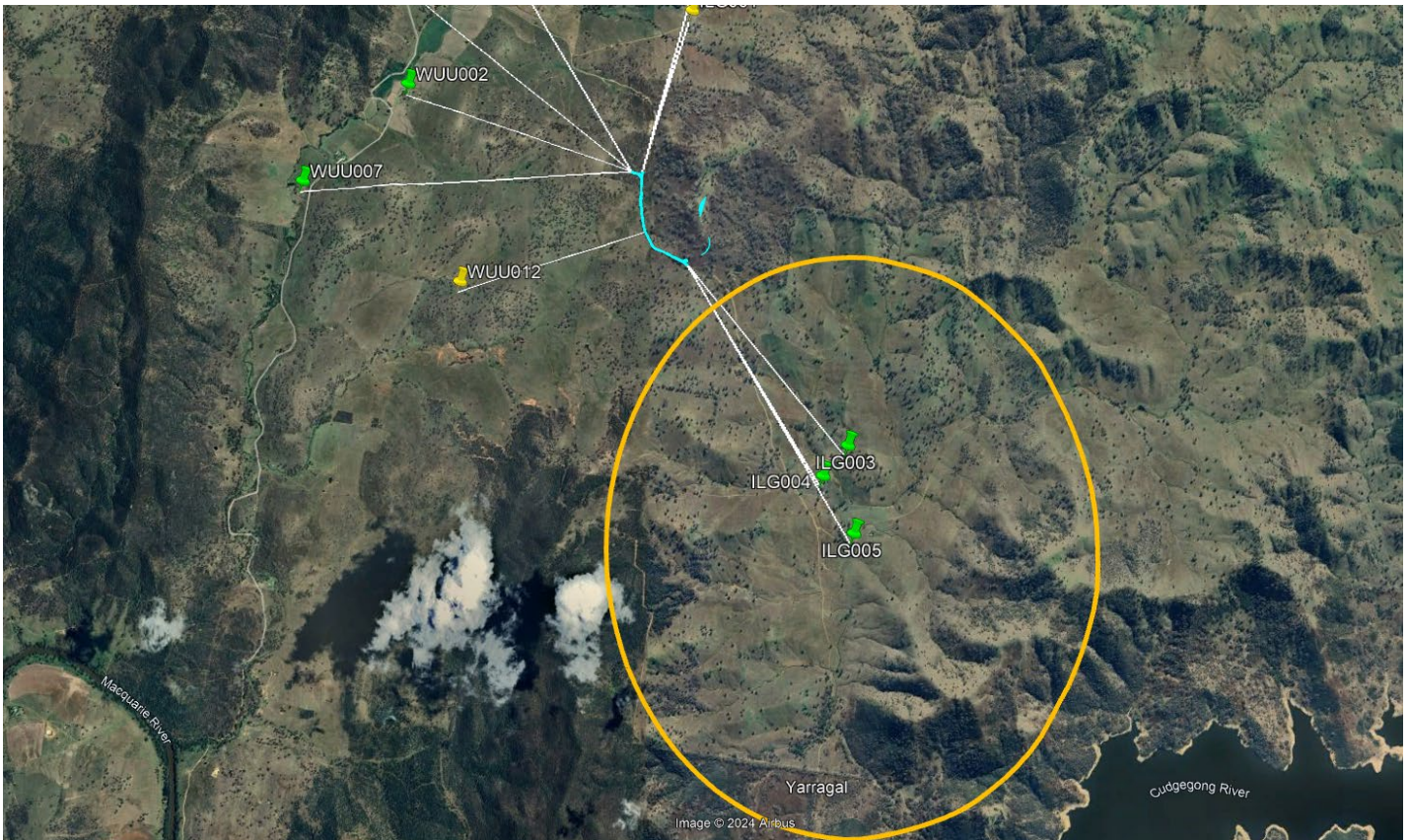
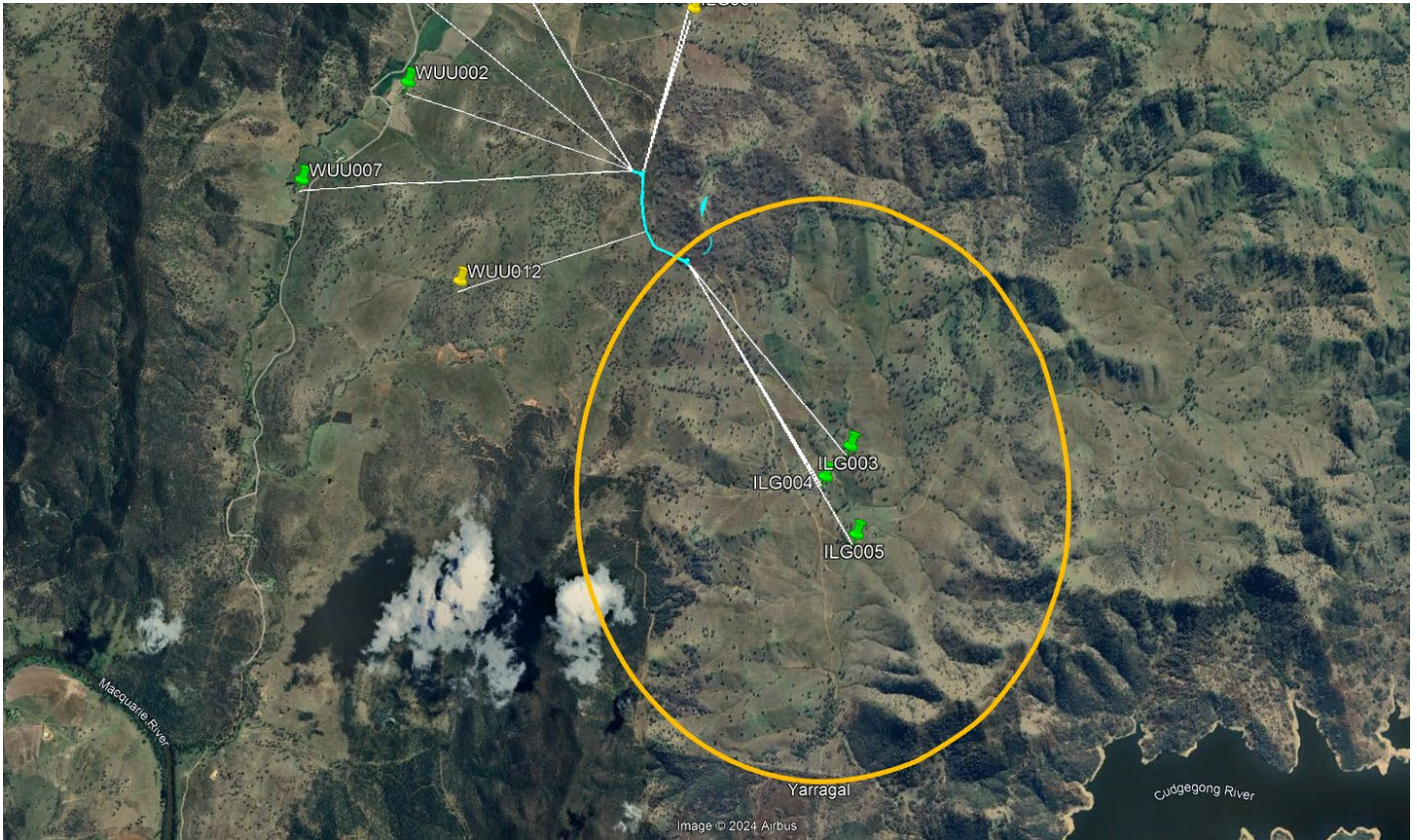
**APPENDIX E – NOISE MAPS (CONT)**

**SETBACK DISTANCE FROM RECEIVER TO ACHIEVE < NML (40 dB) (Cont)**

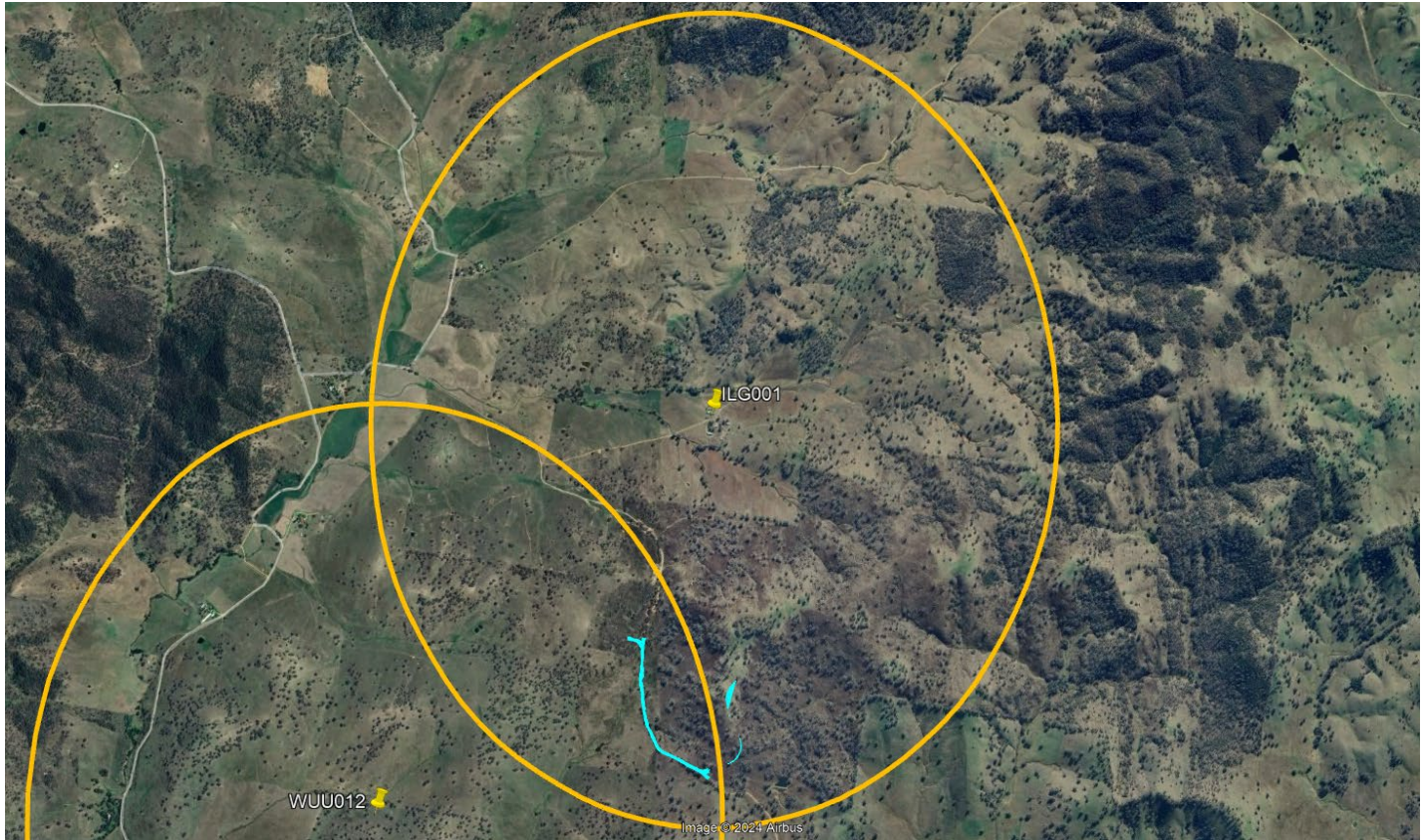


**APPENDIX E – NOISE MAPS (CONT)**

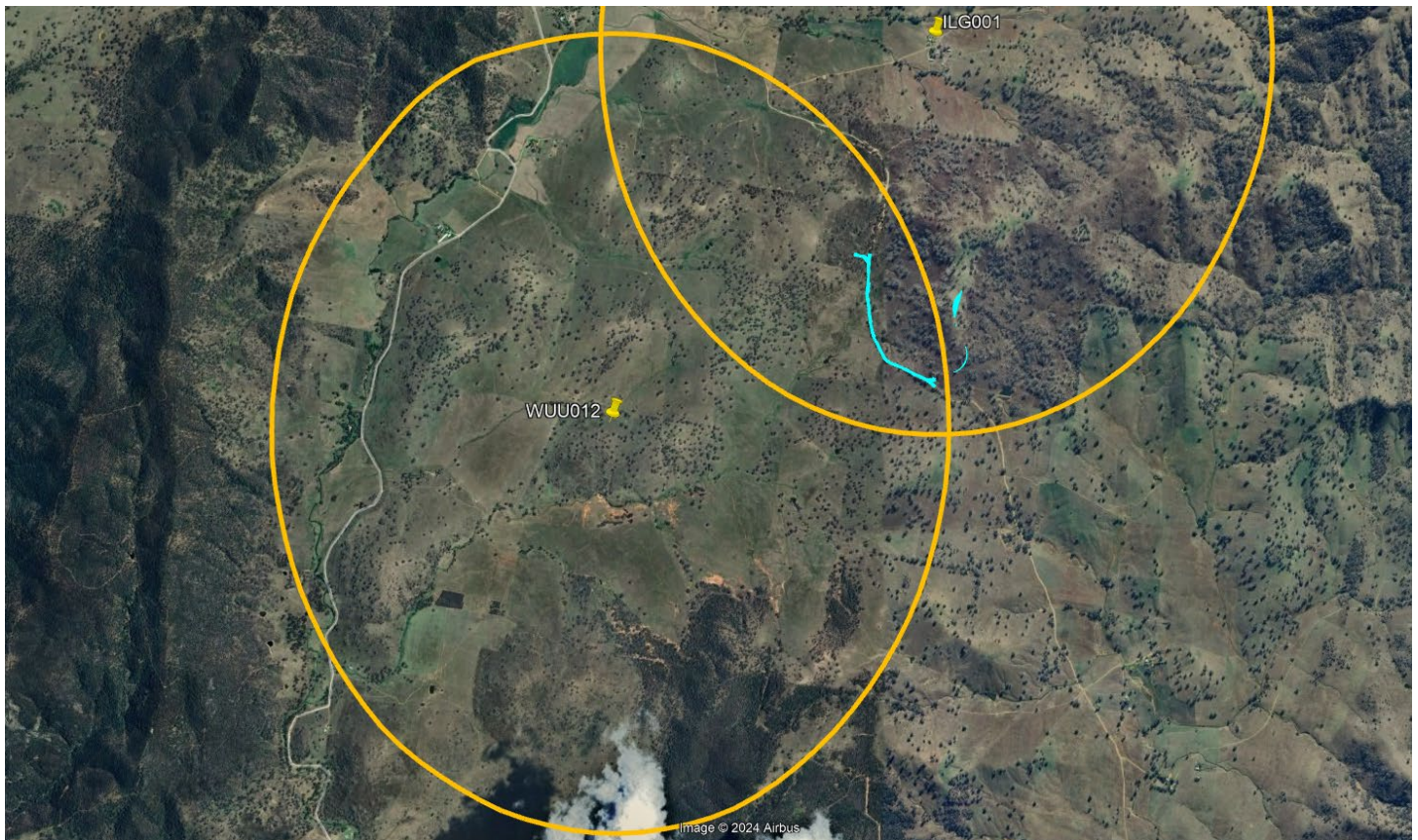
**SETBACK DISTANCE FROM RECEIVER TO ACHIEVE < NML (40 dB) (Cont)**



**APPENDIX F – SENSITIVE RECEIVERS IDENTIFIED WHERE SOUND MAY EXCEED 40 dB**



Receiver – ILG001



Receiver - TMR048, TMR047, CAD001

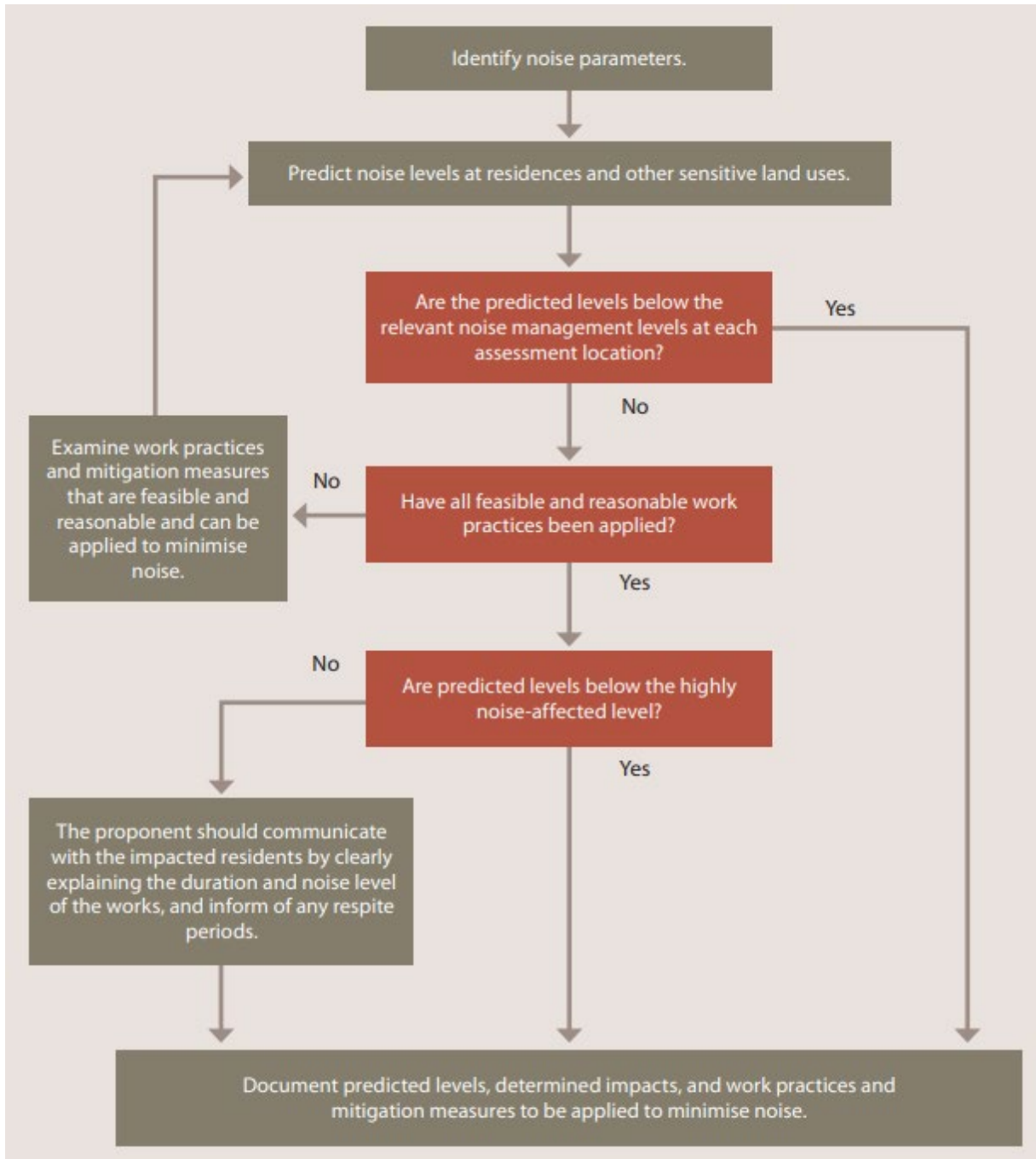
APPENDIX G – NOISE MITIGATION MEASURES

REFERENCE MEASURE	IMPACT	MITIGATION MEASURES	AFFECTED PHASE	APPLICABLE LOCATION(S)
NM1	Construction Noise (Controls at the Source)	In developing the construction methodology, Nacap will explore, confirm, and apply all feasible and reasonable noise mitigation strategies to reduce construction noise impacts and prevent exceeding the relevant noise limits at nearby sensitive locations whenever possible. Measures to achieve this may include, but are not limited to: <ul style="list-style-type: none"> <li>▪ Setting up portable noise barriers near stationary or long-term noise sources, or noise-producing equipment, where practical</li> <li>▪ Increasing the distance between noisy machinery and sensitive receptors as much as possible</li> <li>▪ Operating machinery to minimize high noise levels by reducing actions like shaking excavator buckets, dropping materials from height, or steel-on-steel contact.</li> <li>▪ Shutting down construction equipment and machinery when not actively in use</li> </ul>	Construction	All areas where NML may be exceeded
NM2	Construction Noise (Controls through administrative means)	Nacap will explore, validate, and implement reasonable and feasible administrative controls to reduce instances where construction noise exceeds established goals. The controls under consideration will include, but are not limited to: <ul style="list-style-type: none"> <li>▪ Environmental awareness training and site inductions for personnel, which will cover noise mitigation strategies and procedures for on-site and site access activities.</li> <li>▪ Evaluating the possibility of avoiding simultaneous construction activities at similar locations to reduce potential cumulative noise effects.</li> <li>▪ Choosing plant and equipment with attention to noise emission levels.</li> <li>▪ Restricting noise-intensive operations to less sensitive hours (e.g., avoiding early mornings and late afternoons) as much as possible when near sensitive receptors.</li> <li>▪ Ensuring proper maintenance of plant and equipment to prevent excessive noise generation.</li> <li>▪ Considering respite periods for activities producing noise that may be deemed “annoying” as defined in section 4.5 of the ICNG.</li> </ul>	Construction	All areas where NML may be exceeded
NM3	Construction Noise	Nacap will explore, verify, and implement feasible measures to mitigate the impacts of construction noise through proactive community engagement. The proposed controls will include, but are not limited to: <ul style="list-style-type: none"> <li>▪ Providing notifications to sensitive receivers potentially impacted by the construction at least two days before the start of activities. These notifications will detail the nature and duration of the work, expected noise levels, and contact information for project representatives.</li> </ul>	Construction	All areas where NML may be exceeded

REFERENCE MEASURE	IMPACT	MITIGATION MEASURES	AFFECTED PHASE	APPLICABLE LOCATION(S)
		<ul style="list-style-type: none"> <li>▪ Keeping the community regularly updated about noise-intensive activities occurring in their vicinity.</li> <li>▪ Offering noise monitoring to any complainants who report disturbances, to verify noise levels at their locations. If monitoring reveals that noise exceeds predicted levels, the construction approach will be reassessed and adjusted to bring noise levels into compliance with predictions where feasible.</li> </ul>		
NM4	Construction Noise (Blasting)	No blasting works are proposed to occur for the external road upgrades.	N/A	N/A

APPENDIX H – OTHER SUPPORTING DOCUMENTATION

Prediction and assessment of impacts – quantitative method (source: Interim Construction Noise Guideline)



**APPENDIX I – REFERENCED POLICIES STANDARDS AND GUIDELINES**

ACOUSTIC ASPECT	DESCRIPTION	RELEVANT ASSESSMENT GUIDELINE
Airbourne Noise	Construction noise	Interim Construction Noise Guideline (ICNG) (DECCW, 2009)
Management	Mitigation and management of construction noise issues	Interim Construction Noise Guideline (DECCW, 2009) Noise Policy for Industry (EPA, 2017)
Existing ambient background noise levels		Interim Construction Noise Guideline (ICNG) (DECCW, 2009)