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ARTC InlandRail

Inland Rail Programme

Narrabri to North Star Project



Environmental Impact Statement

Technical Report 5: **Noise and Vibration Assessment**

Image: Newell Highway north of Narrabri, NSW



Technical Report 5:
Noise and Vibration Assessment

Image: Railway and Newell Highway north of Narrabri, NSW

Australian Rail Track Corporation

Inland Rail - Narrabri to North Star
Noise and Vibration Assessment

October 2017

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Glossary

Absolute rail noise	The absolute rail noise refers to noise levels emitted by rail only, that is without the contribution of any other noise source.
Ambient noise	The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far.
Background noise	The underlying level of noise present in the ambient noise when extraneous noise is removed. This is described using the L_{A90} descriptor. (see also Rating background level).
dB	Decibel, which is 10 times the logarithm (base 10) of the ratio of a given sound pressure to a reference pressure; used as a unit of sound.
dB(A)	Unit used to measure 'A-weighted' sound pressure levels.
EPA	Environmental Protection Authority of New South Wales.
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 or rail corridor site constraints such as space limitations • Floodway and stormwater flow obstruction • Access requirements • Maintenance requirements • The suitability of building conditions for at property treatments.
Groundborne vibration	Groundborne vibration is vibration transmitted from source to receiver via the medium of the ground.
$L_{A90\ (Time)}$	The A-weighted sound pressure level that is exceeded for 90% of the time over which a given sound is measured. This is considered to represent the background noise e.g. $L_{A90\ (15\ min)}$.
$L_{Aeq\ (Time)}$	Equivalent sound pressure level: the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring.
$L_{Aeq\ (15\ hr)}$	The L_{Aeq} noise level for the period 7.00 to 22.00 hours.
$L_{Aeq\ (9\ hr)}$	The L_{Aeq} noise level for the period 22.00 to 7.00 hours.
$L_{Aeq\ (1hr)}$	The highest hourly L_{Aeq} noise level during the day and night periods.
$L_{A90(period)}$	The sound pressure level exceeded for 90% of the measurement period.
L_{Amax}	The maximum sound level recorded during the measurement period.
L_{AFmax}	The maximum sound level recorded during the measurement period using a fast time response.
Mitigation	Reduction in severity.
Noise sensitive receiver	An area or place potentially affected by noise including residential dwellings, schools, child care centres, places of worship, health care institutions and active or passive recreational areas.
Operation	Operation of trains between Melbourne and Brisbane on the completed Inland Rail alignment.

Peak Particle Velocity (PPV)	Current practices for assessments of the risk of structural damage to buildings use measurements of Peak Particle Velocity (PPV) in millimetres per second. The PPV is the maximum speed, in mm/s, that occurs from a vibration at the midpoint between maximum displacements in each direction", the existing statement could be added after the definition to provide context of typical use.
Project	For the purposes of the noise and vibration assessment, the term 'Project' is synonymous with 'Proposal'.
Proposal	The construction and operation of the Narrabri to North Star section of Inland Rail. This is the 'Project' for the purposes of the Rail Infrastructure Noise Guideline.
Rating Background Level (RBL)	The overall single-figure background level representing each assessment period (day/evening/night) over the whole monitoring period. This is the level used for assessment purposes.
Reasonable	Selecting reasonable measures from those that are feasible involves judging whether the overall noise benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the mitigation measure. To make such a judgement, the following should be considered: • Noise impacts: - Existing and future levels, and projected changes in noise levels - Level of amenity before the project, e.g. the number of people affected or annoyed - Any noise performance criteria for the development, e.g. internal noise levels for certain rooms - The amount by which the triggers are exceeded • Noise mitigation benefits: - The amount of noise reduction expected, including the cumulative effectiveness of proposed mitigation measures - ideally, a noise wall/mound should be able to reduce noise levels by at least 5 dB - The number of people protected • Cost effectiveness of noise mitigation: - The total cost of mitigation measures, taking into account the physical attributes of the site, e.g. topography, geology, and the cost variation to the project given the expected benefit - Noise mitigation costs compared with total project costs, taking into account capital and maintenance costs - Ongoing operational and maintenance cost borne by the community, e.g. running air conditioners or mechanical ventilation • Community views: - Engage with affected land users when deciding about aesthetic and other impacts of noise mitigation measures - Determine the views of all affected land users, not just those making representations, through early community consultation - Consider noise mitigation measures that have majority support from the affected community
Receiver	A noise modelling term used to describe a map reference point where noise is predicted. A sensitive receiver would be a home, work place, church, school or other place where people spend time.
RMS or Vrms	Root Mean Square (velocity).

Short-term vibration	Vibration that occurs so infrequently that it does not cause structural fatigue nor does it produce resonance in the structure.
Sound Pressure Level (SPL)	20 times the logarithm to the base 10 of the ratio of the RMS sound pressure level to the reference sound pressure level of 20 micro Pascals.
Tonality	Noise containing a prominent frequency or frequencies characterised by a definite pitch.
Vibration dose value (VDV)	As defined in BS6472 – 1992, the vibration dose value is given by the fourth root of the integral of the fourth power of the frequency weighted acceleration.
Vibration	The variation of the magnitude of a quantity which is descriptive of the motion or position of a mechanical system, when the magnitude is alternately greater and smaller than some average value or reference. Vibration can be measured in terms of its displacement, velocity or acceleration. The common units for velocity are millimetres per second (mm/s).

List of abbreviations

AVTG	Assessing Vibration: A Technical Guideline (DEC 2006)
ARTC	Australian Rail Track Corporation
CNS (Rail projects)	Construction Noise Strategy (TfNSW 2012)
CoRTN	Calculation of Road Traffic Noise (UK Department of Transport Welsh Office 1988)
CNVIS	Construction Noise and Vibration Impact Statement
DEC, DECC, DECCW	See OEH
EPA	Environment Protection Authority of New South Wales
EIS	Environmental impact statement
ICNG	*Interim Construction Noise Guideline* (DECC 2009)
km/h	kilometres per hour
INP	*Industrial Noise Policy* (EPA 2000)
mm/s	millimetres per second
m/s	metres per second
NMT	Nordic Prediction Method for Train Noise (TemaNord 1996:524)
NVRF	Sydney Trains Environmental Management System Guide for Noise and Vibration from Rail Facilities
OEH	The Office of Environment and Heritage (OEH). Formerly the Department of Environment and Conservation (DEC) before becoming the Department of Environment and Climate Change (DECC), later known as the Department of Environment Climate Change and Water (DECCW).
RING	*Rail Infrastructure Noise Guideline*
RNP	*Road Noise Policy* (DECCW 2011)
SEARs	Secretary's Environmental Assessment Requirements
SEL	Sound exposure level
TfNSW	Transport for NSW

Executive summary

The proposal

Australian Rail Track Corporation Ltd (ARTC) is seeking approval to construct and operate the Narrabri to North Star section of Inland Rail ('the proposal').

The proposal would involve upgrading the existing rail line for a distance of 188 kilometres between Narrabri and North Star via Moree, including new crossing loops, track realignment and new sections of rail line, new river crossings, and new road over rail bridges at Jones Avenue and Newell Highway.

Ancillary work would include works to level crossings, signalling and communications, signage, fencing, and services and utilities.

This report

This report provides an assessment of the potential noise and vibration impacts of the proposal. The scope of the assessment has been undertaken in response to the Secretary's Environmental Assessment Requirements (SEARs) issued on 8 November 2016 and guided by relevant legislation and various industry guidelines and standards.

Operational noise

Operational noise has been assessed having regard to the NSW *Rail Infrastructure Noise Guideline* (RING) and included modelled operational scenarios at current and future horizon timeframes for both the 'no-build' case that assumes the proposal does not proceed and the 'build' case that incorporates the proposal and corresponding growth in train movements.

The RING criteria for redeveloped rail lines provide trigger levels for noise at residential receivers (L_{Aeq} and L_{Amax}), as well as an increase in noise levels resulting from the proposal. To qualify for mitigation consideration, the proposal must both increase noise levels at a receiver and exceed the noise trigger levels set out in the guideline.

A total of 152 residential receivers were found to exceed the criteria established by the RING for the 2040 design assessment year. These included:

- 14 receivers in North Star
- 16 receivers in Moree-North Star
- 79 receivers in Moree Town
- 15 receivers in Bellata-Moree
- 19 receivers in Bellata
- 9 receivers in Narrabri-Bellata.

A number of non-residential receivers within the study were also predicted to exceed the internal RING trigger levels for the 2040 design assessment year including three educational receivers, three worship receivers this assumes a 10 dB external to internal reduction. Additionally two passive recreation receivers and one active recreation receiver were predicted to exceed the respective RING trigger level at 2040.

A number of potential mitigation options have been reviewed and may be effective, subject to being shown to be reasonable and feasible for this proposal. Details of potential mitigation options can be found in Section 7.2 of this report.

Operational vibration

Operational vibration impacts with consideration to structural damage are not considered likely to result from the proposal. While an increase in vibration due to increased axle loads and speeds is anticipated, vibration is predicted to remain within acceptable levels considering the distance to most nearby receivers. Additionally, improved ballast/sleeper heterogeneity and rail surface smoothness may also reduce transmitted vibration and assist to offset increases in vibration due to axle loading and speed.

Daytime vibration levels are predicted to be within the acceptable range for human comfort impacts at distances of more than 17 metres from the track, while night time levels are predicted to be acceptable at distances of more than 23 metres from the track. Three receivers are located within these distances and are detailed in Section 4.5.2. Potential mitigation measures to reduce vibration impacts are detailed in Section 7.2.2.

Operational traffic noise

Assessment of the expected noise impacts in accordance with the *Road Noise Policy* (RNP) are as follows:

- The controlling criteria is expected to be exceeded at six receivers during the day-time period. The maximum exceedance of the criteria is 1.4 dBA. It should be noted however that these are due to noise from existing roads or roads not part of the proposal and therefore would not qualify for mitigation treatment.
- The controlling criteria is not expected to be exceeded during the night-time period.
- Noise levels are not predicted to exceed the day-time acute criteria of 65 dBA $L_{Aeq(15\ hr)}$ or night-time acute criteria of 60 dBA $L_{Aeq(9\ hr)}$.
- The increase in noise levels between the no-build and build scenarios are less than 2 dB for the receivers that exceed the controlling criterion during the day-time period, therefore mitigation measures are not warranted.
- The Relative Increase Criterion is not applicable to any receiver due to realignment of the Newell Highway overpass or construction of the Jones Avenue bridge.

The proposed overpass at Newell Highway and the Jones Avenue bridge are not expected to adversely impact any sensitive receiver from a noise perspective within the assessment area.

Construction noise

Noise emissions from construction have been assessed during the primary proposal construction hours and outside the primary proposal construction hours. An assessment has been carried out in accordance with the *Interim Construction Noise Guideline* (ICNG) and with consideration to the Inland Rail NSW Construction Noise and Vibration Management Framework.

- In relation to construction activities:
  - Activities such as pre-possession (construction scenario S1), skim track reconditioning (construction scenario S2), full depth reconditioning (construction scenario S3), and drainage construction, are likely to impact the largest number of receivers due to the higher level of noise emitted by the anticipated equipment.
  - Construction activities undertaken outside of the primary proposal construction hours increase the impacted receivers to those within about 1500 metres for bridge works and 700 metres for other activities.
- In relation to the primary proposal construction hours and construction noise management levels:
  - The highly affected level of 75 dB(A) L_{Aeq} is predicted to be exceeded at three receivers.
  - Rail line redevelopment construction activities are predicted to exceed the noise management level at receivers nearest to the construction footprint. Impacted receivers are within about 700 metres of the works and includes up to 1574 identified noise sensitive residential receiver locations. Noise levels are predicted to exceed the proposal specific construction management level by up to 43 dB.
  - Newell Highway overbridge construction is predicted to exceed the proposal specific construction management level by up to 13 dB at two residential receivers.
  - Jones Avenue overbridge construction is predicted to exceed the proposal specific construction management level by up to 41 dB at 1098 residential receivers.
  - Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at non-residential sensitive receivers including educational, child care and hospital facilities. Construction noise management levels are applicable as an internal level only when the facilities are in use.
  - Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at recreational areas including bushland areas, parks and sporting facilities when these areas are in use.

The noise and vibration mitigation measures detailed in Section 7 should be implemented where feasible and reasonable and all potentially affected receivers should be informed of the nature of the works, expected noise levels, duration of works and a method of contacting site management.

Construction vibration

General construction activities

In relation to vibration from general construction activities, the expected magnitude of ground vibration is not expected to be sufficient to cause structural damage if the equipment operates at distances greater than 18 metres from standard residential buildings or structures of similar construction.

Many heritage structures near to the proposal consist of station buildings, sidings and silos which are directly adjacent to the track and bridges that are on the actual alignment. The expected magnitude of ground vibration is not expected to be sufficient to cause structural damage if the equipment operates at distances greater than 35 metres from heritage buildings and structures. However, many items are potentially within this distance from the works and may therefore be affected.

The noise and vibration mitigation measures detailed in Section 7 should therefore be implemented to manage potential construction vibration impacts.

Piling

Vibration impacts due to piling activities have the potential to exceed structural vibration values for standard dwellings at distances of up to 100 metres from the activity for impact piling, 30 metres for vibratory piling and 17 metres for bored piling.

Piling activities have the potential to exceed structural vibration values for heritage structures at distances of 180 metres from the activity for impact piling, 50 metres for vibratory piling and 35 metres for bored piling.

In the event that sensitive receivers fall within these buffer distances, other methods may need to be investigated such as press-in hydraulic piling or jacked-in piling to reduce the potential for impact. These methods generally exhibit much lower vibration levels compared to impact, vibratory and bored piling.

Bridges

For bridges on the alignment within the buffer distances of vibration generating activities it is recommended that the potential for vibration damage be assessed on a case by case basis at detailed design stage with suitable mitigation measures implemented as part of a construction vibration management plan. This may include measurement of existing vibration levels from trains on these structures to provide an existing baseline and/or review by a suitably qualified structural engineer.

Human comfort

Humans are capable of detecting vibration at levels well below those causing risk of damage to buildings. Based on a conservative assessment, it is possible that construction vibration for general construction activities may be perceptible at distances up to 140 metres from the works.

Piling works are required for bridge construction. About 820 receivers may receive perceptible vibration where impact piling is used. These receivers are within 700 metres of piling locations. They are located mostly within Moree and are near to either the Mehi River rail bridge or the Jones Avenue road overbridge.

Vibration impacts due to boring of the cast in-situ piles has the potential to impact receivers up to 120 metres from the work area. There are 56 receivers located within this buffer distance from proposed piling locations.

To minimise human comfort impacts, alternatives to impact piling are recommended where feasible. The mitigation measures detailed in Section 7 should also be considered where feasible and reasonable to reduce the potential for impact.

1. Introduction

1.1 Overview

The Australian Government has committed to delivering a significant piece of national transport infrastructure by constructing a high performance and direct interstate freight rail corridor between Melbourne and Brisbane. The Inland Rail programme (Inland Rail) involves the design and construction of a new inland rail connection, about 1,700 km long, between Melbourne and Brisbane. Inland Rail is a transformational rail infrastructure initiative that will enhance Australia's existing national rail network and serve the interstate freight market.

Australian Rail Track Corporation Ltd (ARTC) is seeking approval to construct and operate the Narrabri to North Star section of Inland Rail ('the proposal'), which consists of 188 kilometres of upgraded rail track and associated facilities.

The proposal requires approval from the NSW Minister for Planning under Part 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposal is also a controlled action under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act), and requires approval from the Australian Minister for the Environment and Energy.

This report has been prepared by GHD Pty Ltd (GHD) as part of the environmental impact statement (EIS) for the proposal. The EIS has been prepared to accompany the application for approval of the proposal, and addresses the environmental assessment requirements of the Secretary of the Department of Planning and Environment (the SEARs), issued on 8 November 2016.

1.2 The proposal

1.2.1 Location

The proposal is generally located in the existing rail corridor between the town of Narrabri and the village of North Star, via Moree. The location of the proposal is shown in Figure 1.1.

1.2.2 Key features

The key features of the proposal involve:

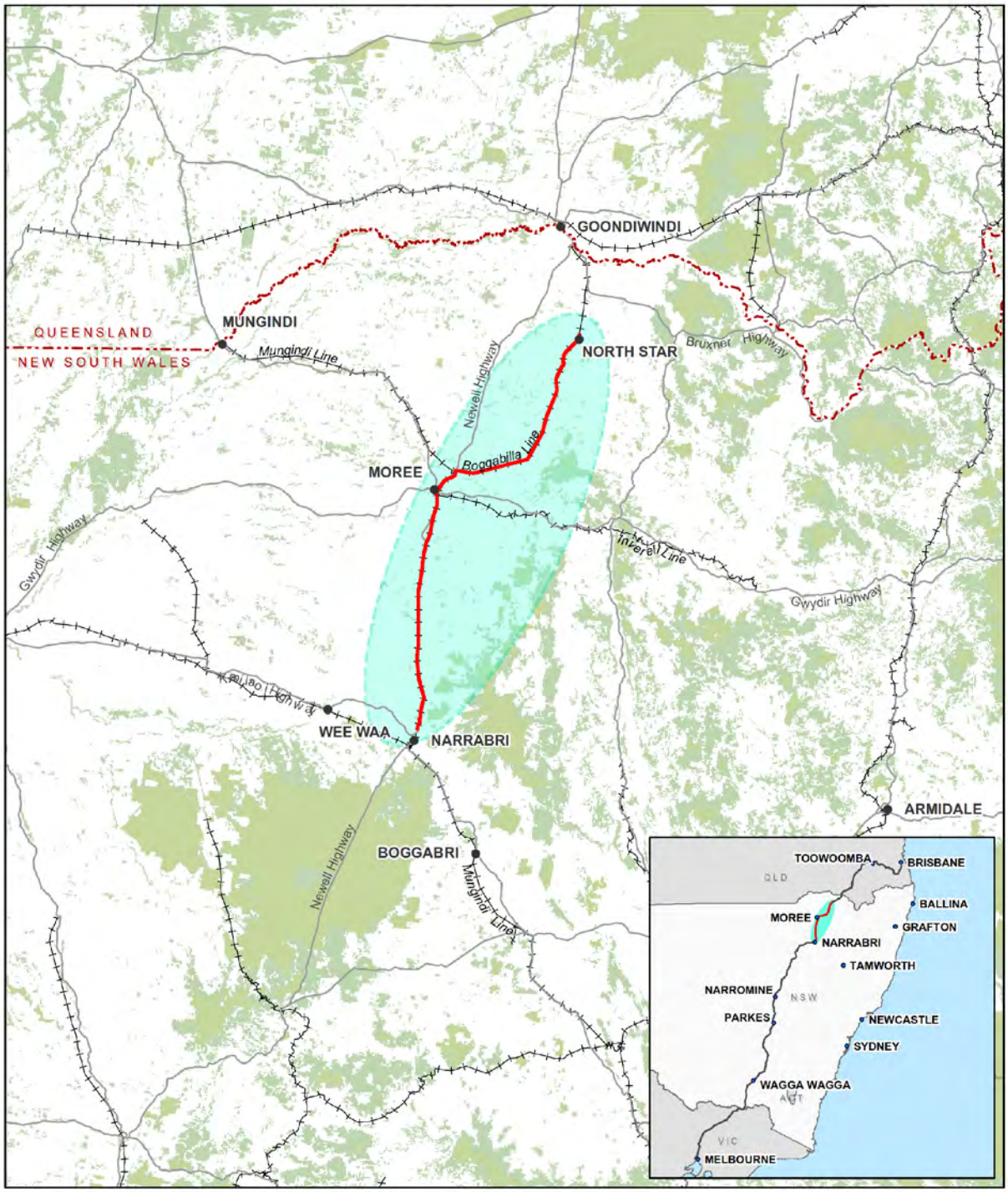
- upgrading the track, track formation, and culverts within the existing rail corridor for a distance of 188 kilometres between Narrabri and North Star via Moree
- realigning the track where required within the existing rail corridor to conform with required platform clearances for Inland Rail trains
- providing five new crossing loops within the existing rail corridor at Bobbiwaa, Waterloo Creek, Tycannah Creek, Coolleearllee and Murgo
- providing a new section of rail line at Camurra about 1.6 kilometres long to bypass the existing hairpin curve ('the Camurra bypass')
- removing the existing bridges and providing new rail bridges over the Mehi and Gwydir rivers and Croppa Creek

- realigning about 1.5 kilometres of the Newell Highway near Bellata and providing a new road bridge over the existing rail corridor (‘the Newell Highway overbridge’)
- providing a new road bridge over the existing rail corridor at Jones Avenue in Moree (‘the Jones Avenue overbridge’).

The key features of the proposal are shown in Figure 1.2.

Ancillary work would include works to level crossings, signalling and communications, signage and fencing, and services and utilities.

Further information on the proposal is provided in the EIS.



LEGEND

Proposal site
Proposal location
Main road
Railway
State border

Paper Size A4

0 10 20 40 60

Kilometers
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail Track Alignment

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Location of the proposal

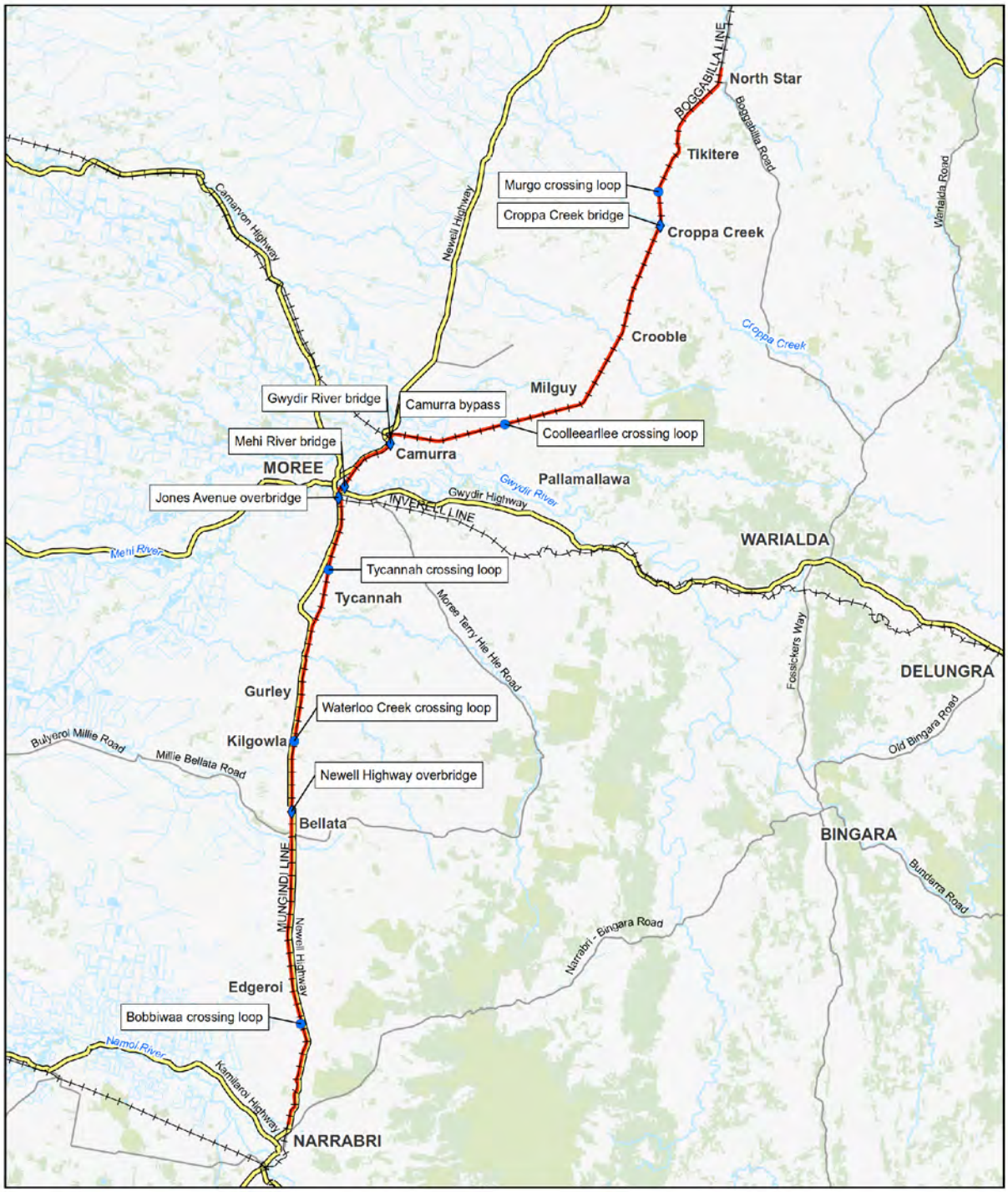
Figure 1-1

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LEGEND

- New bridge
- Crossing loop
- The proposal
- Railway
- Highway
- Road

Paper Size A4

0 3 6 12 18 24

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corportion
Inland Rail Track Alignment

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Key features of the proposal

Figure 1-2

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1.2.1 Timing

Subject to approval of the proposal, construction is planned to start in early to mid 2018, and is expected to take about 24 months. Existing train operations along the Narrabri to North Star line would continue prior to, during, and following construction. Inland Rail as a whole is expected to be operational in 2025.

1.2.2 Operation

Prior to the opening of Inland Rail as a whole, the proposal would be used by existing rail traffic, which includes trains carrying passengers and grain at an average rate of about four trains per day. It is estimated that the operation of Inland Rail would involve an annual average of about 10 trains per day travelling north of Moree (between North Star and Moree) and 12 trains per day travelling south of Moree (between Moree and Narrabri) in 2025. This would increase to about 19 trains per day north of Moree (between North Star and Moree) and 21 trains per day south of Moree (between Moree and Narrabri) in 2040. The trains would be a mix of grain, intermodal (freight), and other general transport trains.

Once operational in 2020, the proposal would enable increased train running speeds in many areas that are currently the subject of restrictions due to local track conditions. Daily average train volumes are not expected to significantly change until Inland Rail through connection in 2025.

1.3 Purpose and scope of this report

The purpose of this report is to assess potential noise and vibration issues from the operation and construction of the proposal, and where required, identify feasible and reasonable mitigation measures.

This noise and vibration assessment has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs). Table 1.1 outlines the requirements relevant to this assessment.

Table 1.1 Relevant SEARs

Requirements for Noise and Vibration	
Noise and vibration – Amenity Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the proposal are effectively managed to protect the amenity and well-being of the community.	1. The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to sensitive receivers including small businesses, and include consideration of sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise). 2. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.

Requirements for Noise and Vibration	
Noise and vibration – Structural Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings, items including Aboriginal places and environmental heritage, and nearby road infrastructure. Increases in noise emissions and vibration affecting environmental heritage as defined in the Heritage Act 1977 during operation of the proposal are effectively managed.	1. The Proponent must assess construction and operation noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage). 2. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.

Specifically, this assessment:

- Identifies key noise and vibration sensitive receivers
- Identifies existing noise and vibration levels in the subject area
- Identifies the likely principal noise sources during operation of the proposal
- Identifies the applicable construction noise and vibration criteria from relevant guidelines and existing background noise levels
- Identification of applicable operational rail noise criteria
- Assesses the potential construction noise and vibration impacts of the proposal on the surrounding environment based on indicative construction methodology and equipment
- Assesses of the potential operational noise and vibration impacts of the proposal on the surrounding environment
- Identifies and discusses potential noise and vibration mitigation measures with consideration to the proposal noise and vibration criteria

1.4 Study area

The study area subject to this noise and vibration assessment is the rail corridor and adjacent land between Narrabri and North Star. The study area encompasses the operational and construction footprints, including areas which could be indirectly impacted by the Project. The study area including sensitive receiver locations is described further in section 2.3.

1.5 Structure of this report

The structure of the report is outlined below.

- Section 1 - provides an introduction to the report
- Section 2 - describes the existing ambient noise environment
- Section 3 - details the relevant noise and vibration criteria
- Section 4 - describes the operational rail noise and vibration assessment
- Section 5 - described the operational road assessment
- Section 6 - describes the construction noise and vibration assessment
- Section 7 - describes the mitigation assessment
- Section 8 - the report conclusion summarising key outcomes from the report

2. Existing environment

2.1 Existing operations

Narrabri and Moree are located on the Mungindi (North West) line, which branches from the Main North Line at Werris Creek Station and heads north-west through the towns of Gunnedah and Narrabri to Moree.

Narrabri Station opened in 1897, which was when the Mungindi line was extended from Boggabri to Moree. The existing Moree Station opened in 1904, replacing the original station (located to the north of the existing station), which opened in 1897 when the line was extended from Boggabri.

From Moree, the Mungindi line travels north-west to Mungindi on the NSW-Queensland border. The line was closed between Weemelah and Mungindi in 1974 when rail services were withdrawn following flooding. The Inverell line is located between the Mungindi line (at Moree Station) and Inverell to the west. The Inverell line, which was completed in 1902, was progressively closed between 1987 and 1994.

North Star is located on the disused Boggabilla line, which branches from the Mungindi line at Camurra (about 10 kilometres north-west of Moree). North Star Station was opened in 1932 with the opening of the Boggabilla line. From Camurra, the Boggabilla line travels north for about 130 kilometres to Boggabilla on the Queensland border. In 1987 the line was truncated at North Star. The remainder of the line was closed to normal operations in 2013 but is still used occasionally.

Figure 2.1 provides a schematic drawing of the rail network in the study area.

Track characteristics

The existing track is a mixture of track weights (47 and 53 kilograms) mainly supported on steel sleepers. The track was originally constructed for light traffic on the existing sub-grade materials. Over time, the track has been re-ballasted and maintained, but no significant improvements have been made to the track formation.

Sections of track pass through low lying flood prone areas, and wash-aways have occurred in the past after heavy rain events. The maintenance access track along the existing rail corridor is not continuous and can be impassable during and after wet weather.

There are about 12 sidings between Narrabri and North Star that provide access to and from the main line for private operations.

2.1.1 Rail operations

Passenger services

The Northern Tablelands Xplorer, run by NSW TrainLink, travels between Sydney and Moree via Werris Creek and Narrabri. In the proposal site, trains stop at Bellata and Moree twice a day (to and from Sydney Central).

Freight services

Occasional grain/goods trains operate on an as needs basis. Annually, there is an average of two grain trains per day carrying about 1.7 million tonnes of grain per year.

Train speeds between Narrabri and Moree are limited to a maximum of 90 to 100 kilometres per hour, with local speed restrictions due to limitations associated with the existing track. Between Moree and North Star, train speeds are limited to a maximum of 80 kilometres. There are also local speed restrictions.

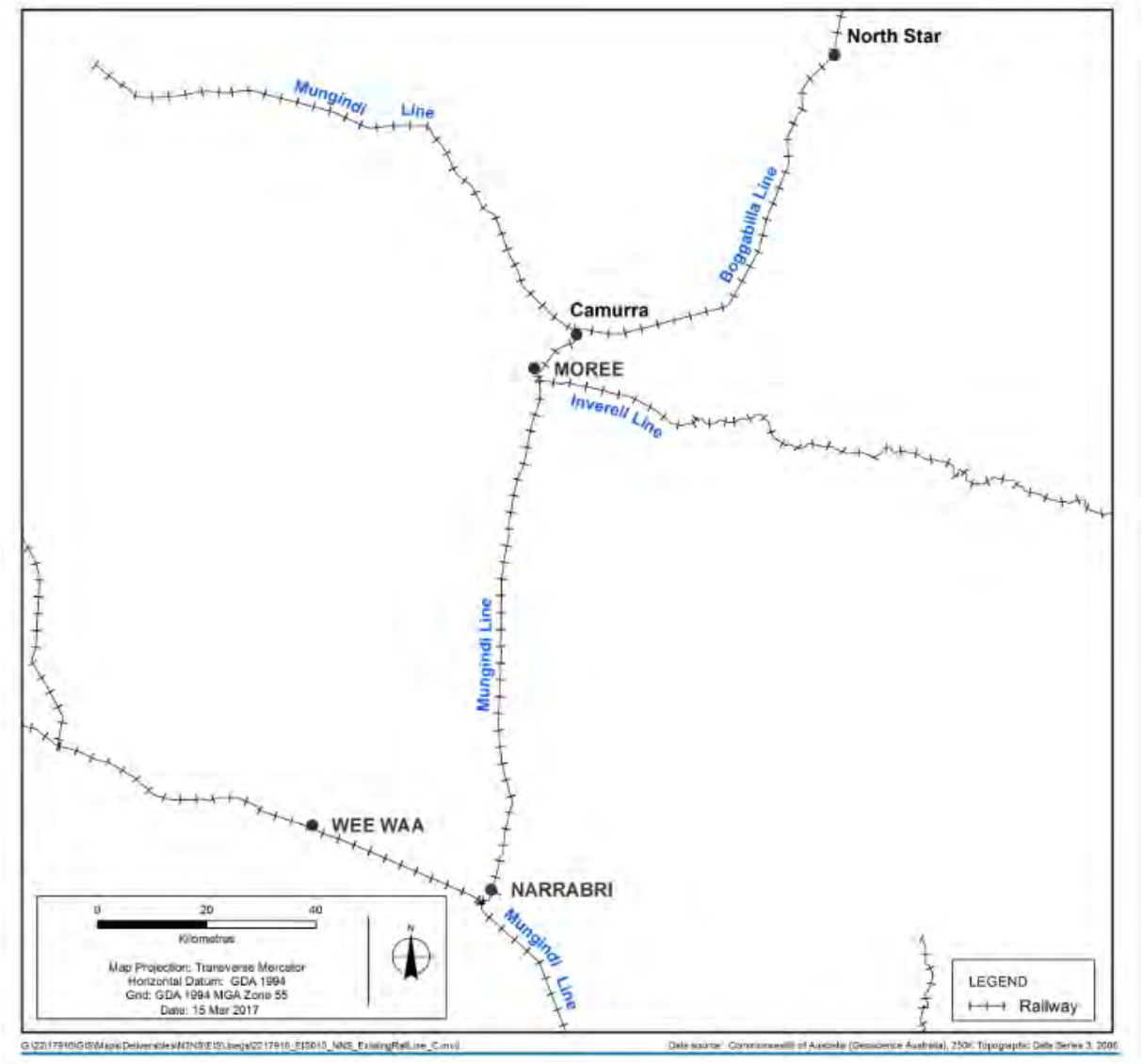


Figure 2.1 Existing rail lines in the study area

Maintenance

Maintenance works and other minor works along the Mungindi line are undertaken by ARTC in accordance with existing ARTC procedures and processes, and relevant State legislative requirements.

2.2 Location of study area

The area surrounding the proposal consists of open space, rural land, residential land and commercial land. The proposal passes through several small rural towns.

For the operational rail noise assessment, the study area was defined as the area that extends about two kilometres either side of the rail corridor and bounded by the extent of works. Noise and vibration sensitive receivers were identified within the operational assessment study area and are shown in Figure 2.2.

For the construction noise and vibration assessment study area, a 2 kilometre buffer from the proposal in all directions was used to identify sensitive receiver locations. The construction assessment study area therefore extends beyond the southern end of the proposal to include some receiver locations within Narrabri. The construction noise and vibration study area is shown in Figure 2.2.

The extents of both the operational and construction noise and vibration assessment study areas will be further reviewed at detailed design stage.

2.3 Identification of sensitive receivers

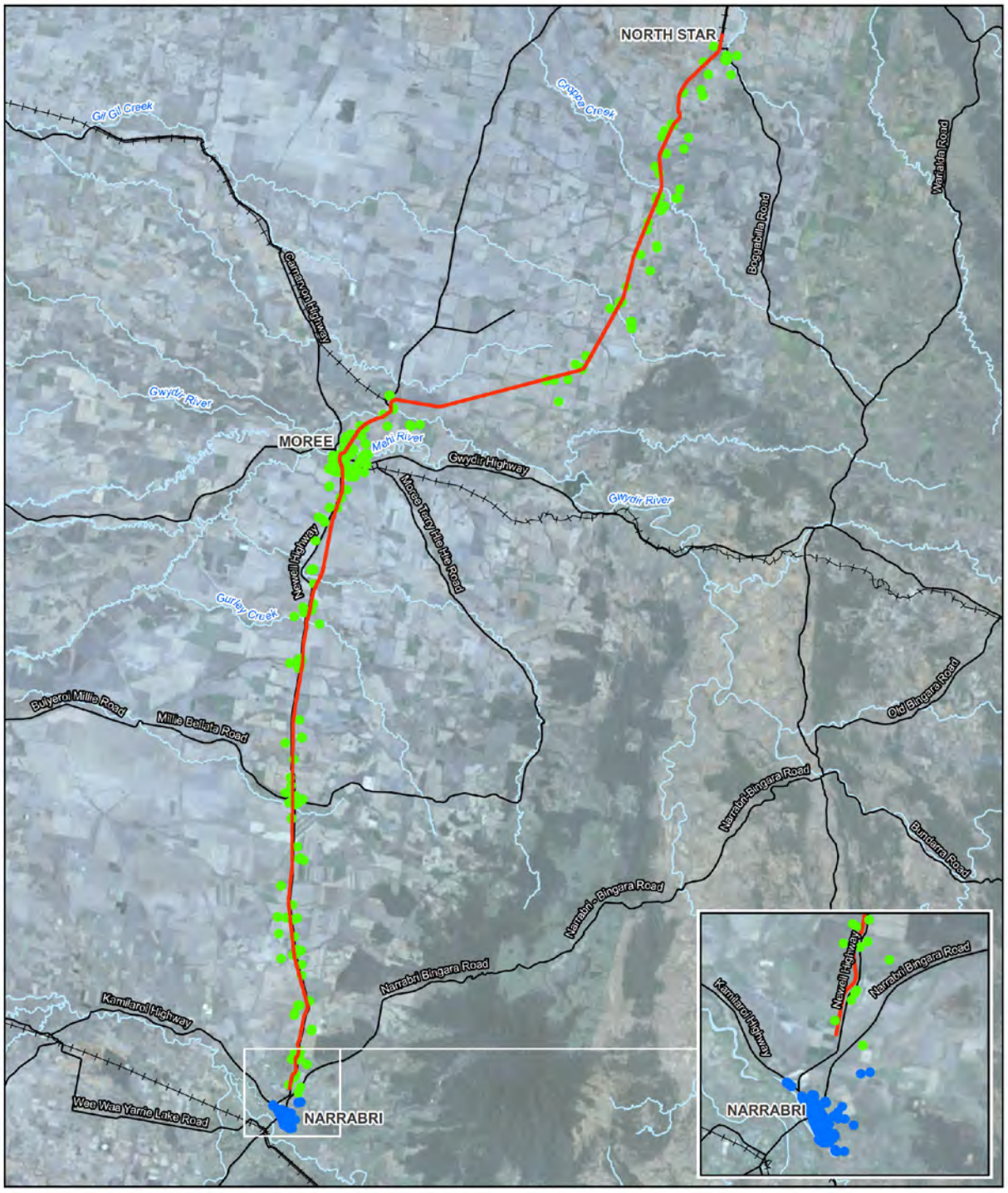
Within the study area, residential sensitive receivers include dwellings located within towns such as Moree, Narrabri, Gurley and Bellata, or are scattered across large areas between the major towns. Noise sensitive receiver locations were identified using aerial imagery and geospatial information.

For the operational noise and vibration assessment, (section 4) 1668 residential receivers were identified within the operational assessment study area. 58 non-residential noise receivers were also identified including: two places of worship, three educational facilities, one medical facility, six active and two passive recreation areas. For the operational noise assessment, all residential receivers will have their own specific noise criteria based on their exposure to noise from the proposal and existing exposure to rail noise. This is discussed in more detail in Section 3.1. The receivers are individually identified in Appendix C.

Non-residential receivers including schools, places of worship (churches) and outdoor recreation areas are summarised in Table 2.1.

For the construction noise and vibration assessment (section 6), there is a total of 2384 residential receivers and 58 non-residential receivers. This differs from the operational noise assessment because some construction activities have the potential to impact a wider area than rail operation associated with the proposal. The non-residential noise receivers are the same as those identified within the operational assessment study area. A number of commercial and industrial facilities are also located adjacent to the rail corridor and are subject to assessment for construction noise only.

Identification of receivers in this assessment was based principally on inspection of aerial imagery. Where receivers have been identified as qualifying for noise mitigation from this proposal, preliminary noise mitigation solutions have been identified to meet the requirements of the SEARs (refer to section 7.2.2) and a more detailed review will be undertaken when further information is available to verify the number of receivers affected and which should be considered for mitigation. Similarly, for non-residential receivers, qualification for noise mitigation will be dependent upon the results of façade testing to determine if the internal noise criteria are exceeded.



LEGEND

- Construction receiver
- Construction and operational receiver
- The proposal
- Road
- Railway
- Watercourse

Paper Size A4

0 2.5 5 10 15 20 25

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 03 Aug 2017

Construction and operational sensitive receiver locations

Figure 2-2

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N008_NNS_Construction_Operational_L.mxd

3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: Imagery, 2012. Commonwealth of Australia (Geoscience Australia): 250K Topographic Data Series 3, 2006. Created by: tmorton, fmackay, kpsroba

Table 2.1 Non-residential receivers

Receiver ID	Description	Receiver Type	Easting	Northing
NNS_WORx0001	Place of worship	Place of Worship	776842.8	6735618.5
NNS_WORx0002	Place of worship	Place of Worship	830720.2	6794764.4
NNS_WORx0003	Place of worship	Place of Worship	776347.1	6735727.1
NNS_WORx0004	Place of worship	Place of Worship	775591.0	6736206.5
NNS_WORx0005	Presbyterian church	Place of Worship	775410.5	6737128.3
NNS_WORx0006	Uniting church	Place of Worship	775694.8	6737404.5
NNS_WORx0007	Catholic church	Place of Worship	769517.7	6686849.4
NNS_WORx0008	Anglican church	Place of Worship	769860.8	6686930.3
NNS_HOSx0001	Moree district hospital	Hospital Ward	775372.1	6736505.1
NNS_EDUx0001	Moree Secondary College	School	775376.5	6735266.7
NNS_EDUx0002	The Barwon learning centre	School	775574.5	6735297.3
NNS_EDUx0003	TAFE New England institute Moree campus Carol Avenue campus	School	775756.2	6737387.0
NNS_EDUx0004	Moree secondary college Albert Street	School	775660.7	6737052.7
NNS_EDUx0005	Tafe Moree campus agricultural school	School	779205.4	6740681.0
NNS_EDUx0006	North Star public school	School	830807.9	6795347.0
NNS_EDUx0007	Croppa Creek public school	School	822056.8	6773631.0
NNS_EDUx0008	Bellata public school	School	769937.4	6686968.4
NNS_EDUx0009	Moree East public school	School	775486.4	6735779.6
NNS_REPx0001	Mary Brand park	Open Space- Passive	775863.6	6737528.3
NNS_REPx0002	Park	Open Space- Passive	822064.8	6773866.1
NNS_REPx0003	Park	Open Space- Passive	821543.3	6773918.4
NNS_REPx0004	Allambie Place park	Open Space- Passive	775297.2	6736308.4
NNS_REPx0005	Railway park	Open Space- Passive	776134.0	6736214.5
NNS_REPx0006	Elizabeth street park	Open Space- Passive	776905.3	6735665.4
NNS_REPx0007	Park	Open Space- Passive	775650.6	6736474.2

Receiver ID	Description	Receiver Type	Easting	Northing
NNS_REPx0008	Park	Open Space- Passive	770277.3	6707461.3
NNS_REPx0009	Kirkby park	Open Space- Passive	775654.0	6736792.8
NNS_REPx0010	Jellicoe park	Open Space- Passive	775846.1	6736581.6
NNS_REPx0011	Park	Open Space- Passive	831180.5	6794811.1
NNS_REPx0012	Lions park	Open Space- Passive	776417.6	6736305.3
NNS_REPx0013	Sullivan place park	Open Space- Passive	776954.5	6735876.6
NNS_REPx0014	Sugars park	Open Space- Passive	769446.8	6686954.3
NNS_REPx0015	Bellata park	Open Space- Passive	769657.9	6686952.8
NNS_REPx0016	Park	Open Space- Passive	775550.7	6734454.0
NNS_REAx0001	Squash courts	Open Space- Active	776110.1	6735167.9
NNS_REAx0002	Basketball centre	Open Space- Active	775317.5	6735604.8
NNS_REAx0003	Golf course	Open Space- Active	770402.4	6686754.2
NNS_REAx0004	Golf course	Open Space- Active	831369.2	6795125.5
NNS_REAx0005	Moree racecourse	Open Space- Active	776375.5	6738005.3
NNS_REAx0006	Moree showground	Open Space- Active	776122.1	6736841.9
NNS_REAx0007	Tennis courts	Open Space- Active	775348.5	6736898.5
NNS_REAx0008	Tennis courts	Open Space- Active	776150.1	6736310.9
NNS_REAx0009	Broughton oval	Open Space- Active	775563.7	6735635.2
NNS_REAx0010	Playing fields	Open Space- Active	775523.5	6735236.4
NNS_REAx0011	Sports field	Open Space- Active	777275.4	6731746.9
NNS_REAx0012	Services oval	Open Space- Active	776101.7	6737288.9
NNS_REAx0013	Playing fields	Open Space- Active	775346.5	6735800.2
NNS_REAx0014	Bloomfield oval	Open Space- Active	775816.8	6736981.3
NNS_REAx0015	Taylor oval	Open Space- Active	775453.7	6737006.6
NNS_REAx0016	Swimming pool	Open Space- Active	776037.2	6736096.3
NNS_REAx0017	Tennis courts	Open Space- Active	769929.4	6686886.1
NNS_REAx0018	Moree gun club	Open Space- Active	785069.4	6744063.2
NNS_REAx0019	Sports courts and field	Open Space- Active	822024.4	6773765.4

2.4 Baseline monitoring

2.4.1 Noise monitoring methodology

Baseline unattended noise monitoring took place at 17 locations in the proposal area between 1 September 2015 and 7 April 2016 in accordance with procedures in the *Industrial Noise Policy* (INP) guideline. Logger locations were selected to capture noise characteristics at a variety of locations throughout the study area. Logger locations included sites within the existing rail corridor, residential locations and commercial locations. Selection considerations included land topography, distance from rail activities and contribution from other noise activities, such as road noise. The logger locations used for the assessment were considered to be representative of the existing background and ambient noise environment in the study area and can be seen in Appendix B.

Noise monitoring locations were constrained to locations where property access was possible on the day of deployment. Access constraints included train schedules precluding track access by HiRail. Security against theft and vandalism were also important considerations when choosing noise monitoring locations.

The objectives of the monitoring were to measure the existing background noise levels in the areas surrounding the proposal site and to measure rail noise from train pass-bys.

The noise loggers were programmed to accumulate L_{A90}, L_{A10}, L_{Aeq} and L_{Amax} noise descriptors continuously over sampling periods of 15 minutes for the entire monitoring period. Two attended noise measurements were also conducted at each logger location for 15 minute durations in order to identify ambient noise sources and validate logger data. Instantaneous noise levels for operator-identified noise sources were observed and noted during the measurements.

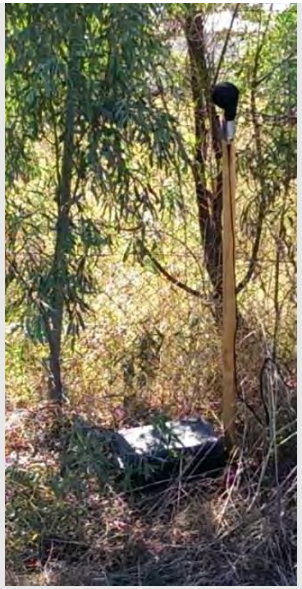
Several of the noise loggers were programmed to record the noise descriptors at more frequent time intervals. The more frequent time intervals were used to enable recording of individual train pass-bys and for determination of the relevant rail noise descriptors.

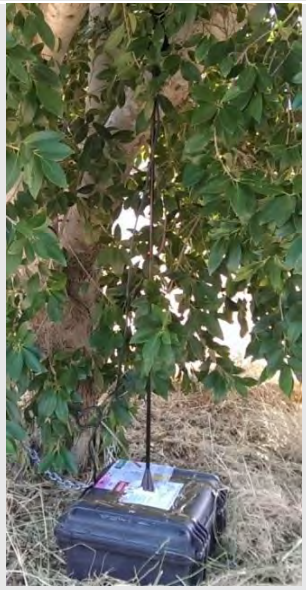
Prior to deployment, a calibration check was performed on the noise monitoring equipment using a Bruel and Kjaer Type 4231 sound level calibrator (serial number 2542101). At completion of the measurements, the equipment was re-checked to ensure the sensitivity of the noise monitoring equipment had not varied. The noise loggers were found to be within the acceptable tolerance of ± 0.5 dB(A).

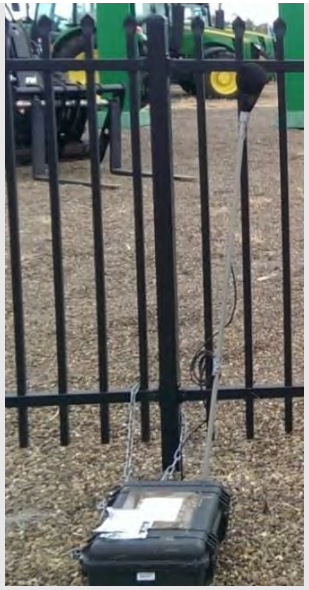
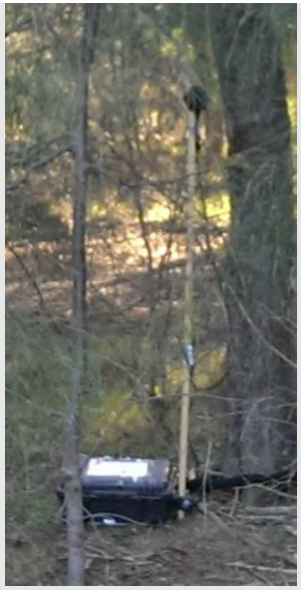
The data collected by the loggers was downloaded and analysed, and any invalid data removed. Invalid data generally refers to periods of time where average wind speeds were greater than 5 metre per second, or when rainfall occurred in accordance with the INP. Concurrent half hourly weather data was sourced from the Bureau of Meteorology's Dubbo automatic weather station and Parkes automatic weather station to identify any periods of weather which may have affected the monitoring results.

All sampling activities were undertaken with consideration to the specifications outlined in AS 1055 (1997) *Acoustics - Description and Measurement of Environmental Noise* and the *Industrial Noise Policy* (INP). Table 2.2 provides details of the noise loggers utilised for unattended monitoring.

Table 2.2 Unattended Noise Logger Details

Noise Logger	L01NNS	L02NNS	L03NNS	L04NNS	L05NNS
Location	Approximate chainage 757.2 km	Approximate chainage 749 km	Approximate chainage 734 km	Approximate chainage 716.4 km	Approximate chainage 700 km
Equipment type (serial)	SVAN 955 (27624)	SVAN 955 (27613)	SVAN 955 (27621)	SVAN 955 (27625)	SVAN 955 (27623)
Measurement started	1/3/2016, 10.00	1/3/2016, 11.30	1/3/2016, 13.00	1/3/2016, 14.30	1/3/2016, 17.30
Measurement ceased	10/3/2016, 09.15	10/3/2016 09.30	10/3/2016, 10.30	10/3/2016, 11.00	10/3/2016, 12.00
Frequency weighting	A	A	A	A	A
Time Response	Fast	Fast	Fast	Fast	Fast
Photo					

Noise Logger	L06NNS	L07NNS	L08NNS	L09NNS	L10NNS
Location	Approximate chainage 678.2 km	Approximate chainage 667.8 km	Reece Plumbing, approximate chainage 664.6 km	Moree council depot, approximate chainage 664.7 km	468 Frome St, approximate chainage 664.7 km
Equipment type (serial)	SVAN 977 (36821)	SVAN 955 (27612)	SVAN 977 (36819)	Rion NL-52 (131630)	Rion NL-21 (773193)
Measurement started	1/3/2016, 16.30	2/3/2016, 13.15	24/3/2016, 9.15	10/3/2016, 12.45	11/3/2016, 10.45
Measurement ceased	10/3/2016, 13.00	10/3/2016, 13.45	7/4/2016, 9.00	23/03/2016, 16.30	20/03/2016, 14.00
Frequency weighting	A	A	A	A	A
Time Response	Fast	Fast	Fast	Fast	Fast
Photo					

Noise Logger	L11NNS	L12NNS	L13NNS	L14NNS	L15NNS
Location	John Deere, approximate chainage 664.4 km	Approximate chainage 660 km	Approximate chainage 643 km	Approximate chainage 635.8 km	Approximate chainage 626 km
Equipment type (serial)	SVAN 977 (36819)	SVAN 955 (27622)	SVAN 955 (27615)	SVAN 955 (27614)	SVAN 955 (27621)
Measurement started	11/3/2016, 09.15	2/3/2016, 11.45	2/3/2016, 10.45	2/3/2016, 09.45	1/9/2015, 15.30
Measurement ceased	23/3/2016, 09.00	9/3/2016, 19.45	9/3/2016, 19.30	9/3/2016, 19.00	15/9/2015, 15.00
Frequency weighting	A	A	A	A	A
Time Response	Fast	Fast	Fast	Fast	Fast
Photo		Image not available			

Noise Logger	L16NNS	L17NNS	L18NNS
Location	Bellata Post office backyard	Graincorp- Edgeroi Silo	Newell Highway, “Rock dale”
Equipment type (serial)	SVAN 955 (27614)	SVAN 955 (27614)	Rion NL-52 (00131630)
Measurement started	11/3/2016, 13.45	24/3/2016, 11.45	24/3/2016, 11.00
Measurement ceased	23/03/2016, 14.00	7/4/2016, 10.30	6/4/2016, 16.15
Frequency weighting	A	A	A
Time Response	Fast	Fast	Fast
Photo			

2.4.2 Attended noise monitoring

Baseline attended noise measurements were conducted at the above monitoring locations to supplement the unattended noise monitoring data and assist with noise source identification. The attended noise measurements were conducted between 21 March 2016 and 6 April 2016 using a B&K 2250 Sound Level Meter (SLM). This SLM is capable of measuring continuous sound pressure levels and is able to record L_{A90}, $L_{A10,}$ L_{Aeq} and the maximum sound level recorded during the measurement period (L_{Amax}) noise descriptors.

Prior to deployment, the meter was calibrated using a B&K Type 4231 Class 1 acoustic calibrator (serial number 2542101) with a sound pressure level of 94 dB at one kilohertz. Calibration was checked prior to the commencement and at completion of the measurements. The difference was less than the acceptable tolerance of +/- 0.5 dB.

All sampling activities were undertaken with consideration to the specifications outlined in AS1055 (1997) *Acoustics - Description and Measurement of Environmental Noise* and the NSW *Industrial Noise Policy* (EPA, 2000).

2.4.3 Ambient noise monitoring results

Unattended monitoring

A summary of the calculated rating background level (RBL) $L_{A90(period)}$ and $L_{Aeq(period)}$ noise monitoring results are shown in Table 2.3. The RBL represents the existing background noise environment in the area of the proposal. Detailed noise monitoring charts are provided in Appendix A.

Table 2.3 RBL $L_{A90\ (period)}$ and $L_{Aeq\ (period)}$ Noise Monitoring Results, dB(A)[1][2]

Location	L_{A90} RBL noise levels			L_{Aeq} ambient noise levels		
	Day	Evening	Night	Day	Evening	Night
L01NNS	39	39	41	49	50	50
L02NNS	19	23	32	46	43	41
L03NNS	27	30	35	45	47	45
L04NNS	21	21	33	49	50	46
L05NNS	20	21	36	40	46	46
L06NNS	26	28	28	48	56	52
L07NNS	41	34	29	48	47	42
L08NNS	36	38	28	53	52	47
L09NNS	35	36	37	54	50	47
L10NNS	42	37	29	54	52	48
L11NNS	43	38	35	65	64	60
L12NNS	38	38	39	54	57	53
L13NNS	28	29	30	51	55	52
L14NNS	30	32	40	49	51	48
L15NNS	30	22	18	58	58	55

[1] The NSW INP states that where the RBL is less than 30 dB(A), then it is set to 30 dB(A). The INP also states that the evening RBL should not be higher than the day time RBL, and that the night time RBL should not be higher than the evening RBL.

[2] The NSW INP defines day as the period from 7:00 am to 6:00 pm Monday to Saturday; or 8:00 am to 6:00 pm on Sundays and Public Holidays. Evening is defined as the period from 6:00 pm to 10:00 pm. Night time is defined as the remaining period.

Location	L_{A90} RBL noise levels			L_{Aeq} ambient noise levels		
	Day	Evening	Night	Day	Evening	Night
L16NNS	34	32	29	46	46	42
L17NNS	34	36	29	52	55	53
L18NNS	35	36	34	53	51	47

Attended monitoring

A summary of the attended noise monitoring results are given in Table 2.4.

Table 2.4 Attended Monitoring Results

Location and date	Measurement Time		Measured noise levels dB(A)			Observations and instantaneous noise levels dB(A)
	Start	Stop	L_{90}	L_{10}	L_{Aeq}	
L01NNS, 1/03/2016	09.50	10.05	39	52	51	Road noise, 44-65 Birds, 38-52 Insects, 36-38 Silo operations, 45-48
	10.09	10.24	41	55	55	Road noise, 45-70 Birds, 40-60 Insects, 35-45 Silo operations, 45-52
L02NNS 1/03/2016	11.21	11.36	27	47	43	Road noise, 30-35 Birds, 28-30 Wind noise, 35-57 Insects, 25-30
	11.38	11.53	25	43	40	Insects, 35-30 Road noise, 25-30 Wind noise, 30-57
L03NNS, 1/03/2016	12.59	13.14	31	44	43	Birds, 30-50 Wind noise, 30-45 Road noise, 33-39
	13.16	13.31	33	48	46	Birds, 30-60 Wind noise, 30-40 Road noise, 40-57
L04NNS, 1/03/2016	14.19	14.35	22	33	32	Insects, 20-30 Birds, 20-35 Wind noise, 20-40
	14.36	14.52	23	34	35	Wind noise, 20-40 Insects, 25-35 Birds, 25-35
L05NNS, 1/03/2016	17.35	17.50	27	41	41	Birds, 30-45 Insects, 25-30 Wind noise, 25-43 Road noise, 35-45
	17.51	18.06	31	41	41	Birds, 28-38 Insects, 25-30 Wind noise, 25-42

Location and date	Measurement Time		Measured noise levels dB(A)			Observations and instantaneous noise levels dB(A)
	Start	Stop	L_{90}	L_{10}	L_{Aeq}	
L06NNS, 1/03/2016	16.15	16.30	28	45	40	Road noise, 30-53 Insects, 20-30
	16.52	17.07	26	43	40	Road noise, 30-50 Insects, 25-35
L07NNS, 2/03/2016	13.13	13.28	31	39	39	Road noise, 30-41 Birds, 30-40 Insects, 30-35 Conversations, 30-45 Wind noise, 32-36
	13.30	13.45	31	39	37	Birds, 30-48 Road noise, 30-39 Insects, 32-36 Wind noise, 32-35
L08NNS, 24/3/2016	8.54	9.09	42	51	49	Road noise, 48-60 Birds, <40 Wind noise, <40
	9.11	9.26	41	51	53	Road noise, 42-61 Birds, 40-50 Aircraft, 60-76
L09NNS 23/3/2016	15.46	16.01	41	56	54	Road noise, 52-66 Vehicles in depot, 48-64 Aircraft, 50-55
	16.02	16.17	40	53	51	Road noise, 40-60 Vehicles in depot, 50-53 Dog barking, 48-60 Wind noise, <30 Aircraft, 48-58
L10NNS, 11/03/2016	10.06	10.21	45	60	59	Road noise, 50-61 Birds, 40-50 Wind noise, 40-45
	10.45	11.00	45	60	57	Road noise, 50-60 Birds, 40-50 Wind noise, 40-45
L11NNS, 11/03/2016	09.05	09.20	55	71	68	Road noise, 55-80 Insects, <50 Wind noise, <50 Site operations (banging, forklifts), 50-57 Birds, <50
	09.30	09.45	53	71	67	Road noise, 55-80 Insects, <50 Wind noise, <50 Site operations (banging, forklifts), 50-57 Birds, <50

Location and date	Measurement Time		Measured noise levels dB(A)			Observations and instantaneous noise levels dB(A)
	Start	Stop	L_{90}	L_{10}	L_{Aeq}	
L12NNS, 2/03/2016	11.30	12.00	43	58	54	Road noise, 48-62 Birds, 40-45 Machinery, 40-45 Insects, <30
	11.46	12.01	43	56	52	Road noise, 48-65 Birds, 40-50 Machinery, 40-44 Insects, 38-43
L13NNS, 2/03/2016	10.26	10.31	33	53	49	Road noise, 40-58 Insects, 32-36 Wind noise, 38-42 Birds, 35-40
	10.42	10.57	36	54	50	Road noise, 33-62 Insects, 30-36 Birds, 30-40 Wind noise, 37-46
L14NNS, 2/03/2016	09.34	09.49	38	51	48	Road noise, 40-60 Bird noise, 40-42 Banging/hammering, 48-42 Wind noise, 35-45 Insects, <30
	09.51	10.06	39	50	47	Road noise, 40-57 Wind noise, 40-45 Birds, 38-50
L15NNS, 1/9/2015	15.33	15.49	40	62	58	Road noise, 54-63 Birds audible
L16NNS, 11/03/2016	13.32	13.47	35	49	47	Birds, 40-43 Insects, 35-40 Road noise, 40-60 Wind noise, 40-43
	13.49	14.04	36	46	46	Birds, 36-52 Road noise, 40-50 Insects, 35-40 Wind noise, <35
L17NNS, 24/3/2016	11.32	11.47	40	54	50	Road noise, 42-54 Wind noise, 40-45
	11.48	12.03	39	55	50	Road noise, 45-63 Wind noise, 40-43 Birds, <40
L18NNS, 24/3/2016	10.27	10.42	43	54	50	Road noise, 48-63 Wind noise, 40-45 Birds, <40
	10.48	11.03	40	52	49	Road noise, 47-61 Wind noise, 40-45 Birds, <40

2.4.4 Train pass-by noise levels

Data from the unattended noise loggers located adjacent to existing rail lines were reviewed and analysed to identify train pass-by events which occurred during the monitoring period. The relevant train noise parameters were calculated and are summarised in Table 2.5.

Table 2.5 Identified Train Pass-by Summary

Monitoring Location	Distance to nearest rail track (m)	Train type	Average noise level SEL dB(A)	Average duration (s)
L12NNS	20	Freight	98	52
L13NNS	30	Freight	93	52
L14NNS	65	Freight	86	83
L16NNS	60	Freight	90	77

The results from the noise monitoring were used to determine the L_{Aeq} over the relevant time period (day and night) for rail pass-by noise during the monitoring period and is further discussed in Section 4.2.

3. Legislative context

3.1 Operational rail noise criteria

Operational rail noise criteria are derived from the *Rail Infrastructure Noise Guideline* (RING) (EPA, 2013).

This guideline presents non-mandatory noise criteria for receivers affected by the proposal. Where receivers are predicted to exceed the relevant noise criteria, an assessment of possible mitigation measures to ameliorate these impacts would be conducted. These mitigation measures would be considered if they can be reasonably and feasibly implemented.

The RING applies to both light and heavy rail infrastructure proposals and distinguishes between 'new' or 'redeveloped' heavy rail lines in terms of the criteria which apply.

Heavy rail is considered to be rail infrastructure and its associated rolling stock, which may be electrified or hauled by diesel locomotives, that operates in dedicated rail corridors for either passenger and/ or freight transportation.

A 'new' heavy rail line development is one where rail infrastructure is to be developed on land that is not currently an operational rail corridor and where more stringent noise criteria apply. According to the RING, a 'redevelopment' of a heavy rail line occurs where a rail infrastructure proposal is to be developed on land that is either:

- located within an existing and operational corridor, where a rail line is or has been operational
- immediately adjacent to an existing operational rail line which may result in widening of an existing corridor.

Typically, the works associated with the 'redevelopment' of an existing rail line will increase its capacity to carry rail traffic or alter the alignment through design changes. In such cases, the 'redevelopment of existing rail line' noise criteria apply.

For this assessment, ARTC considers the Inland Rail proposal to be a 'redevelopment of an existing heavy rail line' as the proposal will be developed on land within an existing operational rail corridor. The Camurra Bypass section of the proposal is to be substantially realigned based on the definitions provided in the RING, however there are no nearby receivers that are located close enough to the Camurra bypass to be considered for noise mitigation under the RING and therefore only the redevelopment criteria is relevant for this assessment. Therefore, the 'redevelopment of existing rail line' criteria listed in Table 3.1 apply to this assessment.

For residential receivers, the noise trigger levels for absolute levels of rail noise have two components, L_{Aeq} and L_{Amax}. The L_{Aeq} contribution level of rail noise is assessed over the day or night period and the maximum noise level (L_{Amax}) from pass-by events. The trigger values listed in Table 3.1 need to be exceeded to initiate an assessment of rail noise impacts and investigate potential mitigation measures.

Table 3.1 Airborne rail traffic noise trigger levels for residential land uses

Type of Development	Noise Trigger Levels dB(A) (External)	
	Day (7.00 – 22.00)	Night (22.00 – 7.00)
Redevelopment of existing rail line	Development increases existing $L_{Aeq(period)}$ rail noise levels by 2 or more, or existing L_{Amax} rail noise levels by 3 or more and predicted rail noise levels exceed	
	65 $L_{Aeq(15h)}$ OR 85 L_{AFmax}	60 $L_{Aeq(9h)}$ OR 85 L_{AFmax}
New rail line development	Predicted rail noise levels exceed:	
	60 $L_{Aeq(15h)}$ OR 80 L_{AFmax}[3]	55 $L_{Aeq(9h)}$ OR 80 L_{AFmax}

Source: *Rail Infrastructure Noise Guideline* (RING) (EPA, 2013).

In accordance with the RING, other non-residential sensitive land uses including hospitals, schools and outdoor recreational areas have their own specific noise trigger levels for heavy rail redevelopments that are applicable when the facility or space is in use. Noise trigger levels for these receivers are applicable as internal or external levels depending on the land use. For internal noise criteria, the acoustic performance of the building façade affects the transmission of noise into the premises. As construction materials and the façade acoustic performance of these buildings is unknown and may vary, a conservative 10 dBA reduction in noise between the external level and internal level has been assumed[4]. The RING criteria for non-residential land uses are shown Table 3.2.

Table 3.2 Airborne rail traffic noise trigger levels for non-residential land uses

Land use type	Noise Trigger Levels dB(A) (When in use)	
	New rail line development	Redevelopment of existing rail line
	Resulting rail noise levels exceed:	Development increases existing $L_{Aeq(period)}$ rail noise levels by 2 dB or more ***and*** resulting rail noise levels exceed:
Schools, educational institutions and child care centres	40 $L_{Aeq(1h)}$ Internal	45 $L_{Aeq(1h)}$ Internal
Places of worship	40 $L_{Aeq(1h)}$ Internal	45 $L_{Aeq(1h)}$ Internal
Hospital wards	35 $L_{Aeq(1h)}$ Internal	40 $L_{Aeq(1h)}$ Internal
Hospitals – other uses	60 $L_{Aeq(1h)}$ External	65 $L_{Aeq(1h)}$ External
Open space – Passive use	60 $L_{Aeq(15h)}$ External	65 $L_{Aeq(15h)}$ External
Open space – Active use	65 $L_{Aeq(15h)}$ External	65 $L_{Aeq(15h)}$ External

Source: *Rail Infrastructure Noise Guideline* (RING) (EPA, 2013).

[3] The L_{AFMAX} level is the L_{AMax} level using a fast time response

[4] See RING - Technical notes to tables 1,2 and 3 – Technical note 6. Allows that a window may be opened to provide adequate ventilation.

3.2 Road traffic noise criteria

Operational road traffic noise criteria for sensitive receivers are based on the NSW *Road Noise Policy* (RNP) (DECCW, 2011). Application of noise criteria has been conducted in accordance with the RMS *Noise Criteria Guideline* (NCG). The assessment timeframe for operational road traffic noise are in the proposed year of 2020 (the year of operation of the new and upgraded roads) and ten years after this in 2030.

The criteria applied at residential receivers within the study area are dependent on the functional class of the road and the road development type. For the purposes of determining road noise criteria, the NCG classifies road development types as new, redeveloped and transition zone. Noise criteria is calculated for each building façade and the criteria developed at the most affected façade is considered the most stringent and will be used in this assessment.

Where a residential receiver is exposed to noise from both new and redeveloped roads a transition zone is created to establish the appropriate criteria. A further check using the relative increase criterion is used to prevent excessive changes in noise levels.

The proposal consists of both new and redeveloped segments with transition zones at the following locations:

- Jones Avenue (existing) to Jones Avenue (new alignment/bridge). Two transitions have been identified at the ends of the new bridge connecting to Jones Avenue and Tycannah Street.
- Newell Highway existing to Newell Highway (new alignment). Two transition zones have been identified at either end where the new alignment connects with the existing alignment.

Noise criteria for residences exposed to noise from roads in the transition zone will be between the new and redeveloped NCG noise criteria. The road proposal is considered new where the road has been substantially realigned. The criteria for residences are summarised in Table 3.3.

Table 3.3 NCG assessment criteria for residential land uses, $L_{Aeq(period)}$, dBA

Road category	Type of project	Assessment criteria (external)	
		Day (7:00 am to 10:00 pm)	Night (10:00 pm to 7:00 am)
Arterial roads/ sub-arterial roads	Existing residences affected by noise from new arterial road corridors	$L_{Aeq(15hr)}$ 55 (external)	$L_{Aeq(9hr)}$ 50 (external)
	Existing residences affected by noise from redevelopment of an existing arterial road	$L_{Aeq(15hr)}$ 60 (external)	$L_{Aeq(9hr)}$ 55 (external)
	Existing residences affected by both new roads and the redevelopment of existing arterial/sub-arterial roads in a Transition Zone	$L_{Aeq(15hr)}$ 55-60 (external)	$L_{Aeq(9hr)}$ 50-55 (external)
	Existing residences affected by increases in traffic noise of 12dBA or more from new arterial/sub-arterial roads	$L_{Aeq(15hr)}$ 42-55 (external)	$L_{Aeq(9hr)}$ 42-50 (external)
	Existing residences affected by increases in traffic noise of 12dBA or more from redevelopment of existing arterial/sub-arterial roads	Between $L_{Aeq(15hr)}$ 42-60 (external)	Between $L_{Aeq(9hr)}$ 42-55 (external)

When the proposal specific criteria have been exceeded, a receiver may qualify for consideration of noise mitigation. The qualifying process from the Noise Mitigation Guideline (NMG) is provided in Section 3.2.3.

3.2.1 Sleep disturbance

The RNP provides a literature review for the assessment of sleep arousal due to traffic noise however does not set a sleep disturbance assessment criterion.

Sleep disturbance impacts are likely to depend on the following:

- Maximum noise level of an event
- Number of occurrences
- Duration of the event
- Level above background or ambient noise levels

Sleep disturbance criteria are based on ENMM Practice Note III:

- Maximum internal noise levels below 55 dBA are unlikely to cause awakening reactions.
- One or two maximum internal noise level events of 65 dBA are not likely to significantly affect health and well-being.

For continuous rather than intermittent traffic flow, the ENMM recommends L_{Amax} noise pass-by events should not exceed $L_{Aeq\ (1hr)}$ noise levels by more than 15 dBA. The ENMM advises that maximum noise levels can be used as a tool to prioritise and rank mitigation strategies, but should not be applied as a decisive criterion in itself.

3.2.2 Proposal specific operational noise criteria

A summary of the road classifications in the study area is provided in Table 3.4. Classification changes have been qualitatively assessed based on expected traffic flows as a result of the proposal.

Table 3.4 Road types and classifications

Road name	Road classification	Type of road (as per NCG)	Change in road classification?
Jones Avenue	Sub-arterial	Redeveloped	Yes
Jones Avenue	Sub-arterial	New	Yes
Newell Highway	Arterial	Redeveloped	No
Newell Highway	Arterial	New	No

Noise contribution differences have been calculated and the noise criteria at residential receivers within the transition zones and all other receivers are summarised in Appendix H.

3.2.3 Guidance on the evaluation of noise mitigation measures for road traffic noise

The Noise Mitigation Guideline (NMG) provides guidance in managing and controlling road traffic generated noise and describes the principles to be applied when reviewing noise mitigation. The NMG recognises that the criteria recommended by the NCG are not always practicable and that it is not always feasible or reasonable to expect that they should be achieved.

The NMG notes that the most effective way of minimising noise from vehicles and traffic is to control vehicle noise at the source. Where source measures are not practical, or do not provide sufficient noise reduction, additional methods are required to reduce levels to within acceptable margins. Such additional methods may include the use of noise barriers and/or consideration for architectural treatment of residences.

The NMG provides three triggers where a receiver may qualify for consideration of noise mitigation (beyond the adoption of road design and traffic management measures). These are:

- The predicted Build noise level exceeds the NCG controlling criterion and the noise level increase due to the proposal (i.e. the noise predictions for the Build minus the No Build) is greater than 2 dBA.
- The predicted Build noise level is 5 dBA or more above the criteria (exceeds the cumulative limit) and the receiver is significantly influenced by proposal road noise, regardless of the incremental impact of the project.
- Where the cumulative limit does not apply (i.e. most of the noise causing the cumulative limit to be exceeded comes from a road that is not assessed as part of the project), if the noise level contribution from the road proposal is acute (daytime $L_{Aeq(15\ hour)}$ 65 dB or higher, or night-time $L_{Aeq(9\ hour)}$ 60 dB or higher) then it qualifies for consideration of noise mitigation even if noise levels are dominated by another road.

The NMG mitigation guidance is presented as a flowchart in Figure 3.1.

3.3 Construction noise criteria

The ICNG (DECC 2009) provides recommended standard hours for construction activities as follows:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 8:00 am to 1:00 pm
- No work on Sundays or Public Holidays

ARTC operates its rail network in accordance with an Environmental Protection Licence (EPL) administered by the EPA. The licence sets out performance standards and criteria for discharges to air, water and land, including noise from construction and operation of the network.

In accordance with EPL 3142, the upgrade of existing rail infrastructure is classified as “maintenance”. EPL 3142 condition O4.1 states maintenance work should be undertaken within recommended standard hours “where to do so would not adversely affect ARTC’s ability to provide safe and reliable services or a safe working environment”. EPL 3142 condition O4.1 defines the same standard working hours as the ICNG.

Scheduling three track possessions (that is, the times that the movement of trains along the rail corridor are stopped for maintenance) to complete the works is the most efficient manner in which ARTC can continue to provide reliable services while maintaining a safe working environment for construction team members.

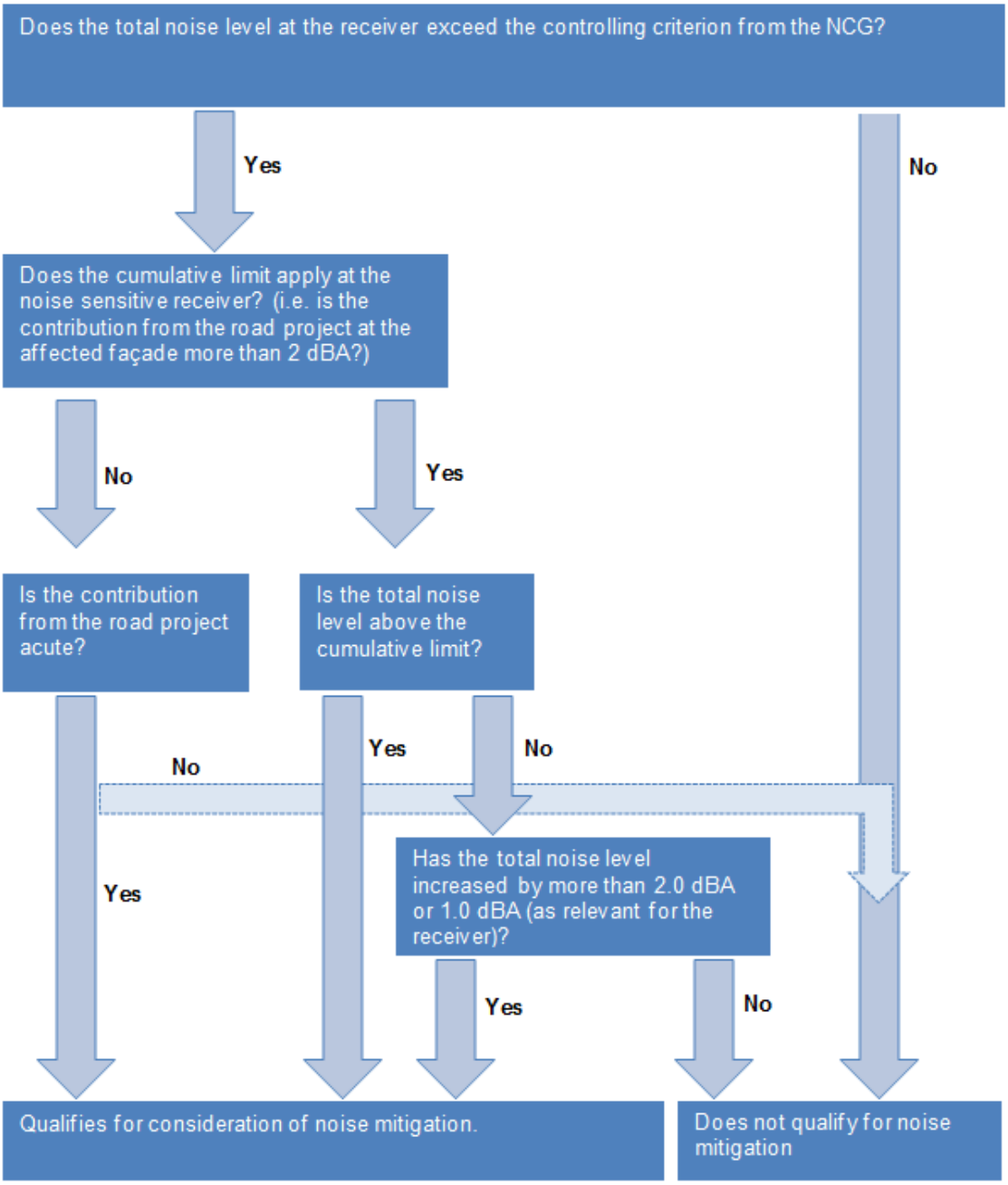


Figure 3.1 Noise mitigation flowchart (derived from the NMG)

EPL 3142 condition O4.3 states:

Where maintenance activities are undertaken, including outside of the hours specified in condition O4.1, noise impacts must be managed in accordance with those provisions of the Interim Construction Noise Guideline (DECC, 2009) which require the licensee to:

- *identify noise sensitive receivers that may be affected at least 7 days prior to the proposed commencement date; except where the licensee first becomes aware of the need to undertake the railway maintenance activities less than 7 days prior to the proposed commencement date, in which case the identification must be undertaken as soon as practicable after becoming aware of the need to undertake the railway maintenance activities;*
- *identify hours for the proposed activities;*
- *identify noise impacts at noise sensitive receivers;*
- *select and apply reasonable and feasible work practices to minimise noise impacts; and*
- *notify the noise sensitive receivers at least 5 days prior to the commencement of railway maintenance activities undertaken outside of the hours specified in Condition O4.1, except where the licensee first becomes aware of the need to undertake those railway maintenance activities less than 5 days prior to the proposed commencement date, in which case the notification must be provided as soon as practicable after becoming aware of the need to undertake the railway maintenance activities.*

The construction the Camurra bypass and the construction of crossing loops are considered 'construction' activities under EPL 3142. The EPL states that:

O4.6 So far as is reasonably practicable and where to do so would not adversely affect ARTC's ability to provide safe and reliable services or a safe working environment, construction activities must be undertaken: a) between the hours of 7.00 am and 6.00 pm Mondays to Friday b) between the hours of 8.00 am and 1.00 pm Saturday; and c) not on Sundays or public holidays.

O4.9: When construction activities are required to be undertaken outside of the hours specified in Condition O4.6, any high noise generating works must only be undertaken: a) between the hours of 8.00 am and 10.00 pm Monday to Friday; b) between the hours of 8.00 am and 6.00 pm Saturdays and Sundays; and c) where the high noise impact generating works are likely to impact the same noise sensitive receivers, in blocks of no more than 3 hours, with at least a 1 hour respite between each block of work.

O4.10: Where construction activities are undertaken, including outside of the hours specified in Condition O4.6, noise impacts must be managed in accordance with those provisions of the Interim Construction Noise Guideline (DECC, 2009) which require the licensee to: a) identify noise sensitive receivers that may be affected at least 7 days prior to the proposed commencement date; b) identify hours for the proposed activities; c) identify noise impacts at noise sensitive receivers; d) select and apply reasonable and feasible work practices to minimise noise impacts; and e) notify the noise sensitive receivers as per Condition O4.11.

Table 3.5 and Table 3.6 list the ICNG (DECC 2009) construction noise criteria at surrounding residential and industrial receivers.

The ‘noise affected’ management level represents the point above which there may be some community reaction to noise. Where the noise affected management level is exceeded, all feasible and reasonable work practices to minimise noise need to be applied and all potentially affected receivers informed of the nature of the works, expected noise levels, duration of works and a method of contact. The noise affected management level is the background noise level plus 10 dB(A) during recommended standard hours and the background noise level plus 5 dB(A) outside of recommended standard hours.

The ‘highly noise affected’ management level represents the point above which there may be strong community reaction to noise. Where noise is above this management level, any feasible and reasonable ways to reduce noise below this level would be applied. If no quieter work method is feasible and reasonable, the affected residence would be advised of the duration and noise levels of the works and any respite periods that will be provided. The highly noise affected management level for standard working hours is 75 dB(A).

The ICNG defines what is considered to be feasible and reasonable as follows:

‘Feasible - A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given project constraints such as safety and maintenance requirements.

Reasonable - Selecting reasonable measures from those that are feasible involves making a judgment to determine whether the overall noise benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the measure.’

Table 3.5 ICNG construction noise criteria for residential receivers, dB(A)

Time Period	ICNG Management Level $L_{Aeq(15\ min)}$
Recommended standard hours: Day Mon-Fri (7:00 am – 6:00 pm) Sat (8:00 am – 1:00 pm) Sun/Pub Hol (Nil)	Noise affected level: RBL+10 dB(A) Highly noise affected level (all residential receivers) - 75 dB(A)
Outside of standard hours: Evening Mon-Fri (6:00 pm – 10:00 pm) Sat (1:00 pm – 10:00 pm) Sun/Pub Hol (8:00 am – 6:00 pm)	Noise affected level – RBL+5 dB(A)
Outside of standard hours: Night Mon-Fri (10:00 pm – 7:00 am) Sat (10:00 pm – 8:00 am) Sun/Pub Hol (6:00 pm – 7:00 am)	Noise affected level – RBL+5 dB(A)

Source: Interim Construction Noise Guideline (DECC 2009)

Note 1: The INP states that where the RBL is less than 30 dB(A), then it is set to 30 dB(A)

Table 3.6 ICNG construction noise criteria for industrial premises, dB(A)

Time period	Background level $L_{A90(period)}$	ICNG management level $L_{Aeq(15\ min)}$
When in use	NA	75 dB(A)

Source: Interim Construction Noise Guideline (DECC 2009)

3.3.1 Proposal specific construction noise management level

Construction of the proposal is expected to be undertaken during the primary proposal construction hours in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework. Construction work would be undertaken during the following primary proposal construction hours:

- Monday to Friday: 6.00 am to 6.00 pm
- Saturday: 6.00 am to 6.00 pm
- Sundays and public holidays: 6.00 am to 6.00 pm

As the proposal construction hours would be undertaken during and outside of the ICNG standard construction hours (Table 3.5), the preferred approach for the proposal is that the more stringent level night noise management level will be adopted as the proposal specific construction noise management level. This corresponds to a level of 35 dB(A) for all logger locations, with the exception of L01NNS, L09NNS, L11NNS, L12NNS and L18NNS. Site observations and analysis of logger data at these locations indicate that the elevated background levels were due to insect noise. In accordance with the INP, background levels at these locations may not be representative of the noise environment during seasonal variations where noise from this source may not occur. As such, and to provide a consistent mitigation approach, the lower noise management level of 35 dB(A) has been adopted across this project.

Table 3.7 ICNG construction noise criteria for residential receivers, dB(A)

Time period	Proposal specific construction noise management level LAeq(15 min)
All periods	35 dB(A)

The EIS provides further details on the anticipated work hours and construction methodology.

3.4 Construction traffic noise criteria

The *Road Noise Policy* (RNP) (DECCW 2011) provides non-mandatory traffic noise assessment criteria for land use developments with the potential to create additional traffic on existing freeways, arterial, sub-arterial and local roads.

The relevant construction traffic noise criteria are listed in Table 3.5.

Table 3.8 Construction traffic noise criteria for residential land uses

Road Category	Type of proposal/Land Use	Assessment Criteria – external dB(A)	
		Day (7:00 am–10:00 pm)	Night (10:00 pm–7:00 am)
Freeway/ arterial road/sub-arterial roads	Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments	$L_{Aeq\ (15\ hour)}$ 60 (external)	$L_{Aeq\ (9\ hour)}$ 55 (external)
Local road	Existing residences affected by additional traffic on existing local roads generated by land use developments	$L_{Aeq\ (1\ hour)}$ 55 (external)	$L_{Aeq\ (1\ hour)}$ 50 (external)

Source: Road Noise Policy (DECCW 2011)

Note: Section 2.4 of the RNP indicates that where existing road traffic noise levels already exceed the assessment criteria, an increase of less than 2 dB represents a minor impact that is barely perceptible to the average person.

The accepted application of Section 2.4 of the RNP is that where existing road traffic noise levels already exceed the assessment criteria, an increase of less than 2 dB represents a minor impact that is barely perceptible to the average person.

3.5 Vibration criteria

3.5.1 Human vibration criteria

The DEC's publication, *Assessing vibration: A technical guideline* 2006 outlines methods of assessing potential impacts and ways to manage vibration from construction activities as well as rail operations such as ground-induced vibration created by rolling stock movements.

Assessing vibration: a technical guideline is based on guidelines contained in British Standard BS 6472:1992 *Evaluation of human exposure to vibration in buildings* (1–80 Hz).

Typically, construction works generate ground vibration of an intermittent nature. In accordance with BS 6472–1992, intermittent vibration is assessed using the Vibration Dose Value (VDV). Further, operational vibration produced by train pass-bys are classified as intermittent vibration. Acceptable VDV's, as outlined in *Assessing vibration: A technical guideline*, are listed in Table 3.9.

Table 3.9 Acceptable vibration dose values for intermittent vibration

Location	Daytime[1] ($m/s^{1.75}$)		Night-time[1] ($m/s^{1.75}$)	
	Preferred Value	Maximum Value	Preferred Value	Maximum Value
Critical areas[2]	0.10	0.20	0.10	0.20
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

Source: Table 2.4 Assessing vibration: A technical guideline (DEC 2006)

Notes:

1. Daytime is 7.00 to 22.00 and night-time is 22.00 to 7.00.
2. Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring. These criteria are only indicative, and there may be need to assess intermittent values against the continuous or impulsive criteria for critical areas.

Whilst the assessment of response to vibration in BS 6472-1:1992 is based on VDV and weighted acceleration, for construction-related vibration, it is considered more appropriate to provide guidance in terms of PPV, since this parameter is more likely to be routinely measured based on the more usual concern over potential building damage.

Humans are capable of detecting vibration at levels well below those that risk causing damage to a building. The degrees of perception for humans are suggested by the vibration level categories given in British Standard BS 5228-2:2009 *Code of practice for noise and vibration on construction and open sites – Part 2: Vibration* as listed below in Table 3.10.

Table 3.10 Guidance on the effects of vibration levels

Approximate Vibration Level	Degree of Perception
0.14 mm/s	Vibration might be just perceptible in the most sensitive situations for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.
0.30 mm/s	Vibration might be just perceptible in residential environments.
1.00 mm/s	It is likely that vibration of this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given to residents.
10.00 mm/s	Vibration is likely to be intolerable for any more than a very brief exposure to this level.

Source: BS 5228-2:2009 Code of practice for noise and vibration on construction and open sites – Part 2: Vibration

3.5.2 Structural damage criteria

Currently, there is no Australian Standard that sets criteria for the assessment of building damage caused by vibration. Consistent with other major projects of a similar type, guidance on limiting vibration values has been obtained by reference to German Standard *DIN 4150-3: 1999-02 Structural Vibration – Part 3: Effects of vibration on structures.* Short-term vibration guideline values are listed in Table 3.11.

Table 3.11 Guideline values for short term vibration on structures

Line	Type of Structure	Guideline Values for Velocity, vi(t)[1] [mm/s]		
		1 Hz to 10 Hz	10 Hz to 50 Hz	50Hz to 100Hz[2]
1	Buildings used for commercial purposes, industrial buildings, and buildings of similar design.	20	20 to 40	40 to 50
2	Dwellings and buildings of similar design and/or occupancy.	5	5 to 15	15 to 20
3	Structures that, because of their particular sensitivity to vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (such as heritage listed buildings under preservation order).	3	3 to 8	8 to 10

Source: German Standard DIN 4150-3: 1999-02 Structural Vibration – Part 3: Effects of vibration on structures
Notes:

1. The term v_i refers to vibration levels in any of the x, y or z axes
2. At frequencies above 100 Hz the values given in this column may be used as minimum values

3.6 Blasting

The proposal does not include blasting as part of the construction works, therefore blasting is not discussed further in this assessment.

3.7 Other standards and guidelines

The following additional standards and guidelines have been referenced in this assessment:

- Environmental Noise Management Manual (ENMM) (RTA 2001)
- *Industrial Noise Policy* (INP) and Application Notes, EPA, 2000
- Construction Noise Strategy (CNS), TfNSW, 2012
- Environmental Management System Guide: Noise and Vibration from Rail Facilities (NVRF), Sydney Trains, 2013
- Development near rail corridors and busy roads – interim guideline, Department of Planning, 2008
- Australian Standard AS 1055 - 1997 Acoustics – Description and Measurement of Environmental Noise
- Australian Standard AS 2436 – 2010 Guide to noise and vibration control on construction, demolition and maintenance sites
- *Transit noise and vibration impact assessment,* US Department of Transportation Federal Transit Administration (FTA), 2006
- NSW Sustainable Design Guidelines Version 3.0, TfNSW, 2013

4. Operational rail noise and vibration assessment

4.1 Methodology

4.1.1 Overview

The approach to assessing operational rail noise can be summarised as follows:

- Identify the existing and proposed rail traffic volumes and speeds for the study area (provided by ARTC).
- Calculate L_{Aeq} and L_{Amax} using noise logger data obtained at the monitoring locations.
- Validate noise model using the calculated noise levels from noise loggers.
- Model operational rail (L_{Aeq} and L_{AMax}) noise for the agreed scenarios.
- Assess operational rail noise predictions (L_{Aeq} and L_{AMax}) against the relevant RING trigger levels.
- Consider noise mitigation options where exceedances of the trigger levels are predicted.

Note that the predicted rail noise levels (termed the 'absolute rail noise levels') refers to noise levels emitted by rail only, that is without the contribution of any other noise source.

4.1.2 Noise modelling scenarios

The operational rail noise scenarios used in the assessment were developed to clearly identify noise levels resulting from existing operations and future rail operations with the inclusion of the proposal. A scenario was also developed which identifies the likely future rail operations noise without the proposal so that the effect of the proposal can be clearly identified.

The RING states that noise trigger levels are to be evaluated at two points in time: Immediately after operations commence and for a design year, typically 10 years later. The Inland Rail project is composed of a number of individual brownfield and greenfield proposals, each with their own planning conditions. Therefore, for the proposal, assessment timeframes should consider changes in operations within the study area that are enabled by the Inland Rail project as a whole.

Inland Rail 'through connection' operation will occur once all component proposals are completed, therefore completion of a single brownfield proposal will have minor impact on train numbers and speeds in the years immediately after completion other than improvements in local operating conditions. After through connection is established in 2025 by completion of the remaining brownfield and greenfield proposals, Inland Rail trains will begin to operate, generating an overall increase in train volumes on each proposal. Because each proposal is subject to individual approval conditions, the impacts of both the individual proposal in isolation and the overall Inland Rail project need to be assessed against the RING trigger levels.

Consequently, the following three assessment timeframes have been evaluated within the proposal's operational assessment study area for both build and no build scenarios:

1. Proposal: the individual proposal to which the planning conditions apply:
   - No build and build scenarios for the year in which operations commence following construction completion, 2020.
2. Through connection: the estimated time at which Inland Rail through connection between Brisbane and Melbourne is anticipated:
   - No build and build scenarios within the proposal's operational assessment study area at the through connection year, 2025.
3. Design year: a future scenario that reflects the normal operation of the Inland Rail project:
   - No build and build scenarios within the proposal's operational assessment area at the design year, 2040.

Rail operational volumes and speeds are not expected to change within the operational assessment study area if the proposal is not implemented (no build scenario), therefore only one no build model is needed, which represents the no build assessment scenarios at 2020 proposal opening year, 2025 Inland Rail through connection year and 2040 Inland Rail design year.

For the proposal opening year, the primary difference in operating conditions between the 2020 no build and 2020 build scenarios are the speed increases enabled through track improvements, while train volumes remain unchanged. For through connection and design years, operating volumes increase significantly at 2025 when through connection is established, then gradually grow through to 2040.

Noise modelling was also completed to demonstrate the existing noise environment and validate predictions. For this proposal, the existing operations were modelled for the year 2016.

The noise modelling scenarios used for the assessment are described in Table 4.1.

Table 4.1 Noise modelling scenarios

Time Frame:	Proposal build	No proposal build
	Includes: - Higher growth in projected volumes due to the proposal - Increases in train speeds due to the proposal	Includes: - Lower growth in projected volumes due to natural growth only without the proposal - No increases in train speeds
2016 – model for calibration against noise logger data		L_{Aeq}
2020 – Proposal opening year	L_{Aeq} note 1	L_{Aeq} note 1
2025 – Through connection opening year	L_{Aeq} and L_{Amax} note 2	L_{Aeq} and L_{Amax} note 2
2040 – Proposal design year[1]	L_{Aeq} and L_{Amax} note 2	L_{Aeq} and L_{Amax} note 2

Notes:

1. L_{Amax} levels are not expected to change at project opening as operating trains and train speeds are assumed to be unchanged until through connection opening year.
2. L_{Amax} levels are unrelated to volumes, therefore equivalent at 2025 and 2040 assessment timeframes.

4.1.3 Existing and future rail capacity

Rail volumes have been provided by ARTC for the current conditions as well as for the future conditions. Note that the volumes used in this assessment are different from those provided in the EIS Chapter 7. The noise assessment has been based on a more conservative estimate (greater numbers) of projected train volumes.

An equal split of day/night train movements was assumed over each 1-hour period. The data used for noise modelling inputs are listed in Table 4.2 and Table 4.3 below.

Table 4.2 Proposal rail volumes (trains per 24 hours)

Year	Track segment	Train Type			
		Grain	InterCapital	General	Passenger
2020- Proposal opening year	North Star - Moree	-	-	-	-
	Moree - Narrabri South Jct	1.7	-	-	1.8
2025- Through Connection	North Star - Moree	0.4	8.4	0.8	-
	Moree - Narrabri South Jct	1.7	8.4	-	1.8
2040- Design Year	North Star - Moree	0.4	18.0	0.9	-
	Moree - Narrabri South Jct	1.7	18.0	-	1.8

Source: ARTC

Table 4.3 Proposal train lengths (metres)

Train type	2020 - Proposal opening year		2025 - Through Connection		2040 - Design Year	
	no build	build	no build	build	no build	build
Grain	710	710	710	710	710	710
Intercapital	-	-	-	1800	-	1800
General	926	926	926	926	926	926
Passenger	50	215	50	215	50	215

Source: ARTC

4.1.4 Train speeds

For the purposes of this assessment, train speeds have been taken from ARTC's Route Access Standard for Dubbo to Goobang Junction (RAS I5, version 1.5, February 2016). Train speed graphs along the proposal track section are shown in Figure 4.1 and Figure 4.2. These speed profiles have been used in the noise model.

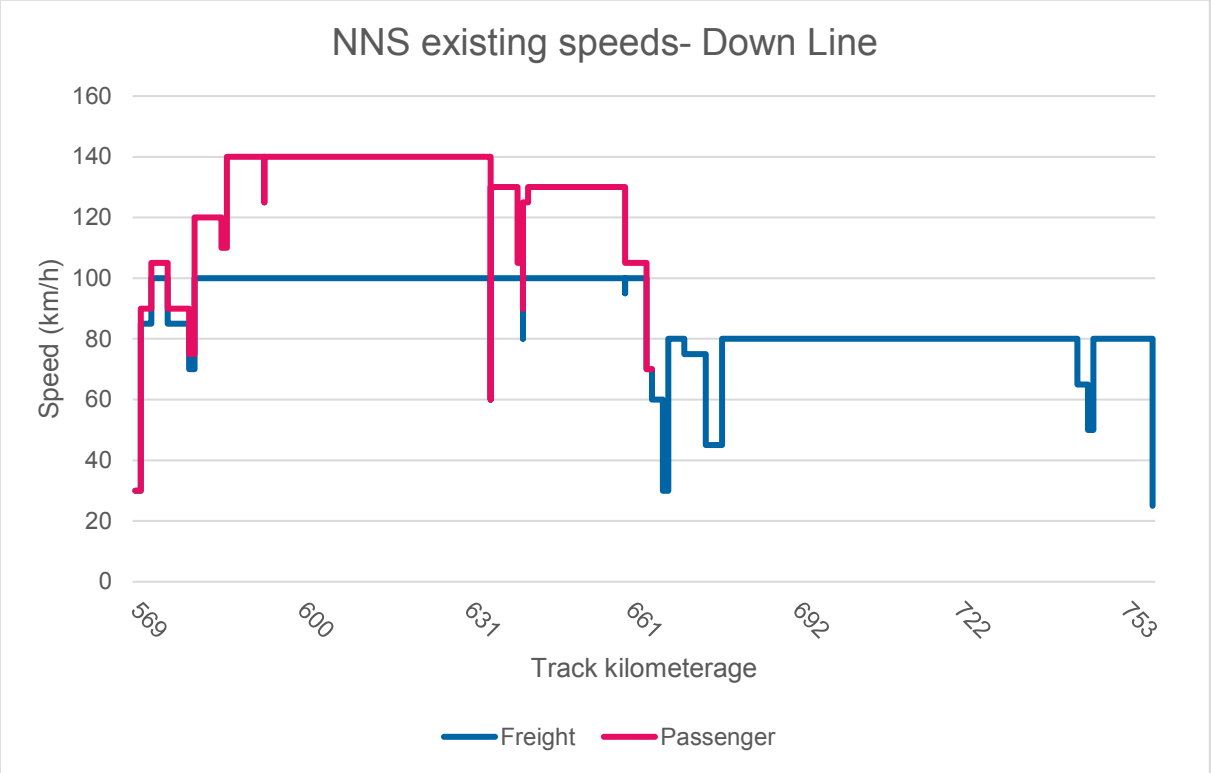


Figure 4.1 Existing track speeds- Down Line

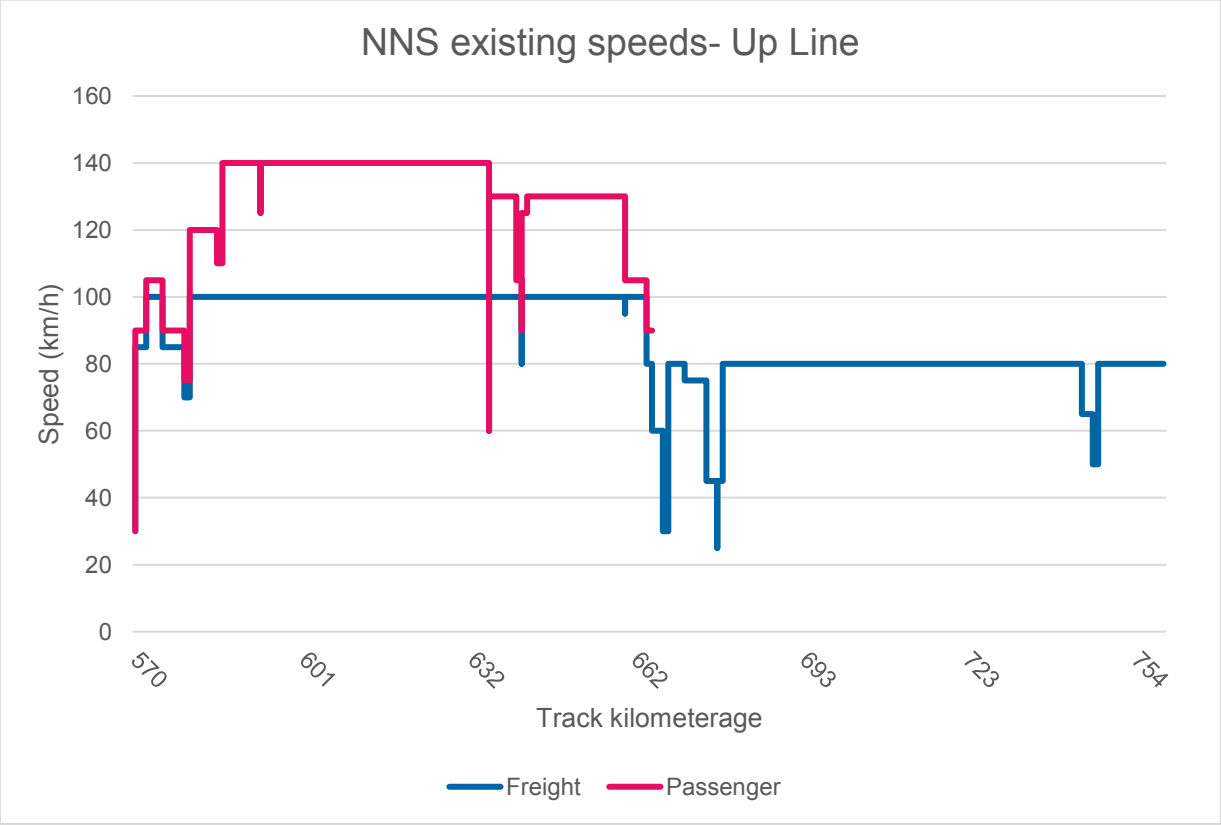


Figure 4.2 Existing track speeds- Up Line

4.1.5 NNS design speeds

The proposal will allow for an increase of freight train speeds up to 115 km/h and passenger train speeds up to 145 km/h. For some sections of track, speed will be limited due to curves, turnouts, crossings, crossing loops and sidings. As details of speed board locations were not available at the time of this assessment, the noise modelling adopts the track design speed which is limited by track geometry only and this will result in the assessment being conservative and over-predicting future noise levels. For each train type, the modelled speed is the lower of the design speed at a given location on the track and the train type speed limitations shown in Table 4.4. Track design speeds are shown in Figure 4.3 and apply to both up and down directions.

Table 4.4 Train type maximum speeds

Train type	Grain	Intercapital	General	Passenger
Type speed	80	115	80	140

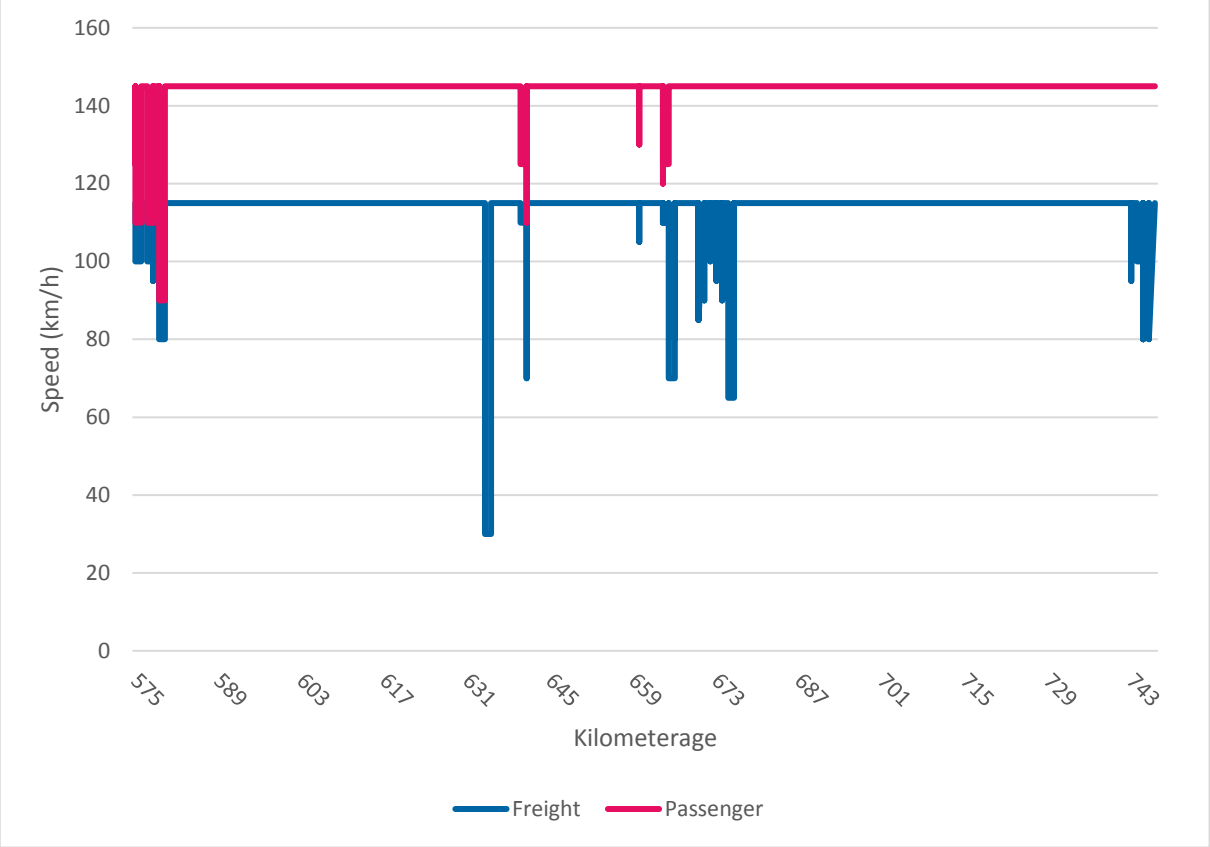


Figure 4.3 Proposal Design Speeds

4.1.6 Rail noise model setup

Acoustic modelling was undertaken using the computer prediction software Computer Aided Noise Abatement (CadnaA) version 4.6 to predict the effects of rail traffic noise from the proposal. The Nordic prediction method (TemaNord 1996:524) was used for modelling as this is able to produce L_{Aeq} and L_{AmaxF} levels.

The proposed development has been modelled based on available data at the time of the assessment, and as such, should be used for comparison purposes only. In particular, the model reflects the status of the design at the time of the assessment.

Model configuration

The following assumptions were made with regard to the model configuration:

- A general ground absorption coefficient of 1.0 was used.
- Atmospheric conditions of 10°C and 70 per cent humidity were adopted..
- Neutral weather and atmospheric conditions were assumed
- Topographical information was based on Lidar data provided by ARTC.
- Receivers were modelled at a height of 1.5 metres above ground.
- Buildings close to the rail line have been modelled based on aerial imagery. Buildings have been assumed to be single storey at a height of 4.5 metres.
- Existing rail alignments were based on data provided by ARTC.

Rail traffic assumptions

In regards to rail traffic, for modelling purposes it is assumed that rail capacity and speeds are as described in Section 4.1.3 and 4.1.4 and represent a conservative operational rail scenario for predicting noise impacts.

Rail source levels for representative trains from the Nordic prediction method are presented in Table 4.5.

Table 4.5 Train source SELn values

Train type	SELn dB 1/Oct						
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Diesel Goods Train	89.5	92.5	94.5	98.5	93.5	92.5	86.5
Passenger Train	86.5	84.5	88.5	97.5	97.5	94.5	90.5

Note: Values are normalised to: 100 km/h speed, 100 metre length, reference position 10 metres from the track and 1.5 metres above ground.

Track corrections

The following track corrections have been made in the model:

- +3 dB correction for partial track length on bridges with ballast (ThemaNord 1996:524).
- +6 dB correction for partial track length on bridges without ballast (ThemaNord 1996:524).

- +6 dB correction per 10 metres track length for each unit of switches and crossings (ThemaNord 1996:524).
- +3 dB correction for track curves with radius of 300-500 metres (Schall 03, 2006).

Based on information provided by ARTC, the following assumptions have been made for noise produced in crossing loops:

- 25 per cent of the total trains will utilise each crossing loop.
- All loops were modelled as being utilised equally.
- An indicative source level of 90 dB(A) at 15 metres from the rail source has been assumed for bunching noise.
- Bunching noise events have been modelled as 1 second duration events between each wagon.
- An indicative source level of 70 dB(A) at 15 metres from the rail source has been assumed for idling noise.
- Train idling durations have been assumed to be 20 minutes.

Warning bells and horns

Warning bells at level crossing have been modelled based on the following assumptions:

- Crossing bells will activate 30 seconds prior to train entering level crossing and remain audible throughout train pass-by.
- An indicative source level of 105 dB(A) at 3 metres from the source has been assumed for warning bells at level crossings. This is based on the AREMA Communications and signal manual Part 3.2.60.

Noise emitted from train horns have been modelled based on the following assumptions:

- All trains will use horns 150 m before entering a level crossing.
- An indicative source level of 88 dB(A) at 200 metres from the source has been assumed for train horns. This is based on ARTC's Locomotive Specific Interface Requirements (WOS 01.300).

4.2 Existing rail noise levels and model validation

Existing rail noise levels were calculated using the results from the baseline monitoring described in Section 2.4. Existing rail noise levels were calculated based on the noise logger data obtained at locations L12NNS, L13NNS, L14NNS and L16NNS. Passby information for loggers within Moree town were not suitable for calibration due to the infrequency of trains and the nearby Newell Highway resulting in the rail pass-bys being indistinguishable from road traffic events.

With consideration to the RING, the existing rail noise L_{Aeq}'s at the monitoring locations are determined as follows:

$$L_{Aeq(T)} = 10 \times \log_{10}(1/T \times (\Sigma (n_i \times t_i \times 10^{0.1LAeq(i)})))$$

Where:

- T is the total time in the relevant period (day or night) in seconds

- t_i is the average time of each type of event in seconds
- n_i is the number of each type of event

$L_{Aeq(i)}$ is the representative L_{Aeq} level for each type of event as measured at the receiver and is summed over the different types of events.

Noise modelling was undertaken for the existing 2016 scenario for comparison to measured existing rail noise levels to confirm the model's accuracy and validity for assessing the subsequent modelling scenarios.

Table 4.6 presents the measured 2016 rail noise levels and modelling results for the existing 2016 scenario to demonstrate the calibration of the noise model achieved.

Table 4.6 Measured absolute existing rail noise levels and model validation

Location	Measured absolute existing 2016 rail noise levels (dB)		Noise model predictions, 2016 existing scenario (dB)		Difference (dB)
	Day $L_{Aeq\ (15hr)}$	Night $L_{Aeq\ (9hr)}$	Day $L_{Aeq\ (15hr)}$	Night $L_{Aeq\ (9hr)}$	
L12NNS	50.9	50.9	51.0	51.0	+0.1
L13NNS	46.5	46.5	47.7	47.7	+1.2
L14NNS	39.0	39.0	40.8	40.8	+1.8
L16NNS	43.3	43.3	44.5	44.5	+1.2

As indicated by the above table, the predicted 2016 noise levels are within 2 dB of the measured rail noise levels with the difference ranging between +0.1 to +1.8 dB. Therefore, the model is considered to be validated.

4.3 Operational rail noise model results

Table 4.7 presents a summary of the modelling results where the RING trigger levels are predicted to be exceeded for residential receivers. In order to be considered for mitigation, L_{Aeq} noise levels must exceed the relevant day/night criteria and the level at receivers must also increase by 2 dB or more from the no build scenario. Receivers can also be considered for mitigation where there is a predicted increase of 3 dB or more due to the proposal at an assessment timeframe and L_{Amax} levels are predicted to exceed 85 dBA.

Note that due to the proportional day/night split of train movements assumed (i.e. the same number of trains per each 1-hour period), the $L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$ model noise levels were equal. The RING night time trigger levels are 5 dB lower than daytime and therefore provides the controlling criteria for identification of receivers that qualify for consideration of noise mitigation measures.

Non-residential receivers including schools, places of worship (churches) and outdoor recreation areas have different RING noise criteria for operational noise.

Table 4.8 presents a summary of the modelling results where the RING trigger levels are predicted to be exceeded for non-residential receivers.

For the year 2040 scenario, the following number of residential receivers were found to have qualified for mitigation consideration under the RING:

- 14 receivers in North Star
- 16 receivers in Moree-North Star
- 79 receivers in Moree Town
- 15 receivers in Bellata-Moree
- 19 receivers in Bellata
- 9 receivers in Narrabri-Bellata.

Table 4.7 Predicted rail noise levels for residential receivers exceeding RING trigger levels – Narrabri to North Star (dBA)

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 2377	830847	6795448	North Star	-	58	61	61.1	76	81	5.5		Y	
NNS_Rx 2369	830741	6795303	North Star	-	62	66	65.6	83	88	5.1	Y	Y	Y
NNS_Rx 2367	830804	6795196	North Star	-	58	61	60.8	75	81	6.3		Y	
NNS_Rx 2361	830704	6795098	North Star	-	62	65	64.8	83	88	4.9	Y	Y	Y
NNS_Rx 2359	830694	6795077	North Star	-	63	66	65.9	84	89	4.9	Y	Y	Y
NNS_Rx 2358	830704	6795051	North Star	-	59	63	62.5	80	85	4.8		Y	
NNS_Rx 2356	830688	6795036	North Star	-	63	66	65.9	85	88	3.7	Y	Y	Y
NNS_Rx 2355	830745	6795005	North Star	-	58	62	61.5	79	82	3.5		Y	
NNS_Rx 2352	830674	6794961	North Star	-	63	66	66.1	89	89	0.0	Y	Y	
NNS_Rx 2350	830673	6794913	North Star	-	63	66	65.6	91	91	0.0	Y	Y	
NNS_Rx 2347	830705	6794865	North Star	-	59	62	61.9	88	88	0.0		Y	
NNS_Rx 2346	830661	6794852	North Star	-	63	66	66.2	91	91	0.0	Y	Y	
NNS_Rx 2344	830729	6794793	North Star	-	58	61	60.5	82	82	0.0		Y	
NNS_Rx 2342	830647	6794779	North Star	-	63	66	66.1	88	88	0.0	Y	Y	
NNS_Rx 2324	821992	6776886	Moree-North Star	-	59	62	61.9	77	82	5.3		Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 2320	822002	6773892	Moree-North Star	-	61	65	64.6	84	86	2.7	Y	Y	
NNS_Rx 2311	821641	6773452	Moree-North Star	-	64	67	66.9	91	91	0.0	Y	Y	
NNS_Rx 2308	821521	6773400	Moree-North Star	-	58	61	60.6	80	80	0.2		Y	
NNS_Rx 2306	821570	6773346	Moree-North Star	-	61	64	64.3	84	86	2.2	Y	Y	
NNS_Rx 2305	821487	6773321	Moree-North Star	-	58	61	60.7	81	81	0.0		Y	
NNS_Rx 2304	821480	6773303	Moree-North Star	-	58	61	60.8	81	81	0.0		Y	
NNS_Rx 2302	821559	6773293	Moree-North Star	-	61	64	63.9	82	86	3.8	Y	Y	Y
NNS_Rx 2301	821460	6773248	Moree-North Star	-	58	61	60.7	79	80	0.9		Y	
NNS_Rx 2300	821596	6772924	Moree-North Star	-	62	65	64.7	82	87	5.0	Y	Y	Y
NNS_Rx 2299	820349	6769982	Moree-North Star	-	63	67	66.5	86	90	3.6	Y	Y	Y
NNS_Rx 2298	820098	6768936	Moree-North Star	-	57	61	60.5	82	82	0.0		Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 2287	816238	6758238	Moree-North Star	-	65	68	67.9	92	92	0.0	Y	Y	
NNS_Rx 2270	810881	6749030	Moree-North Star	-	58	61	61.2	84	84	0.0		Y	
NNS_Rx 2267	805767	6747404	Moree-North Star	-	65	69	68.5	87	92	5.0	Y	Y	Y
NNS_Rx 2251	779279	6740688	Moree-North Star	8	60	63	55.1	87	87	0.0		Y	
NNS_Rx 2144	777254	6737902	Moree Town	18	60	61	43.0	74	80	5.8		Y	
NNS_Rx 2095	777139	6737718	Moree Town	19	59	61	41.4	76	79	3.4		Y	
NNS_Rx 2043	776930	6737468	Moree Town	21	60	61	40.2	81	81	0.0		Y	
NNS_Rx 2012	776676	6737051	Moree Town	24	62	62	38.3	79	83	4.2	Y	Y	
NNS_Rx 2005	776865	6736746	Moree Town	27	61	61	34.3	80	83	2.3	Y	Y	
NNS_Rx 2002	776172	6736658	Moree Town	31	64	65	34.3	89	89	0.2	Y	Y	
NNS_Rx 2001	776190	6736667	Moree Town	30	65	66	35.2	89	91	2.1	Y	Y	
NNS_Rx 2000	776103	6736671	Moree Town	30	60	61	31.1	85	85	0.0		Y	
NNS_Rx 1999	776363	6736669	Moree Town	18	66	67	49.0	84	91	6.4	Y	Y	Y
NNS_Rx 1998	776333	6736668	Moree Town	17	69	69	52.6	88	96	8.2	Y	Y	Y

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 1997	776417	6736665	Moree Town	18	64	65	47.2	81	89	8.1	Y	Y	Y
NNS_Rx 1995	776105	6736651	Moree Town	31	61	62	31.1	86	86	0.0	Y	Y	
NNS_Rx 1994	776417	6736648	Moree Town	29	61	62	33.1	78	87	8.9	Y	Y	Y
NNS_Rx 1993	776362	6736648	Moree Town	29	61	61	32.6	79	87	8.4	Y	Y	Y
NNS_Rx 1991	776087	6736633	Moree Town	24	61	61	37.6	86	86	0.0	Y	Y	
NNS_Rx 1990	776415	6736634	Moree Town	29	61	61	32.0	78	87	9.0	Y	Y	Y
NNS_Rx 1989	776276	6736628	Moree Town	30	73	73	43.8	92	101	8.6	Y	Y	Y
NNS_Rx 1986	776414	6736620	Moree Town	30	60	61	31.5	80	86	6.1		Y	Y
NNS_Rx 1985	776084	6736620	Moree Town	22	60	61	38.4	86	86	0.0		Y	
NNS_Rx 1984	776414	6736605	Moree Town	30	60	61	30.7	78	85	7.1		Y	
NNS_Rx 1983	776277	6736604	Moree Town	29	70	70	40.8	92	97	4.9	Y	Y	Y
NNS_Rx 1982	776356	6736603	Moree Town	30	60	61	31.0	86	86	0.0		Y	
NNS_Rx 1980	776099	6736592	Moree Town	32	62	63	31.3	88	88	0.0	Y	Y	
NNS_Rx 1979	776275	6736590	Moree Town	31	69	70	39	94	97	2.9	Y	Y	
NNS_Rx 1975	776353	6736575	Moree Town	24	60	61	36.9	84	85	0.7		Y	
NNS_Rx 1973	776099	6736568	Moree Town	32	62	63	31.4	88	88	0.0	Y	Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 1972	776279	6736568	Moree Town	28	67	68	40.0	94	94	0.0	Y	Y	
NNS_Rx 1969	776096	6736547	Moree Town	32	62	63	31.9	88	88	0.0	Y	Y	
NNS_Rx 1968	776306	6736551	Moree Town	28	62	63	35.1	91	91	0.0	Y	Y	
NNS_Rx 1967	776276	6736546	Moree Town	31	67	68	36.8	95	95	0.0	Y	Y	
NNS_Rx 1962	776097	6736528	Moree Town	30	62	64	33.3	88	88	0.0	Y	Y	
NNS_Rx 1959	776225	6736523	Moree Town	22	74	75	53.0	101	102	1.4	Y	Y	
NNS_Rx 1958	776275	6736523	Moree Town	27	65	67	39.3	94	94	0.0	Y	Y	
NNS_Rx 1957	776223	6736511	Moree Town	32	74	74	42.5	98	102	4.0	Y	Y	Y
NNS_Rx 1955	776273	6736510	Moree Town	25	65	66	41.7	93	93	0.0	Y	Y	
NNS_Rx 1954	776097	6736503	Moree Town	23	62	63	40.7	87	87	0.0	Y	Y	
NNS_Rx 1928	776296	6736399	Moree Town	30	60	62	31.3	80	85	4.7		Y	
NNS_Rx 1925	776268	6736397	Moree Town	34	65	67	33.2	86	92	6.1	Y	Y	Y
NNS_Rx 1918	776269	6736370	Moree Town	35	65	67	32.8	87	92	4.4	Y	Y	Y
NNS_Rx 1908	776269	6736351	Moree Town	35	65	67	32.3	88	91	3.2	Y	Y	Y
NNS_Rx 1897	776269	6736339	Moree Town	36	65	68	32.0	89	92	2.6	Y	Y	
NNS_Rx 1886	776269	6736313	Moree Town	36	65	67	31.0	91	91	0.8	Y	Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 1876	776268	6736299	Moree Town	37	65	68	30.5	92	92	0.0	Y	Y	
NNS_Rx 1862	776267	6736274	Moree Town	38	65	68	29.2	93	93	0.0	Y	Y	
NNS_Rx 1848	776269	6736255	Moree Town	39	65	67	27.9	93	93	0.0	Y	Y	
NNS_Rx 1834	776267	6736235	Moree Town	40	64	67	26.4	93	93	0.0	Y	Y	
NNS_Rx 1820	776275	6736216	Moree Town	38	62	65	26.4	91	91	0.0	Y	Y	
NNS_Rx 1801	776265	6736193	Moree Town	43	63	66	22.5	91	91	0.0	Y	Y	
NNS_Rx 1793	776266	6736174	Moree Town	45	63	66	21.0	89	89	0.1	Y	Y	
NNS_Rx 1774	776263	6736128	Moree Town	46	63	65	19.0	83	90	6.5	Y	Y	Y
NNS_Rx 1741	776267	6736082	Moree Town	47	62	65	18.4	83	90	7.2	Y	Y	Y
NNS_Rx 1733	776263	6736068	Moree Town	47	63	65	18.2	83	91	7.3	Y	Y	Y
NNS_Rx 1721	776262	6736057	Moree Town	47	63	66	18.1	84	91	7.4	Y	Y	Y
NNS_Rx 1715	776261	6736047	Moree Town	48	63	66	18.0	84	91	7.5	Y	Y	Y
NNS_Rx 1705	776263	6736038	Moree Town	48	63	65	17.9	84	91	7.3	Y	Y	Y
NNS_Rx 1699	776087	6736032	Moree Town	46	61	64	18.5	82	88	5.4	Y	Y	Y
NNS_Rx 1685	776085	6736015	Moree Town	46	61	64	18.3	82	88	5.9	Y	Y	Y
NNS_Rx 1679	776258	6736005	Moree Town	48	63	66	17.7	84	92	7.5	Y	Y	Y

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 1664	776083	6735991	Moree Town	46	61	64	18.2	81	87	6.4	Y	Y	Y
NNS_Rx 2457	776267	6735987	Moree Town	47	61	64	17.4	83	90	7.7	Y	Y	Y
NNS_Rx 1649	776082	6735975	Moree Town	45	61	64	18.2	81	87	6.7	Y	Y	Y
NNS_Rx 1648	776263	6735969	Moree Town	48	62	65	17.5	83	91	7.2	Y	Y	Y
NNS_Rx 1635	776087	6735956	Moree Town	46	61	64	18.1	80	88	7.3	Y	Y	Y
NNS_Rx 1630	776266	6735953	Moree Town	47	62	65	17.5	83	90	7.2	Y	Y	Y
NNS_Rx 1618	776087	6735938	Moree Town	45	61	64	18.1	80	87	7.2	Y	Y	Y
NNS_Rx 1610	776262	6735936	Moree Town	48	63	66	17.6	84	91	7.1	Y	Y	Y
NNS_Rx 1591	776269	6735919	Moree Town	47	61	64	17.3	82	90	7.3	Y	Y	Y
NNS_Rx 1578	776267	6735902	Moree Town	47	62	65	17.5	83	90	7.1	Y	Y	Y
NNS_Rx 1552	776244	6735851	Moree Town	50	64	67	17.2	86	93	7.2	Y	Y	Y
NNS_Rx 1548	776263	6735845	Moree Town	44	59	62	17.6	80	87	6.8		Y	Y
NNS_Rx 1526	776261	6735823	Moree Town	47	62	65	17.4	83	91	7.8	Y	Y	Y
NNS_Rx 1508	776082	6735798	Moree Town	46	60	63	17.7	80	87	6.8		Y	Y
NNS_Rx 1493	776084	6735780	Moree Town	46	61	63	17.4	80	87	7.0	Y	Y	Y
NNS_Rx 1445	776095	6735719	Moree Town	47	61	64	17.3	81	88	6.8	Y	Y	Y

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 1420	776367	6735668	Moree Town	44	59	62	17.4	76	84	8.2		Y	
NNS_Rx 1387	776357	6735622	Moree Town	45	60	63	18.1	77	86	8.1		Y	Y
NNS_Rx 1365	776383	6735607	Moree Town	44	59	62	17.3	76	85	8.5		Y	
NNS_Rx 1259	776535	6735130	Moree Town	49	60	63	13.9	88	88	0.0		Y	
NNS_Rx 1257	776534	6735107	Moree Town	50	61	64	14.0	88	88	0.0	Y	Y	
NNS_Rx 0898	776333	6730531	Bellata-Moree	53	64	67	13.6	90	90	0.0	Y	Y	
NNS_Rx 0897	776328	6730479	Bellata-Moree	52	63	66	13.8	87	89	1.9	Y	Y	
NNS_Rx 0896	776352	6730476	Bellata-Moree	47	58	61	13.6	84	84	0.3		Y	
NNS_Rx 0892	776313	6730410	Bellata-Moree	52	63	66	13.7	86	88	2.0	Y	Y	
NNS_Rx 0891	776332	6730407	Bellata-Moree	49	59	62	13.3	84	84	0.0		Y	
NNS_Rx 0890	776355	6730402	Bellata-Moree	47	58	61	13.3	81	81	0.3		Y	
NNS_Rx 0887	776308	6730373	Bellata-Moree	51	63	65	13.7	87	87	0.2	Y	Y	
NNS_Rx 0885	775930	6729006	Bellata-Moree	47	58	61	14.4	83	83	0.0		Y	
NNS_Rx 0867	770794	6707372	Bellata-Moree	51	63	66	14.3	85	88	3.6	Y	Y	Y
NNS_Rx 0863	770799	6707269	Bellata-Moree	53	64	66	13.6	91	91	0.0	Y	Y	
NNS_Rx 0862	770796	6707241	Bellata-Moree	53	64	66	12.9	92	92	0.0	Y	Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 0861	770713	6707213	Bellata-Moree	48	59	61	13.1	86	86	0.0		Y	
NNS_Rx 0860	770791	6707193	Bellata-Moree	54	64	66	12.7	92	92	0.0	Y	Y	
NNS_Rx 0859	770779	6707134	Bellata-Moree	52	63	66	13.9	89	89	0.8	Y	Y	
NNS_Rx 0841	769253	6689283	Bellata-Moree	45	58	61	15.3	78	83	4.6		Y	
NNS_Rx 0838	769516	6687824	Bellata	50	62	65	14.9	84	88	3.7	Y	Y	Y
NNS_Rx 0837	769510	6687556	Bellata	52	63	66	13.7	87	88	1.1	Y	Y	
NNS_Rx 0836	769581	6687480	Bellata	48	59	62	13.8	83	83	0.0		Y	
NNS_Rx 0835	769506	6687458	Bellata	52	64	66	13.9	87	89	2.1	Y	Y	
NNS_Rx 0834	769561	6687457	Bellata	49	59	62	13.3	85	85	0.0		Y	
NNS_Rx 0832	769516	6687418	Bellata	52	63	66	13.8	88	88	0.0	Y	Y	
NNS_Rx 0830	769582	6687362	Bellata	48	59	62	14.2	85	85	0.0		Y	
NNS_Rx 0827	769499	6687293	Bellata	52	63	66	14.2	90	90	0.2	Y	Y	
NNS_Rx 0823	769509	6687265	Bellata	50	62	65	14.4	87	89	1.1	Y	Y	
NNS_Rx 0822	769508	6687244	Bellata	50	62	65	14.7	86	89	2.1	Y	Y	
NNS_Rx 0819	769510	6687224	Bellata	50	61	64	14.7	85	88	2.6	Y	Y	
NNS_Rx 0817	769511	6687198	Bellata	48	60	63	15.6	82	88	5.7		Y	Y

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 0812	769519	6687140	Bellata	45	58	61	15.9	79	83	4.7		Y	
NNS_Rx 0800	769491	6687002	Bellata	49	62	65	15.8	85	90	4.9	Y	Y	Y
NNS_Rx 0797	769500	6686959	Bellata	48	61	64	15.9	83	88	5.5	Y	Y	Y
NNS_Rx 0794	769496	6686911	Bellata	49	62	65	16.0	84	88	4.3	Y	Y	Y
NNS_Rx 0786	769500	6686819	Bellata	49	62	65	16.0	83	89	5.4	Y	Y	Y
NNS_Rx 0783	769570	6686803	Bellata	45	58	61	15.8	77	83	5.6		Y	
NNS_Rx 0778	769516	6686737	Bellata	49	62	65	16.1	81	87	5.8	Y	Y	Y
NNS_Rx 0767	769302	6684642	Narrabri-Bellata	52	63	66	13.3	89	89	0.0	Y	Y	
NNS_Rx 0766	769298	6684556	Narrabri-Bellata	52	63	66	13.4	85	88	3.1	Y	Y	Y
NNS_Rx 0748	769745	6665301	Narrabri-Bellata	45	58	61	15.8	79	82	2.7		Y	
NNS_Rx 0745	769723	6665202	Narrabri-Bellata	49	63	65	16.0	83	89	5.9	Y	Y	Y
NNS_Rx 0744	769723	6665184	Narrabri-Bellata	49	63	65	15.9	83	89	5.6	Y	Y	Y
NNS_Rx 0743	769856	6665174	Narrabri-Bellata	46	58	61	14.7	82	82	0.0		Y	
NNS_Rx 0742	769870	6665132	Narrabri-Bellata	46	58	61	14.3	82	82	0.0		Y	

Receiver	Easting	Northing	Locality	L_{Aeq} No Build	L_{Aeq}-2025 Build	L_{Aeq} 2040 Build	L_{Aeq} 2040 Build Increase	L_{Amax} Existing	L_{Amax} Design	L_{Amax} increase	L_{Aeq} RING Triggered-2025	L_{Aeq} RING Triggered-2040	L_{Amax} RING Triggered
NNS_Rx 0741	769516	6665054	Narrabri-Bellata	46	58	61	14.8	82	82	0.0		Y	
NNS_Rx 0718	768945	6646456	Narrabri-Bellata	48	60	63	14.8	86	86	0.0		Y	

Notes:

$L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$ model predictions were equal. The results are provided as one value for L_{Aeq} which represents both $L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$.

The 'increase' in noise should be calculated to a single decimal place before comparing it with the 2 dB and 3 dB noise-increase trigger levels. However, the absolute noise levels should be calculated to the nearest whole decibel number before comparing them with the absolute trigger (RING).

The L_{AMax} levels do not depend on train volumes. Therefore, the L_{Amax} levels for design years 2025 and 2040 will be equal.

Table 4.8 Predicted rail noise levels for non-residential receivers exceeding RING trigger levels – Narrabri to North Star (dBA)

Receiver ID	Easting	Northing	Locality	L_{Aeq} Levels - No Build	L_{Aeq} Levels - 2025 Build	L_{Aeq} Levels - 2040 Build	L_{Aeq} Increase - 2025	L_{Aeq} Increase - 2040	Controlling Criteria (External L_{Aeq} level)	Controlling Criteria Exceeded
NNS_WORx0007	769513	6686849	Bellata	47	61	63	13.3	16.0	55	Y
NNS_WORx0003	776323	6735725	Moree Town	45	59	62	14.4	17.3	55	Y
NNS_WORx0002	830720	6794764	North Star	-	58	62	58.4	61.5	55	Y
NNS_REPx0014	769447	6686954	Bellata	53	66	69	12.9	15.9	65	Y
NNS_REPx0005	776134	6736215	Moree Town	44	66	69	21.7	24.4	65	Y
NNS_REAx0008	776150	6736311	Moree Town	39	68	71	29.3	31.6	65	Y
NNS_EDUx0007	822057	6773631	Moree-North Star	-	57	60	56.5	59.6	55	Y
NNS_EDUx0006	830764	6795354	North Star	-	61	65	61.4	64.6	55	Y
NNS_EDUx0005	779224	6740673	Moree-North Star	8	59	62	50.9	54.1	55	Y

Notes:

$L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$ model predictions were equal. The results are provided as one value for L_{Aeq} which represents both $L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$.

The 'increase' in noise should be calculated to a single decimal place before comparing it with the 2 dB and 3 dB noise-increase trigger levels. However, the absolute noise levels should be calculated to the nearest whole decibel number before comparing them with the absolute trigger (RING).

The L_{AMax} levels do not depend on train volumes. Therefore, the L_{Amax} levels for design years 2025 and 2040 will be equal.

Where receivers are subject to internal noise criteria, these have been converted to external levels based on a conservative 10 dB internal-external correction.

4.3.1 Discussion

In general, for a largely homogeneous rail line with consistent volumes, constant speeds and few tight radius curves, the level of rail noise exposure for any given receiver is a function of the distance to the track, the angle of view and the presence or absence of any shielding terrain or objects.

Most of the RING exceedances were around the towns, such as Moree, North Star and Bellata areas, with the remainder scattered throughout the study area. This is due to the higher density of receivers in these areas that are located in close proximity to the rail line. Section 7.1 provides an assessment of reasonable and feasible mitigation measures to reduce noise levels at receivers found to exceed RING criteria.

A number of non-residential receivers were found to exceed the relevant RING criteria. For non-residential receivers with internal noise criteria, a conservative 10 dB internal-external noise correction was assumed. Qualification for noise mitigation will be dependent upon the results of façade testing to determine if the internal noise criteria are exceeded.

The accuracy of noise predictions depends on a variety of factors. It is important to note that the modelling is largely dependent on the model inputs and assumptions detailed in Section 4.1.

Full operational noise results are presented in Appendix D. Noise contour plots showing receiver locations are presented in Appendix E for L_{Aeq} levels and Appendix F for L_{Amax} levels.

4.4 Horn noise

Horns are an important safety device and are a normal part of train operation. Trains are generally required to sound their horns as they pass through level crossings and additionally at other times. ARTC's *Locomotive Specific Interface Requirements (WOS 01.300)* provides minimum and maximum levels for horn noise. The purpose of these prescribed noise levels is to provide safe operating conditions for people close to the rail line. Note that both 'town' and 'country' horns can be fitted that have high and low noise level features.

For a rail redevelopment project to trigger the RING's L_{Amax} level of 85 dB(A) at a noise sensitive receiver, a 3 dB or greater increase in L_{Amax} level is required. Receivers affected by horn noise have been assessed in the operational noise modelling, as detailed in Section 4.1.6. Horn noise has been assessed in the L_{Aeq} and L_{Amax} models:

- The L_{Amax} models assess the maximum noise impacts from the instantaneous high level of noise generated by horns.
- The L_{Aeq} models assess the effect of horn noise to the overall day ($L_{Aeq15hr}$) and night (L_{Aeq9hr}) noise levels.

It should be noted that an appreciable difference in the number of horn events is expected due to the projected volume growth.

It is expected that the number of horn noise events would be comparable to the increase in trains per day. For example, in the year 2040 in the Moree-Narrabri section of track, there is expected to be approximately 22 trains per 24 hour period, increasing from the existing approximately 4 trains per 24 hour period. For the North Star-Moree section of track, existing train volumes are very infrequent. This section of track is expected to have 19 trains per 24 hour period in the year 2040.

While noise levels at receivers from horn usage locations may exceed 85dB(A) L_{Amax} noise levels, there are no additional proposed locations of horn usage in the proposal and the RING redevelopment trigger of 3dB increase in L_{Amax} levels is not expected to be achieved by horns.

4.5 Operational vibration

Vibration from the operation of heavy rail infrastructure can adversely affect sensitive receivers located near a rail line. Vibration can cause buildings, windows and other fixtures to shake; contribute to annoyance and impacts on residents and other land uses; and interfere with vibration-sensitive equipment. Building damage is not usually likely for operation of rail infrastructure, however annoyance can occur at significantly lower vibration levels which are often only slightly higher than the limits of human perception. Therefore, human comfort goals provide the controlling criteria for operational vibration for the proposal.

The level of vibration at a receiver is generally a function of the energy of the vibration source, the propagation through the ground and the coupling of the ground to the receiver, structure or building.

Vibration generation from rail traffic is generally a function of the following:

- wheel-rail interface including wheel defects, acceleration and braking
- the quality of the rail
- track geometry
- variations in sleepers and ballast
- axle load
- geometry and composition of the train
- Speed.

Propagation and perception of vibration is further influenced by the soil, geological conditions and building characteristics such as:

- soil stiffness
- ground internal damping
- depth of bedrock
- depth of water table
- building mass
- building coupling to the ground
- propagation of vibration through the building

4.5.1 Operational vibration assessment

Axle loading

The increase to 30 tonne axle load capacity from an existing 23 tonnes is not expected to result in substantially increased vibration levels as the proposed intercapital trains have axle loads of 21 tonnes while bulk freight is expected to have 25 tonne axle loads. Typically, a doubling of axle load can be expected to double vibration, and a proportional increase in vibration due to increased axle loading is likely.

Track condition

For the main alignment, vibration levels may decrease (or possibly offset any increase) as a result of the proposal due to improved ballast/sleeper heterogeneity and rail surface smoothness, both features which have greater potential to influence rail-induced vibration levels than axle loading or speed alone. Additional reductions in vibration may also be realised by reducing the need for acceleration and braking as more constant speeds would be achieved through a removal of some level crossings and lifting of existing temporary speed restrictions at sections of track, for instance dilapidated bridges being replaced as part of the proposal.

Speed

The US Federal Transit Administration's "Transit Noise and Vibration Impact Assessment" report provides a method for estimating the ground surface vibration levels near rail lines. The process involves selecting a base curve for typical ground-surface vibration levels. The base curve assumes rail equipment is in good condition and operating at speeds of 80 km/h. Correction factors are then applied to account for different speeds, geological conditions, etc.

The report notes that vibration levels are approximately proportional to 20 $\log_{10}$ (speed/speed_{ref}). although the relationship can be as low as 10 to 15 $\log_{10}$ (speed/speed_{ref}). A speed relationship of 20 $\log_{10}$ (speed/speed_{ref}) has been adopted for this assessment.

Distance attenuation

The distance attenuation relationship of ground vibration measurements was derived from the FTA base curve for locomotive-powered freight/passenger trains. Vibration measurements from similar rail proposals undertaken by GHD, can be seen in Figure 4.4. Note that these values have been adjusted to the reference speed of 80 kilometres per hour, using the 20 $\log_{10}$(speed/speed_{ref}) relationship.

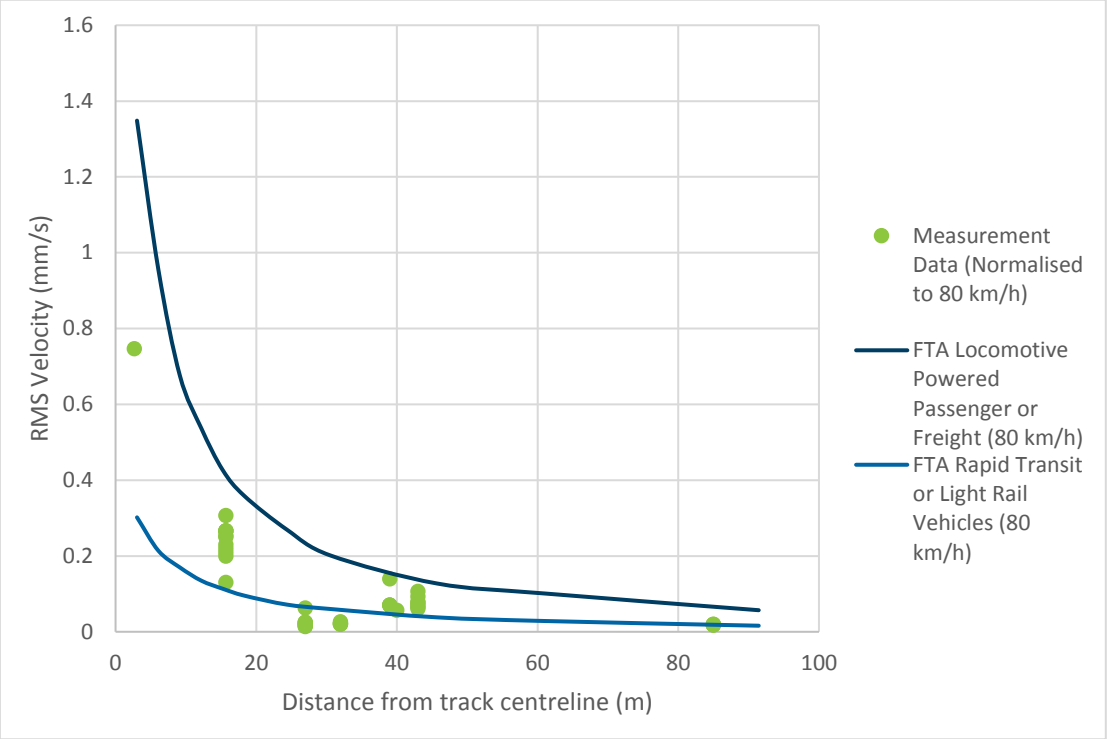


Figure 4.4 Ground vibration levels

Vibration measurements are highly variable and are largely dependent on local geological conditions. Further, track irregularities may significantly increase vibration levels (for example, at crossovers and joints). A significant variation in vibration levels for similar systems are not uncommon and the FTA curves represent the upper range of measurement data for well-maintained systems. The measured vibration data presented in Figure 4.4 are consistently lower than that upper-range vibration curve from the FTA guideline. Therefore, the use of levels from the FTA locomotive curve are expected to provide a conservative estimate of vibration levels.

For the purposes of this assessment, the track has been assumed to be in good condition and track irregularities such as joints or crossovers have not been assessed due to the current lack of design detail. An assessment of these factors should be completed once the detailed design has been finalised.

4.5.2 Human comfort assessment

Human comfort for operational vibration has been assessed in accordance with British Standard BS 6742-1:1992. The Vibration Dose Value (VDV) provides a cumulative descriptor of the vibration level received for a given period.

British Standard BS 6472 provides a method to calculate the estimated VDV using RMS vibration velocity. The estimated VDV is calculated as:

$$eVDV = 0.07 \times V_{rms} \times t^{0.25} \ (m/s^{1.75})$$

Where t= duration of the event.

The eVDV's for this proposal have been estimated by adjusting vibration levels for speed, duration and distance from the track.

The following assumptions have been made:

- maximum train lengths as specified in Table 4.3
- maximum train speeds as specified in Table 4.4
- track in good condition with no track irregularities
- train volumes specified in section 4.1.3
- proportional day/night splits of trains.

These assumptions are expected to provide a conservative estimate of future vibration levels. The predicted future eVDV values for day and night-time, as well as the respective residential criteria, can be seen in Figure 4.5 and Figure 4.6.

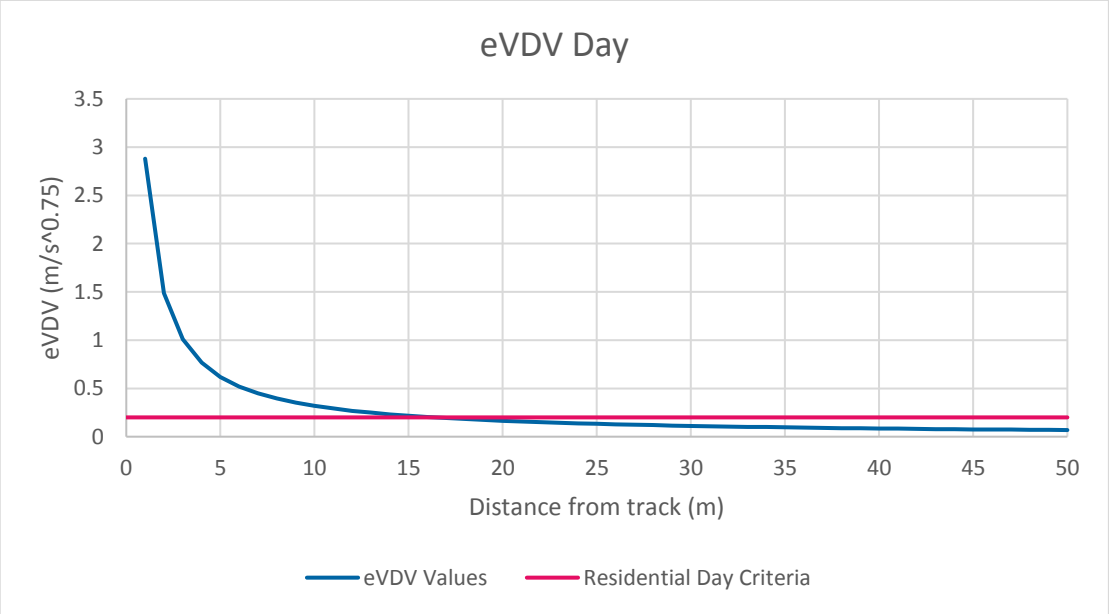


Figure 4.5 Daytime VDV levels (2040)

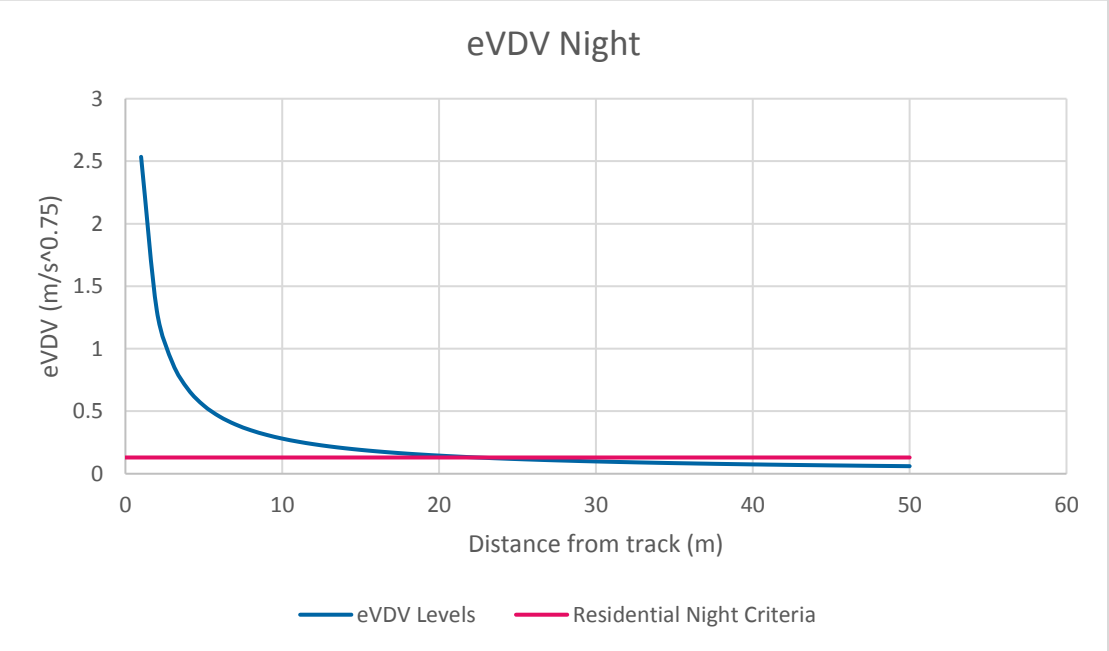


Figure 4.6 Night-time VDV levels (2040)

Estimated vibration levels at three receivers are predicted to trigger the night-time human comfort criteria. These receivers are located in Moree and are summarised in Table 4.9. Vibration mitigation strategies to reduce vibration impacts are discussed in Section 7.2.2.

Table 4.9 Receivers potentially affected by operational vibration

Receiver	Locality	Easting	Northing	Approximate distance from track
NNS_Rx1957	Moree	776222	6736511	18
NNS_Rx1959	Moree	776225	6736523	16
NNS_Rx1989	Moree	776276	6736628	15

5. Operational road traffic noise assessment

5.1 Noise modelling methodology

The methodology for the road traffic noise assessment included the following:

- The noise study area was established in accordance with the NCG.
- Road classification changes were assessed for existing side roads.
- Transition zones were established between new and road redevelopment segments and between the proposal and existing roads by preparing a separate transition zone contribution difference model.
- Transition zones created between new and redeveloped sections were based on a 42 metre buffer from the edge of the existing road corridor (using cadastre data with a seven metre total lane width).
- A traffic noise model was prepared to predict the existing level of road traffic noise for the current year. The current year noise model was used for the operational noise model verification process.
- Noise predictions were undertaken for the following cases:
  - Year 2020 'no build option' (traffic flow on the existing alignment for year opening).
  - Year 2030 'no build option' (traffic flow on the existing alignment 10 years after opening).
  - Year 2020 'build option' (proposed design for year opening).
  - Year 2030 'build option' (proposed design 10 years after opening).
- These models were used to assess the potential noise impact against the noise criteria and assess any increase in road traffic noise at sensitive receivers.

5.1.1 Modelling inputs and assumptions

The noise model inputs and assumptions for the existing, 2020 and 2030 No Build and Build scenarios are presented in Table 5.1.

Table 5.1 Operational noise model inputs and assumptions

Inputs/assumptions	Data incorporated into noise model
Noise model	SoundPLAN Version 7.4
Prediction algorithm	United Kingdom Department of Transport, Calculation of Road Traffic Noise (CoRTN) adapted for NSW conditions.
Heavy vehicle %	Day and night heavy vehicle (HV) percentages obtained from GHD Traffic and Transport Impact Assessment.
Verification model traffic speeds	Sign-posted traffic speeds were used for the verification model. Traffic count data were based off observations during attended noise monitoring.
Future traffic speeds	Sign-posted traffic speeds used in future 2020 and 2030 No Build and Build models. • Newell highway: 110 km/h • Moree bypass: 60 km/h

Inputs/assumptions	Data incorporated into noise model
	• Local roads in Moree: 50 km/h
Traffic volumes	Existing scenario based on traffic monitoring taken concurrently with attended noise measurements. No build traffic data assumed to be the same as the predicted build traffic data (2020 and 2030). Predicted traffic on roads in Moree based on GHD Traffic and Transport Impact Assessment. Assumptions: • No HV on Jones Avenue bridge Predicted traffic on Newell Highway based on AADT in 2008 with 0.9% growth.
Low traffic flow	Disabled
Road gradient	Taken into account based on the road design
Terrain resolution	1 m
Grid contour spacing	20 m
Buildings	4.5 m – single storey buildings 7.5 m – double storey buildings
Road surface adjustments	Dense graded asphalt (DGA) – 0 dBA
Façade correction	+2.5 dBA to account for noise reflected from the façade.
CoRTN conversion factors	CoRTN predicts $L_{A10(1hr)}$ noise levels which is converted to the $L_{Aeq(1hr)}$ descriptor with a -3 dBA correction factor.
CoRTN factor (Adapted to Australian conditions through research undertaken by the Australian Road Research Board)	-1.7 façade -0.7 freefield
Source height	Cars - 0.5 m Truck engines - 1.5 m, include -0.6 dBA source correction Truck exhausts - 3.6 m, includes -8.6 dBA source correction
Receiver heights	1.5 m above terrain level for ground floor 4.5 m above terrain level for first floor
Ground absorption	G = 0.75 for rural areas G = 0 for water

5.2 Traffic data

5.2.1 Existing traffic flows

Existing traffic volumes at four locations were recorded during short-term attended noise monitoring and are provided in Table 5.2.

Table 5.2 Existing traffic volumes, hourly

Receiver ID	Location	Address	Light	Heavy	Speed
L08NNS	Reece Plumbing	71 Tycannah Street	252	88	60

Receiver ID	Location	Address	Light	Heavy	Speed
L09NNS	Moree Council Depot	52 Tycannah Street	92	52	60
L10NNS	468 Frome Street	468 Frome Street	320	36	60
L11NNS	John Deere	2 Amaroo Drive	208	96	60

5.2.2 Future traffic flows

Projected traffic volumes in 2020 and 2030 in Moree were sourced from the Inland Rail Traffic and Transport Impact Assessment (GHD, 2016). A summary of the traffic volumes for roads in Moree during the day-time and night-time periods are provided in Table 5.3.

Table 5.3 Moree projected traffic volumes

Description	Day-time (15 hour)				Night-time (9 hour)			
	Light	Heavy	Total	% HV	Light	Heavy	Total	% HV
2020 No-Build								
Moree Bypass	1,822	620	2,442	25	181	61	242	25
Jones Avenue (Bridge overpass)	-	-	-	-	-	-	-	-
Jones Avenue (West of Newell Highway)	1,787	785	2,572	31	177	78	255	31
Jones Avenue (East of Newell Highway)	283	4	287	1	28	0	28	1
Tycannah Street (North of Jones Avenue)	1,391	303	1,695	18	138	30	168	18
Tycannah Street (South of Jones Avenue)	1,353	341	1,695	20	134	34	168	20
Bullus Drive	2,049	623	2,672	23	203	62	265	23
2020 Build								
Moree Bypass	1,822	620	2,442	25	181	61	242	25
Jones Avenue (Bridge overpass)	1,044	0	1,044	0	103	0	103	0
Jones Avenue (West of Newell Highway)	1,932	849	2,781	31	191	84	276	31
Jones Avenue (East of Newell Highway)	1,313	17	1,331	1	130	2	132	1
Tycannah Street (North of Jones Avenue)	1,927	420	2,348	18	191	42	233	18
Tycannah Street (South of Jones Avenue)	1,665	420	2,086	20	165	42	207	20
Bullus Drive	1,749	532	2,281	23	173	53	226	23
2030 No-Build								
Moree Bypass	1,997	680	2,677	25	198	67	265	25
Jones Avenue (Bridge overpass)	-	-	-	-	-	-	-	-

Description	Day-time (15 hour)				Night-time (9 hour)			
	Light	Heavy	Total	% HV	Light	Heavy	Total	% HV
Jones Avenue (West of Newell Highway)	1,959	860	2,819	31	194	85	279	31
Jones Avenue (East of Newell Highway)	310	4	314	1	31	0	31	1
Tycannah Street (North of Jones Avenue)	1,525	333	1,858	18	151	33	184	18
Tycannah Street (South of Jones Avenue)	1,483	374	1,858	20	147	37	184	20
Bullus Drive	2,246	683	2,929	23	223	68	290	23
2030 Build								
Moree Bypass	1,997	680	2,677	25	198	67	265	25
Jones Avenue (Bridge overpass)	1,144	0	1,144	0	113	0	113	0
Jones Avenue (West of Newell Highway)	2,118	930	3,048	31	210	92	302	31
Jones Avenue (East of Newell Highway)	1,440	19	1,459	1	143	2	145	1
Tycannah Street (North of Jones Avenue)	2,113	461	2,573	18	209	46	255	18
Tycannah Street (South of Jones Avenue)	1,826	461	2,286	20	181	46	227	20
Bullus Drive	1,918	583	2,500	23	190	58	248	23

Road traffic volumes along Newell Highway at the proposed location of the overpass were sourced from traffic count station 91022 located 120 metres north of Brigalow Lane (RMS Traffic Volume Viewer). Traffic volumes in the opening and design year were calculated based on an AADT of 1,231 vehicles for northbound traffic and an AADT of 1,169 vehicles for southbound traffic in 2008. A growth rate of 0.9% based on traffic volume increase in Moree was applied to predict traffic volumes. The projected traffic volumes on Newell Highway are provided in Table 5.4.

The following assumptions were used to predict the traffic volumes in the opening and design year:

- 0.9% growth rate
- day/night traffic splits based on the hourly profile on the RMS Traffic Volume Viewer
- northbound/southbound splits based on 2008 data.

Table 5.4 Newell Highway projected traffic volumes

Description	Day-time (15 hour)				Night-time (9 hour)			
	Light	Heavy	Total	% HV	Light	Heavy	Total	% HV
2020 No-Build/Build								
Newell Highway (Northbound)	680	545	1225	44.5	64	107	171	62.5
Newell Highway (Southbound)	680	439	1119	39.2	56	154	210	73.3

Description	Day-time (15 hour)				Night-time (9 hour)			
	Light	Heavy	Total	% HV	Light	Heavy	Total	% HV
2030 No-Build/Build								
Newell Highway (Northbound)	744	596	1340	44.5	70	117	187	62.5
Newell Highway (Southbound)	744	480	1224	39.2	61	168	229	73.3

5.3 Noise modelling verification

Long-term noise monitoring results were used to verify and calibrate the noise model. Verification of the noise model demonstrates the accuracy of the noise model and the validity of the CoRTN algorithm adjusted for NSW conditions used to predict road traffic noise. This enables noise levels for future scenarios to be predicted with a higher level of confidence. In addition, verification of the noise model allows the assumptions used for the road surface and vehicle source heights to be justified by comparing them against measured data (traffic volumes, noise levels).

The noise model used for validation was generated using traffic data and sign-posted vehicle speeds were used. Results from the noise model were compared to short-term attended measurements and any variations between the levels were analysed. Variations between the measured and modelled results are deemed to be acceptable if the levels are within ± 2 dBA.

A comparison of the measured and modelled results is shown in Table 5.5. The predicted results and measured results have an acceptable average variance within 2 dBA. Model calibration depends on a variety of inputs including the road surface, average traffic volumes, vehicle types and speed, ground absorption and any obstacles obstruction the sound transmission path.

Table 5.5 Noise model verification, dBA

Location	$L_{Aeq(15\ hr)}$ – Day 7:00 am – 10:00 pm		Change, dBA
	Measured	Modelled	
L08NNS	54.4	54.1	-0.3
L09NNS	62.2	61.8	-0.4
L10NNS	56.9	58.1	+1.2
L11NNS	67.1	66.2	-0.9
Median			-0.35

Corrections to calibrate the operational noise model during the opening and design years was not required as the results from model verification are within acceptable values.

5.4 Predicted noise levels

The predicted ‘no-build’ and ‘build’ day and night-time noise levels for each receiver in the year 2020 and year 2030 are detailed in Appendix H including the road traffic criteria calculated with consideration to the RNP and NCG.

All road traffic noise levels include a +2.5 dBA façade correction and a -1.7 dBA ARRB correction.

Day and night-time façade noise results for the design year ‘no build’ and ‘build’ options are provided in Appendix H.

5.5 Assessment of impacts

Assessment of the expected noise impacts in accordance with the RNP are as follows:

- The controlling criteria is expected to be exceeded at six receivers (NNS_Rx1325, NNS_Rx1326, NNS_Rx1327, NNS_Rx1328, NNS_Rx1540, NNS_Rx1758) during the day-time period. The maximum exceedance of the criteria is 1.4 dBA at NNS_Rx1328. It should be noted however that these are due to noise from existing roads or roads not part of the proposal and therefore would not qualify for mitigation treatment.
- The controlling criteria is not expected to be exceeded during the night-time period.
- Noise levels are not predicted to exceed the day-time acute criteria of 65 dBA $L_{Aeq(15\ hr)}$ or night-time acute criteria of 60 dBA $L_{Aeq(9\ hr)}$.
- The increase in noise levels between the no-build and build scenarios are less than 2 dB for the receivers that exceed the controlling criterion during the day-time period, therefore mitigation measures are not warranted.
- The Relative Increase Criterion is not applicable to any receiver due to realignment of the Newell Highway overpass or construction of the Jones Avenue bridge.

The proposed overpass at Newell Highway and the Jones Avenue bridge are not expected to adversely impact any sensitive receiver from a noise perspective within the assessment area.

5.6 Maximum noise level/sleep disturbance assessment

The *Road Noise Policy* provides a literature review for the assessment of sleep arousal due to traffic noise however does not set a sleep disturbance assessment criterion. Sleep disturbance impacts are likely to be dependent on the following:

- maximum noise level of an event
- number of occurrences
- duration of the event
- level above background or ambient noise levels.

For continuous rather than intermittent traffic flow, the ENMM recommends L_{Amax} noise pass-by events may lead to sleep disturbance if the L_{Amax} noise levels exceeds the L_{Aeq} noise level by more than 15 dBA when the L_{Amax} noise levels is greater than 65 dBA (external).

The ENMM advises that the maximum noise level can be used as a tool to prioritise and rank mitigation strategies, but should not be applied as a decisive noise criterion for selection of mitigation treatments.

The L_{Amax} and $L_{Aeq(1hr)}$ noise levels during the night-time period (10 pm to 7am) at four road traffic noise monitoring locations are summarised in Table 5.6.

Table 5.6 Summary of maximum noise levels (10 pm to 7 am) - dBA

Noise monitoring location	$L_{Amax(1hr)}$ range	$L_{Aeq(1hr)}$	Highest $L_{Amax(1hr)}$ - $L_{Aeq(1hr)}$	$L_{Amax(1hr)}$ - $L_{Aeq(1hr)}$ average	Number of $L_{Amax(1hr)}$ events > 65 dBA	Number of $L_{Amax(1\ hr)}$ > 15 dBA above $L_{Aeq(1hr)}$
Location 1 L08NNS	43-78	36-53	31	19	5	14
Location 2 L09NNS	42-79	33-58	29	17	5	10
Location 3 L10NNS	54-83	41-53	33	20	9	13
Location 4 L11NNS	42-92	51-65	30	22	29	26

The current maximum noise levels exceed the $L_{Aeq(1hr)}$ noise levels by more than 15 dBA and are above 65 dBA on several occasions per night. Based on the measurement taken at location L11NNS (John Deere) there are 39 $L_{Amax(1\ hour)}$ events above 65 dBA. This location is not representative of the area surrounding Jones Avenue as the measurements include traffic travelling along Moree Bypass and Newell Highway.

Five external $L_{Amax(1\ hour)}$ events above 65 dBA were measured on the eastern side of the rail line at L09NNS (Moree Council Depot). The number of internal maximum noise level events at this location is one assuming a reduction of 10 dBA from external to internal noise levels.

Construction of the bridge at Jones Avenue is unlikely to increase the number of maximum noise levels events on the western side of the rail due to noise level contributions from Moree Bypass and Newell Highway. However, maximum noise level events causing sleep disturbance impacts on the eastern side of the rail has the potential to increase. However, construction of a new road will not increase the maximum noise levels due to an improved road surface which is likely to reduce road irregularities and associated maximum noise level events.

6. Construction noise and vibration assessment

6.1 Construction methodology

6.1.1 Construction timing and duration

Construction staging

Construction of the proposal would commence once all necessary approvals are obtained, and the detailed design is complete. It is anticipated that construction would take about 24 months, commencing in mid 2018, and concluding in mid 2020.

Construction along the existing rail corridor would depend on the possession strategy however it is anticipated that progress would involve four main stages:

- Stage 1- Camurra to North Star
- Stage 2- Narrabri to Bellata
- Stage 3- Bellata to Moree South
- Stage 4- Moree South to Camurra

Construction of the Newell Highway overbridge, the bridges over the Mehi and Gwydir rivers and Croppa Creek, the Camurra bypass, and the Jones Avenue overbridge would be undertaken in parallel with the above stages.

For the works along the existing rail corridor, it is anticipated that it would take about eight to 10 weeks to construct a 4.5 to 5 kilometre section of track. This does not include location specific works such as culverts and underbridges or the relocation of services and utilities.

Proposal working hours

Construction work would be undertaken during the following primary proposal construction hours:

- Monday to Friday: 6:00 am to 6:00 pm
- Saturday: 6:00 am to 6:00 pm
- Sundays and public holidays: 6:00 am to 6:00 pm

Some minor works may also be undertaken during scheduled rail corridor possession periods (that is, the times that the movement of trains along the rail corridor are stopped for maintenance). This could include, for example, the connection of the tracks at either end of each stage, and some finishing works. During possessions, works may need to be undertaken on a 24 hour basis.

The primary proposal construction hours have been developed to:

- accommodate the remote location of worksites and the efficient use of the workforce
- reduce the duration of impact on individual receivers and minimise disruption to commuters and freight operators using existing operational lines
- avoid sleep disturbance by limiting work to daylight hours.

Out of hours works protocol

An out-of-hours work protocol would be developed to guide the assessment and management of works outside the primary proposal construction hours. The out of hours works protocol would:

- address the requirements of consent conditions allocated to the proposal relating to works outside of standard construction hours
- provide details on what would need to be considered to justify works being undertaken outside standard work hours
- describe the assessment process for out of hours works against relevant noise and vibration criteria
- provide specific mitigation measures for any residual impacts (in addition to general mitigation measures)
- describe the communication plan including notification arrangements for potentially impacted receivers
- detail how exceedances or non-conformances would be handled.

As detailed in section 2.2 of the Inland Rail Construction Noise and Vibration Management Framework some activities, including emergency works and delivery of oversized plant, can occur outside of the proposal hours without an out of hours work protocol.

6.1.2 Construction activities

The proposed track formation works and structure renewals are located between (569.240 km) and North Star (758.255 km). Temporary works include access into and out of the construction impact zone (CIZ). Table 6.1 lists the site establishment activities, Table 6.2 lists the main upgrading construction activities and Table 6.3 lists the post-construction activities. The construction hours are also provided in these tables to indicate the activities that are generally expected to occur during the primary proposal construction hours and the activities that are expected to occur during possessions.

Table 6.1 Site establishment activities

Activity	Works to be undertaken	Construction Hours
Site establishment	• Consult land owners/occupants where required • Install site environment management and traffic controls in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework and the CEMP • Establish site compounds and facilities • Clear vegetation • Erect temporary fencing • Establish site access roads where required • Utility relocations as required • Deliver and stockpile materials including rail, sleepers, ballast, culverts and structural fill	Primary proposal construction hours

Table 6.2 Main upgrading construction activities

Activity	Works to be undertaken	Construction Hours
Track upgrading - skim reconditioning/skim plus reconditioning	• Remove fastenings, rail and sleepers and stockpile to one side of the rail corridor • Trim and level the existing ballast bed and compact • (Skim plus reconditioning only) place new capping material on top of compacted ballast • Place concrete sleepers and rail track on prepared ballast bed and weld up rails • Place new ballast on top of the sleepers • Tamp and profile the ballast around the sleepers and line to a smooth alignment	Primary proposal construction hours During possessions when connecting stage sections
Track upgrading - track reconstruction	• Remove fastenings, rail and sleepers and stockpile to one side of the rail corridor • Excavate the existing ballast and earth formation • Place new earth and recycled ballast into the excavated area and compact • Place new ballast on top of the earth formation and compact • Place concrete sleepers and rail tracks on prepared ballast bed and weld up rails • Place new ballast on top of the sleepers • Tamp and profile the ballast around the sleepers and line to a smooth alignment	Primary proposal construction hours During possessions when connecting stage sections
Drainage construction	• Prepare survey control points for planned excavation of cess drains • Excavate earth material from the side of the existing track formation, and trim and compact base and sides of the drain • Form spoil mounds	Primary proposal construction hours
Level crossings – upgrading controls	• Remove existing controls, excavate to a suitable depth as required, place new formation material and ballast, replace track and surface panel as required • Install new controls • Provide standard road signs and road markings The pedestrian level crossing at Moree Station would be upgraded as follows: • Remove existing pedestrian crossing • Construct pedestrian footpath and pedestrian maze • Install relevant track circuitry for active crossing control • Line marking and installation of signage	Primary proposal construction hours

Activity	Works to be undertaken	Construction Hours
Level crossings-consolidating level crossings	• Complete road works and appropriate road signage to redirect traffic • Remove level crossing signs and road markings • Upgrade tracks	Primary proposal construction hours During possessions when connecting stage sections
Culvert replacement	• Remove existing culvert structure (either concrete or steel pipes) • Excavate to the required depth • Place and compact bedding material • Install substructure as required • Place pre-fabricated culvert structures on the new formation area and fasten together • Place ballast, sleepers and rail on top of the culverts and tamp and profile the ballast under and around the sleepers and weld up tracks	Primary proposal construction hours
Turnout construction	• Cut existing track, remove and dispose of existing turnout (at existing sidings only) • Undertake formation improvement works as required • Install ballast and rails • Install control mechanisms (points motor, power supply etc.) • Testing and commissioning	Primary proposal construction hours
Underbridge replacement	• Install substructure components including bored/ precast concrete/steel piles beneath the existing structure • During a track possession remove existing superstructure (including girders) and substructure components (abutments and piers) and store at nominated locations within the rail corridor • Install any new substructure precast concrete components on the new substructure/piles • Place new girders (concrete) on the new concrete substructures • Place ballast, sleepers and rail on top of the girders • Place ballast, sleepers and rail on top of the new bridge and tamp and profile the ballast under and around the sleepers and weld up tracks • Install guard rails as required	Primary proposal construction hours

Activity	Works to be undertaken	Construction Hours
Mehi River bridge, Gwydir River bridge and Croppa Creek bridge	• Install substructure components including bored/ precast concrete/steel piles alongside the existing underbridge • Install any new substructure precast concrete components on the new substructure/piles • Remove existing bridge superstructure and demolish the existing visible substructure as far as required • Place new girders (concrete) on the new concrete substructures • Construct new earth formation to connect between the existing track alignment and the new bridge alignment • Place ballast, sleepers and rail on top of the new bridge and tamp and profile the ballast under and around the sleepers and weld up tracks • Install guard rails as required Demolition of the existing bridges over the Mehi and Gwydir rivers and Croppa Creek would generally involve the following: • Establish a crane pad for an appropriately sized crane (probably at least one on each side of the river bank) • Demolish the steel superstructure (lifting sections onto trucks to be disposed of at nearby recycling facility) • Demolish the visible existing brick or concrete piers • Dispose of waste material offsite	Primary proposal construction hours
Crossing loop Constructions	• Excavate beside the existing track for the length of the crossing loop • Place and compact formation material • Place ballast, sleepers and rail tracks on top of the new formation • Install signal equipment and associated equipment • Testing and commissioning	Primary proposal construction hours
Rail Station Works	Station realignment works at Bellata, Gurley and Moree stations would be undertaken as follows: • Excavate and remove existing track and formation • Construct new track as described above • Weld and adjust track to interface back into existing track alignment	Primary proposal construction hours

Activity	Works to be undertaken	Construction Hours
Newell highway overbridge construction	Bridge works: • Construct cast-in-place piles at abutments and piers • Construct spill through abutments, column extensions and pier headstocks • Install pre-stressed concrete girders and construct reinforced concrete deck • Construct reinforced concrete approach slabs • Install expansion joints and steel traffic barrier railing • Install waterproof membrane and asphalt Embankment and pavement works • Place bulk general fill to construct approach embankments • As part of constructing approach embankments install a culvert suitable for the travelling stock route • Construct new pavement, including placing and compacting select fill, sub base and asphalt wearing surface • Tie into the existing Newell Highway Finishing and landscaping • Rehabilitate disturbed areas and landscape in accordance with the rehabilitation plan • Line marking and sign posting • Final site clean-up • Switch traffic • Demolish the existing bridge	Primary proposal construction hours

Activity	Works to be undertaken	Construction Hours
Jones Avenue overbridge construction	Bridge works • Construct cast-in-place piles at abutments and piers • Construct spill through abutment on eastern side and reinforced soil wall abutment on western side • Construct column extensions and pier headstocks • Install girders and construct reinforced concrete deck • Install pedestrian footpath • Construct reinforced concrete approach slabs • Install throw screens • Install expansion joints and steel traffic barrier railing • Install waterproof membrane and asphalt Embankment and pavement works • Place bulk general fill to construct approach embankments • Construct new pavement, including placing and compacting select fill, sub base and asphalt wearing surface • Construct pedestrian walkway down the side of the embankments to be *Disability Discrimination Act 1992* compliant • Tie into existing Jones Avenue Finishing and landscaping • Rehabilitate disturbed areas and landscape in accordance with the rehabilitation plan • Line marking and sign posting • Construct cul-de-sac at existing Joyce Avenue intersection with Jones Avenue • Relocate property accesses for affected properties • Final site clean-up	Primary proposal construction hours

Activity	Works to be undertaken	Construction Hours
Camurra bypass construction	• Excavate to a depth determined by geotechnical investigations and design • Place imported formation material into the excavated area and compact using vibratory compaction rollers • Place bottom ballast • Place skeletonised track consisting of fastenings, rail and sleepers on bottom ballast • Place ballast on top of the track • Tamp and profile the ballast around the sleepers and line to the design's vertical and horizontal alignment • Construct cess drainage • Construct tie ins to the existing alignment and install turnouts	Primary proposal construction hours
Earthworks	Earthworks would be required: • Where upgrades to the formation are required • To widen existing embankments and cuttings to meet design requirements • To construct the new crossing loops • To construct the Newell Highway and Jones Avenue overbridges and Mehi River, Gwydir River and Croppa Creek bridges • To construct the Camurra bypass • To construct culverts and underbridges Minor earthworks would also be required to construct the ancillary infrastructure and undertake the ancillary works associated with the proposal.	Primary proposal construction hours

Table 6.3 Post-construction activities

Activity	Works to be undertaken
Post possession (finishing works/reinstatement)	• Demobilise site compounds and facilities • Remove all materials, waste and redundant structures from the works sites • Forming, and stabilising of spoil mounds • Decommission all temporary work site signs • Remove temporary fencing • Establish permanent fencing • Decommission site access roads that are no longer required • Restoration of disturbed areas as required, including revegetation where required

6.1.3 Construction compounds

Minor compounds/storage areas are areas that would be used temporarily for the assembly of adjacent infrastructure such as culverts and turnouts. These compounds would be located within the rail corridor.

Larger compound sites would be established for general construction activities associated with each stage of work. For the purposes of the EIS, it is assumed that temporary compounds would be sited outside the existing rail corridor every 4.5 to five kilometres Indicative compound locations are provided in the EIS and would be confirmed by the contractor prior to works commencing.

Each larger compound site would contain:

- stockpiles
- track infrastructure laydown area
- bunded refuelling area
- fencing as required
- office area including parking, offices and ablutions
- hazardous material storage.

Activities undertaken at compound sites would include the following:

- site office operations
- delivery and stockpiling of various construction materials including rail, sleepers, ballast, culverts and structural fill
- movement of plant and equipment
- operation of mobile concrete batching plant
- maintenance of site environmental management controls.

Not all of the above activities would be undertaken at every compound site.

As locations for construction compounds have not yet been finalised, specific impacts could not be assessed on an individual basis. Instead the above compound activities have been accounted for within the modelled construction scenario S1 (site establishment) and impacts have been modelled for the entire alignment. Compounds would be located at least one kilometre from the nearest residence or other noise sensitive receiver where possible, and if required, compounds would be further assessed once locations are finalised.

Mobile concrete batching plant

In addition to the plant and equipment listed in Table 6.4 the use of mobile concrete batching plants, to supplement supply from existing readymix plants, is proposed for the following construction works:

- earthworks and drainage
- road overbridges and underbridges.

The size of the plant would be about 15 metres by 10 metres, and up to eight metres high. The plant and ancillary features would have a footprint of about 100 by 150 metres to account for a water tanker, concrete trailer and storage of materials including aggregate and sand. The location of the plant would be wholly within the proposal site.

The assessment results from the Site Establishment (S1) modelling scenario provides indicative assessment of impacts as they may be positioned at various locations along the alignment within compound sites. Batching plants would be further assessed once locations are finalised.

6.1.4 Haul roads

While a detailed haulage program has not yet been developed, it is expected that some of the proposal's components would be delivered by rail. Other transport would be undertaken by heavy vehicles using the Newell Highway, Gwydir Highway/Alice Street and Kamilaroi Highway and then local roads and existing access roads along the rail corridor.

It is likely that rail components, including sleepers, ballast, and track, would be transported to the work areas via dedicated rail trains; while pre-fabricated concrete units, fill and equipment deliveries would most likely be via road from suppliers or town centres.

6.1.5 Construction noise assessment methodology

The methodology for the construction noise and vibration assessment included:

- The rating background levels (RBL) for the proposal were calculated from the baseline noise monitoring data. The RBLs were used to establish the construction noise management levels in accordance with the ICNG.
- A list of likely construction activities and machinery was provided. Representative sound power levels for the selected equipment were obtained from the TfNSW CNS and AS 2436 – 2010 *Guide to noise and vibration control on construction, demolition and maintenance sites* and British Standard *BS 5228.1 Code of Practice for noise and vibration control on construction and open sites: Part 1 Noise.*
- Noise propagation calculations were carried out for the anticipated equipment.
- Vibration from construction plant and equipment was predicted and assessed with consideration to Assessing Vibration: A Technical Guideline and German Standard DIN 4150, Part 3: Structural Vibration in Buildings: Effects on Structures.
- Where noise and vibration levels were predicted to exceed the construction noise management levels, appropriate construction noise and vibration mitigation measures were provided to reduce potential impacts.

6.1.6 Construction plant and equipment

Noise emissions from construction activities have been assessed at identified sensitive receivers in the study area during the primary proposal construction hours and outside the primary proposal construction hours. A quantitative assessment has been carried out with consideration to the ICNG.

Plant and equipment to be used to construct the proposal would be confirmed by the construction contractor once appointed. At this stage of development, the plant and equipment have been selected using professional judgement. Construction equipment will move about the project site and will operate at maximum power for only brief periods. At other times, noise levels will be reduced as the machinery may not require full power or will operate in a different location. It is highly unlikely that all assumed construction equipment would be operating at maximum power simultaneously. However, in accordance with the ICNG prediction procedure, the two loudest construction plant are assumed to operate concurrently and used to predict the expected construction noise levels. A number of these assumptions therefore provide a degree of conservatism in the predicted results.

The predicted construction sound power levels are shown in Table 6.4 for the construction activities and the plant and equipment expected to be used for the proposal.

Table 6.4 Construction activities and corresponding equipment

Modelling scenario	General tasks	Representative equipment	Equipment individual sound power level, LWdB(A)	Adopted activity sound power level, LW dB(A)	Location
S1	Site establishment works	Hand tools	102	118	Full alignment
		Road truck	108		
		Excavator	110		
		Water cart	107		
		Grader	110		
		Dump truck	117		
S2	Track upgrading - skim reconditioning/skim plus reconditioning	Dump truck	117	118	Full alignment
		Rail saw	107		
		Vibratory roller	113		
		Front end loader	111		
		Grader	110		
		Tamper and regulator	112		
S3	Track upgrading –track reconstruction	Dump truck	117	118	Full alignment
		Rail saw	107		
		Vibratory roller	113		
		Front end loader	111		
		Grader	110		
		Tamper and regulator	112		
S4	Drainage construction	Excavator	110	118	Full alignment
		Dump truck	117		
		Franna crane	98		
		Vibratory roller	113		
		Batching Plant (Concrete)	113		

Modelling scenario	General tasks	Representative equipment	Equipment individual sound power level, LWdB(A)	Adopted activity sound power level, LW dB(A)	Location
S5	Level crossings - upgrade to signalised level crossing	Asphalt paver	108	115	Signalised level crossings
		Franna crane	98		
		Excavator	110		
		Vibratory roller	113		
		Hand tools	102		
S6	Upgrade passive protection (Give Way Signs to Stop Signs)	Hand tools	102	109	Level crossings
		Road truck	108		
S7	Level Crossing Consolidation	Hand tools	102	116	Level crossings for removal
		Excavator	110		
		Front end loader	111		
		Vibratory roller	113		
		Road truck	108		
		Tamper and regulator	112		
		Franna crane	98		
S8	Culvert replacement	Crane	110	118	Culverts
		Excavator	110		
		Dump truck	117		
		Road truck	108		
		Vibratory roller	113		
		Tamper and regulator	112		
		Batching Plant (Concrete)	113		
S9	Underbridge replacement	Piling (bored)	111	116	Underbridges
		Drilling rig	111		
		Crane	110		
		Excavator	110		

Modelling scenario	General tasks	Representative equipment	Equipment individual sound power level, LWdB(A)	Adopted activity sound power level, LW dB(A)	Location
		Road truck	108		
		Vibratory roller	113		
		Tamper and regulator	112		
		Concrete truck	112		
		Batching Plant (Concrete)	113		
S10	Mehi River bridge, Gwydir River bridge and Croppa Creek bridge	Piling (bored)	111	116	Mehi River bridge, Gwydir River bridge and Croppa Creek bridge
		Drilling rig	111		
		Crane	110		
		Excavator	110		
		Road truck	108		
		Vibratory roller	113		
		Tamper and regulator	112		
		Concrete truck	112		
		Batching Plant (Concrete)	113		
S11	Crossing loop Constructions	Excavator	110	118	Crossing loops
		Dump truck	117		
		Vibratory roller	113		
		Front end loader	111		
S12	Rail station works	Dump truck	117	118	Rail Stations
		Vibratory roller	113		
		Excavator	110		
		Tamper and regulator	112		
S13	Overbridge construction- Newell Highway	Piling (bored)	111	117	Newell Highway
		Compactor	113		
		Vibratory roller	113		

Modelling scenario	General tasks	Representative equipment	Equipment individual sound power level, LWdB(A)	Adopted activity sound power level, LW dB(A)	Location
		Concrete truck	112		
		Batching Plant (Concrete)	113		
		Drilling rig	111		
		Pavement laying machine	114		
S14	Overbridge construction- Jones Avenue	Piling (bored)	111	117	Jones Avenue
		Compactor	113		
		Vibratory roller	113		
		Concrete truck	112		
		Batching Plant (Concrete)	113		
		Drilling rig	111		
		Pavement laying machine	114		
S15	Camurra bypass construction	Dump truck	117	118	Camurra bypass
		Rail saw	107		
		Vibratory roller	113		
		Front end loader	111		
		Grader	110		
		Tamper and regulator	112		
		Batching Plant (Concrete)	113		
S16	Post possession works	Road truck	108	113	Full alignment
		Hand tools	102		
		Crane	110		
		Excavator	110		

6.1.7 Construction noise prediction method

The noise emissions generated by construction activities have been determined using a computer software model Computer Aided Noise Abatement (CadnaA v4.6) to predict noise levels at the nearest sensitive receivers.

CadnaA is a computer program for the calculation, assessment and prognosis of noise propagation. CadnaA calculates sound propagation according to ISO 9613-2, "*Acoustics – Attenuation of sound during propagation outdoors*". The ISO 9613-2 algorithm also takes into account the presence of a well-developed moderate ground based temperature inversion, such as commonly occurs on clear, calm nights or 'downwind' conditions which are favourable to sound propagation.

Ground absorption, reflection, terrain and relevant shielding objects are taken into account in the calculations.

Model configuration

The noise model inputs and assumptions for the construction assessment are provided in Table 6.5.

Table 6.5 Construction noise modelling assumptions

Modelling component	Assumption
Prediction algorithm	*ISO 9613 – 2 Acoustics – Attenuation of sound during propagation outdoors*
Modelling period	Typical worst case 15 minute period of operation where the two loudest items of equipment are running at full power
Meteorology	ISO 9613 considers the presence of a well-developed moderate ground based temperature inversion, such as commonly occurs on clear, calm nights or 'downwind' conditions which are favourable to sound propagation
Ground absorption coefficient	G = 1.0 for rural areas
Atmospheric absorption	Based on an average temperature of 10 °C and an average humidity of 70 %
Receiver heights	1.5 m above building ground level (ground floor)
Operating intensity	Construction scenario sound power levels have been adopted

The magnitude of the noise levels associated with construction activities would be dependent upon a number of factors:

- the intensity and location of construction activities
- the type of equipment used
- existing local noise sources
- intervening terrain
- the prevailing weather conditions.

6.2 Construction noise level prediction

Sound power levels presented in Table 6.4 were grouped into activity based noise levels for input into the noise model. Using the sound power level from the two loudest pieces of equipment operating simultaneously is considered a conservative approach. The predicted noise management level exceedances for each activity scenario are shown in Table 6.6 while the numbers of receivers exceeding each management level are presented in Table 6.7. The number of exceedances for non-residential receivers are presented in Table 6.8.

Table 6.6 Activity-based construction noise management level exceedances for residential receivers

Construction noise management level (CNML)	CNML dBA $L_{Aeq\ 15min}$	Maximum predicted exceedance of construction noise management level										
		Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7: Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13: Newell Highway Overbridge	S14: Jones Avenue Overbridge	S15: Camurra Bypass	S16: Post possession
Highly Affected	75	3	-	-	-	-	-	-	-	1	-	-
Proposal specific CNML (all periods)	35	43	22	12	9	39	24	27	13	41	10	38

Table 6.7 Activity-based construction noise management level, number of exceedances for residential receivers

Construction noise management level (CNML)	CNML dBA $L_{Aeq\ 15min}$	Number of exceedances of construction noise management level										
		Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7: Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13: Newell Highway Overbridge	S14: Jones Avenue Overbridge	S15: Camurra Bypass	S16: Post possession
Highly Affected	75	3	0	0	0	0	0	0	0	1	0	0
Proposal specific CNML (all periods)	35	1574	252	22	1	653	682	685	2	1098	3	834

Table 6.8 Construction activity, number of exceedances - Non-residential receivers

Land Use	Number of receivers	Number of exceedances of construction noise management level										
		Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7: Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13: Newell Highway Overbridge	S14: Jones Avenue Overbridge	S15: Camurra Bypass	S16: Post possession
Place of Worship	8	2	0	0	0	0	0	2	0	0	0	2
Hospital Ward	1	0	0	0	0	0	0	0	0	0	0	0
Schools	9	0	0	0	0	0	0	0	0	0	0	0
Recreational-Passive	16	1	0	0	0	0	0	0	0	0	0	1
Recreational-Active	19	1	0	0	0	0	0	1	0	0	0	1

6.2.1 Impacts of construction activities for the key proposal features

Based on the results listed in Table 6.6, Table 6.7 and Table 6.8, the findings of the construction noise assessment in relation to the key features of the proposal for residential receivers are discussed below.

Track works

Activities that encompass the entire proposal site (i.e. the full alignment), such as pre possession works (S1), skim track reconditioning (S2), full depth reconditioning (S3), and drainage construction (S4), are predicted to exceed the construction noise management levels:

- in North Star at 37 residential receivers with impacts up to 27 dB and one educational facility up to 5 dB
- between Moree and North Star at 70 residential receivers with impacts up to 29 dB
- in Moree at 922 residential receivers with impacts up to 43 dB
- between Bellata and Moree at 48 residential receivers with impacts up to 22 dB
- in Bellata at 71 residential receivers with impacts up to 23 dB and one recreational area by up to 6 dB
- between Narrabri and Bellata at 38 residential receivers with impacts up to 24 dB
- in Narrabri at 388 residential receivers with impacts up to 20 dB.

Construction would progress along the route, therefore, noise impacts would be experienced for a relatively short time at most locations.

Level crossing upgrades and consolidation

Construction activities of crossing signalisation (S5), give way crossing upgrades (S6), and level crossing consolidation (S7) are predicted to exceed the construction noise management levels:

- in North Star at 22 residential receivers with impacts up to 18 dB
- between Moree and North Star at 9 residential receivers with impacts up to 9 dB
- in Moree at 205 residential receivers with impacts up to 22 dB and one recreational receiver by up to 1 dB
- between Bellata and Moree at 24 residential receivers with impacts up to 17 dB
- in Bellata at 11 residential receivers with impacts up to 11 dB and at one recreational receiver by up to 7 dB
- between Narrabri and Bellata at four residential receivers with impacts up to 12 dB
- no impacts are predicted in Narrabri.

Culvert works

Replacement and upgrade of existing culverts and bridges (culvert works, S8) are predicted to exceed the construction noise management levels:

- in North Star at 30 residential receivers with impacts up to 22 dB
- between Moree and North Star at 22 residential receivers with impacts up to 22 dB

- in Moree at 489 residential receivers with impacts up to 39 dB
- between Bellata and Moree at 22 residential receivers with impacts up to 8 dB
- in Bellata at 65 residential receivers with impacts up to 16 dB
- between Narrabri and Bellata at 25 residential receivers with impacts up to 19 dB
- no impacts are predicted in Narrabri.

Bridge works

Construction of bridges (S09, S10) are predicted to exceed the construction noise management levels:

- between Moree and North Star at 37 residential receivers with impacts up to 15 dB
- in Moree at 639 residential receivers with impacts up to 24 dB
- between Bellata and Moree at two residential receivers with impacts up to 4 dB
- no impacts are predicted in Bellata or Narrabri
- between Narrabri and Bellata at four residential receivers with impacts up to 11 dB
- no impacts are predicted in North Star.

Construction of the Mehi and Gwydir river bridges would take about six to eight months each to complete. Construction of the Croppa Creek bridge would take about seven months to complete.

Crossing loops

Construction of crossing loops (S11) is predicted to exceed the construction noise management levels:

- in North Star at 36 residential receivers with impacts up to 22 dB
- between Moree and North Star at 24 residential receivers with impacts up to 24 dB
- in Moree at 517 residential receivers with impacts up to 27 dB
- between Bellata and Moree at 29 residential receivers with impacts up to 23 dB
- in Bellata at 69 residential receivers with impacts up to 21 dB
- between Narrabri and Bellata at 10 residential receivers with impacts up to 18 dB
- no impacts are predicted in Narrabri.

Newell highway overbridge

Construction of the Newell highway overbridge (S13) is predicted to exceed the construction noise management levels:

- between Bellata and Moree at two residential receivers with impacts up to 13 dB
- no impacts are predicted for other receiver areas.

Construction of the Newell highway overbridge would take about 10 months to complete.

Jones avenue overbridge

Construction of the Jones Avenue overbridge (S14) is predicted to exceed the construction noise management levels:

- in Moree at 1098 residential receivers with impacts up to 41 dB
- no impacts are predicted for other receiver areas.

Construction of the Jones Avenue overbridge would take about six to eight months to complete.

Camurra Bypass

Construction of the Camurra bypass (S15) is predicted to exceed the construction noise management levels:

- between Moree and North Star at three residential receivers with impacts up to 10 dB
- no impacts are predicted for other receiver areas.

6.2.2 Impacts of construction activities in relation to working hours

Works during primary proposal construction hours

The assessment indicates that:

- The highly affected level of 75 dB(A) L_{Aeq} is predicted to be exceeded at three receivers.
- Rail line redevelopment construction activities are predicted to exceed the noise management level at receivers nearest to the construction footprint. Impacted receivers are within about 700 metres of the works and includes up to 1574 identified noise sensitive residential receiver locations. Noise levels are predicted to exceed the proposal specific construction management level by up to 43 dB.
- Newell highway overbridge construction is predicted to exceed the proposal specific construction management level by up to 13 dB at two residential receivers.
- Jones Avenue overbridge construction is predicted to exceed the proposal specific construction management level by up to 41 dB at 1098 residential receivers.
- Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at non-residential sensitive receivers including educational, child care and hospital facilities. Construction noise management levels are applicable as an internal level only when the facilities are in use.
- Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at recreational areas including bushland areas, parks and sporting facilities when these areas are in use.

In accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework the noise and vibration mitigation measures detailed in Section 7 would be implemented where feasible and reasonable to protect the environment and reduce the potential for noise exceedances at receivers. All potentially affected receivers should be informed of the nature of the works, expected noise levels, duration of works and a method of contact.

6.3 Construction traffic noise

It is expected that vehicles will access working sites via arterial, sub-arterial and local roads.

Limited existing traffic volume data is available for most roads in and around the study area, although in most cases, volumes are expected to range between 50 vehicles per day for lower order roads, up to 9,000 vehicles per day on some of the more significant roads radiating from Moree.

The proposed works will temporarily increase truck movements on major roads during construction. Predictions of the change in traffic noise level due to the addition of construction traffic were undertaken using the United Kingdom Department of Transport's 'Calculation of Road Traffic Noise' CoRTN algorithm.

The exact number of construction vehicles will vary at different stages of the construction works and will be confirmed when the construction contractor is appointed.

Construction of the proposal would result in temporary impacts to traffic and access within the study area, and an increase in both heavy and light vehicle movements on the local road network. The most significant impacts will be during the days of delivery where heavy vehicle volumes on the roads between Narrabri and North Star may increase by up to 234 vehicles per day.

However, it is estimated that during the busiest construction period, there will be approximately 404 vehicle movements, including 234 heavy vehicle movements and this peak volume has been used to provide a conservative analysis of the likely level of noise levels.

The traffic information and expected noise level increase from additional traffic on major roads in the area are summarised in Table 6.9. It is anticipated that the contribution of additional construction traffic will have a minimal impact on the noise levels along the highway. The increase in noise levels due to construction traffic is estimated to be less than 2 dB which will not be noticeable at receivers.

Table 6.9 Construction traffic noise increase

Road	Location	AADT	Existing heavy vehicle percentage	Approximate noise level increase (dBA)
Newell Highway/Moree Bypass	North of Narrabri	3,100	39	0.7
Newell Highway/Moree Bypass	South of Moree (between Bellata and Gurley)	2,400	45	0.8
Newell Highway/Moree Bypass	North of Moree (between Croppa Moree Road and Buckie Road)	2,000	46	0.9
Alice St/Gwydir Highway	Moree (west of the Moree bypass)	9,000	-[5]	0.7
Bullus Drive		2,800	8%[6]	1.5

[5] Heavy vehicle percentage not available

[6] 8% during afternoon peak

6.4 Sleep disturbance impacts

The *Interim Construction Noise Guideline* (DECC, 2009) states that '*where construction works are planned to extend over more than two consecutive nights, the impact assessment should cover the maximum noise level from the proposed works*'.

Typically, $L_{A1(1minute)}$ or, L_{Amax} noise levels are around 5 dB to 10 dB greater than the $L_{Aeq(15minute)}$ noise levels. Typically, a standard window will provide a 10 dB reduction when partially open and a 20 dB reduction when closed. To be conservative, it is assumed that windows would be kept partially open during night-time construction activities.

The *Environmental Criteria for Road Traffic Noise* (EPA, 1999) acknowledges that based on the current level of understanding, no absolute noise level criteria have been established that correlate to an acceptable level of sleep disturbance. However, the RNP suggests that internal noise levels below 50 dB(A) L_{Amax} to 55 dB(A) L_{Amax} are unlikely to cause awakening reactions and one or two events per night, with internal noise levels of 65 dB(A) L_{Amax} to 70 dB(A) L_{Amax} (inside dwellings) are not likely to significantly affect health and wellbeing.

There is the potential for sleep disturbance impacts, with consideration to the RNP sleep disturbance levels, if construction activities occur during the night-time period. Table 6.10 lists each construction scenario and estimates the number of receivers where sleep disturbance could result.

Table 6.10 Sleep disturbance, number of exceedances

L_{AMax} Internal Level[7]	Number of predicted exceedances of sleep disturbance criteria										
	Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7: Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13: Newell Highway Overbridge	S14: Jones Avenue Overbridge	S15: Camurra Bypass	S16: Post possession
55 dB(A)	75	2	0	0	11	8	23	0	43	0	23

Given the potential for sleep disturbance impacts, construction activities likely to generate the highest levels of noise should be scheduled to occur at the beginning of the shift (before 11 pm) to minimise the potential for sleep disturbance. All workers should be briefed on the need to minimise noise as a result of their activities.

The noise and vibration mitigation measures detailed in section 7 would be implemented to manage potential sleep disturbance impacts during construction.

[7] 55 dB(A) internal level from the RNP. L_{AMax} levels were estimated as 10 dB greater than the LAeq(15minute) levels and external noise levels were assessed as 10 dB above internal levels.

6.5 Construction vibration assessment

6.5.1 Potential impacts of individual equipment

Energy from equipment is transmitted into the ground and transformed into vibration, which attenuates with distance. The magnitude and attenuation of ground vibration is dependent on the following:

- the efficiency of the energy transfer mechanism of the equipment (i.e. impulsive, reciprocating, rolling or rotating equipment)
- the frequency content
- the impact medium stiffness
- the type of wave (surface or body)
- the ground type and topography.

Table 6.11 outlines typical vibration levels for different plant activities sourced from the RMS *Environmental Noise Management Manual* (ENMM) (2001), British Standard *BS 5228.1 Code of Practice for noise and vibration control on construction and open sites: Part 2 Vibration* and the *Construction Noise Strategy* (Transport for NSW 2012).

As stated in the ENMM (RMS 2001), it can be assumed that the vibration level of a source is inversely proportional to the distance source-receiver. Field variations show that the distance relationship generally varies between $d^{-0.8}$ and $d^{-1.6}$, rather than d^{-1}.

Table 6.11 Typical vibration levels for construction equipment

Item	PPV at 10 m (mm/s)
Roller	5 - 6
15 tonne roller	7 - 8
7 tonne compactor	5 - 7
Dozer	2.5 - 4
Backhoe	1
Excavators, Scrapers, Graders etc.	2.5[1]
Piling (impact)	30
Piling (vibratory)[2]	16.8
Piling (bored)[2]	7.4

Note 1: Based on levels derived at 8 m from: Tyan, A. E. *Ground Vibrations. Damaging effects to Buildings*. Road Research Board 1973
Note 2: Based on levels derived from BS5228-2. *Bored piling through stones or other obstruction*. Vibratory piling based on relationship provided in Table E.1

Based on the typical vibration levels listed in Table 6.11, the potential vibration levels due to the construction works at various distances are shown in Table 6.12.

Table 6.12 Predicted construction vibration levels

Vibration source	Distance to Source/Peak Particle Velocity (mm/s)			
	10 m	20 m	50 m	100 m
Roller	6.0	3.4	1.7	1.0
15 tonne vibratory roller	8.0	4.6	2.2	1.3
7 tonne compactor	6.0	3.4	1.7	1.0

Vibration source	Distance to Source/Peak Particle Velocity (mm/s)			
	10 m	20 m	50 m	100 m
Dozer	4.0	2.3	1.1	0.6
Backhoe	1.0	0.6	0.3	0.2
Excavator	2.1	1.2	0.6	0.3
Piling (impact)	30	17.2	8.3	4.8
Piling (vibratory)[1]	16.8	7.3	2.4	1.1
Piling (bored)[1]	7.4	4.3	2.1	1.2

Note 1: Based on levels derived from BS5228-2. *Bored piling through stones or other obstruction*. Vibratory piling based on relationship provided in Table E.1

Construction vibration buffer distances

Predicted safe working buffer distances to comply with the human comfort, cosmetic damage, standard dwelling and heritage building structural damage criteria were calculated for typical vibration values and listed in Table 6.12. This table is based on advice given in British Standard BS 7385:1993 – *Evaluation and measurement of vibration in buildings.*

Vibration may be amplified in multi-level buildings through the structure to the upper floors. A doubling of the buffer distances provided in Table 6.13 would provide a conservative allowance for this possible effect. The number of receivers within these buffer zones are provided in Table 6.14. For the purposes of this assessment, non-residential receiver structures such as educational facilities, churches and medical facilities are assumed to have equivalent construction to standard dwellings. Passive and active recreational receivers have also been included as these may include facilities building, club houses or buildings for equipment storage.

Table 6.13 Vibration buffer distances

Activity	Human comfort BS 5228-2 criteria (1.0mm/s)	Structural damage	
		Heritage building/structure DIN 4150-3 criteria (3.0mm/s)	Standard dwellings DIN 4150-3 criteria (5.0mm/s)
General construction activities			
Roller	90 m	24 m	13 m
15 tonne vibratory roller	140 m	35 m	18 m
7 tonne compactor	90 m	24 m	13 m
Dozer	60 m	15 m	8 m
Backhoe	10 m	3 m	2 m
Excavator	25 m	7 m	4 m
Piling (Bridges)			
Piling (impact)	700 m	180 m	100 m
Piling (vibratory)[2]	110 m	50 m	30 m
Piling (bored)[2]	120 m	35 m	17 m

Note 1: Based on advice given in British Standard BS 7385:1993 – Evaluation and measurement of vibration in buildings.
Note 2: Based on levels derived from BS 5228-2. *Bored piling through stones or other obstruction*. Vibratory piling based on relationship provided in Table E.1.

Table 6.14 Construction vibration activities- number of potentially impacted receivers

Activity	Human comfort BS 5228-2 criteria	Heritage building/structure DIN 4150-3 criteria	Standard dwellings DIN 4150-3 criteria
General construction activities			
Roller	144	2	13
15 tonne vibratory roller	219	2	20
7 tonne compactor	144	2	13
Dozer	79	2	6
Backhoe	7	1	4
Excavator	28	1	5
Piling (Bridges)			
Piling (impact)	820	0	45
Piling (vibratory)	50	0	5
Piling (bored)	56	0	1

General construction activities

With consideration to structural damage vibration impacts from general construction activities, the expected magnitude of ground vibration should not be sufficient to cause damage if the equipment operates at distances greater than 18 metres from buildings of equivalent standard dwelling construction or 35 metres from heritage structures.

The number of potentially impacted receivers are provided in Table 6.14 for the anticipated vibration generating equipment. During general construction activities, vibration is predicted to be perceptible at up to 219 sensitive receivers that are within 140 metres of the proposal. These receivers are generally spread along the length of the proposal, but are also in greater density within Moree, Bellata, Edgeroi, Gurley, Croppa Creek and North Star.

Twenty structures have been identified within 18 metres of potential general construction activities and may receive vibration levels exceeding the 5 mm/s structural damage criteria. These structures are mostly located within Bellata and Moree, with two also situated adjacent to the proposal between Moree and North Star.

The noise and vibration mitigation measures detailed in Section 7 should be implemented to reduce the potential for construction vibration impacts to occur.

Piling

Vibration impacts due to piling activities associated with bridge construction works have the potential to exceed structural vibration values for standard dwellings at distances from the activity of 100 metres for impact piling, 30 metres for vibratory piling and 17 metres for bored piling.

About 820 receivers may receive perceptible vibration where impact piling is used. These receivers are mostly within Moree and are near to either the Mehi River rail bridge or the Jones Avenue road over bridge.

In the event that these buffer distances are not possible to achieve, other methods may be investigated such as CFA piling, press-in hydraulic piling or jacked-in piling. These methods generally exhibit much lower vibration levels compared to impact, vibratory and bored piling.

6.5.2 Construction vibration impacts on heritage structures

As noted in Table 6.13, construction vibration impacts for heritage items may extend up to 180 metres from the proposal site. Heritage listed items located within this distance have been identified as part of the heritage report undertaken for the EIS (refer Umwelt, 2017, *Australian Rail Track Corporation Inland Rail – Narrabri to North Star Non-Aboriginal Heritage Impact Statement*) and are provided in Table 6.15 for comparison to the structural damage buffer distances stated in Table 6.13.

Table 6.15 Heritage listed items

Item name	Location	Distance to corridor/track
Mehi River Bridge	Moree – Mungindi Line 666.340 kilometres from Sydney	On alignment
Moree Railway Station	As listed in LEP: Gosport Street, Moree Adjacent to Lot 158, DP 1157018 As listed on S170: Morton Street	On alignment/Immediately adjacent
Gwydir River Bridge	Camurra – Mungindi Line 676.220 kilometres from Sydney	On alignment
Victoria Hotel	339 Gosport Street, Moree	Approximately 100 metres to west
Moree Baths and swimming pool	Corner of Anne and Warialda Street, Moree	Approximately 100 metres to west
Moree Showground	Warialda St, Moree	Approximately 100 metres to northwest (Pavilion mentioned in listing, approximately 270 metres to the northwest)
Gwydir River Underbridge, Camurra	Camurra – Mungindi Line 676.220 kilometres from Sydney	Approximately 180 metres west of alignment (different bridge to above)
A.B. Meppem and Co.	30 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east
Bellata Police Station and Official Residence	24 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east
Oldhams Smallgoods	26 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east
Post Office	28 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east
LS Rowe Stock and Station Agents	40 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east
Nandewar Hotel	Lot 1 Railway Pde (Newell Highway), Bellata	Approximately 80 metres to east

The non-Aboriginal heritage assessment also identified potential items with potential heritage significance within and in the vicinity of the proposal site. Potential heritage items that may be impacted by vibration include:

- the rail line (including underbridges and associated rail infrastructure)
- 13 former railway station sites and one existing station (Bellata) located within the proposal site

- one former and one existing station (Camurra and Narrabri respectively) located close to the proposal site
- Edgeroi Woolshed, located adjacent to the rail line near the site of the former Woolenget Station, about 10 metres from the fence marking the edge of the rail corridor.

General construction activities

Heritage structures in the proposal area include station buildings, sidings and silos. Many of these structures are directly adjacent to the track alignment. With consideration to structural damage, vibration impacts for general construction activities, the expected magnitude of ground vibration should not be sufficient to cause damage if the equipment operates at distances greater than 35 metres from heritage buildings and structures. Moree Station and some potential heritage items are located within this buffer distance. The Mehi River, Gwydir River and Croppa Creek bridges are also located with this buffer distance, but would be removed as part of the proposal.

If vibration generating activities (non-piling) are being undertaken within 35 m of the heritage listed structures, alternative work methods will be implemented so the vibration impacts are reduced to acceptable levels. Prior to commencement of construction, a dilapidation survey of the nearby heritage structures (within 35 m of the works) would be undertaken. Measured vibration levels by GHD on other projects in the Hunter Valley during removal and excavation of old track indicated a maximum recorded PVS of 2.87 millimetres per second. Tamping and ballast regulation generated a maximum PVS of 0.98 millimetres per second at the floor of the station building. These vibration velocities are within the DIN 4150-3 criteria for heritage structures of 3 millimetres per second. As identical works are proposed to be undertaken for the proposal, vibration damage for adjacent station structures is not anticipated, however it is recommended that the mitigation measures detailed in Section 7 be considered and implemented where feasible and reasonable.

Piling

Vibration impacts due to piling activities have the potential to exceed structural vibration criteria for heritage structures at distances from the activity of 180 metres for impact piling, 50 metres for vibratory piling and 35 metres for bored piling.

In the event that these buffer distances are not achievable, other methods may be investigated such as CFA piling, press-in hydraulic piling or jacked-in piling. These methods generally exhibit much lower vibration levels compared to impact, vibratory and bored piling. Prior to commencement of construction, a dilapidation survey of the nearby heritage structures (within the relevant piling buffer distance) would be undertaken.

6.5.3 Human comfort impacts

Humans are capable of detecting vibration at levels well below those causing risk of damage to buildings. The degree of perception for humans and sensitive areas are suggested by the vibration level categories given in British Standard BS 5228:2009 and shown in Table 6.12 and Table 6.13.

Based on the conservative estimates detailed in Section 6.5.1, it is possible that construction vibration from general construction work and at crossing loops may be perceptible at distances of up to 140 metres from the works. There are 208 residential receivers identified within this buffer distance. Therefore it is recommended that the mitigation measures detailed in Section 7 be considered and implemented where feasible and reasonable.

Piling works are required for bridge construction. About 820 receivers may receive perceptible vibration where impact piling is used. These receivers are within 700 metres of piling locations. They are located mostly within Moree and are near to either the Mehi River rail bridge or the Jones Avenue road overbridge.

Vibration impacts due to boring of the cast in-situ piles has the potential to impact receivers up to 120 metres from the work area. There are 56 receivers located within this buffer distance from proposed piling locations.

7. Mitigation measures

7.1 Approach to mitigation

An operational noise and vibration review (ONVR) would be prepared to detail how the predicted operation impacts would be mitigated.

A Construction Environment Management Plan (CEMP) and activity specific Construction Noise and Vibration Impact Statements (CNVIS) would be developed based on the requirements and methodologies presented in the Inland Rail NSW Construction Noise and Vibration Management Framework. These documents provide the approach to managing noise and vibration during construction.

The proposal would be designed, constructed, and operated in accordance with the CEMP, the Inland Rail NSW Construction Noise and Vibration Management Framework, the Operational Noise and Vibration Review, the conditions of approval for the proposal, and the environment protection licence for Inland Rail.

7.2 Operational noise and vibration

7.2.1 Noise control strategy

A noise and vibration impact assessment has been completed on the basis of the existing design and other information available for the proposal. While the assessment has been limited due to the preliminary nature and availability of design information, exceedances of the RING criteria are predicted and mitigation measures are therefore necessary to reduce the potential for impacts.

Given the preliminary nature of information about the proposal, it is not possible to be definitive about the mitigation measures required. However, in broad terms there are three main strategies for reducing operational noise and vibration impacts:

- controlling noise and vibration at the source
- controlling noise and vibration along the transmission pathway
- controlling noise and vibration at the receiver.

The RING recommends that these control strategies are considered in this order so that all measures to reduce noise are exhausted before localised ‘at source’ mitigation measures are considered.

The RING also requires that feasible and reasonable mitigation measures are implemented. A feasible mitigation measure is a measure that can be engineered and is practical to build, given constraints such as safety, maintenance and reliability requirements. It may also include options such as amending operational practices (e.g. reviewing idling times or speeds) to achieve noise reduction.

Selecting reasonable measures from those that are feasible involves judging whether the overall noise benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the mitigation measure. To make such a judgement, the following aspects are typically considered:

- noise impacts:
  - existing and future levels, and projected changes in noise levels
  - level of amenity before the proposal, e.g. the number of people affected or annoyed
  - any noise performance criteria for the development, e.g. internal noise levels for certain rooms
  - the amount by which the trigger levels are exceeded.
- noise mitigation benefits:
  - the amount of noise reduction expected, including the cumulative effectiveness of proposed mitigation measures
  - the number of people protected.
- cost-effectiveness of noise mitigation:
  - the total cost of mitigation measures, taking into account the physical attributes of the site, e.g. topography, geology, and the cost variation to the proposal given the expected benefit
  - noise mitigation costs compared with total proposal costs, taking into account capital and maintenance costs
  - ongoing operational and maintenance cost borne by the community, e.g. running air conditioners or mechanical ventilation.
- community views:
  - aesthetic and other impacts of noise mitigation measures with consideration to the affected land users
  - consider the views of all affected land users, not just those making representations, through early community consultation
  - consider noise mitigation measures that have majority support from the affected community.

Based on these considerations, the aim of the mitigation strategy is to strike a balance between the proposal's benefits for the wider community and the costs and benefits of mitigation measures.

Identification of specific noise abatement measures is not possible during this stage of the project, however a range of abatement measures have been identified to reduce noise levels to below the RING trigger levels. Potential noise control options are listed in Table 7.1. The effectiveness and appropriateness of these measures will be considered following detailed design and community consultation.

Table 7.1 Potential noise control options

Noise control strategy	Mitigation option	Description
Controlling noise at source	Rail dampers	Rail dampers are preformed elements made of an elastic material containing steel strips. Dampers are placed on the sides of the rail, dampening the vibration of the rails as the train passes over them and thereby reducing noise emissions. Noise reduction in the order of 2 to 5dBA is possible, depending on the rail roughness (the smoother the rail, the less attenuation). However, this is only valid when the wheel-rail interface is the main noise source. In the context of coal or freight train pass-bys, rail dampers would not attenuate L_{Amax} levels, which are normally dominated by locomotive noise, but would reduce wagon noise. This option could be considered for the proposal where small noise reductions are needed.
	Track lubrication	Trackside lubrication strategies can be employed to improve the performance of the rail track and reduce noise generated, particularly from rail squeal and flanging on tight curves. These strategies are as follows: • Improvements in grease transfer by placing trackside lubricators on moderate curves in advance of the sharp curves which are the main target • Improvements in the lubricant used by choosing a high performance product Track lubrication improves the rail/track interface and can reduce/eliminate curve squeal and flanging at affected locations. This can result in a substantial noise reduction in L_{Aeq}, L_{Amax} levels. Note that there are very few tight radius curves in the proposal, so track lubrication would have limited application.
Controlling noise on the transmission pathway	Noise barriers	Noise barriers are typically constructed on the edge of the rail corridor to shield sensitive receivers from rail vehicles. Depending on the situation, noise barriers can achieve 10 to 15 dBA attenuation. Noise barriers often result in significant costs and visual impacts. They are generally considered preferable where noise attenuation at a larger number of receivers is required and typically not cost-effective for small number of receivers.

Noise control strategy	Mitigation option	Description
	Earth mounds	Earth mounds are generally constructed at a distance from the near rail to shield sensitive receivers from rail vehicles. Earth mounds can provide effective mitigation of noise if sufficient spoil and space is available. However, earth mounds generally provide less attenuation of noise than noise barriers and require a larger area also. During detailed design the potential to utilise the proposed spoil mounds (described in the EIS) as noise barriers would be investigated.
Controlling noise at the receiver	Architectural treatment	Architectural treatment consists of reducing noise levels at affected residences in order to meet internal noise levels. Treatment could include retrofitting thicker window glazing, roof insulation, door and windows acoustic seals and the like. It could also include boundary fences if it would be effective in reducing external noise levels. Noise attenuation is substantially dependant on the condition and design of the existing residence. Note that architectural treatment may also include fitting of mechanical/forced ventilation so that windows can be kept closed if the occupant desires. Architectural treatment is often the most practical option where individual receivers require noise mitigation and where other mitigation options have been considered and exhausted.

An Operational Noise and Vibration Review (ONVR) shall be prepared for the project to confirm noise and vibration control measures based on the final proposal design and operation. The ONVR shall:

- Confirm predicted project noise and vibration levels at sensitive receivers. This may include the results of façade testing for non-residential receivers.
- Assess feasible and reasonable noise and vibration measures consistent with RING and in a hierarchical manner.
- Specify noise and vibration abatement measures for all relevant sensitive receivers.
- Include a consultation strategy to seek feedback from directly affected property owners on the proposed noise and vibration abatement measures.
- Include a timetable for delivery of abatement prior to operation of the Inland Rail.
- Outline post-operational monitoring to verify noise and vibration predictions.

Typically, a post construction noise and vibration assessment including monitoring would be undertaken to validate predicted noise levels and identify any unforeseen impacts. However, as noise and vibration levels are not expected to appreciably change until Inland Rail through connection in 2025, it is considered appropriate to undertake the post construction noise and vibration assessment within six months following through connection. The assessment would be undertaken to confirm compliances with the predicted levels, or as modified by the reasonable and feasible review. If the results of modelling indicated that the predicted noise and vibration levels are exceeded, then additional reasonable and feasible mitigation measures would be implemented in consultation with the affected property owners.

7.2.2 Operational vibration

A number of receivers were predicted to experience human comfort impacts from operation of the project. Although no prescribed methodology is available to ameliorate impacts from operational vibration, the FTA guidelines provides guidance on methods that can be considered. The vibration mitigation options detailed in Table 7.2 should be implemented where it is reasonable and feasible.

Table 7.2 Potential vibration control options

Vibration control strategy	Mitigation option	Description
Planning and design of special trackwork (turnouts, crossings, etc.)		Certain track components, such as turnouts and crossings, are a major contributor to operational vibration impacts. Strategic location of these track components away from sensitive receivers can minimise operational impacts. Another method to reduce vibration impacts is to install special devices at crossovers and turnouts that incorporate mechanisms that close the gaps between running rails. Spring-loaded mechanisms and movable points can be implemented to significantly reduce the severity of vibration impacts.
Special track support systems	Resilient fasteners	Resilient fasteners are very stiff in the vertical direction and are used to fasten the rail to concrete track slabs. Resilient fasteners are effective at reducing vibration at frequencies above 30-40 Hz.
	Ballast mats	Ballast mats consist of an elastomer pad (e.g. rubber) that is placed under the ballast. To be effective, the mat is typically placed upon a concrete pad. Ballast mats are generally not effective if placed on soil or sub-ballast, therefore ballast mats are typically applied to subways or elevated structures. Ballast mats can provide effective attenuation at frequencies above 25-30 Hz.
	Resiliently supported ties	This system consists of concrete ties that are supported by rubber pads. Standard rail clips are used to directly fasten rails to the concrete ties. Measurement data indicates that this system is very effective in reducing low frequency vibration (15-40 Hz).
Building modifications		Impacted buildings can be modified to reduce the vibration levels if practical. Vibration isolation involves supporting the building on elastomer pads. Vibration isolation of existing buildings is typically not a practical option and is normally only applied to the construction of new buildings.
Trenches		Installation of trenches can be used to block the propagation of vibration waves through the ground. This method is analogous to installing noise barriers for mitigation of noise impacts.

Vibration control strategy	Mitigation option	Description
Buffer zones		Expanding the rail right-of-way can be an economical solution to reduce vibration impacts. Similarly, vibration easements can be negotiated with the affected property owners.

7.3 Construction noise and vibration

The Inland Rail NSW Construction Noise and Vibration Management Framework (provided in the EIS) has been developed to show how construction noise and vibration will be managed for Inland Rail in NSW. It provides a framework for managing construction noise and vibration impacts in accordance with the ICNG, to provide a consistent approach to management and mitigation across Inland Rail in NSW.

Specifically the Inland Rail NSW Construction Noise and Vibration Management Framework identifies the requirements and methodology to develop Construction Noise and Vibration Impact Statements. These would be prepared prior to specific construction activities and based on a more detailed understanding of the construction methods, including the size and type of construction equipment, duration and timing of works, and detailed reviews of local receivers if required. A Construction Noise Impact Statement would include:

- A more detailed understanding of surrounding receivers, including particularly sensitive receivers such as education and child care, and vibration sensitive medical, imaging, and scientific equipment.
- Application of appropriate noise and vibration criteria for each receiver type.
- An assessment of the potential noise and vibration impacts as a result of different construction activities.
- Minimum requirements in relation to standard noise and vibration mitigation measures.
- Noise and vibration auditing and monitoring requirements.
- Additional mitigation measures to be implemented when exceedances to the noise management levels are likely to occur - these measures are aimed at pro-active engagement with potentially affected receivers, provision of respite periods, and alternative accommodation for defined exceedance levels.

The proposal would be constructed in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework, the CEMP, site-specific Construction Noise and Vibration Impact Statements, the conditions of approval for the proposal, and the construction EPL.

Practical and reasonable measures would be implemented to reduce the noise and vibration levels at sensitive receivers. Section 7 outlines additional measures to manage noise and vibration where the construction noise assessment identified exceedances of the relevant management levels.

7.3.1 Management of construction noise and vibration exceedances

The approach to managing exceedances of noise management levels will be undertaken in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework and ARTC's NSW communication strategy for Inland Rail.

Mitigation management practices are listed below and the contexts in which they should be implemented are described in Table 7.3 and Table 7.4.

Communication (CO)

The level of noise and vibration impact and duration will guide communication with receivers. Accurate and timely communication is essential to manage and understand community expectations for works undertaken outside of the primary proposal construction hours.

Measures have been developed to manage communication with receivers affected by works undertaken outside of the primary proposal construction hours. Two categories of communication have been developed commensurate with the scale of the impact. The purpose of the communication is described below, but the method of communication will be at the discretion of the proposal and detailed in the NSW communication strategy for Inland Rail.

- Category 1 CO1: Communication should be personalised (e.g. door knock, meeting, telephone call). Contact with these residents should commence early to enable feedback to be considered by the proposal.
- Category 2 CO2: Communication to provide information on the proposal via letter box drop, email, newsletter, media advertisements and/or website a minimum of five days prior to the works commencing.

At minimum the information provided to stakeholders (CO1 or CO2) will include:

- the reason the work is required to be undertaken outside of the primary proposal construction
- a diagram that identifies the location of the proposed works in relation to nearby cross streets and local landmarks
- the nature, scope and duration of the works, including start and finish times
- the expected noise impacts on receivers
- information on how to obtain further information or make a complaint, including an after-hours number and Programme website.

Respite Offer (RO)

Residents subjected to lengthy periods of noise or vibration may be eligible for a respite offer. The purpose of such an offer is to provide residents with respite from an ongoing impact across more than two consecutive evening periods. The offer could comprise pre-purchased movie tickets or similar offer.

Alternate Accommodation (AA)

Alternate accommodation options (i.e. accommodation in motels away from the worksite) may be provided residents living in close proximity to construction sites that are likely to incur noise levels significantly above the applicable level across two or more consecutive sleep periods.

Acceptable accommodation measures will be developed with the affected community and project team.

Assigning additional mitigation measures

The implementation of the above measures is determined by matching the predicted exceedance to the appropriate mitigation measures as detailed in Table 7.3 below. The specific details of communication are to be outlined in the communication strategy for the proposal.

Table 7.3 Additional mitigation measures – Airborne construction noise

Time Period		NML, dB(A)	Perception	Exceedance of NML, dB(A)	Mitigation Measures
All hours		-	Highly affected, >75 dB(A)	-	RO, CO
OOHW Rest Period Evenings	Monday to Sunday 6:00 pm – 10:00 pm (including public holidays)	35	Noticeable	<5	CO1
			Clearly audible	5-15	CO1
			Moderately intrusive	15-25	CO1, CO2
			Highly intrusive	>25	CO1, CO2, RO (>2 consecutive periods)
OOHW Sleep Period Night	Monday to Sunday 10:00 pm – 6:00 am (including public holidays)	35	Noticeable	<5	CO1
			Clearly audible	5-15	CO1
			Moderately intrusive	15-25	CO1, CO2, RO (>2 consecutive periods)
			Highly intrusive	>25	CO1, CO2, RO, AA (>2 consecutive periods)

Notes: OOHW: Out Of Hours Work
CO – Communication. RO – Respite Offer. AA – Alternate Accommodation

Table 7.4 Additional mitigation measures –Construction vibration

Time Period		Mitigation Measures	
		Predicted vibration levels exceed preferred levels	Predicted vibration levels exceed maximum levels
OOHW Rest Period Evenings	Monday to Sunday 6:00 pm – 10:00 pm (including public holidays)	CO1, CO2	CO1, CO2, RO
OOHW Sleep Period Night	Monday to Sunday 10:00 pm – 6:00 am (including public holidays)	CO1, CO2, RO	CO1, CO2, RO, AA

Note 1: OOHW= Out-of-hours Work
CO – Communication. RO – Respite Offer. AA – Alternate Accommodation

7.3.2 Standard construction noise and vibration mitigation measures

Table 7.5 lists the standard mitigation measures which would be implemented for the proposal.

Table 7.5 Standard construction noise and vibration management controls

No	Environmental Management Controls
1.1	Site inductions for all employees and contractors will address: • Environmental aspects and impacts • Proposal specific and standard noise management measures • Licence and approval conditions • Hours of work • Environmental incident reporting and management procedures • Complaint management
1.2	Daily site specific briefings for all employees and contractors will include: • Site specific noise management measures • Location of nearest noise sensitive receivers • Construction employee parking areas • Behavioural practices (e.g. avoid swearing, shouting, dropping materials from heights) • Designated loading/unloading areas and procedures
1.3	Work compounds, storage areas, parking areas, unloading/loading areas and other semi-permanent construction sites should be located away from noise sensitive receivers. Where this is not possible, the orientation and layout of the work site will consider noise impacts, and opportunities to shield receivers from noise through the use of site buildings and stockpiles should be considered.
1.4	When working adjacent to schools, medical centres, childcare centres or places of worship, particularly noisy activities will be scheduled outside of operating or service hours where possible.
1.5	Equipment that is used intermittently is to be shut down when not in use.
1.6	Temporary construction noise barriers and acoustic shrouds will be used to mitigate noise impacts at affected receivers where noise from fixed plant items is predicted to exceed construction noise management levels. These are most suited to mitigate noise impacts from fixed plant items, such as compounds and lighting rigs and may not be suitable for mobile activities.
1.7	The off-set distance between noisy plant and noise sensitive receivers will be maximised.
1.8	The number of vehicle trips to and from site will be optimised.
1.9	Regularly inspect and maintain equipment to ensure it is operating correctly.
1.10	Avoid the simultaneous operation of noisy plant within discernible range of noise sensitive receivers where possible.
1.11	Use of non-tonal reversing alarms for all permanent mobile plant.
1.12	Where available, equipment selection will favour the use of quieter and less vibration emitting construction methods.
1.13	A telephone, email and web based community information service will be established to allow the community to obtain additional information on construction activities, provide feedback or make a complaint.
1.14	Regular communications on the activities and progress of the proposal will be provided to the community (e.g. via newsletter, email and/or website).
1.15	Noise or vibration monitoring in response to complaints will be undertaken where the results or the process assist in resolving or understanding the receiver's issue.

No	Environmental Management Controls
1.16	If vibration-generating activities are conducted within 25 m of a residence attended vibration measurements should be undertaken at the commencement of vibration generating activities to confirm that vibration limits are within the acceptable range. Where vibration levels are found to be unacceptable, alternative work methods will be implemented so the vibration impacts are reduced to acceptable levels.
1.17	If vibration generating activities (non-piling) are being undertaken within 35 m of the heritage listed structures, alternative work methods will be implemented so the vibration impacts are reduced to acceptable levels. For piling, this distance is increased to 180 m.
1.18	Prior to commencement of construction a dilapidation survey of the nearby heritage structures (within 35 m of the works) would be undertaken. These items must be protected from accidental damage for the duration of the works.
1.19	Based on the conservative estimate it is possible that construction vibration may exceed the guidance limits for critical and sensitive areas. The predictions do not account for possible reduced internal vibration levels which may be realised due to the structure of the buildings. It is not known how the structure will respond to external ground vibration sources. Specific consultation would be undertaken with potentially impacted receivers with sensitive equipment prior to commencement of vibration generating activities, and as required throughout the construction phase, with regards to potential detectable vibration levels and possible impacts on critical activities at the facility. Where required specific work practices or scheduling arrangements would be considered to minimise potential impacts on the facility.

7.4 Operational road traffic noise mitigation

Predicted noise levels are not expected to exceed the controlling criterion during the day or night-time periods. Therefore, no residential properties qualify for noise mitigation.

Where noise mitigation is required the RMS *Noise Mitigation Guideline* (NMG) provides recommendations that should be considered during the road design stage. The NMG recommends the following noise mitigation options in order of preference:

- Quieter pavement surfaces
- Noise mounds
- Noise walls
- At-property treatments

7.4.1 Post construction noise monitoring program

To confirm that the noise level targets are achieved, the NMG refers to the ENMM Practice Note VIII which recommends that a post-construction noise monitoring program be undertaken.

The noise monitoring program (including simultaneous traffic counts) should be undertaken within 12 months of opening once traffic flows have stabilised. Monitoring locations should be selected along the route at the monitoring locations undertaken in this assessment and at locations where any noise complaints are received.

The measured noise levels should be compared to the noise level assessment targets. If the noise level targets are exceeded the ENMM recommends the following action:

- If the exceedance is less than two dBA, ‘the prediction methodology and suitability of noise mitigation measures should be reassessed and the reasons for the marginal exceedance should be identified in the report’.
- If the exceedance is greater than two dBA, ‘the adequacy of the noise mitigation measures needs to be reviewed, and if problems are identified steps need to be taken to rectify the situation. Additional noise treatments may be required to achieve the design noise level, where this is feasible and reasonable.’

The NMG states: ‘*Note that where the outcome of the compliance report is that further noise mitigation should be considered the processes in this guideline should be followed.*

8. Conclusion

Based on the modelling results and findings of this noise and vibration assessment, the following conclusions are made with consideration to the assumptions detailed in this report.

8.1 Operational rail noise and vibration

Operational noise modelling indicates that the RING $L_{Aeq\ day}$ and $L_{Aeq\ Night}$ rail noise trigger levels are predicted to be exceeded at a number of receivers near to the rail corridor and that increases in noise due to the proposal are more than 2 dB for a number of receivers. This indicates that the conditions for the consideration of noise mitigation have been triggered at these receivers with regards to the RING.

Further, noise modelling indicates that a number of receivers are expected to exceed the RING L_{Amax} trigger levels and that increases in noise due to the proposal are more than 3 dB for a number of receivers. Therefore, mitigation measures will be required for operational noise at the nearest receivers with consideration to L_{Amax} levels.

Based on train volumes and speeds provided by ARTC, a total of 152 residential receivers were found to exceed the redeveloped rail line RING criteria. The operational noise model is based on a number of conservative assumptions and the information available at the time of the assessment in relation to proposed operations, design and receiver locations and an updated assessment will be undertaken at subsequent stages of the proposal where additional detail is available.

A number of non-residential receivers within the study were also predicted to exceed the internal RING trigger levels for the 2040 design assessment year including three educational receivers, three worship receivers this assumes a 10 dB external to internal reduction. Additionally two passive recreation receivers and one active recreation receiver were predicted to exceed the respective RING trigger level at 2040.A number of potential mitigation measures have been identified to address exceedances of the RING trigger levels. A feasible and reasonable assessment of these measures will be undertaken in consultation with the affected community, following completion of detailed design.

Estimated vibration levels at three receivers within Moree are predicted to exceed the night-time human comfort criteria. Vibration mitigation strategies to reduce vibration impacts are discussed in Section 7.2.2.

Post construction noise monitoring is to be undertaken at representative locations to verify the effectiveness of the applied mitigation measures with respect to the RING trigger levels.

8.2 Operational road traffic noise

Assessment of the expected noise impacts in accordance with the RNP are as follows:

- The controlling criteria is expected to be exceeded at six receivers during the day-time period. The maximum exceedance of the criteria is 1.4 dBA. It should be noted however that these are due to noise from existing roads or roads not part of the proposal and therefore would not quality for mitigation treatment.
- The controlling criteria is not expected to be exceeded during the night-time period.

- Noise levels are not predicted to exceed the day-time acute criteria of 65 dBA $L_{Aeq(15\ hr)}$ or night-time acute criteria of 60 dBA $L_{Aeq(9\ hr)}$.
- The increase in noise levels between the no-build and build scenarios are less than 2 dB for the receivers that exceed the controlling criterion during the day-time period, therefore mitigation measures are not warranted.
- The Relative Increase Criterion is not applicable to any receiver due to realignment of the Newell Highway overpass or construction of the Jones Avenue bridge.

The proposed overpass at Newell Highway and the Jones Avenue bridge are not expected to adversely impact any sensitive receiver from a noise perspective within the assessment area.

8.3 Construction noise

During construction there is the potential for noise impacts to the surrounding community.

- In relation to construction activities:
  - Activities such as pre-possession (construction scenario S1), skim track reconditioning (construction scenario S2), full depth reconditioning (construction scenario S3), and drainage construction, are likely to impact the largest number of receivers due to the higher level of noise emitted by the anticipated equipment.
- In relation to the primary proposal construction and construction noise management levels:
  - The highly affected level of 75 dB(A) L_{Aeq} is predicted to be exceeded at three receivers.
  - Rail line redevelopment construction activities are predicted to exceed the noise management level at receivers nearest to the construction footprint. Impacted receivers are within about 700 metres of the works and includes up to 1574 identified noise sensitive residential receiver locations. Noise levels are predicted to exceed the proposal specific construction management level by up to 43 dB.
  - Newell highway overbridge construction is predicted to exceed the proposal specific construction management level by up to 13 dB at two residential receivers.
  - Jones Avenue overbridge construction is predicted to exceed the proposal specific construction management level by up to 41 dB at 1098 residential receivers.
  - Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at non-residential sensitive receivers including educational, child care and hospital facilities. Construction noise management levels are applicable as an internal level only when the facilities are in use.
  - Construction activities during the primary proposal construction hours have the potential to exceed the noise management level at recreational areas including bushland areas, parks and sporting facilities when these areas are in use.

It is recommended that the mitigation measures detailed in Section 7 be considered and implemented where feasible and reasonable to reduce construction noise impacts.

8.4 Construction vibration

General construction activities

With consideration to structural damage vibration impacts for general construction activities, the expected magnitude of ground vibrations should not be sufficient to cause damage if the equipment operates at distances greater than 18 metres from standard residential buildings or structures of similar construction.

Many heritage structures nearby the Proposal consist of station buildings, sidings and silos which are directly adjacent to the track and bridges that are on the actual alignment. With consideration to structural damage vibration impacts for general construction activities, the expected magnitude of ground vibrations should not be sufficient to cause damage if the equipment operates at distances greater than 35 metres from heritage buildings and structures. Many items are potentially within this buffer from the intended works and may be impacted.

It is recommended that the noise and vibration mitigation measures detailed in Section 7 be implemented to manage potential construction vibration impacts.

Piling

Vibration impacts due to piling activities have the potential to exceed structural vibration values for standard dwellings at distances from the activity of 100 metres for impact piling, 30 metres for vibratory piling and 17 metres for bored piling.

Piling activities have the potential to exceed structural vibration values for heritage structures at distances from the activity of 180 metres for impact piling, 50 metres for vibratory piling and 35 metres for bored piling.

In the event that these buffer distances are not practical, other methods may be investigated such as press-in hydraulic piling or jacked-in piling. These methods generally exhibit much lower vibration levels compared to impact, vibratory and bored piling.

Human comfort

Humans are capable of detecting vibration at levels well below those causing risk of damage to buildings. Based on a conservative assessment, it is possible that construction vibration from general construction activities may be perceptible at times at distances up to 140 m of the works.

Piling works are required for bridge construction. About 820 receivers may receive perceptible vibration where impact piling is used. These receivers are within 700 metres of piling locations. They are located mostly within Moree and are near to either the Mehi River rail bridge or the Jones Avenue road over bridge.

Vibration impacts due to boring of the cast in-situ piles has the potential to impact receivers up to 120 metres from the work area. There are 56 receivers within this buffer distance from proposed piling locations.

To minimise human comfort impacts, alternatives to impact piling are recommended where feasible. The mitigation measures detailed in Section 7 should also be considered where feasible and reasonable to reduce the potential for human comfort vibration impacts from general construction and piling activities.

8.5 Summary

The Australian Rail Track Corporation (ARTC) has engaged GHD Pty Ltd (GHD) to prepare a Noise and Vibration assessment for the proposed upgrade of the Narrabri to North Star section of the inland rail project. This upgrade is located in between Narrabri and North Star, New South Wales.

Based on the findings of this assessment, it is considered that the noise and vibration impacts associated with the proposal can be managed and controlled both from the construction and operational points of view provided that the recommendations outlined in this report or equivalent are implemented.

8.6 Limitations

This report has been prepared by GHD for Australian Rail Track Corporation and may only be used and relied on by Australian Rail Track Corporation for the purpose agreed between GHD and the Australian Rail Track Corporation as set out in section 1.3 of this report.

GHD otherwise disclaims responsibility to any person other than Australian Rail Track Corporation arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Australian Rail Track Corporation and others who provided information to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

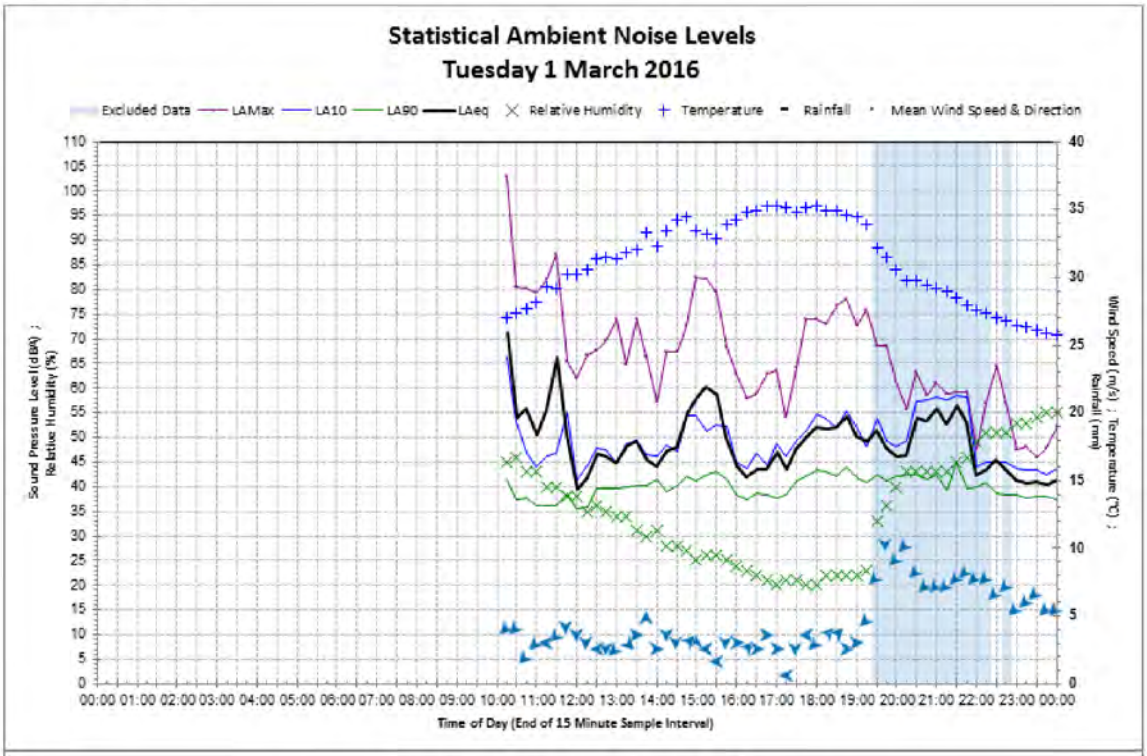
It is not the intention of the assessment to cover every element of the acoustical environment, but rather to conduct the assessment with consideration to the prescribed work scope.

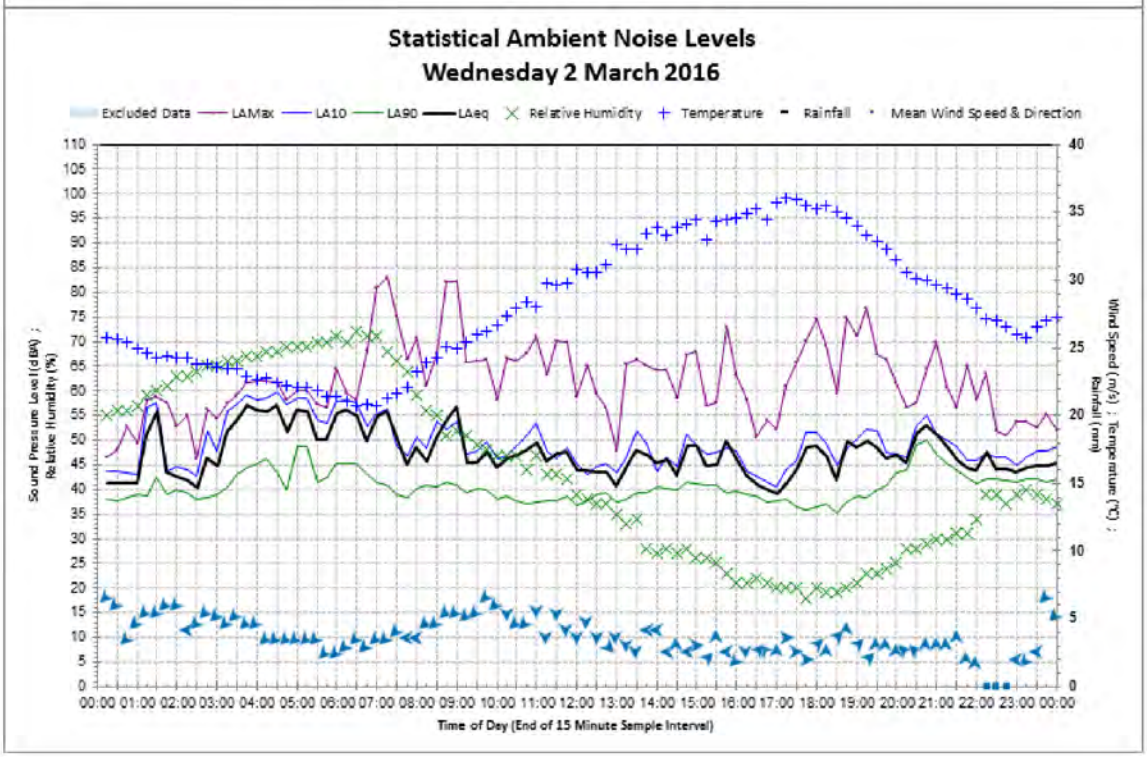
The findings of the acoustic assessment represent the findings apparent at the date and time of the monitoring and the conditions of the area at that time. It is the nature of environmental monitoring that not all variations in environmental conditions can be accessed and all uncertainty concerning the conditions of the ambient noise environment cannot be eliminated. Professional judgement must be exercised in the investigation and interpretation of observations.

Appendices

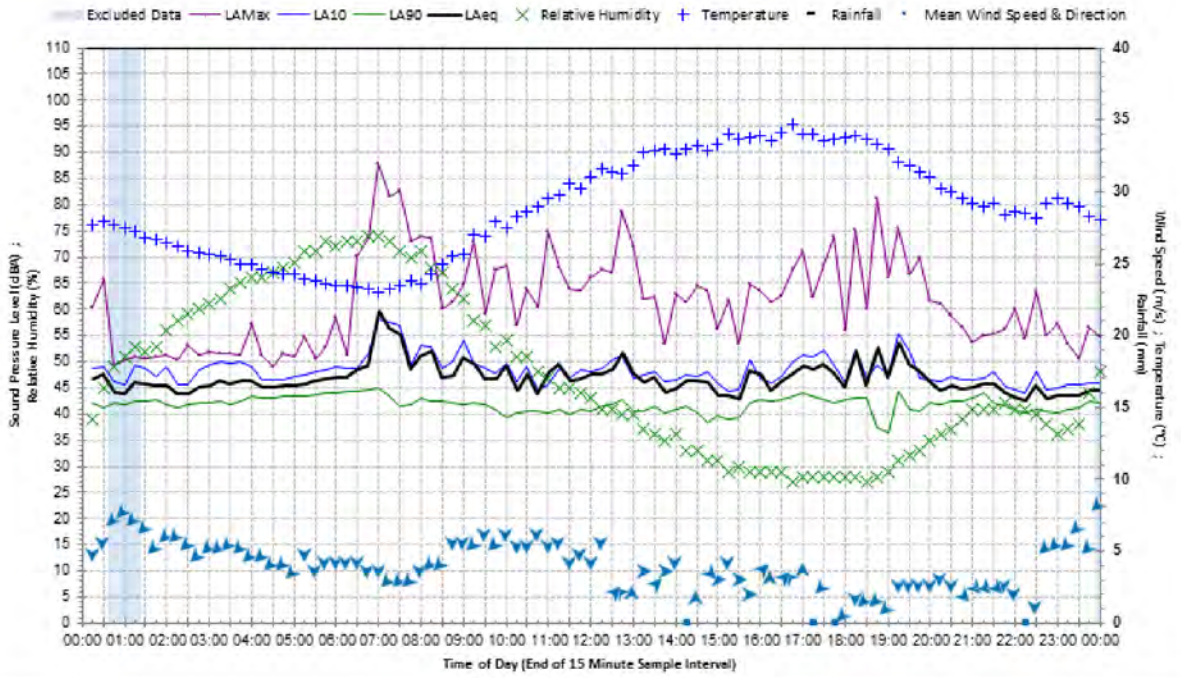
Appendix A - Unattended noise logger results

Logger L01NNS

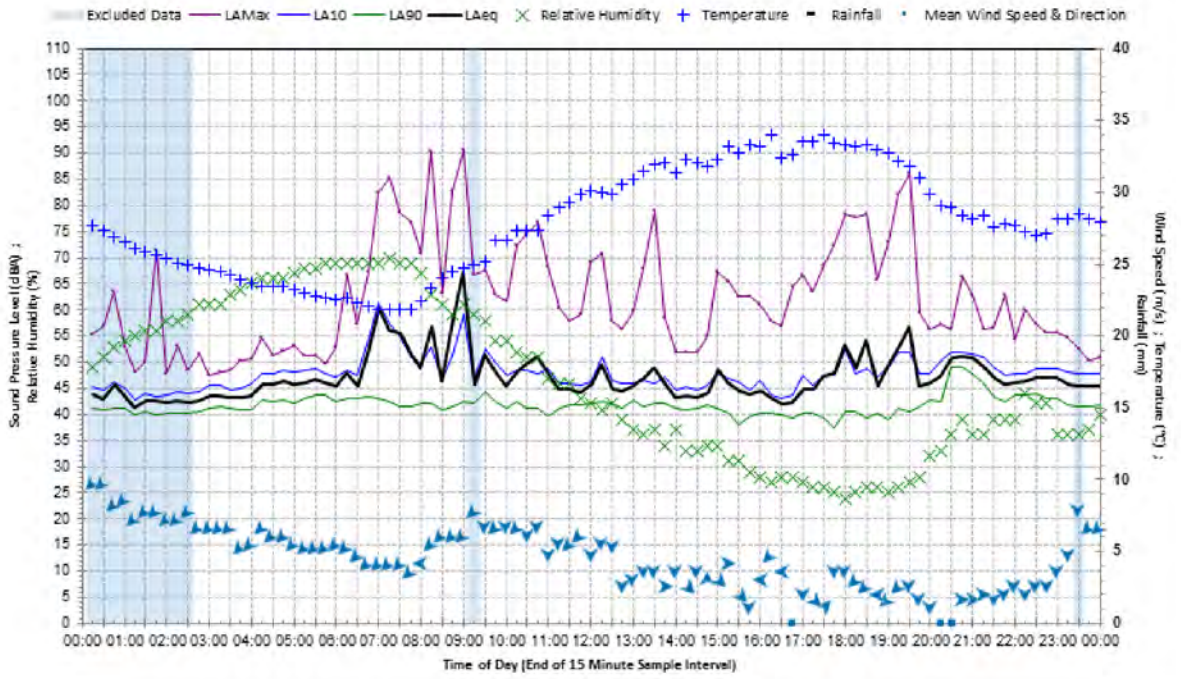




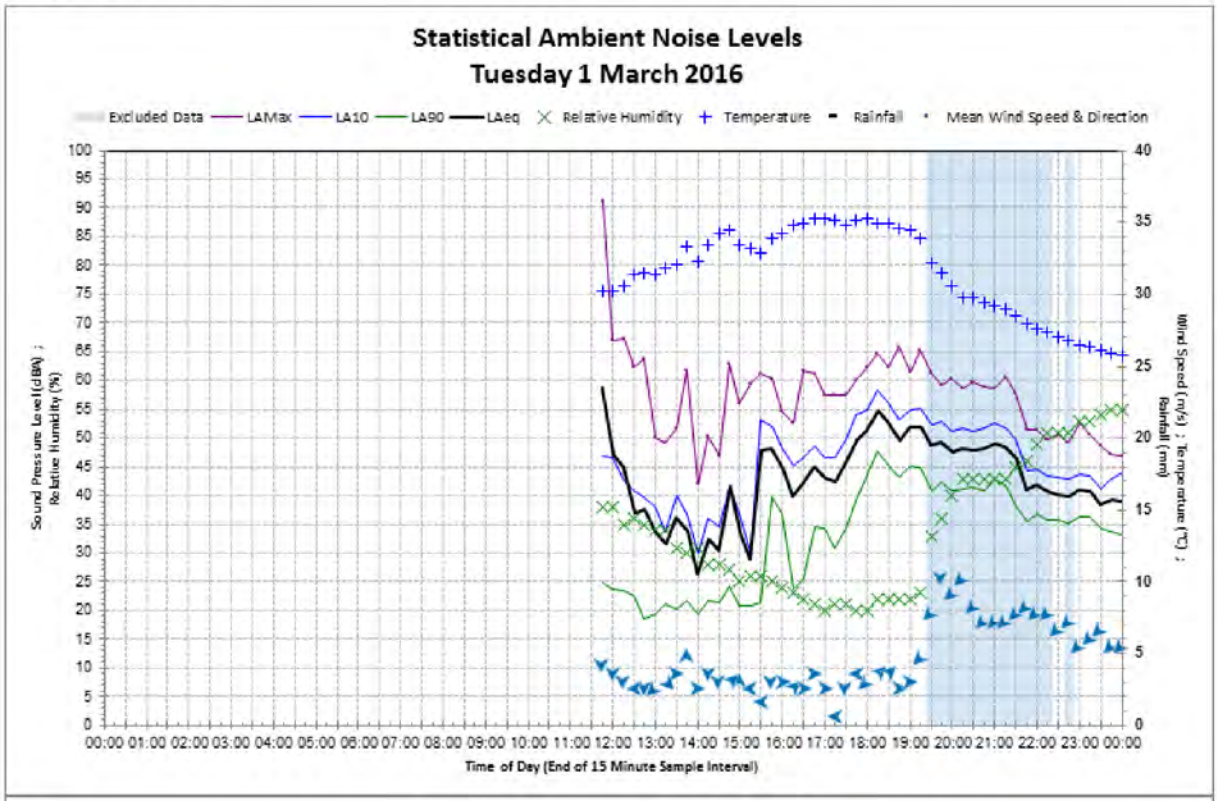
Statistical Ambient Noise Levels
Thursday 3 March 2016

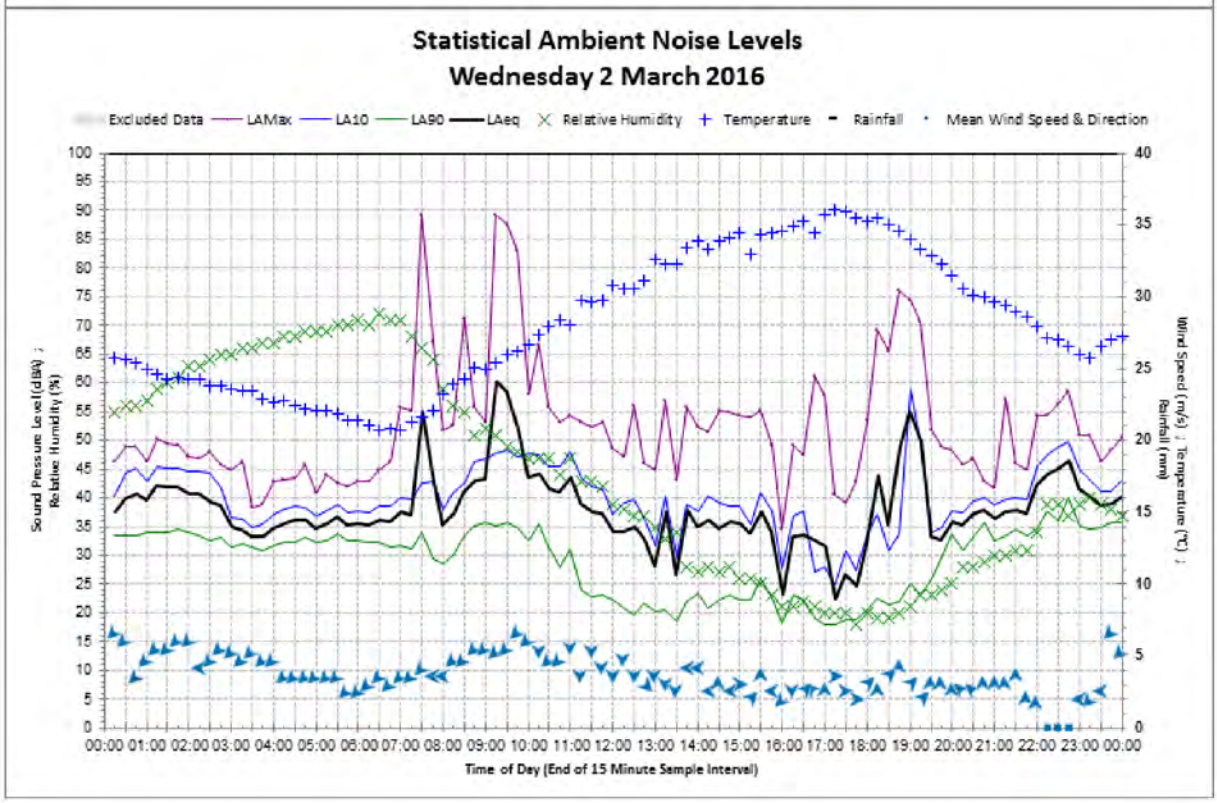


Statistical Ambient Noise Levels
Friday 4 March 2016

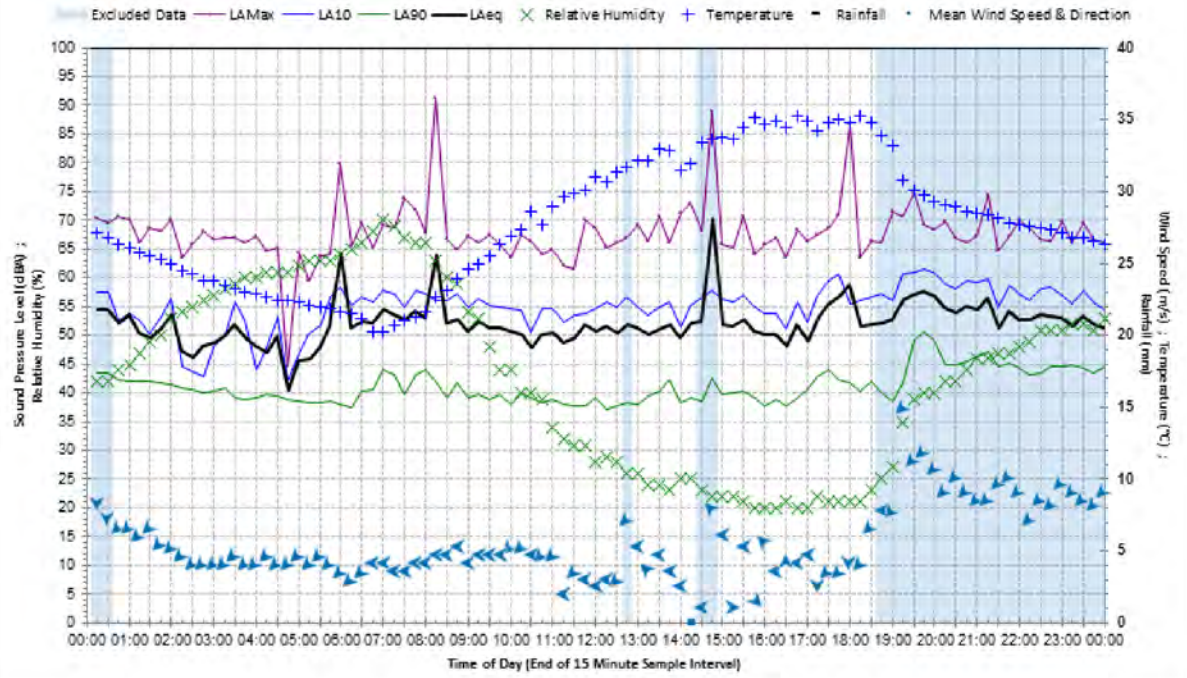


Logger L02NNS

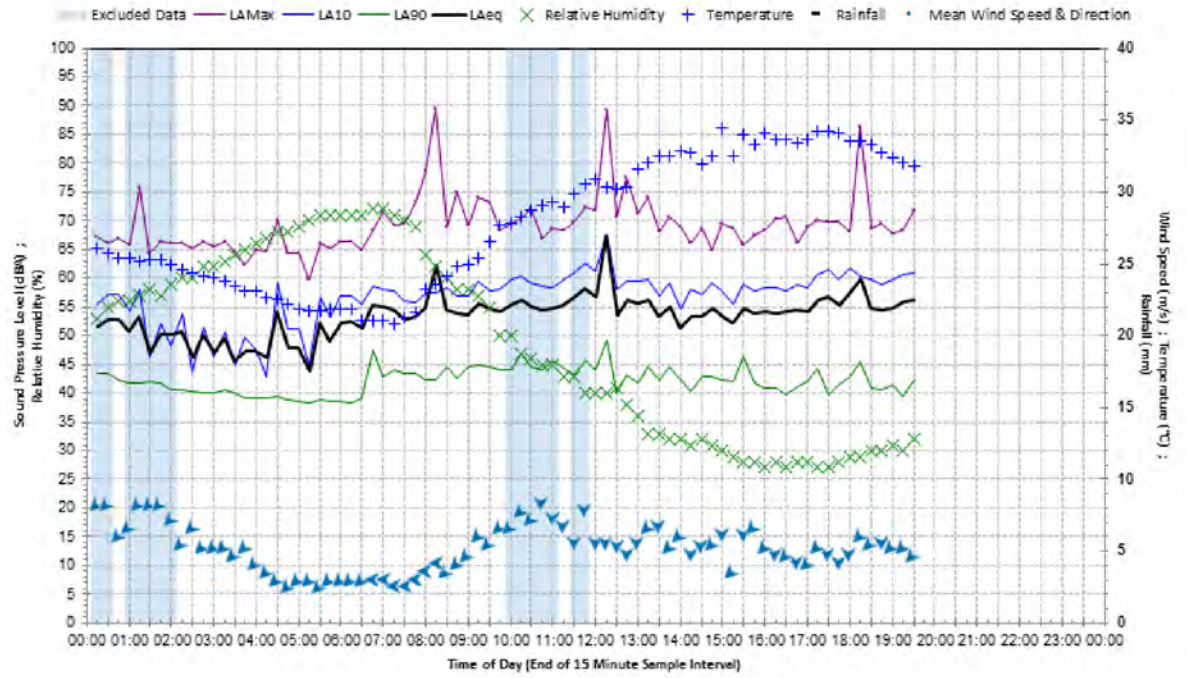




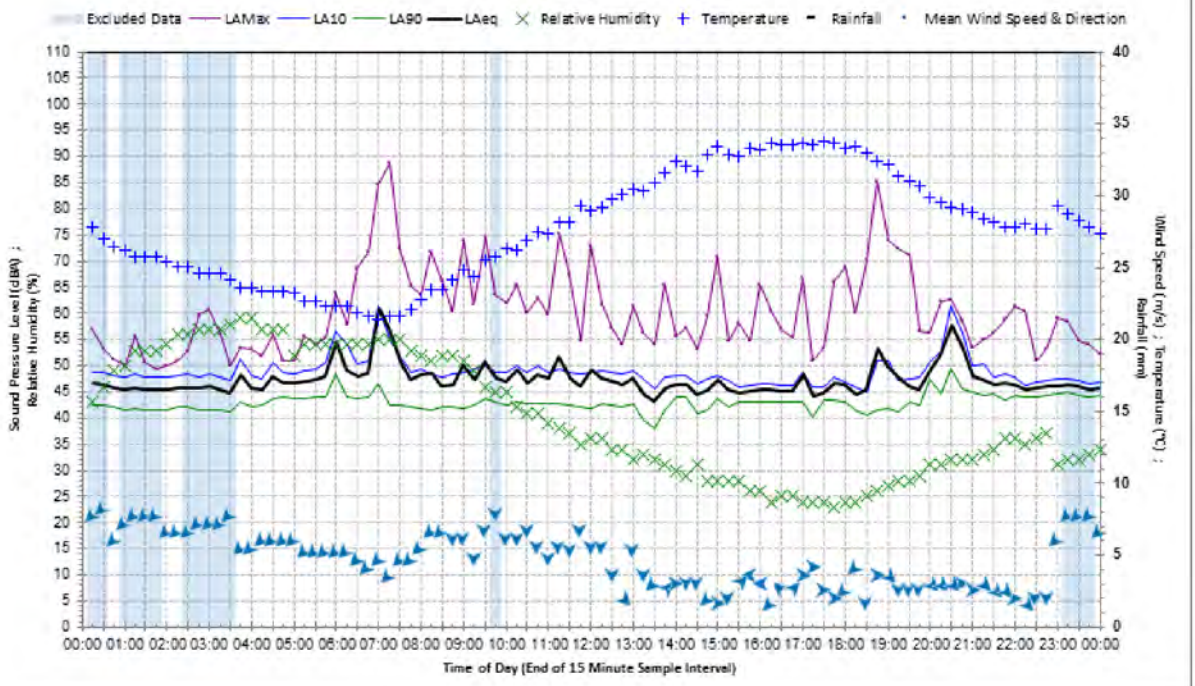
Statistical Ambient Noise Levels
Tuesday 8 March 2016



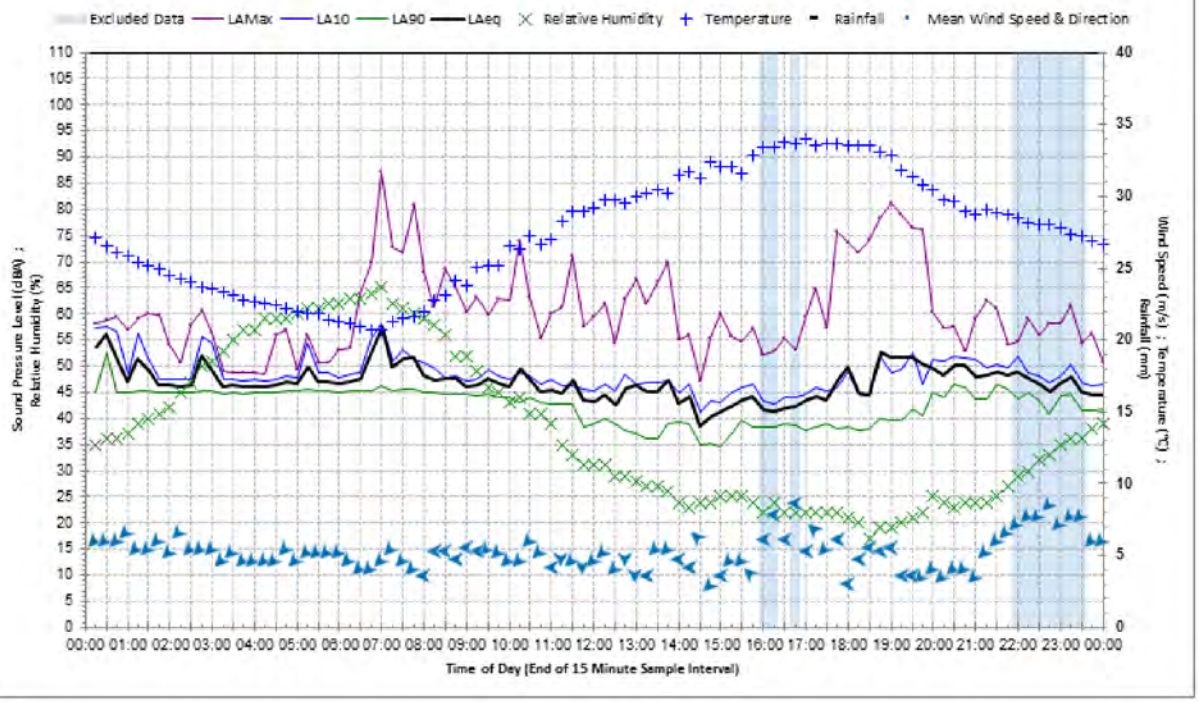
Statistical Ambient Noise Levels
Wednesday 9 March 2016



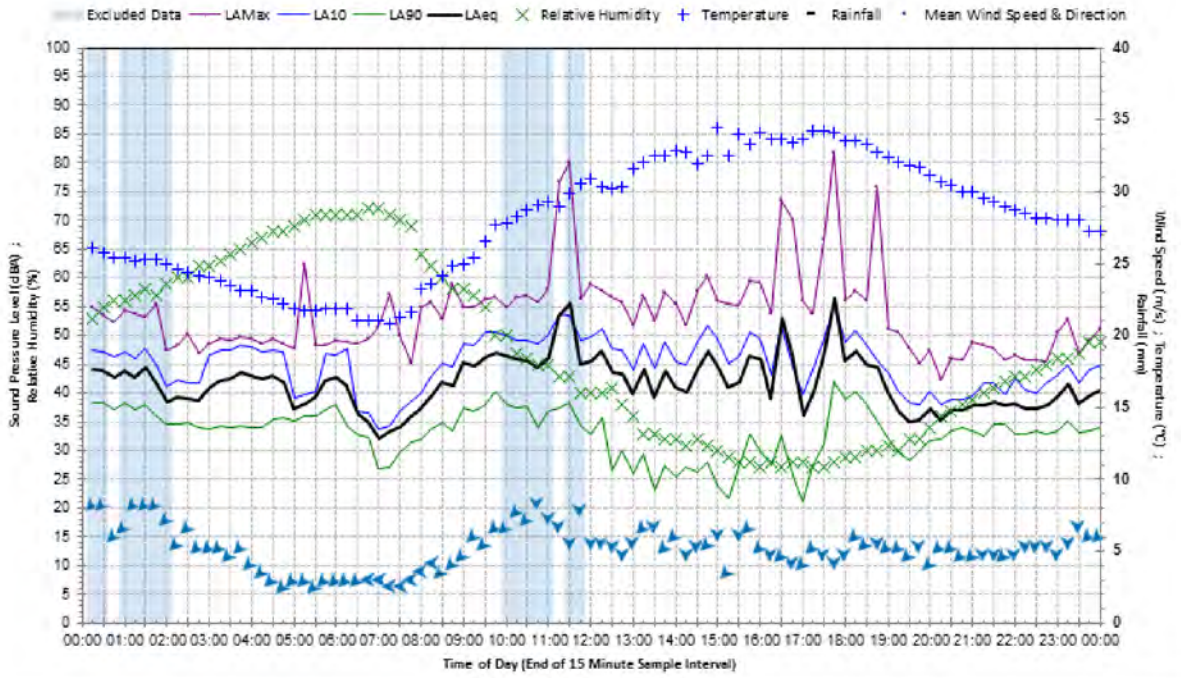
Statistical Ambient Noise Levels
Saturday 5 March 2016



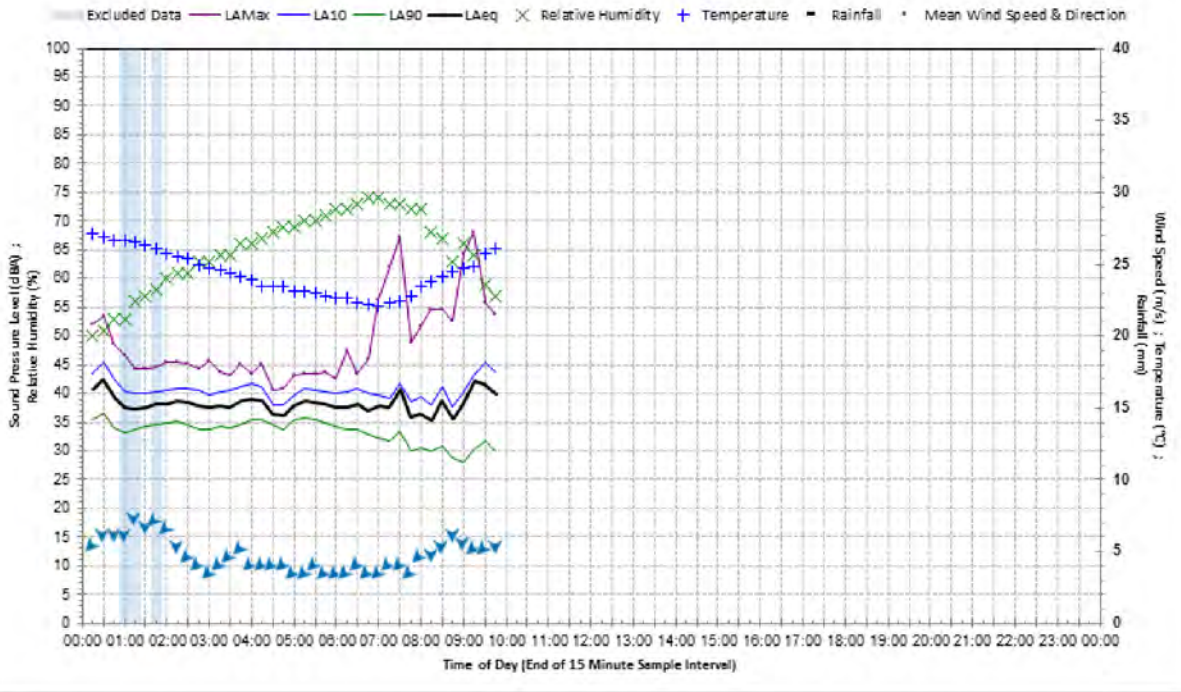
Statistical Ambient Noise Levels
Sunday 6 March 2016



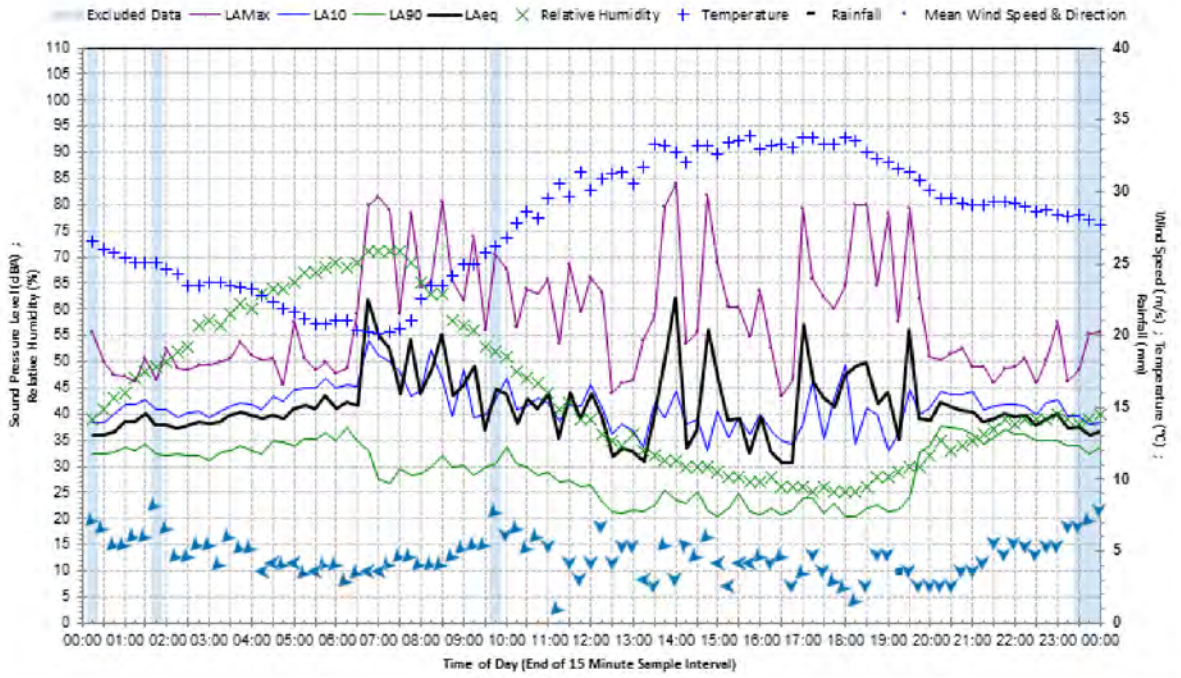
Statistical Ambient Noise Levels
Wednesday 9 March 2016



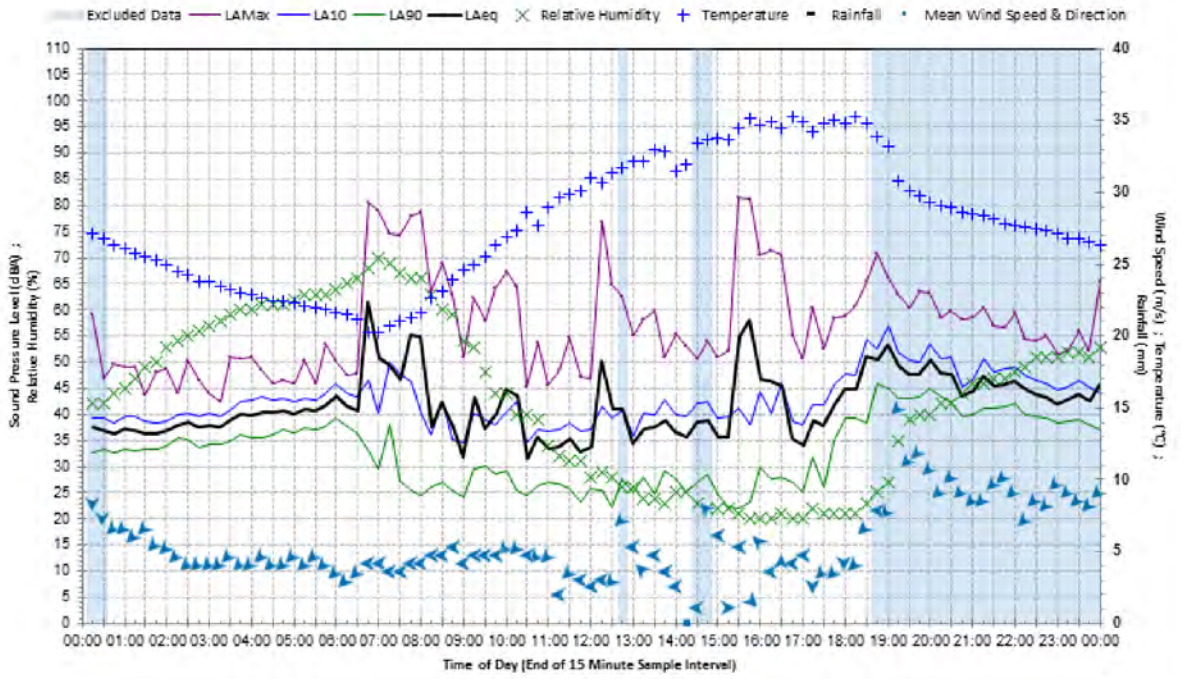
Statistical Ambient Noise Levels
Thursday 10 March 2016



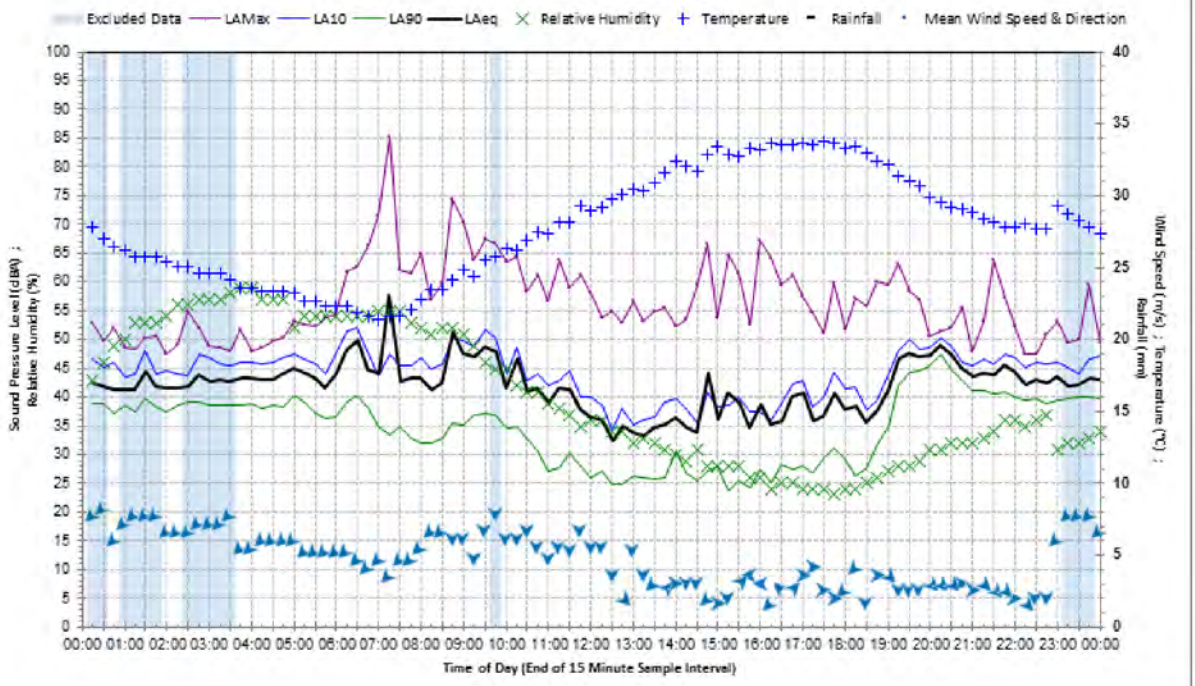
Statistical Ambient Noise Levels
Monday 7 March 2016



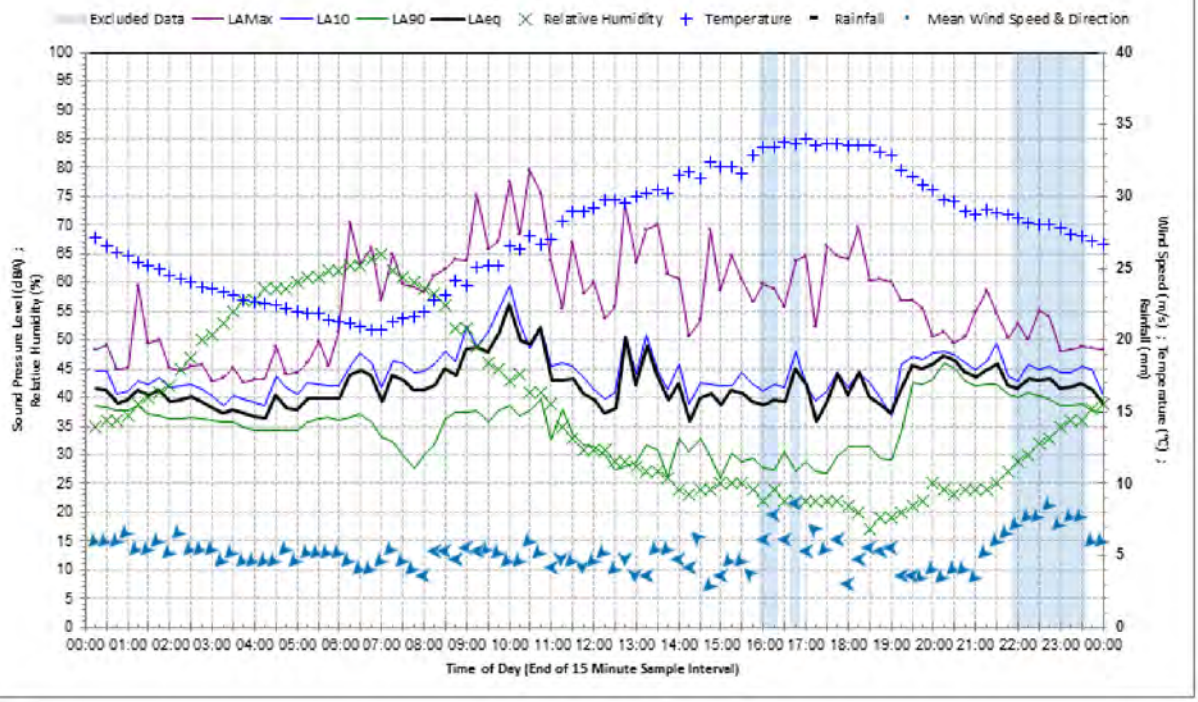
Statistical Ambient Noise Levels
Tuesday 8 March 2016



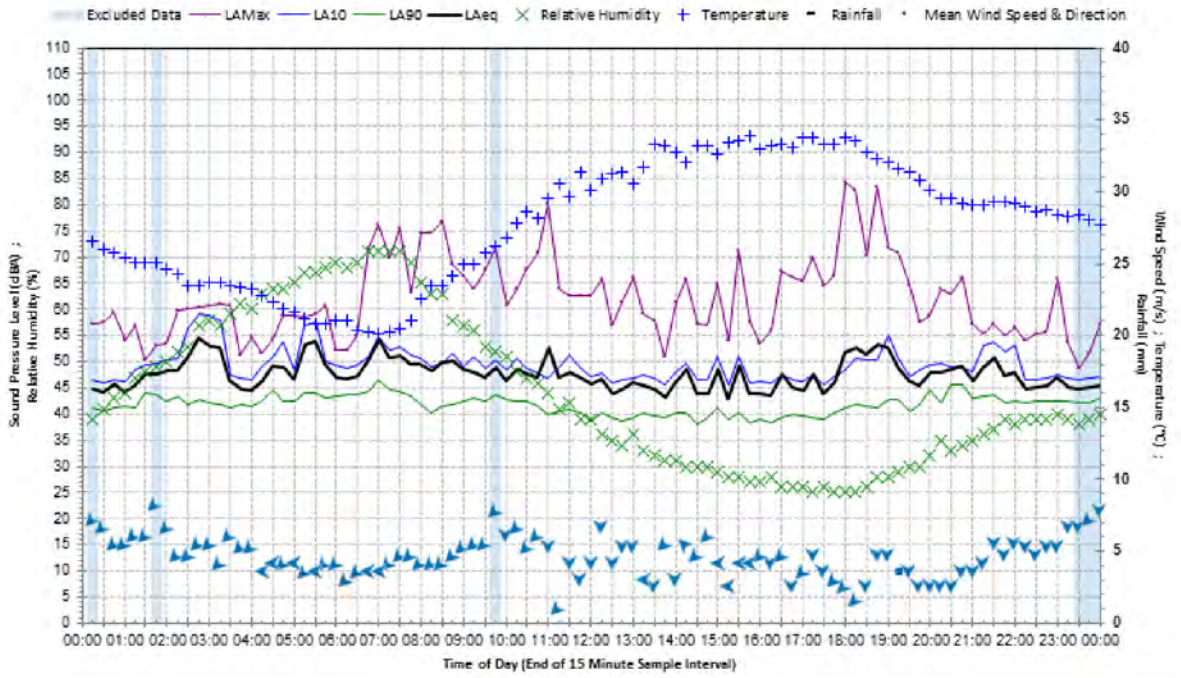
Statistical Ambient Noise Levels
Saturday 5 March 2016



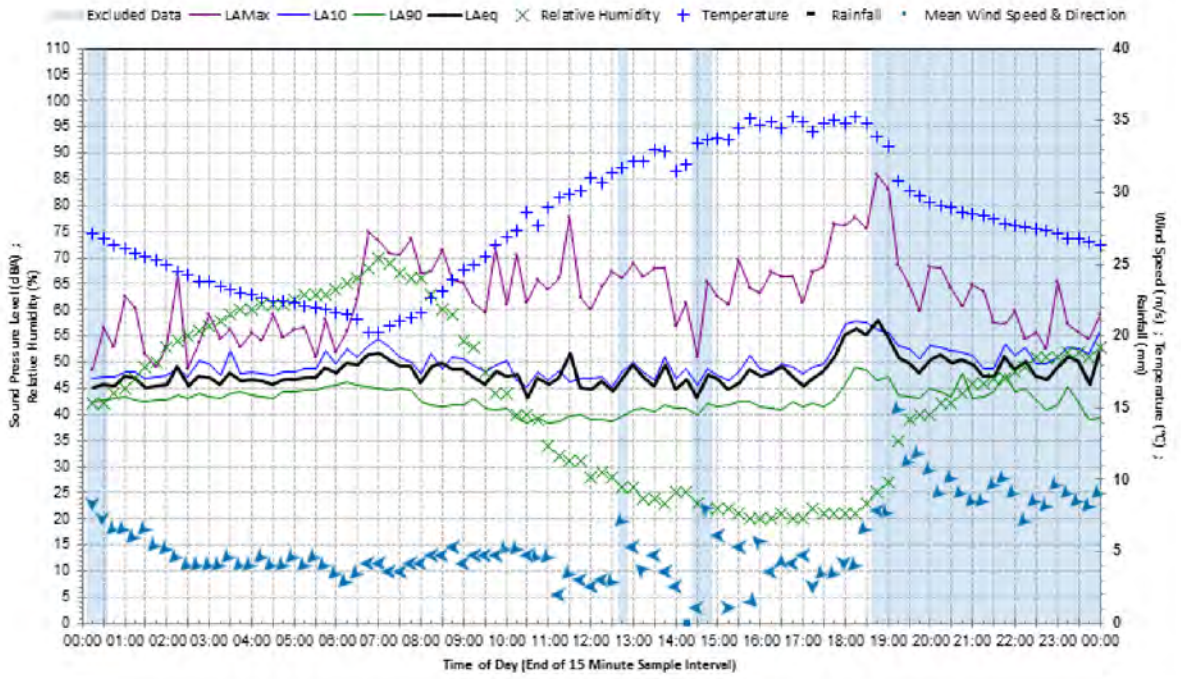
Statistical Ambient Noise Levels
Sunday 6 March 2016

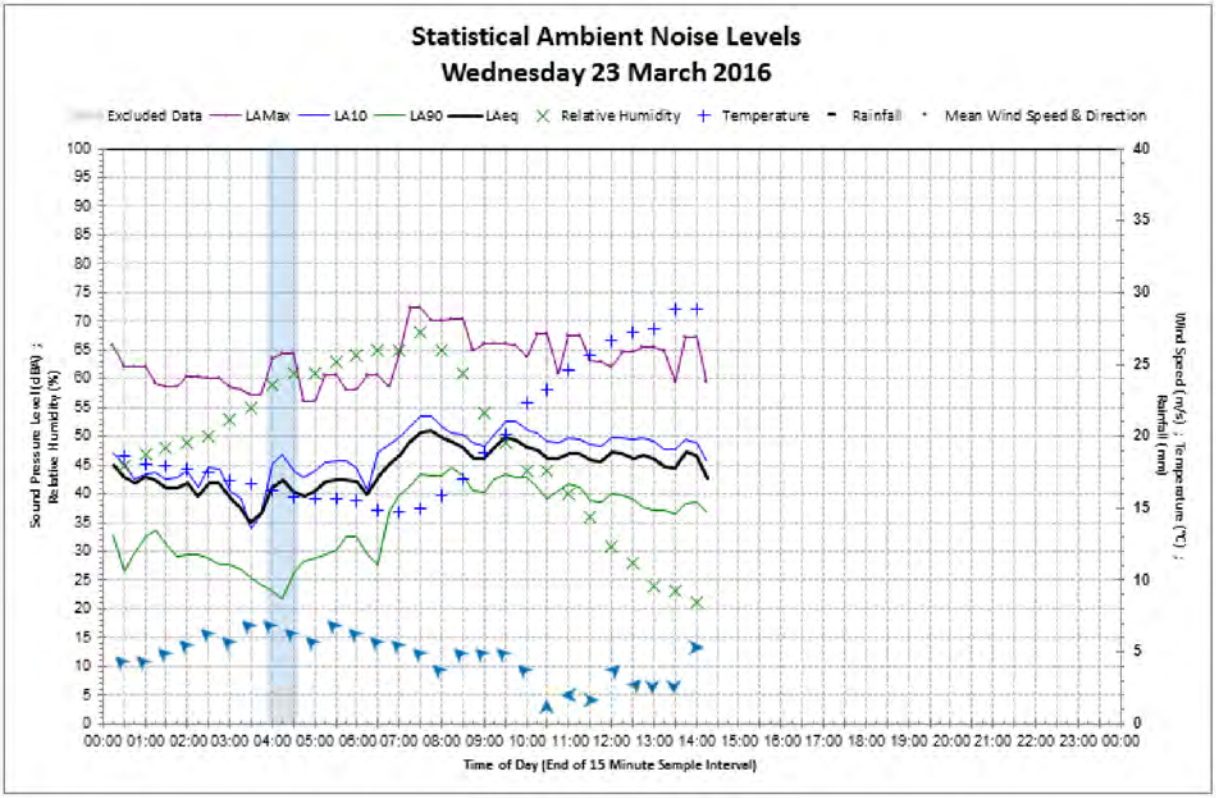


Statistical Ambient Noise Levels
Monday 7 March 2016

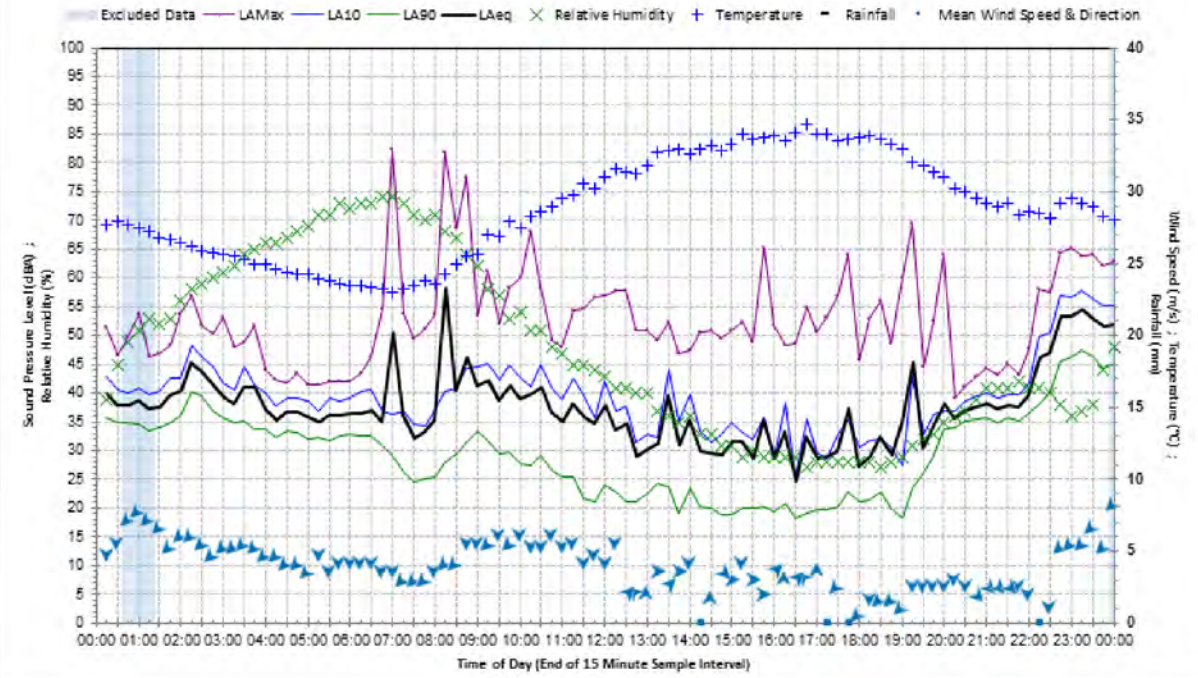


Statistical Ambient Noise Levels
Tuesday 8 March 2016

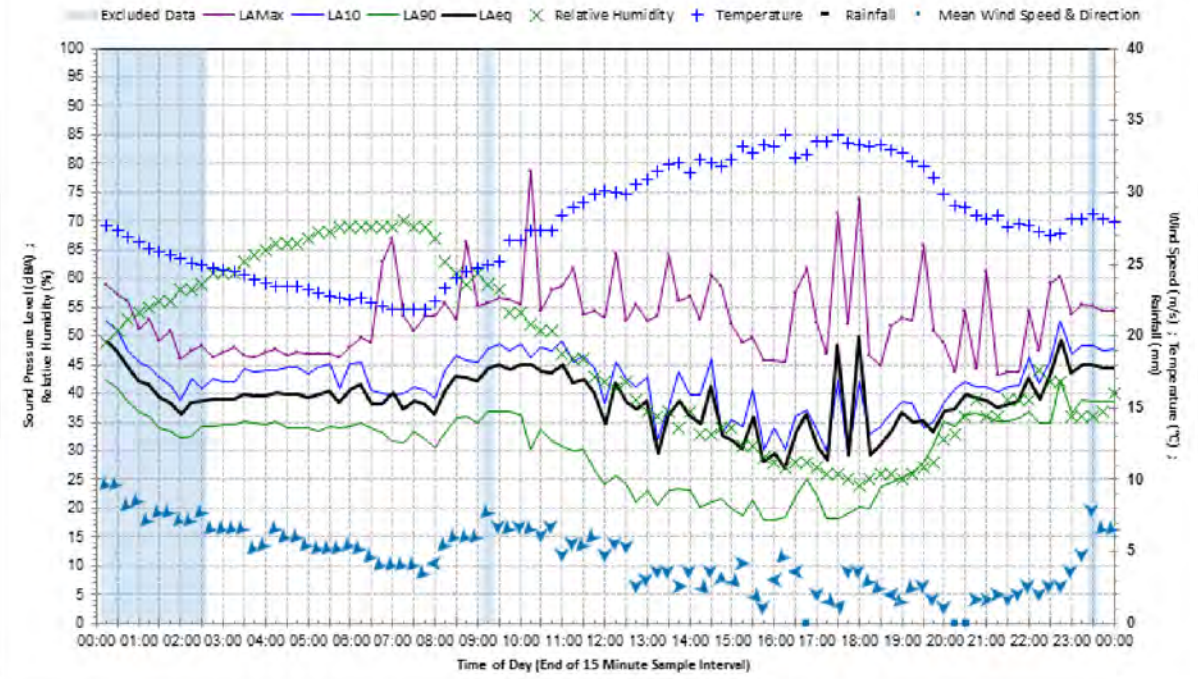



Statistical Ambient Noise Levels
Wednesday 23 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

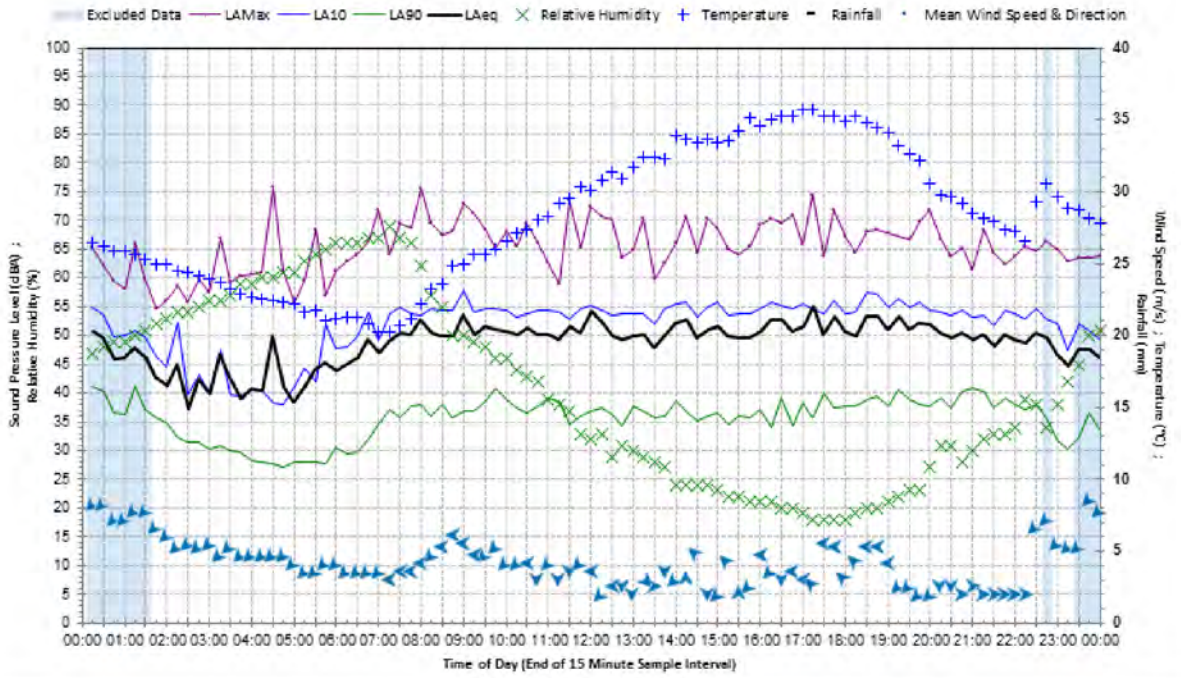
Statistical Ambient Noise Levels
Thursday 3 March 2016



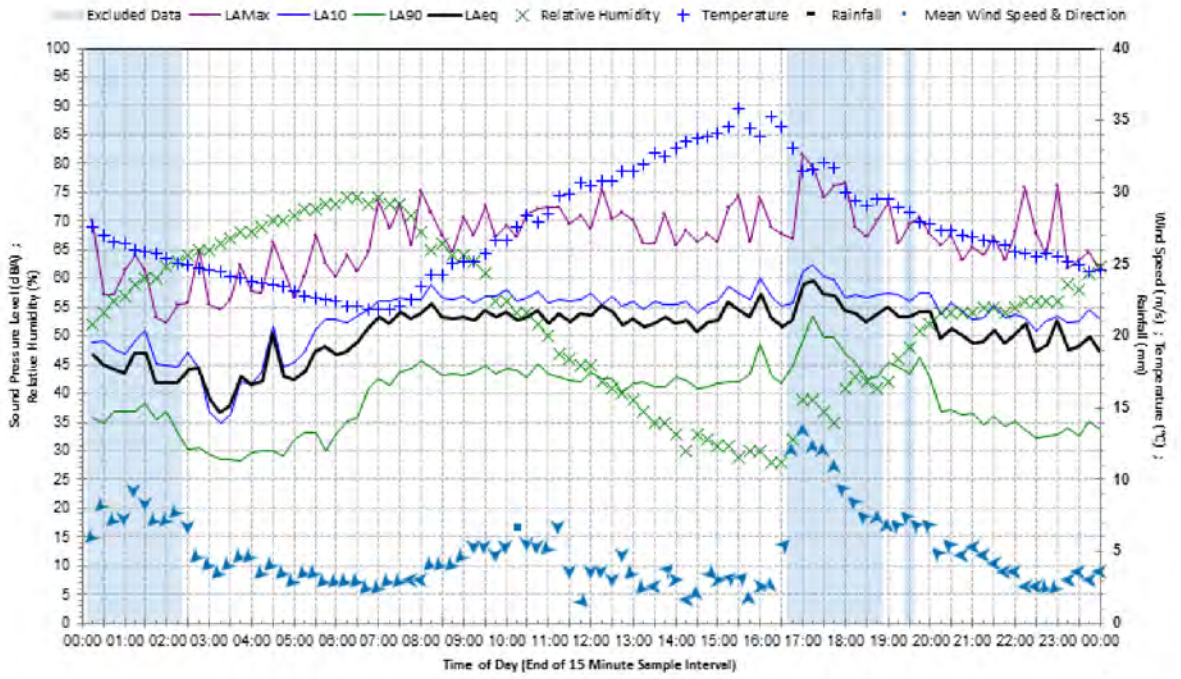
Statistical Ambient Noise Levels
Friday 4 March 2016



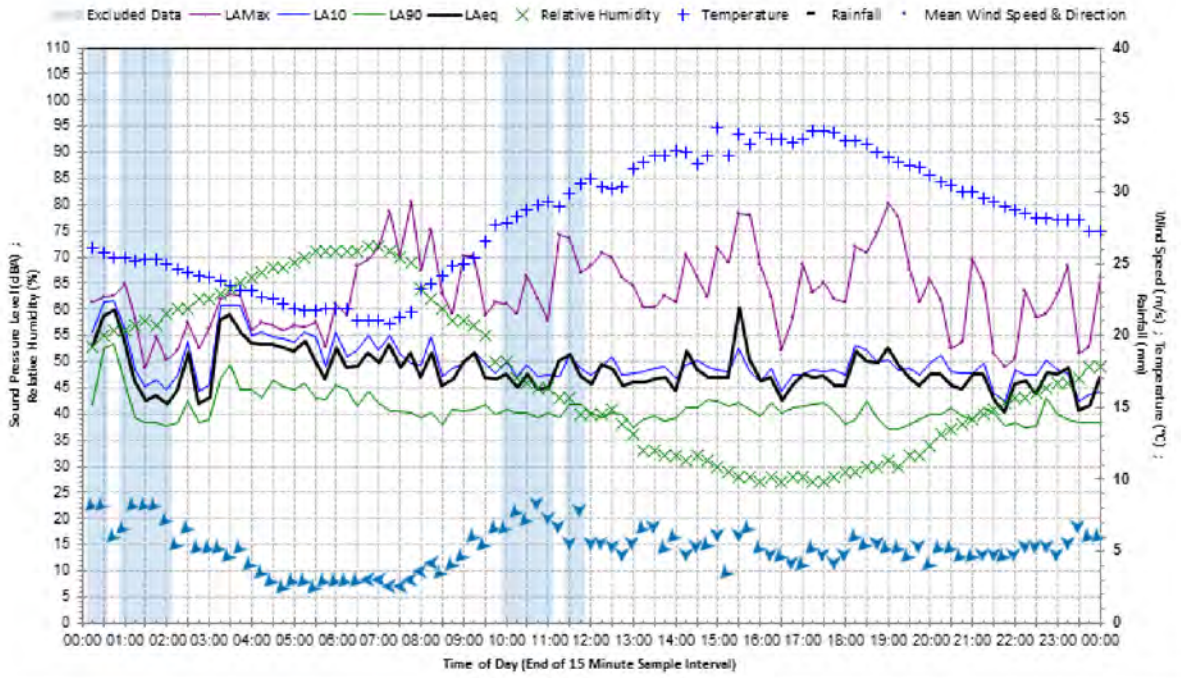
Statistical Ambient Noise Levels
Sunday 13 March 2016



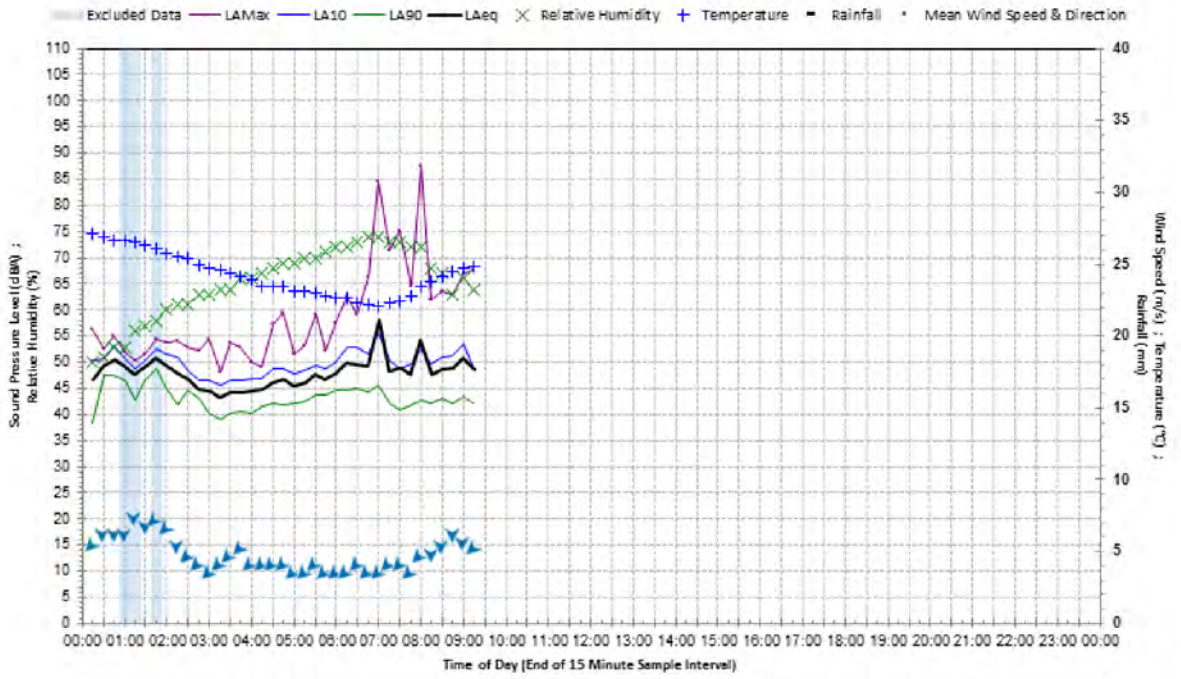
Statistical Ambient Noise Levels
Monday 14 March 2016



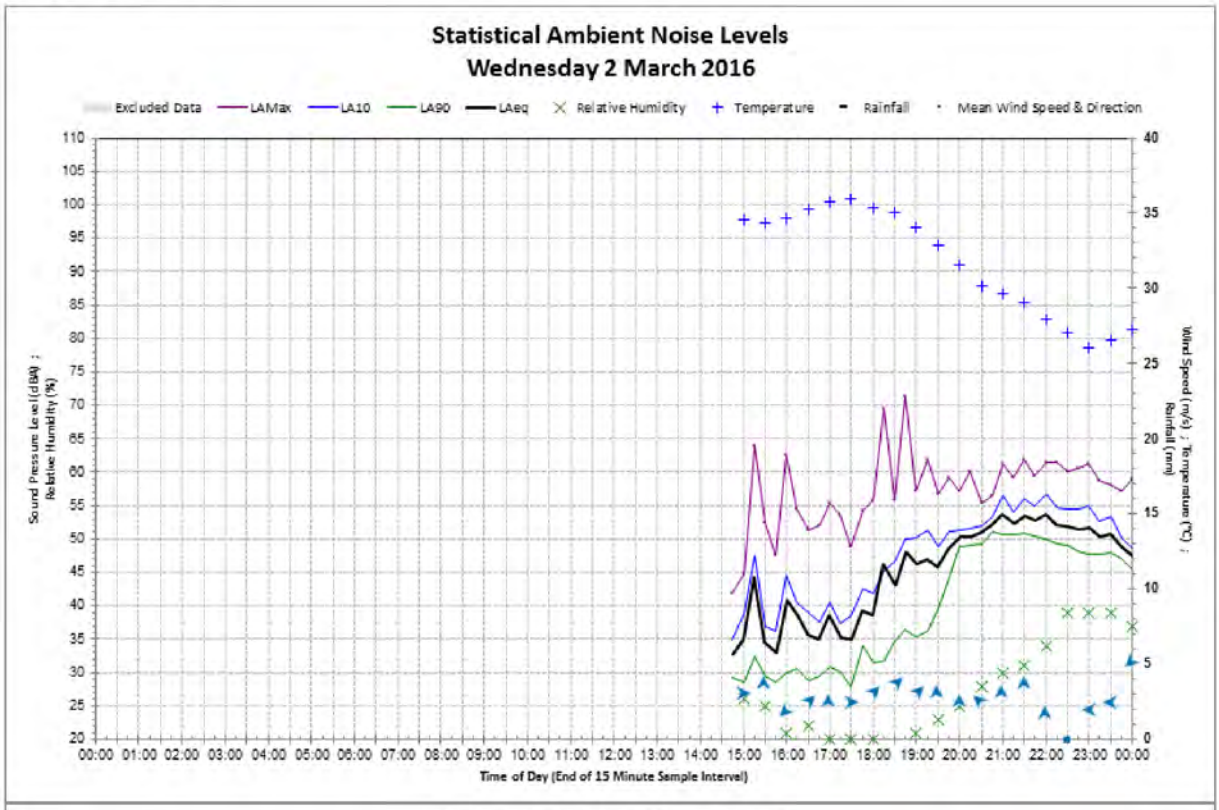
Statistical Ambient Noise Levels
Wednesday 9 March 2016

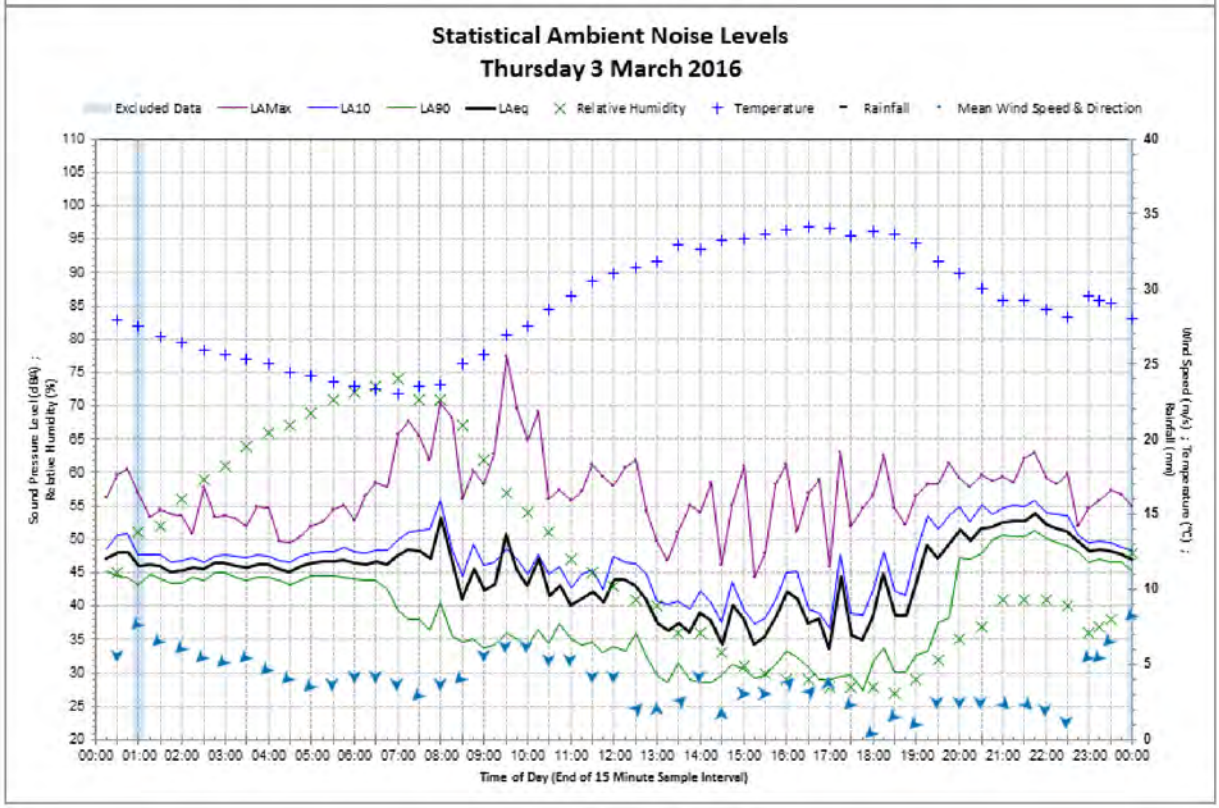


Statistical Ambient Noise Levels
Thursday 10 March 2016

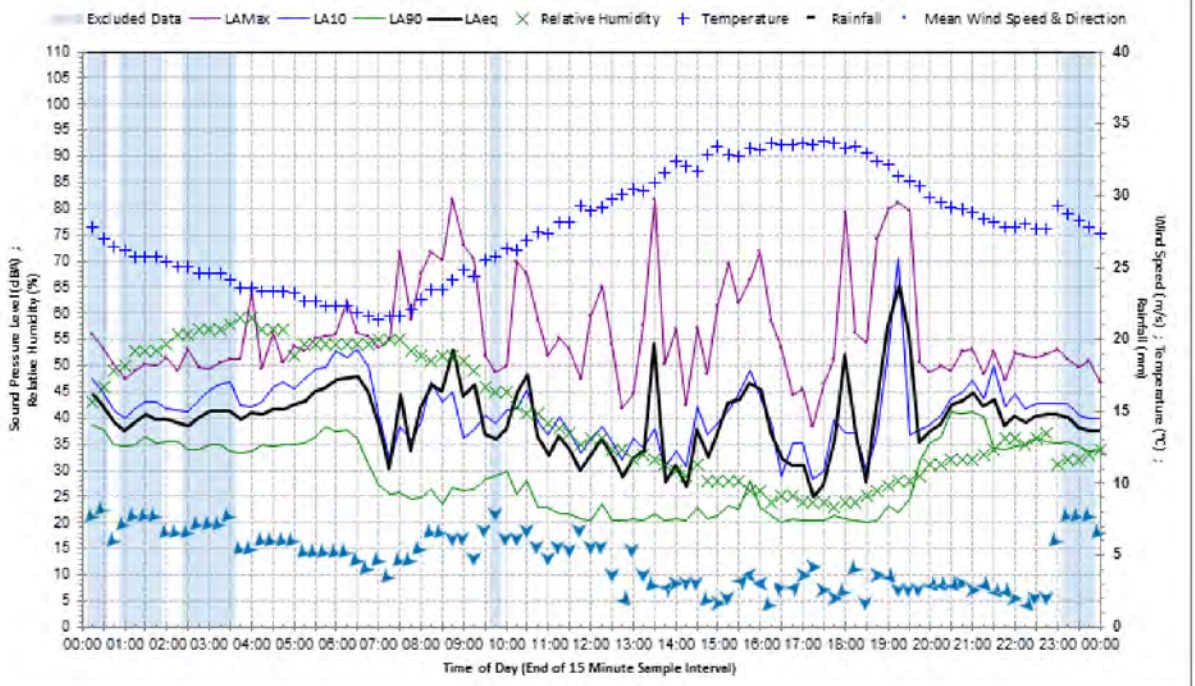


Logger L07NNS

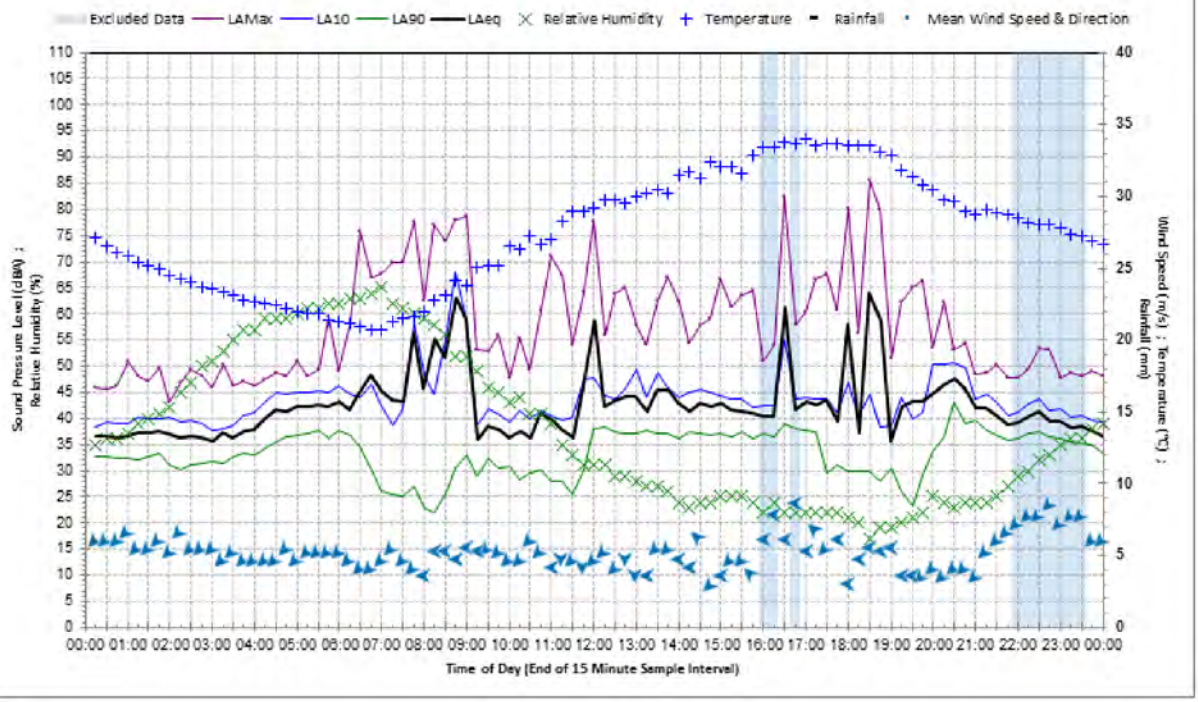




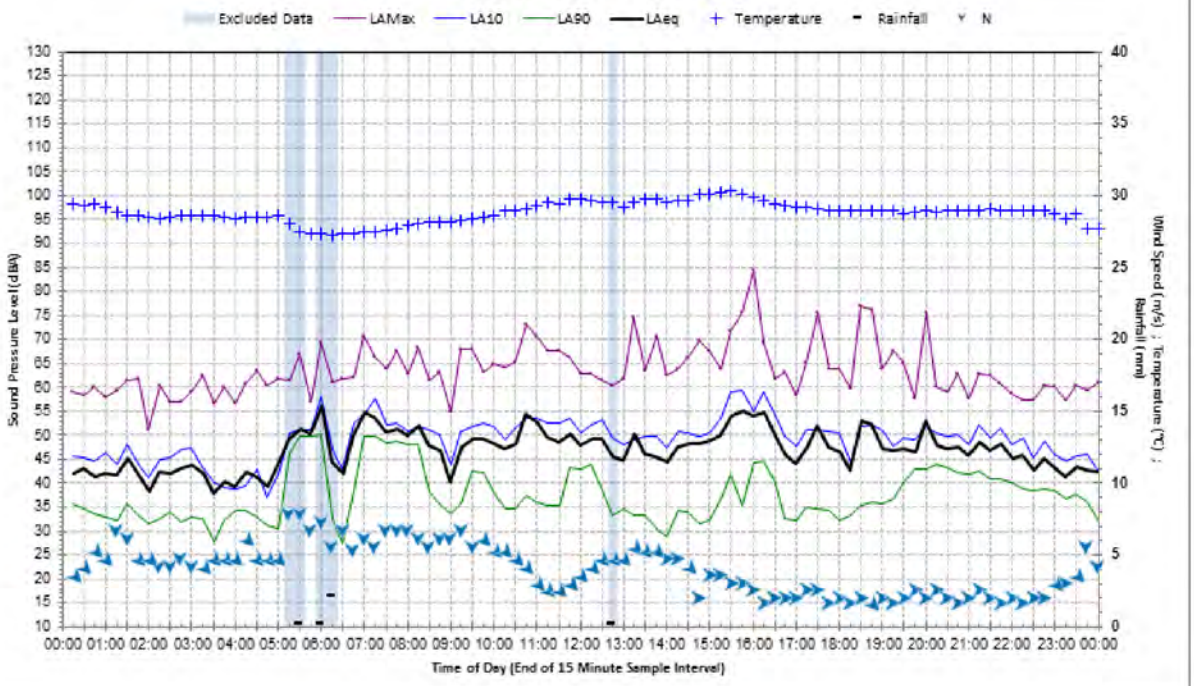
Statistical Ambient Noise Levels
Saturday 5 March 2016



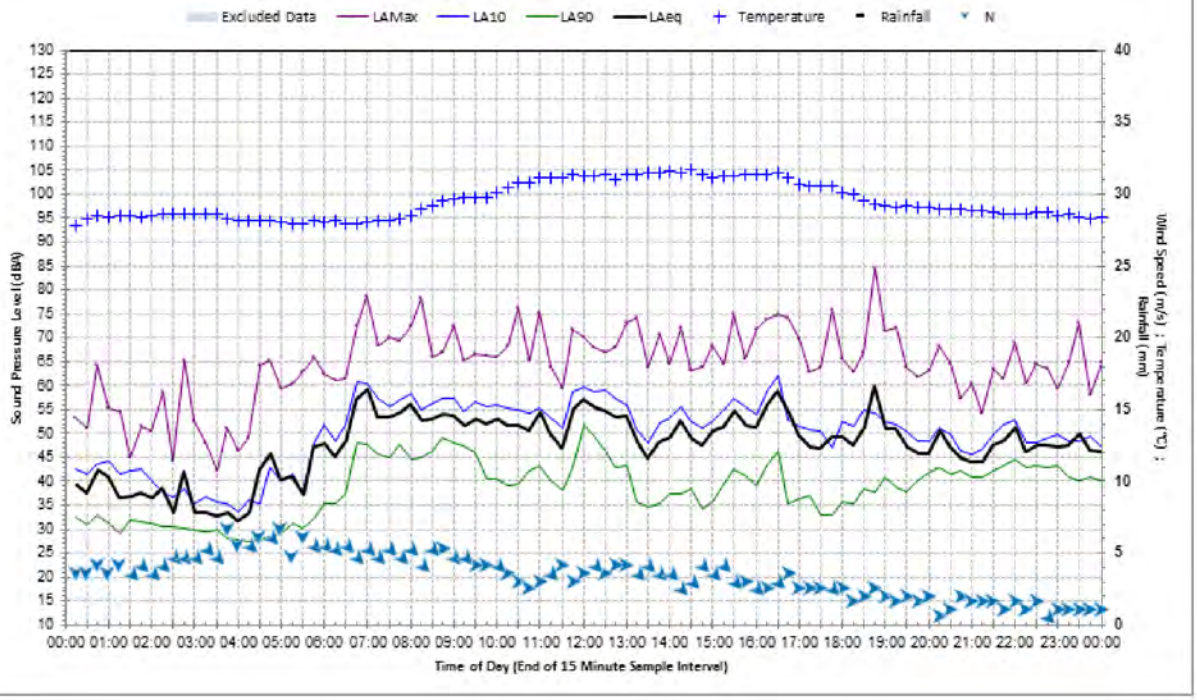
Statistical Ambient Noise Levels
Sunday 6 March 2016



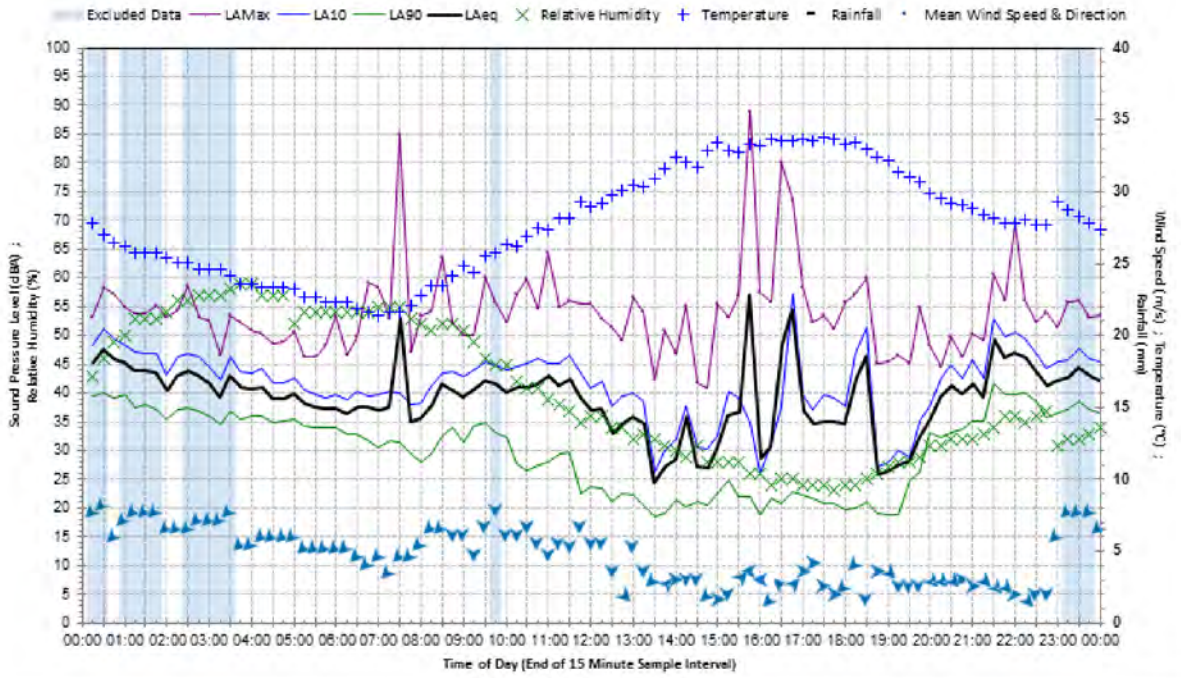
Statistical Ambient Noise Levels
Sunday 20 March 2016



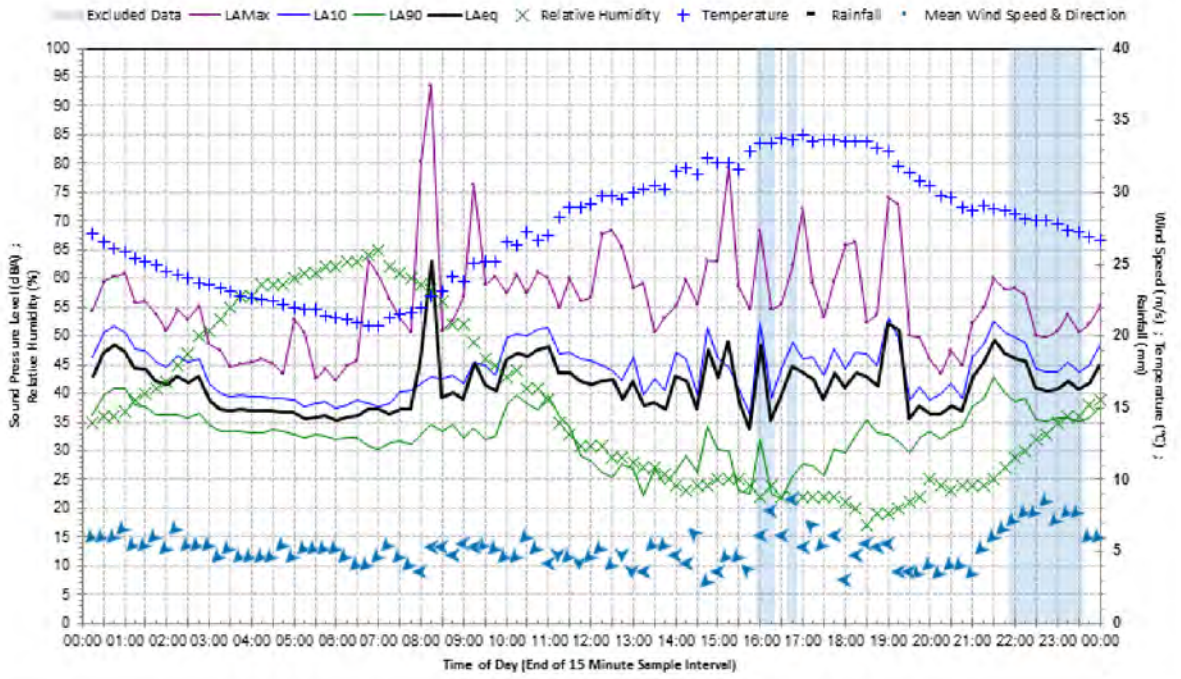
Statistical Ambient Noise Levels
Monday 21 March 2016



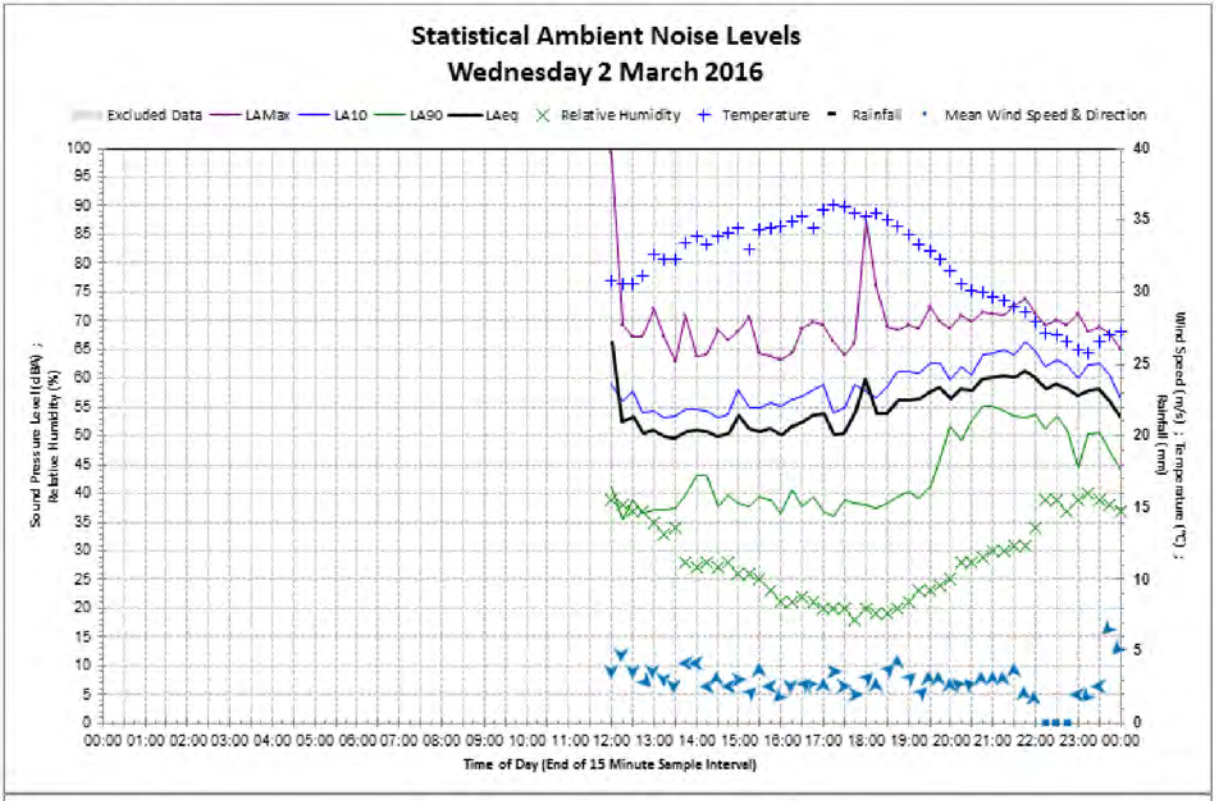
Statistical Ambient Noise Levels
Saturday 5 March 2016

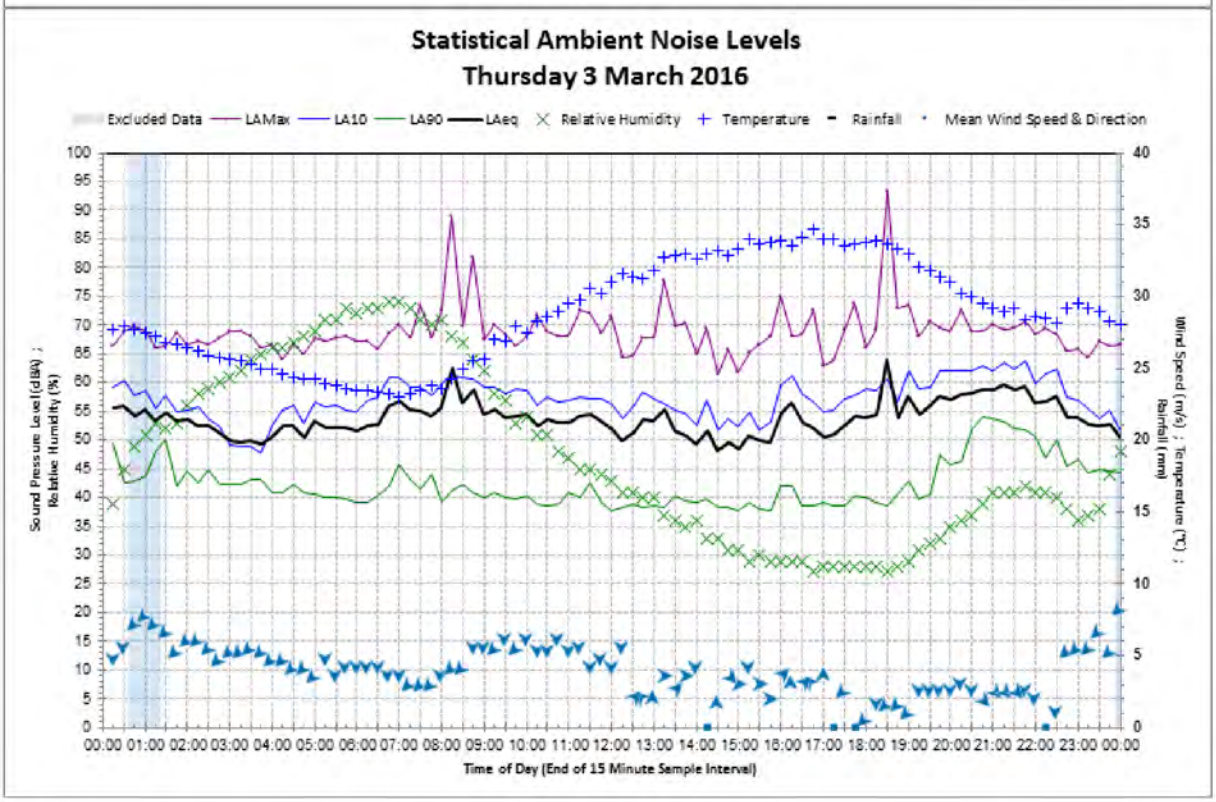


Statistical Ambient Noise Levels
Sunday 6 March 2016

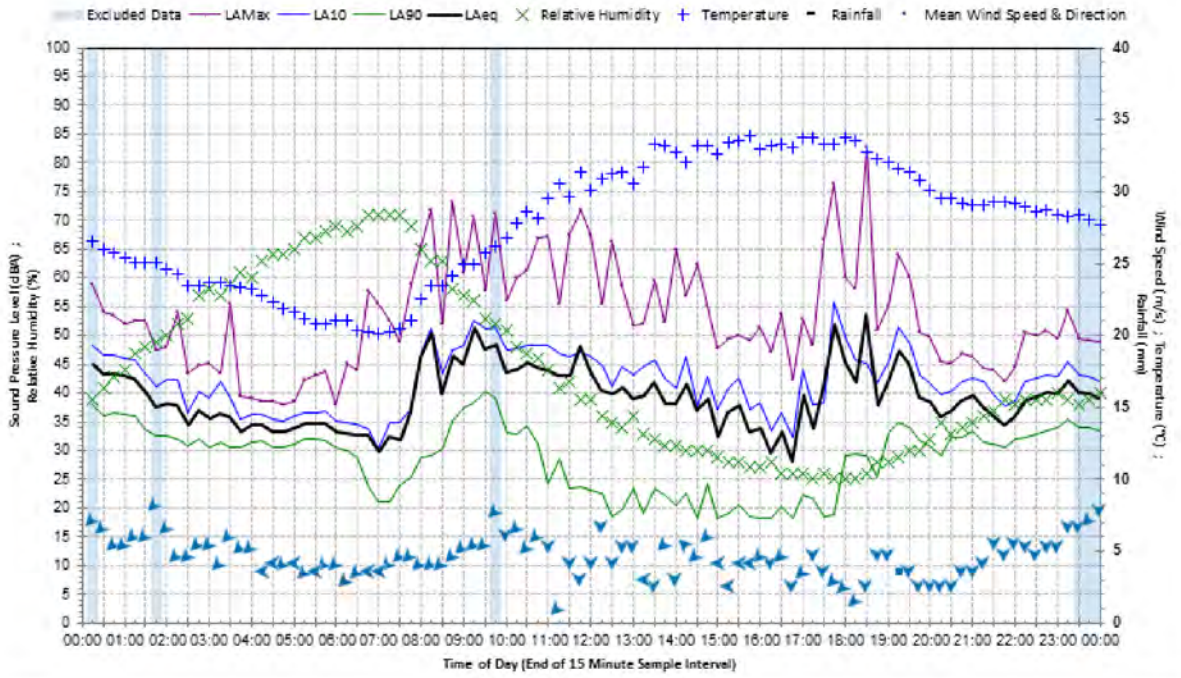


Logger L12NNS

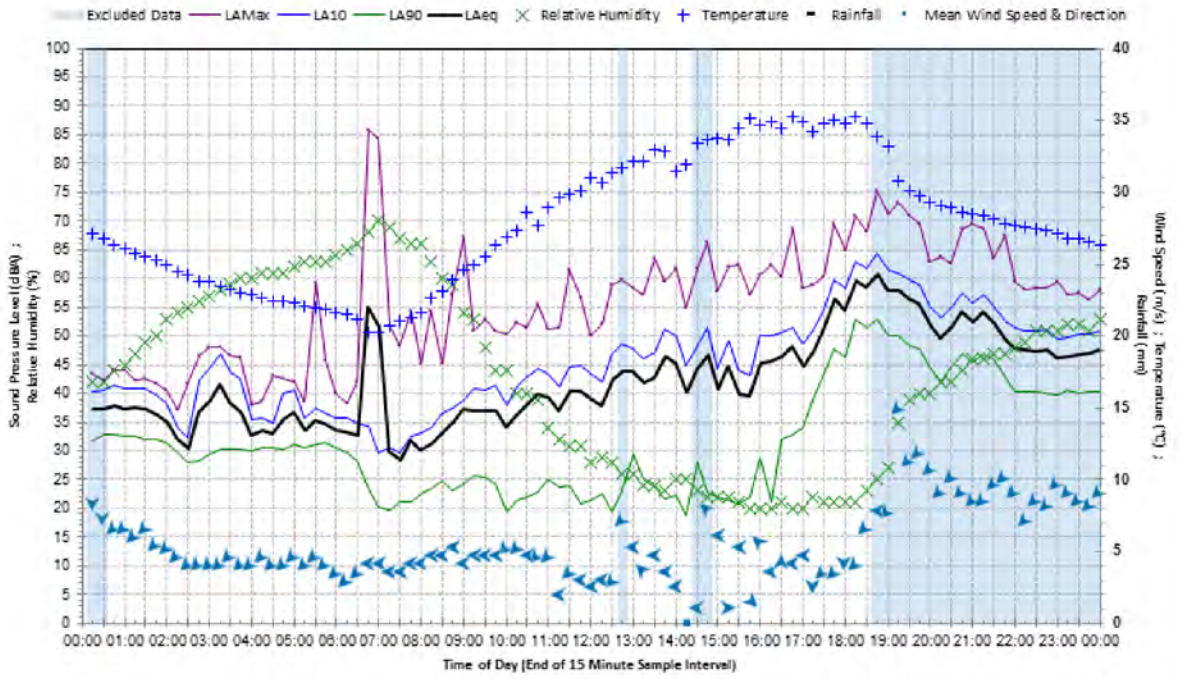




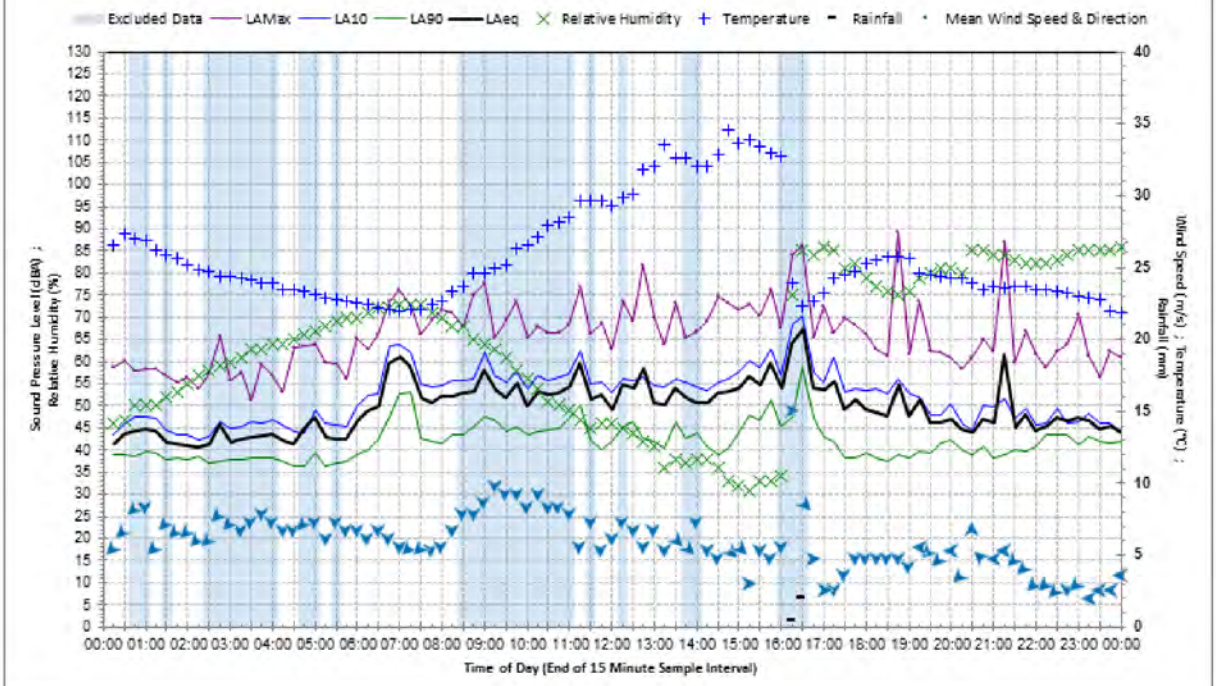
Statistical Ambient Noise Levels
Monday 7 March 2016



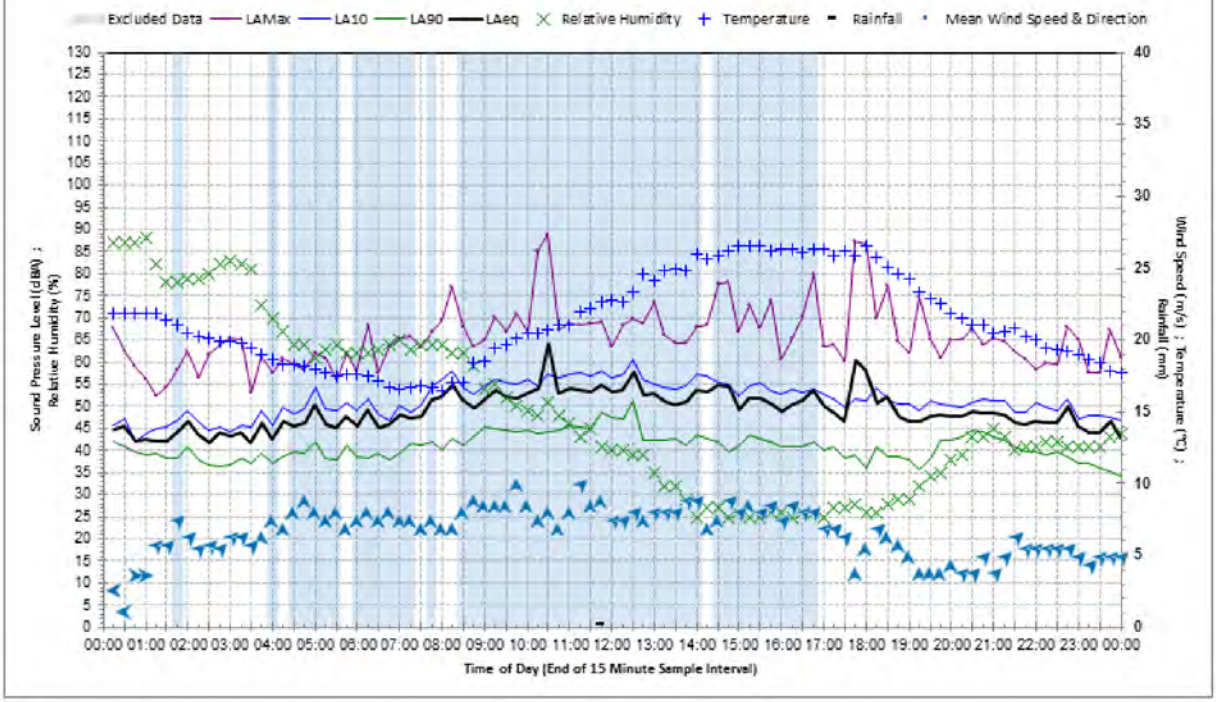
Statistical Ambient Noise Levels
Tuesday 8 March 2016

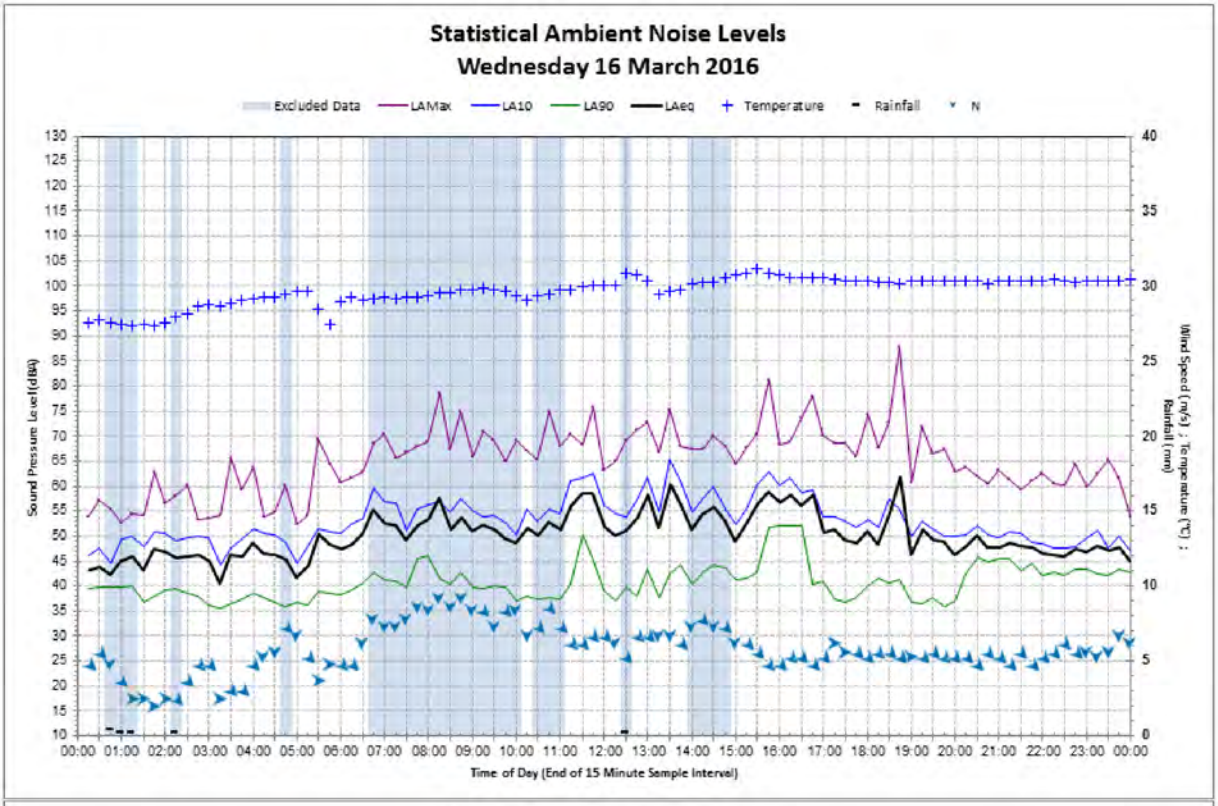


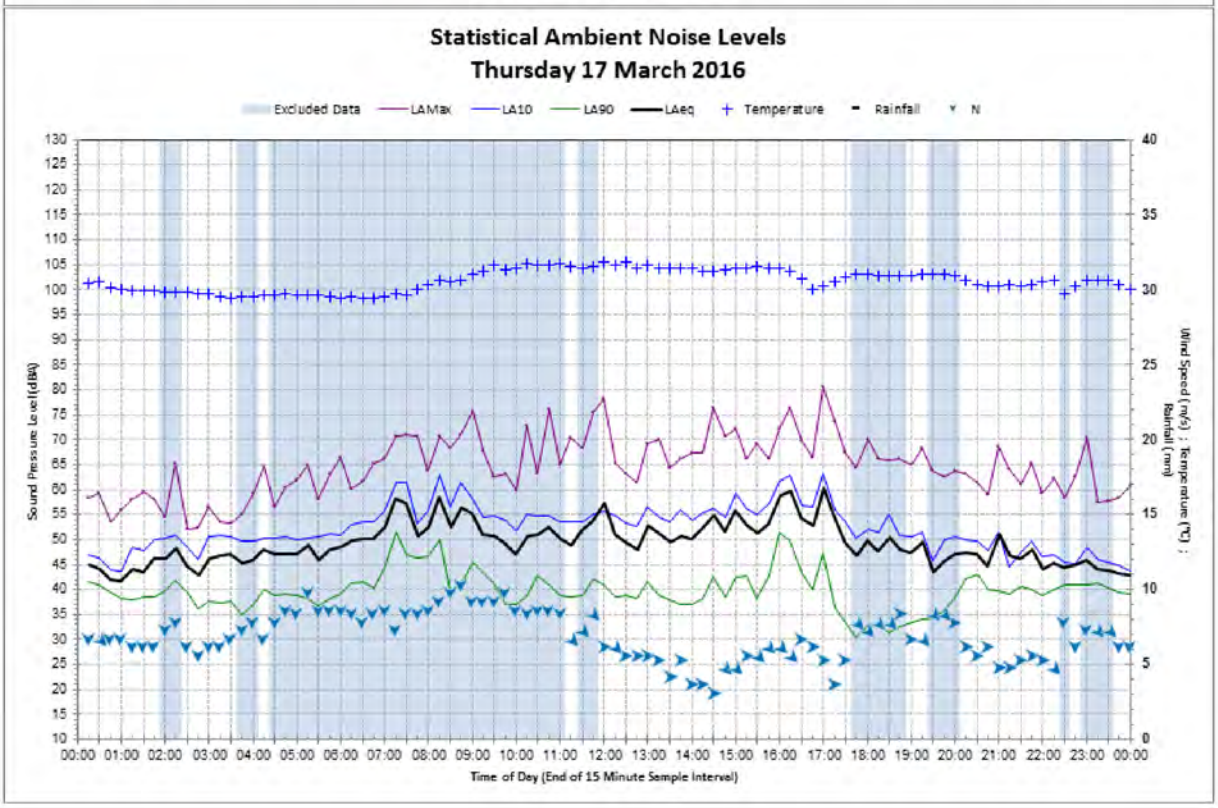
Statistical Ambient Noise Levels
Friday 18 March 2016



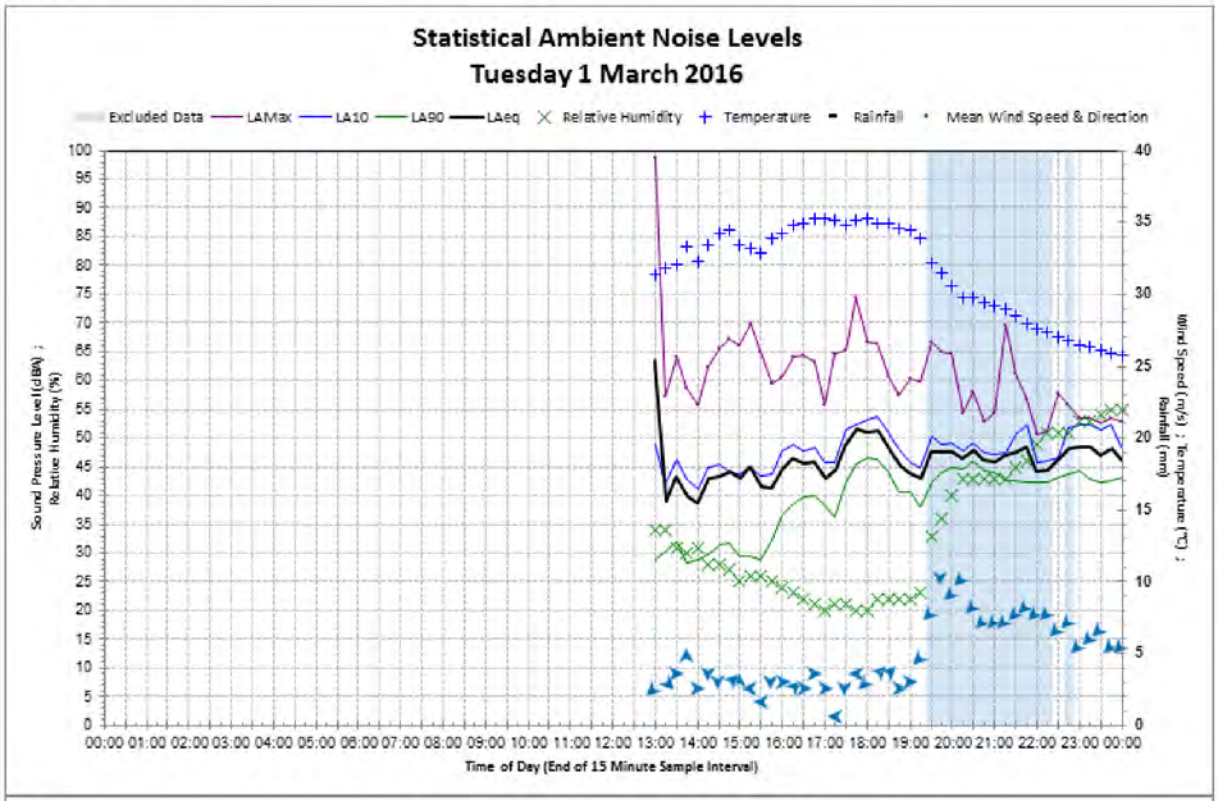
Statistical Ambient Noise Levels
Saturday 19 March 2016

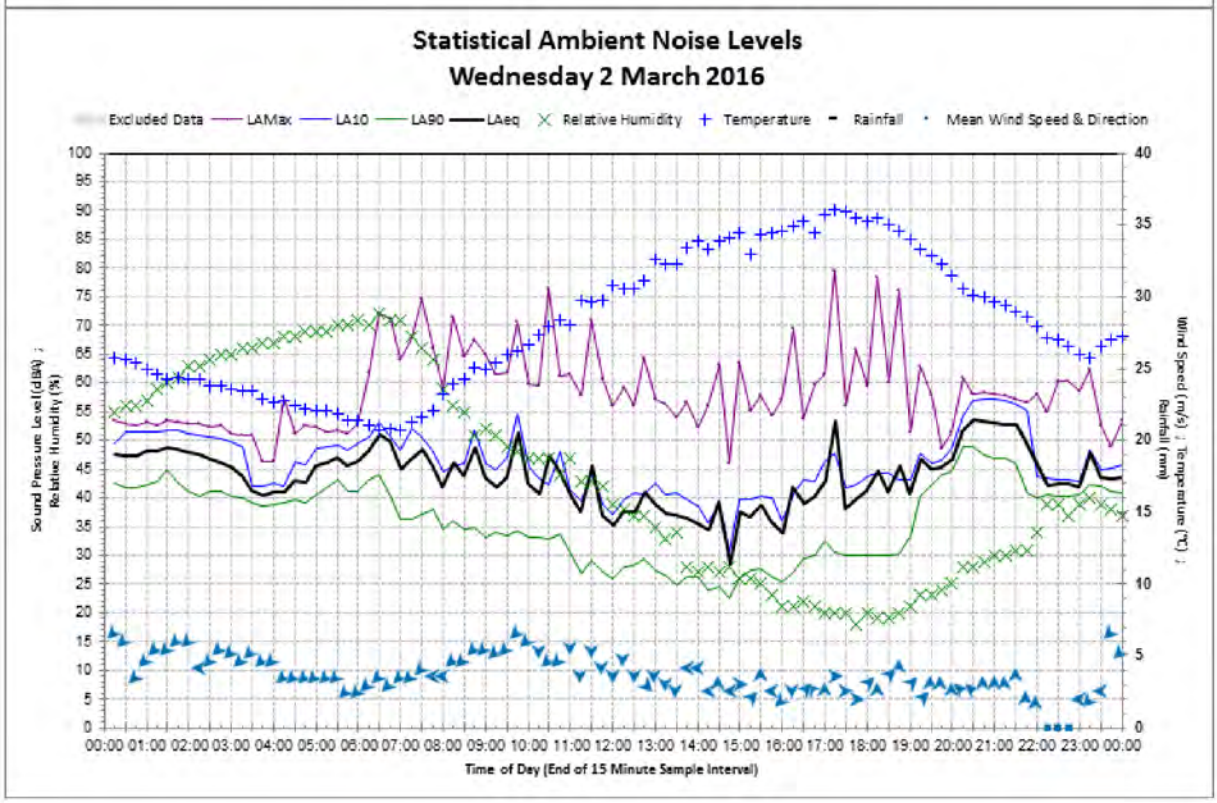



Statistical Ambient Noise Levels
Wednesday 16 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

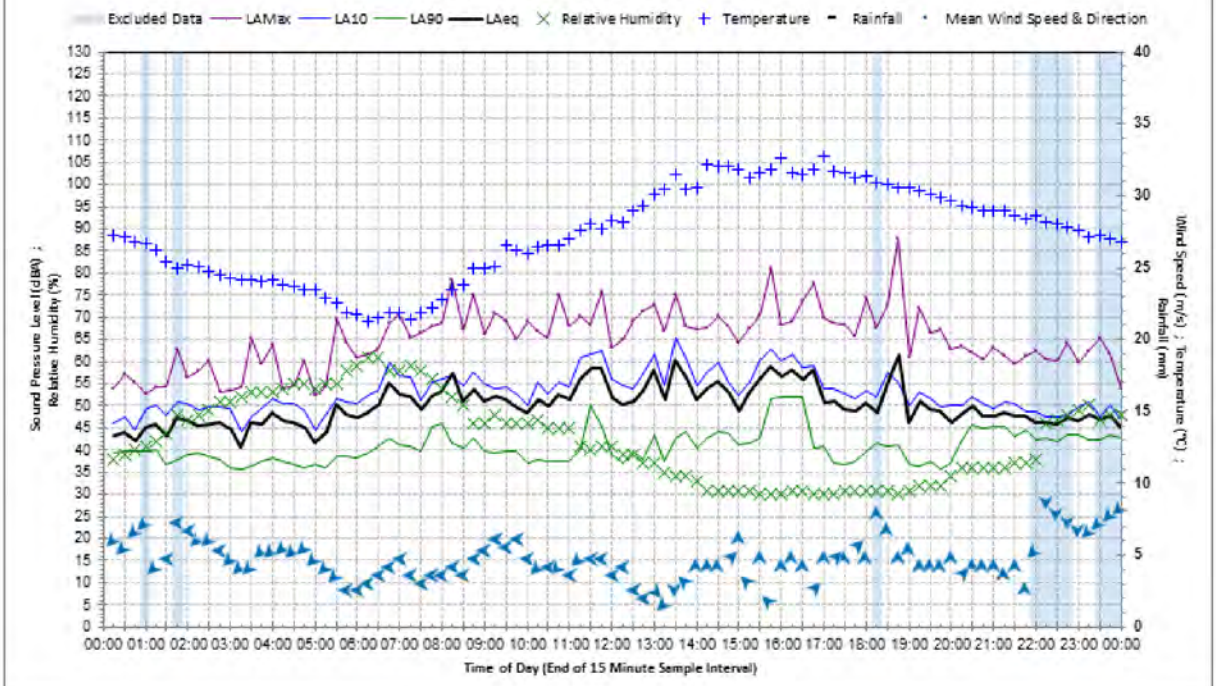

Statistical Ambient Noise Levels
Thursday 17 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Logger L03NNS

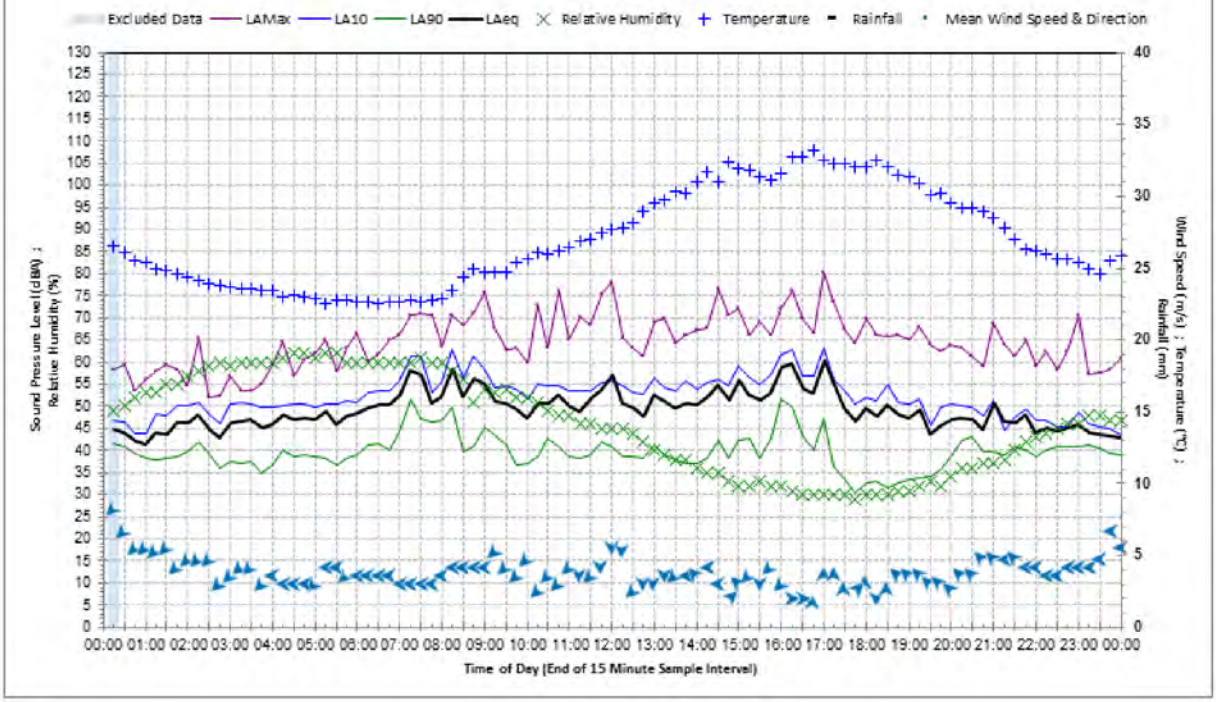




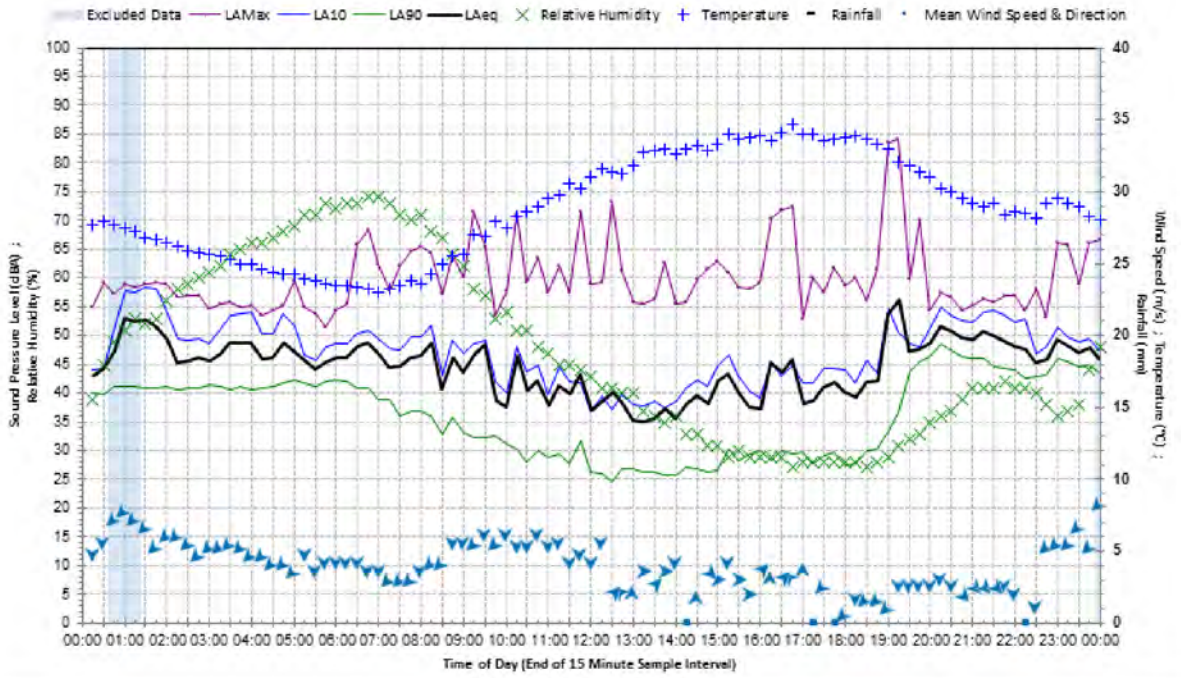
Statistical Ambient Noise Levels
Wednesday 16 March 2016



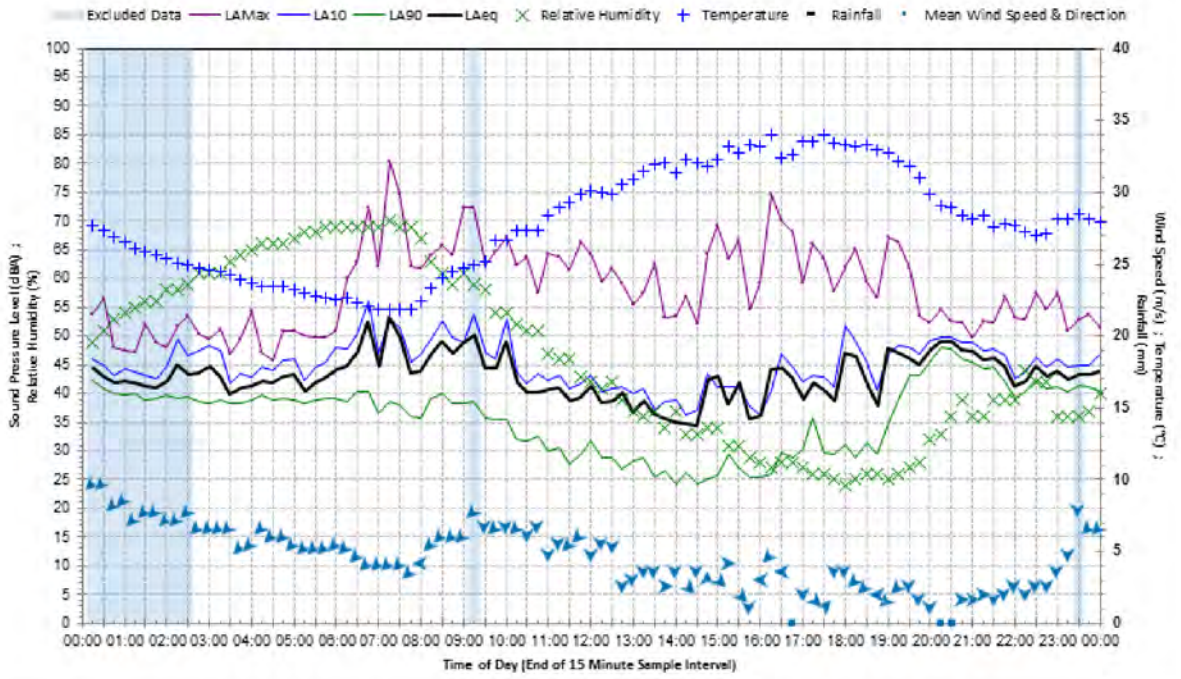
Statistical Ambient Noise Levels
Thursday 17 March 2016



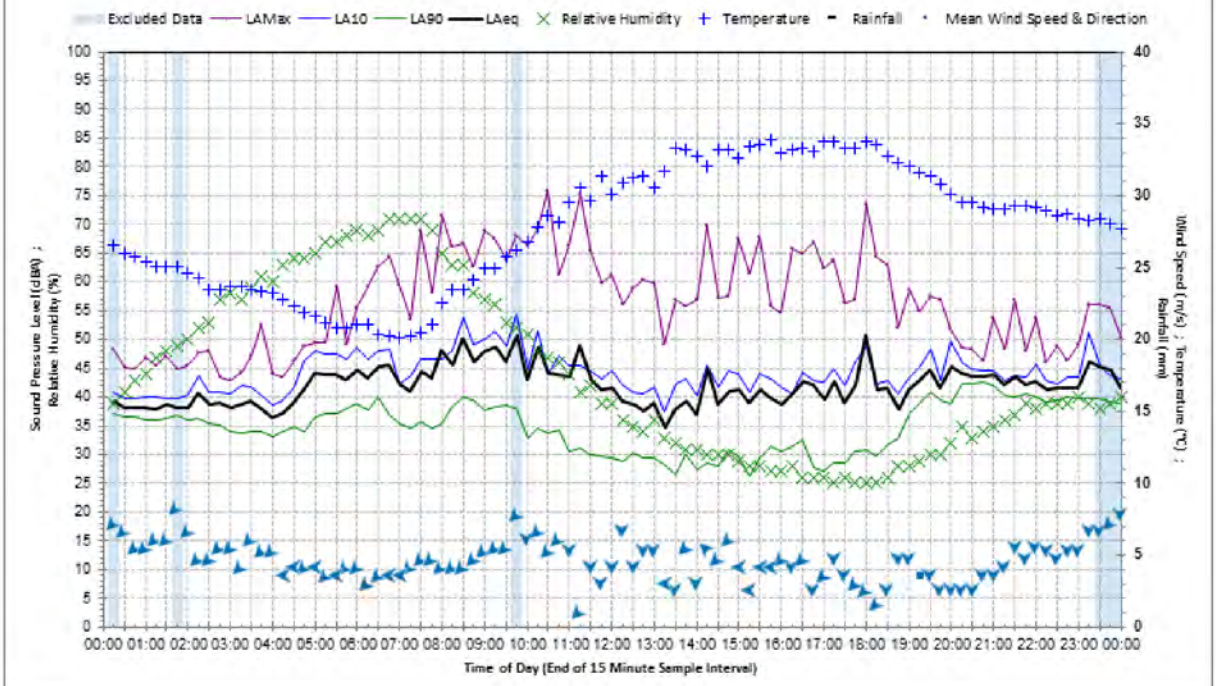
Statistical Ambient Noise Levels
Thursday 3 March 2016



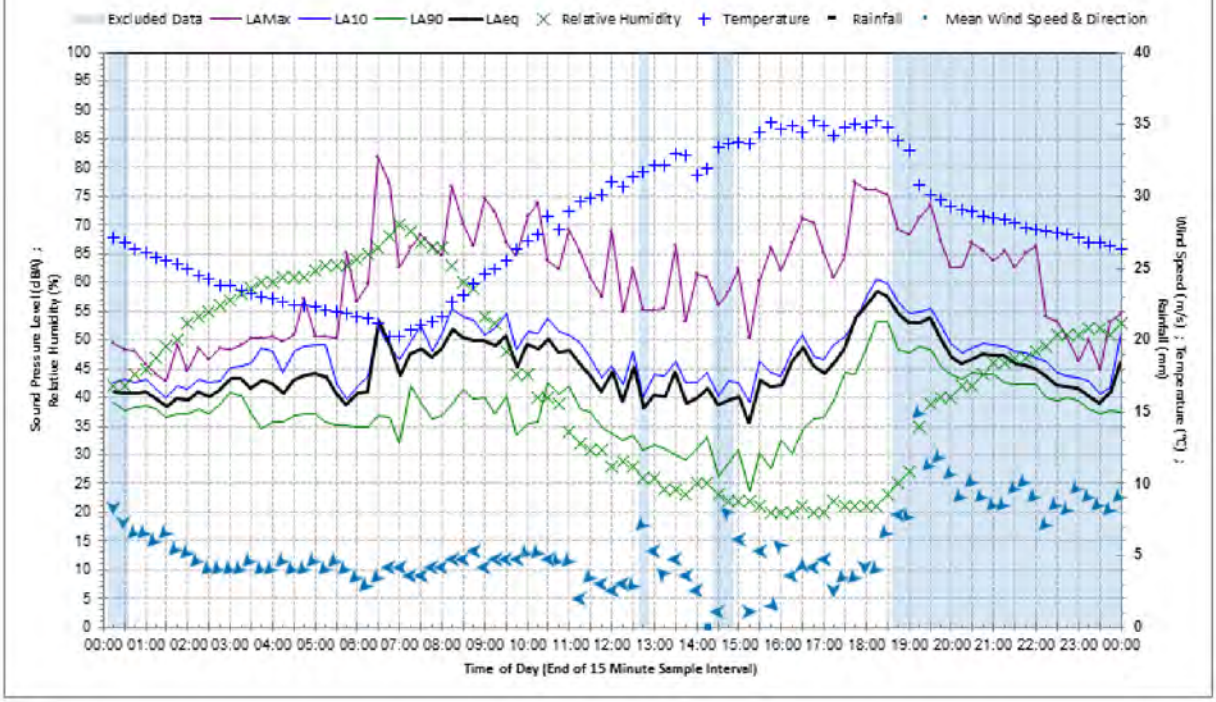
Statistical Ambient Noise Levels
Friday 4 March 2016



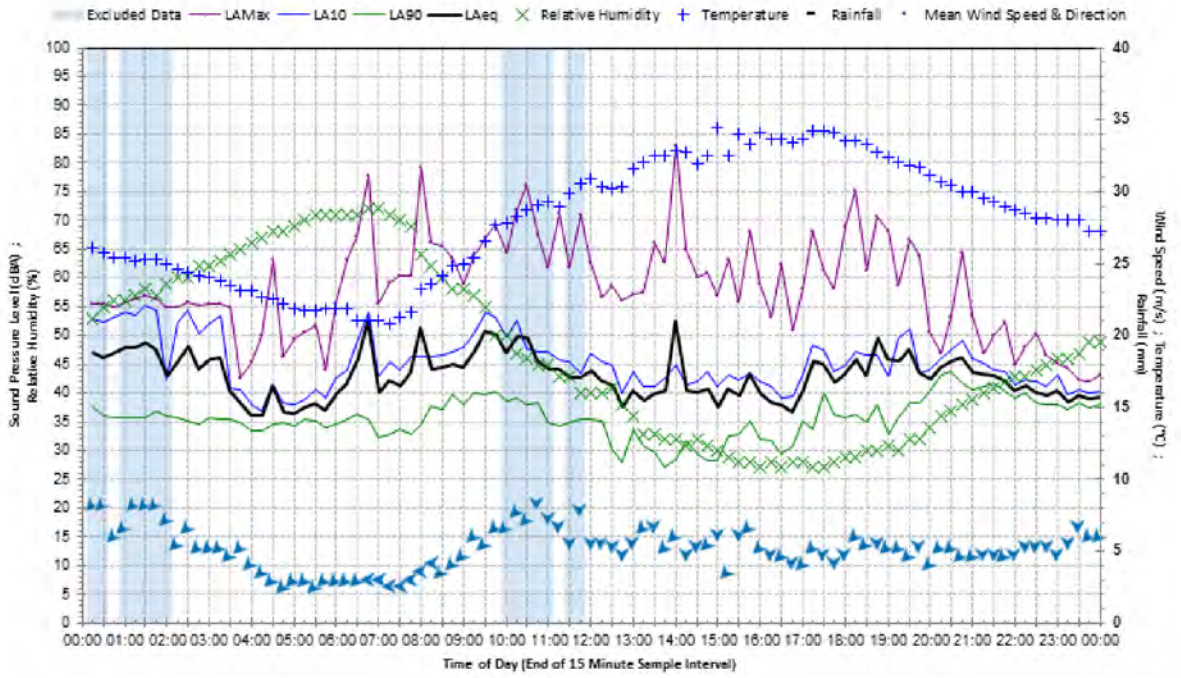
Statistical Ambient Noise Levels
Monday 7 March 2016



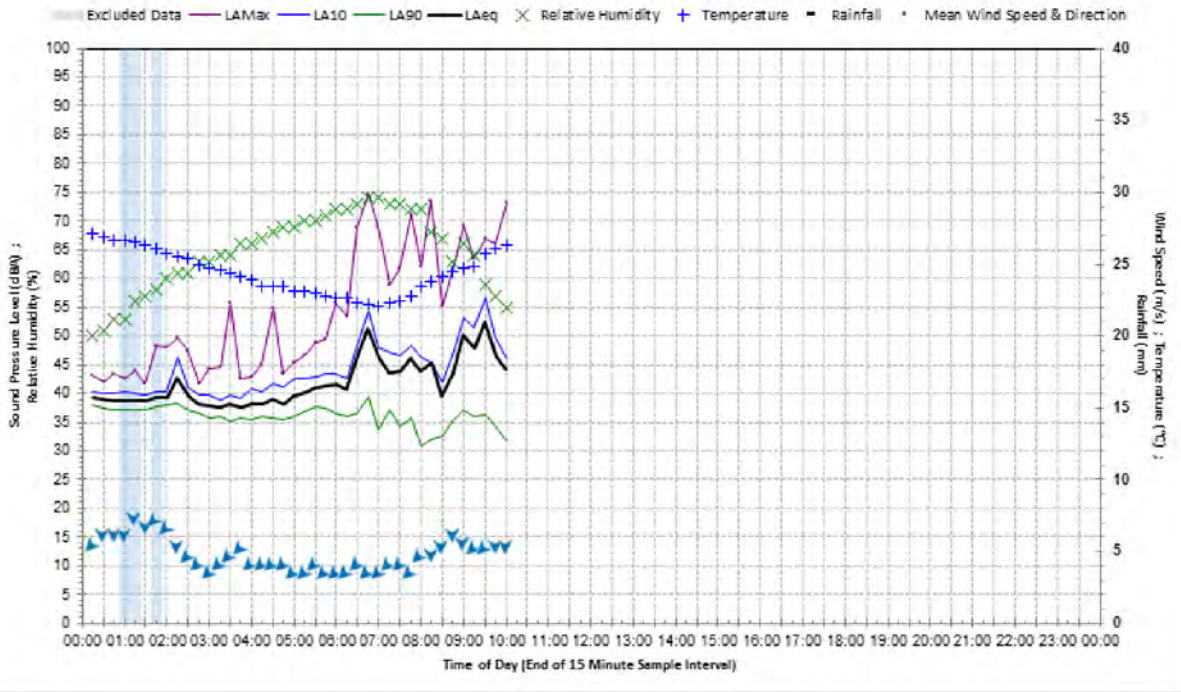
Statistical Ambient Noise Levels
Tuesday 8 March 2016



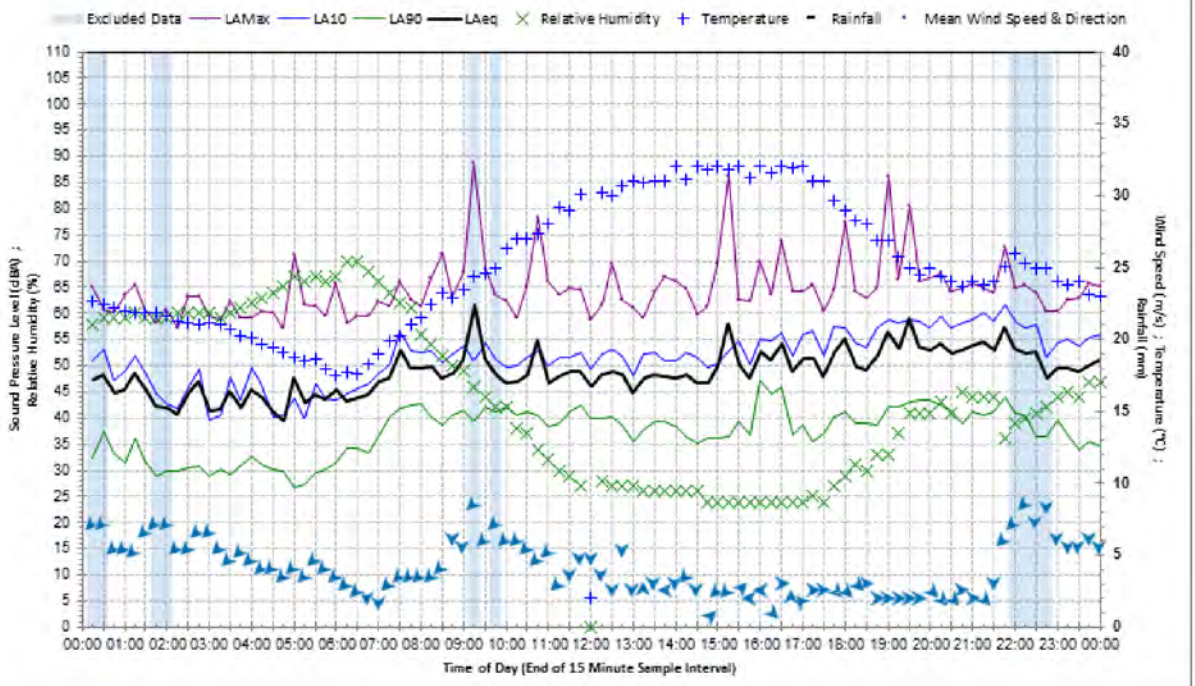
Statistical Ambient Noise Levels
Wednesday 9 March 2016



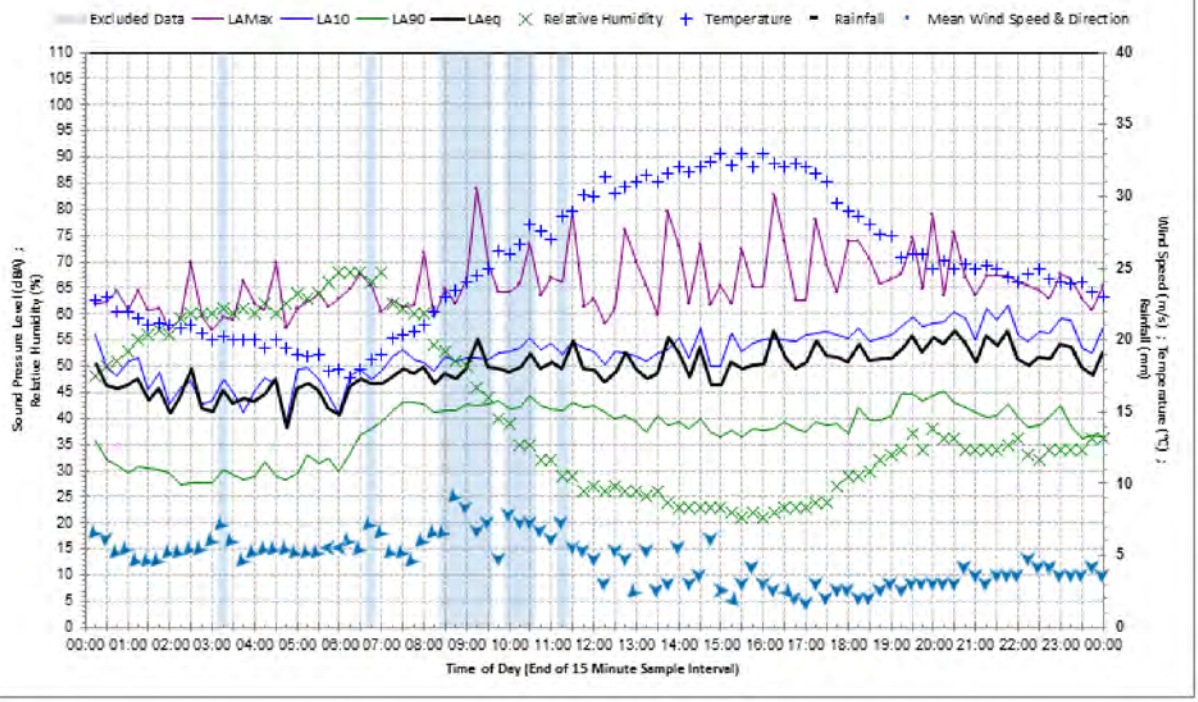
Statistical Ambient Noise Levels
Thursday 10 March 2016



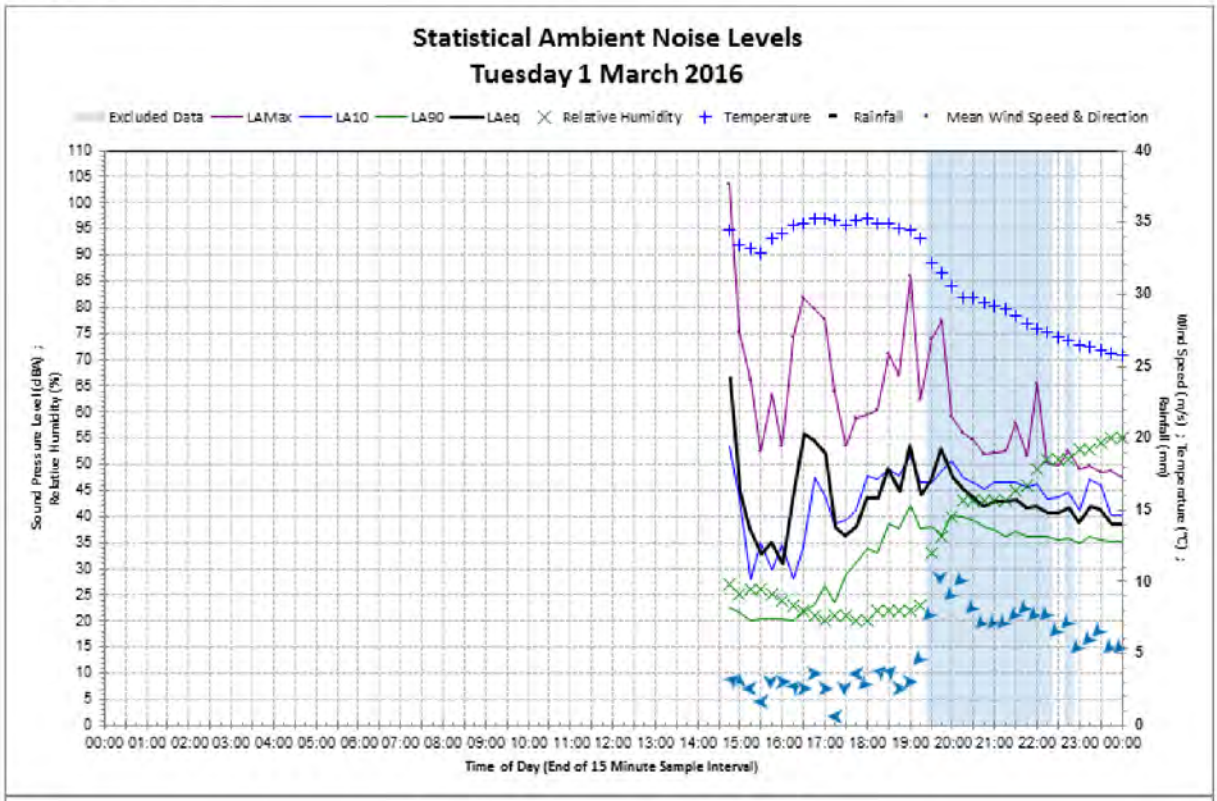
Statistical Ambient Noise Levels
Tuesday 5 April 2016

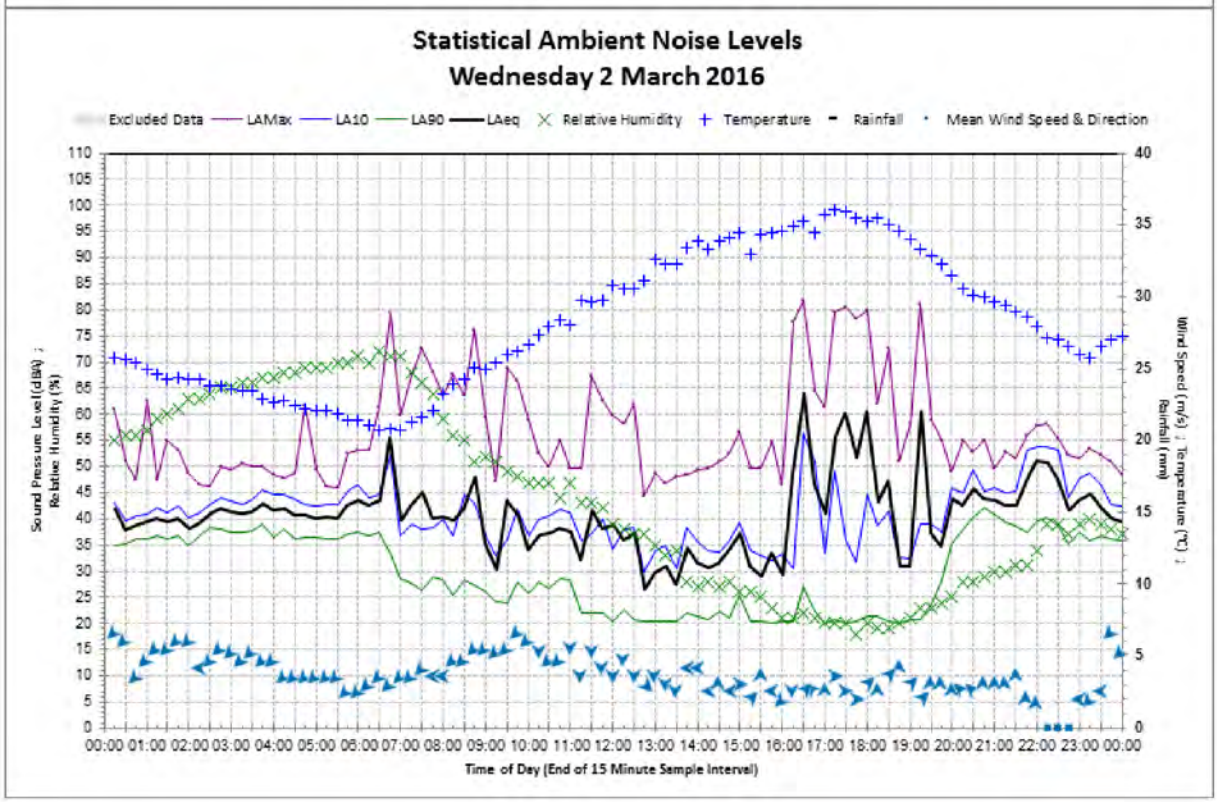


Statistical Ambient Noise Levels
Wednesday 6 April 2016

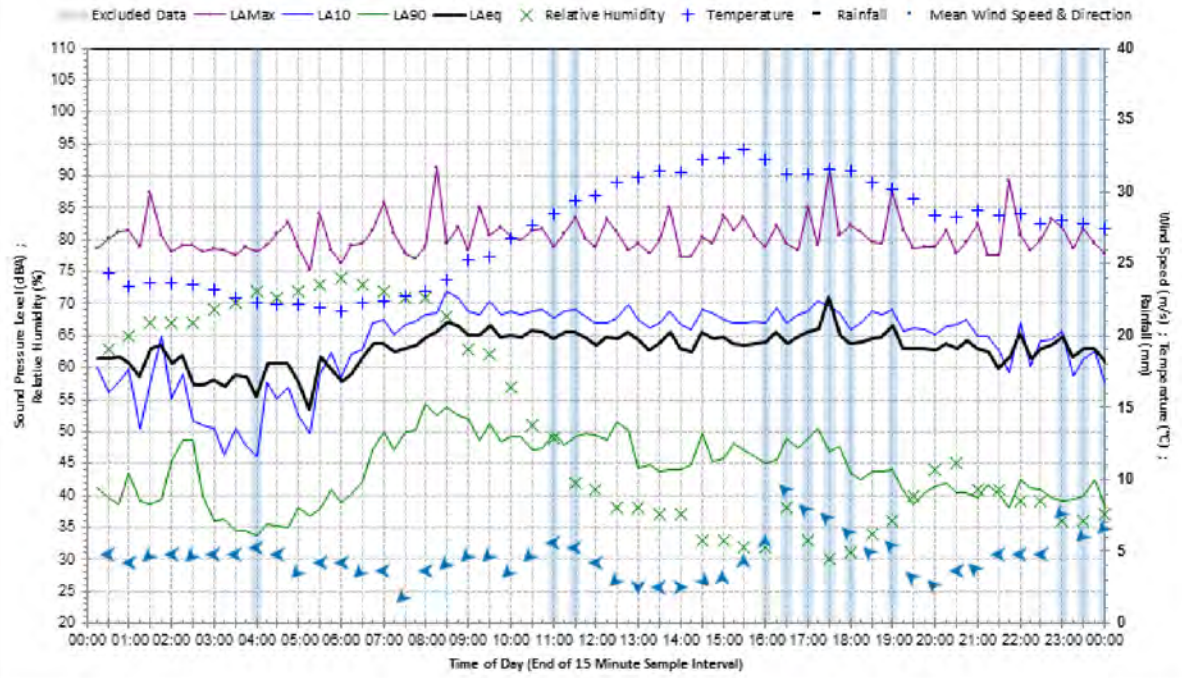


Logger L04NNS

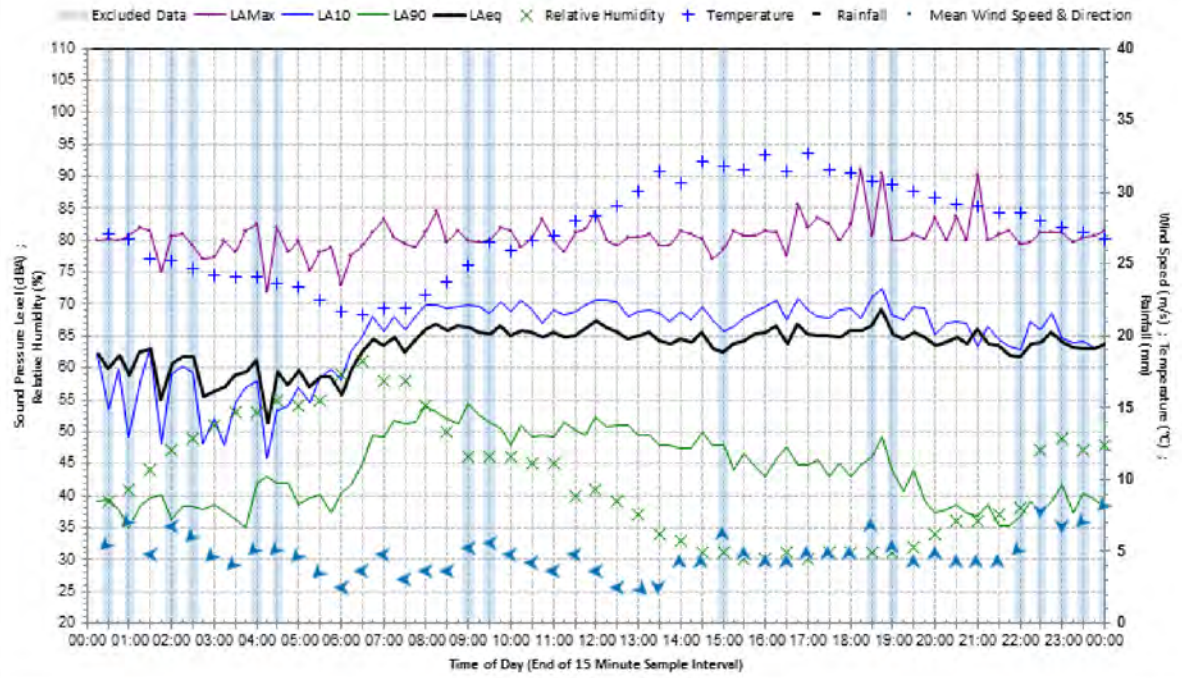




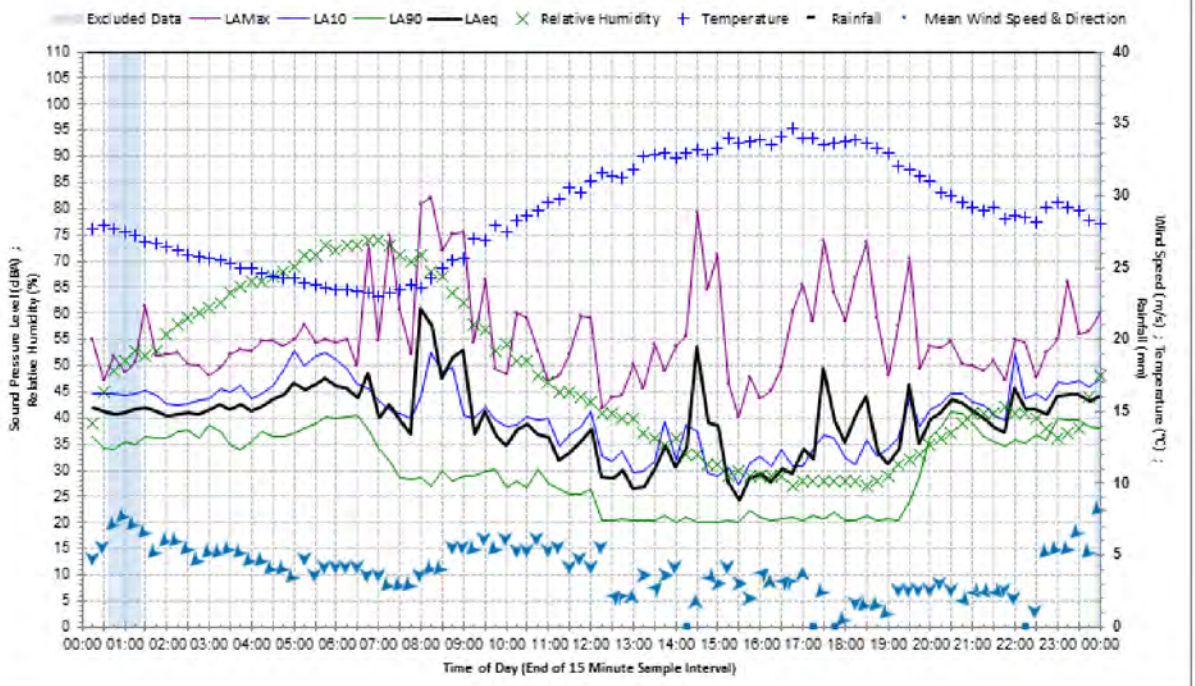
Statistical Ambient Noise Levels
Tuesday 15 March 2016



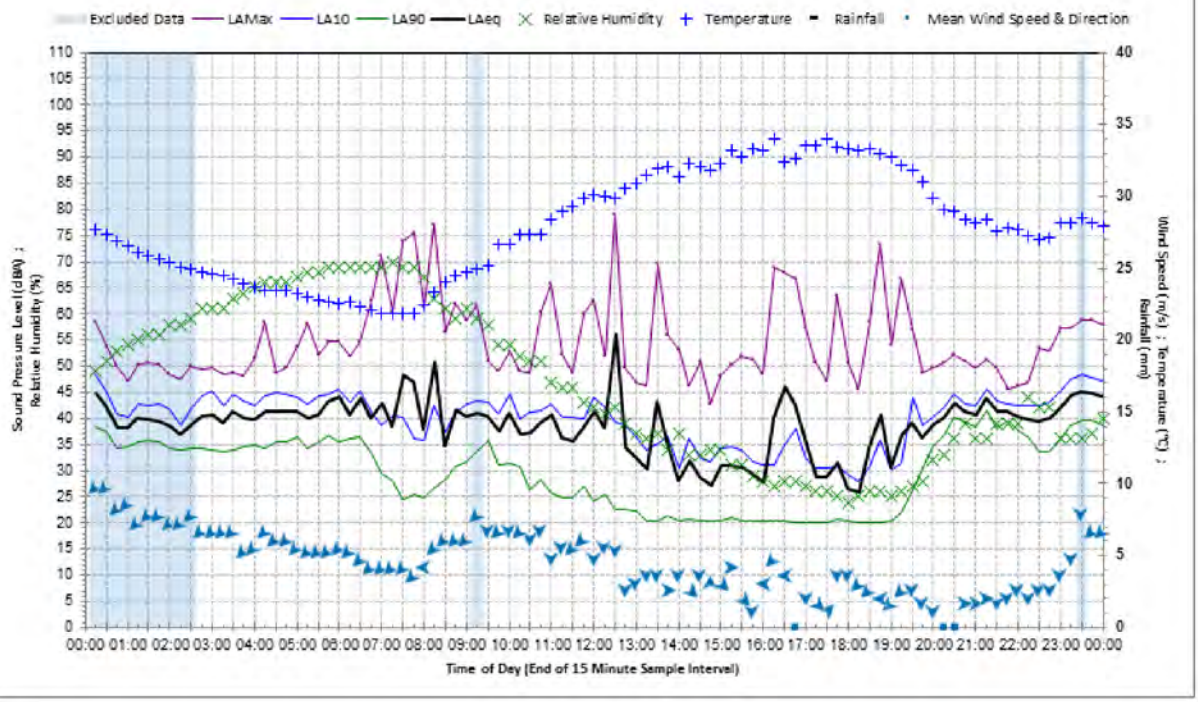
Statistical Ambient Noise Levels
Wednesday 16 March 2016



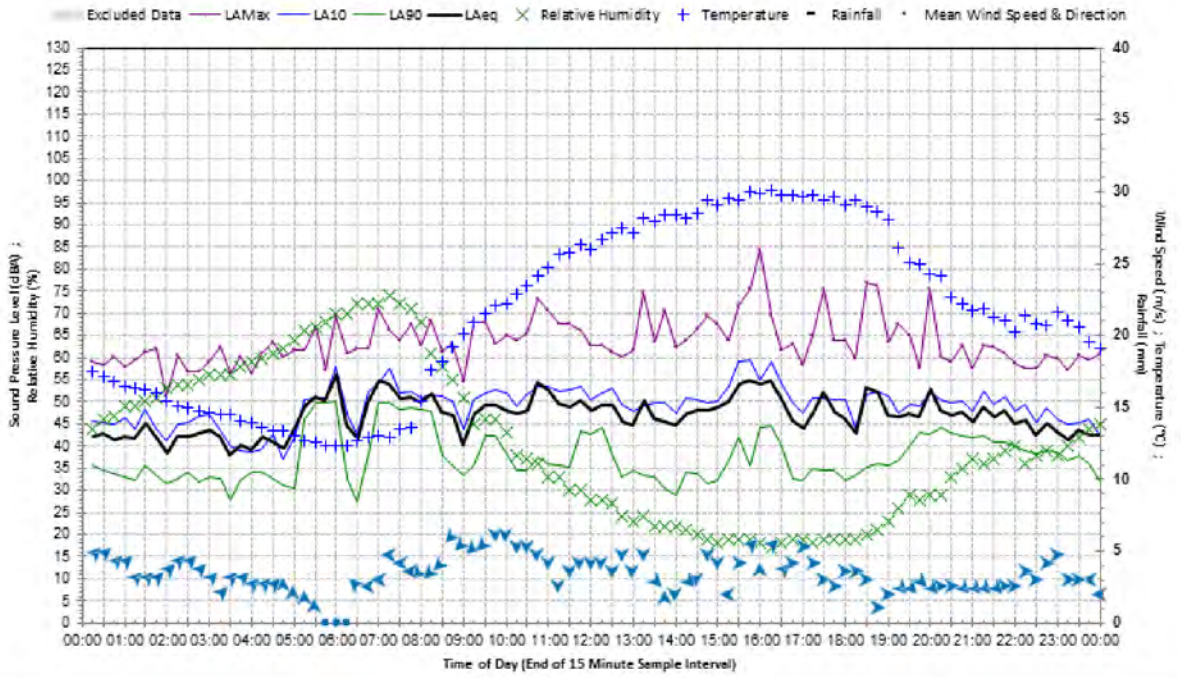
Statistical Ambient Noise Levels
Thursday 3 March 2016



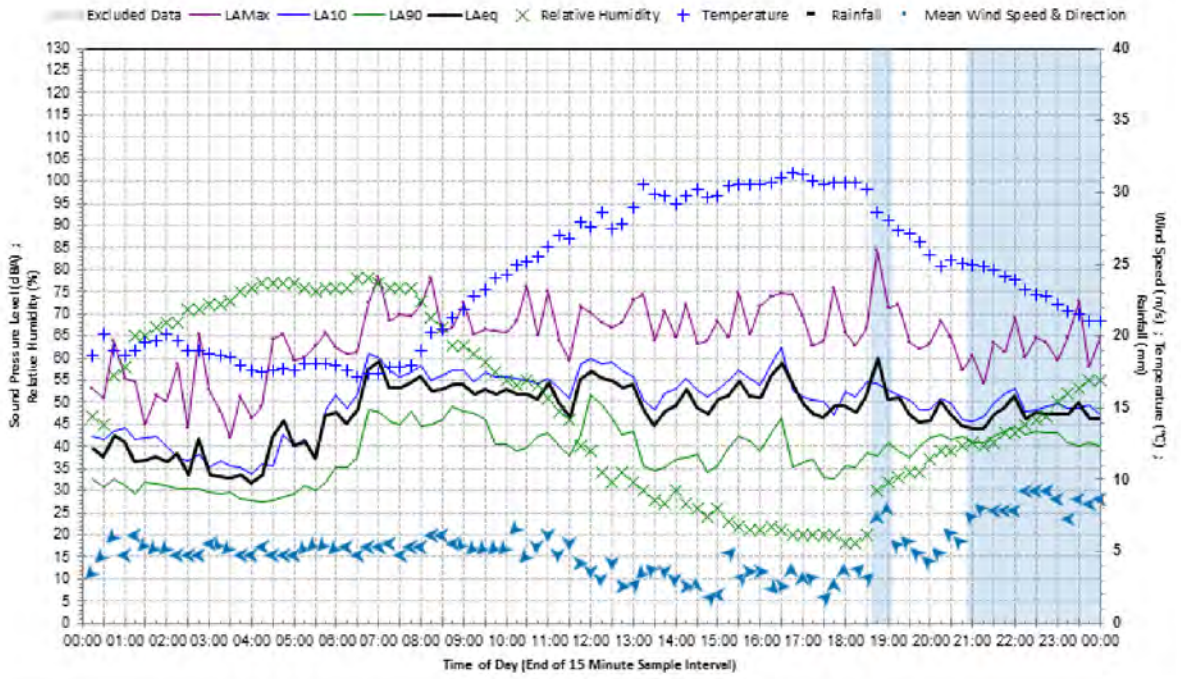
Statistical Ambient Noise Levels
Friday 4 March 2016



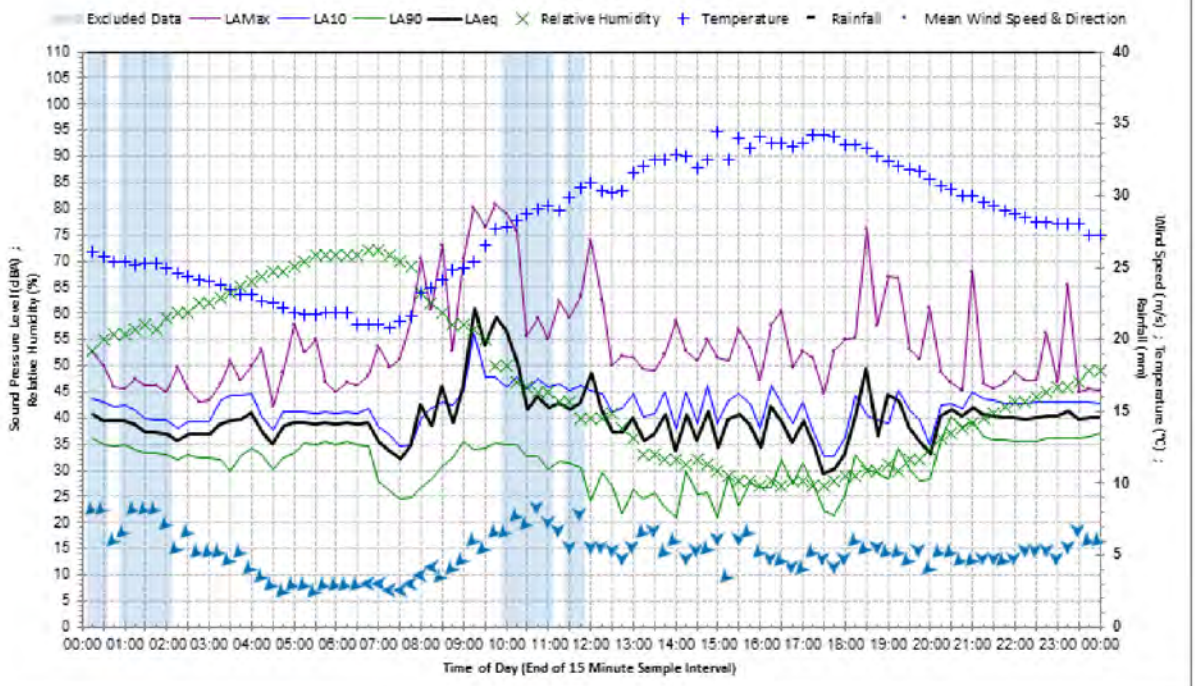
Statistical Ambient Noise Levels
Sunday 20 March 2016



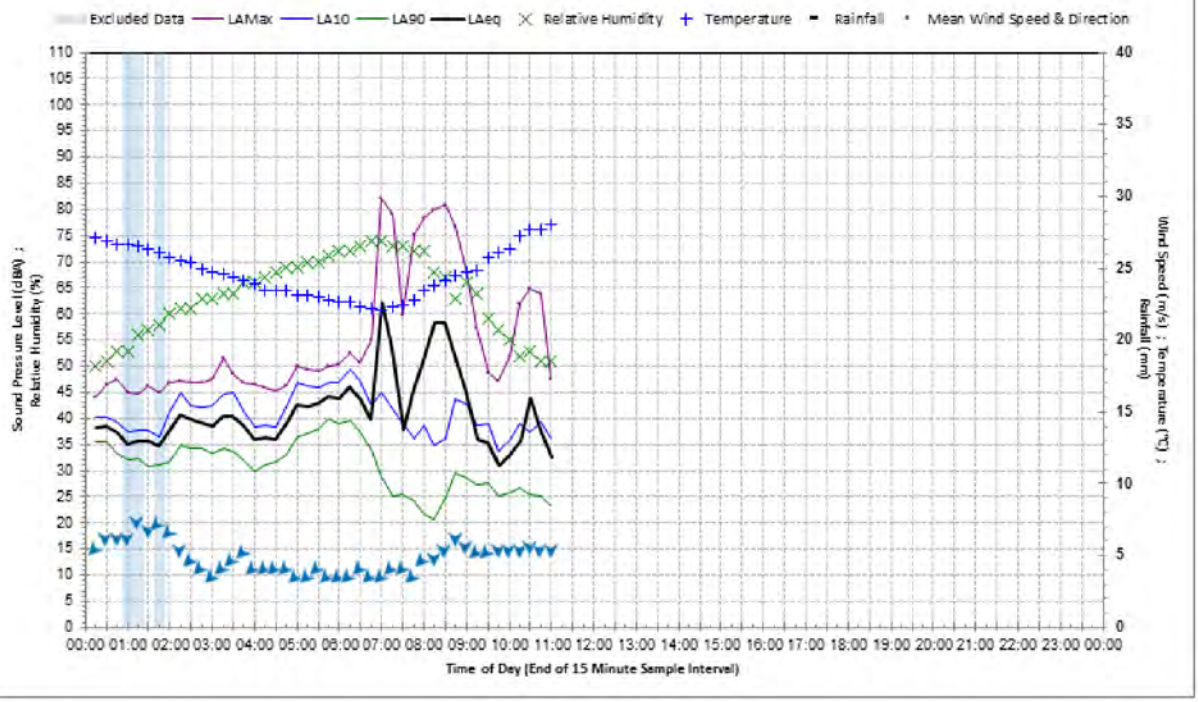
Statistical Ambient Noise Levels
Monday 21 March 2016



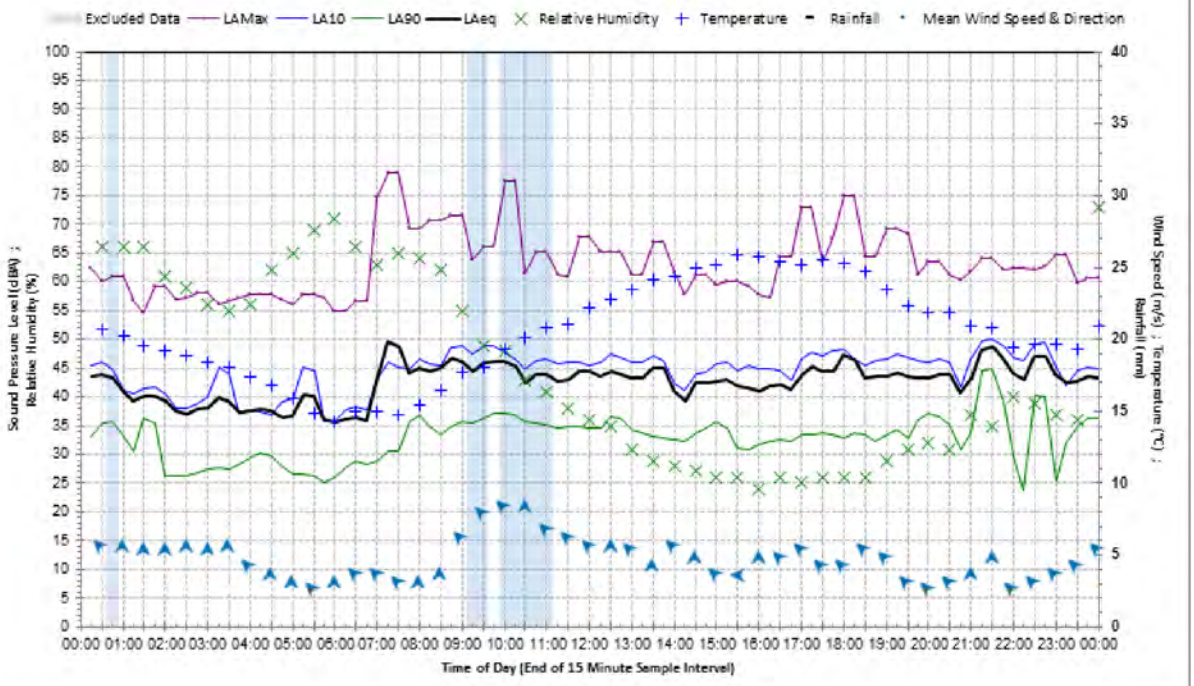
Statistical Ambient Noise Levels
Wednesday 9 March 2016



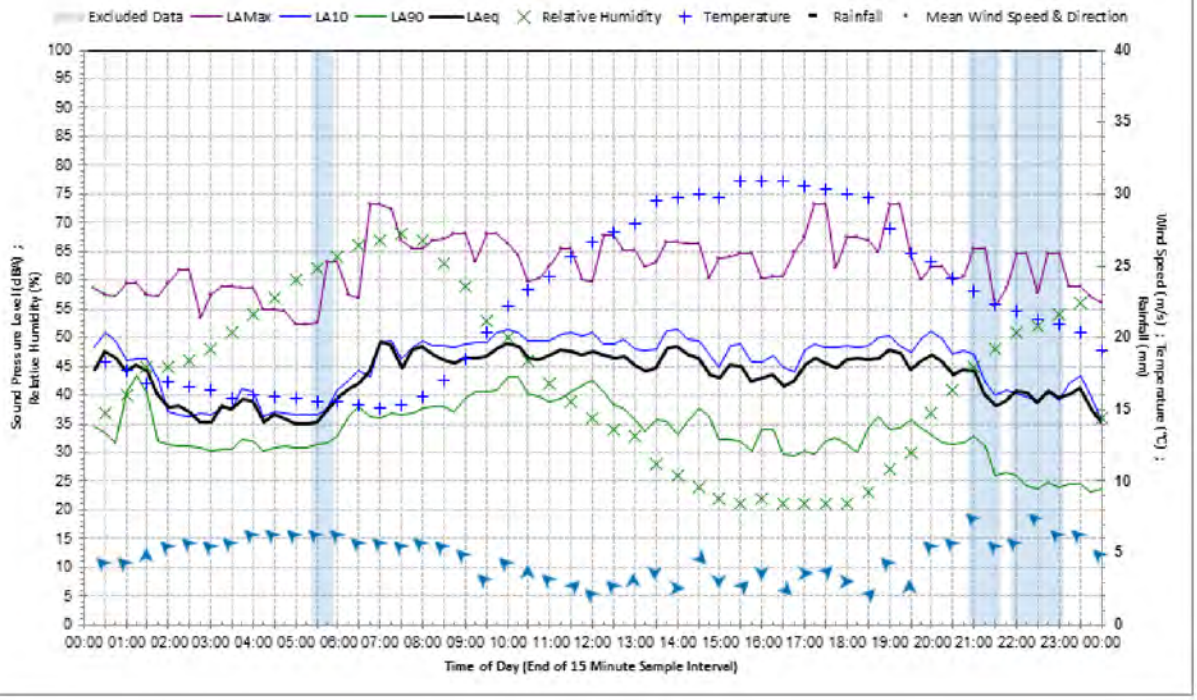
Statistical Ambient Noise Levels
Thursday 10 March 2016



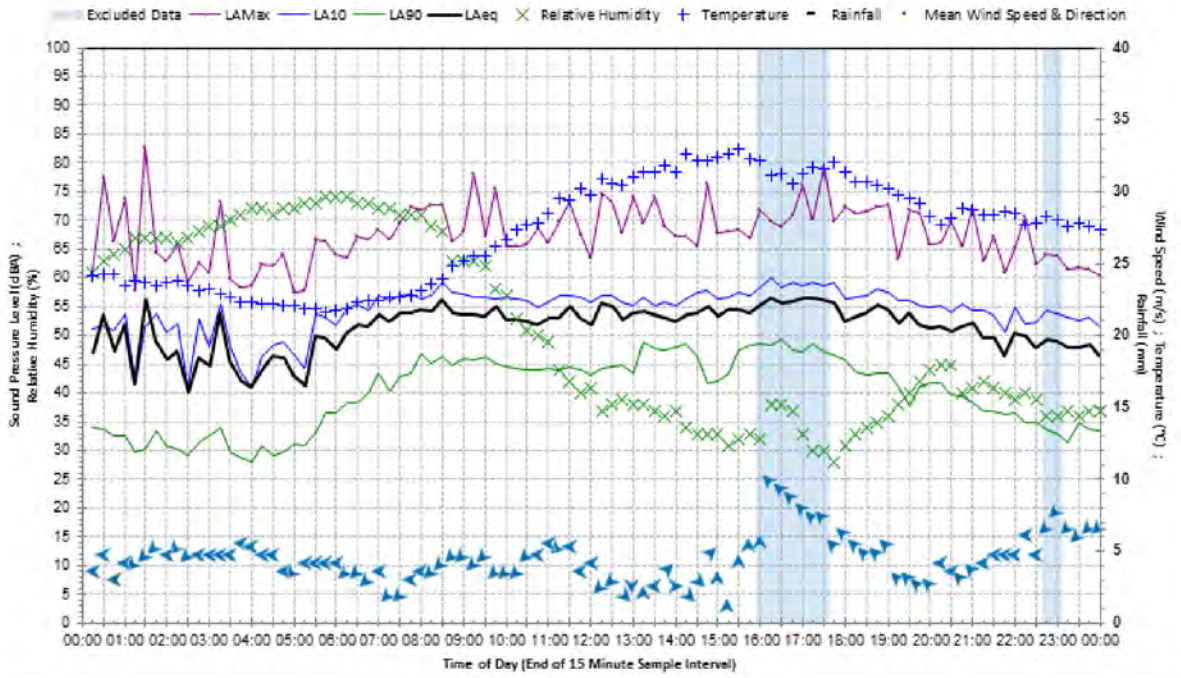
Statistical Ambient Noise Levels
Saturday 19 March 2016



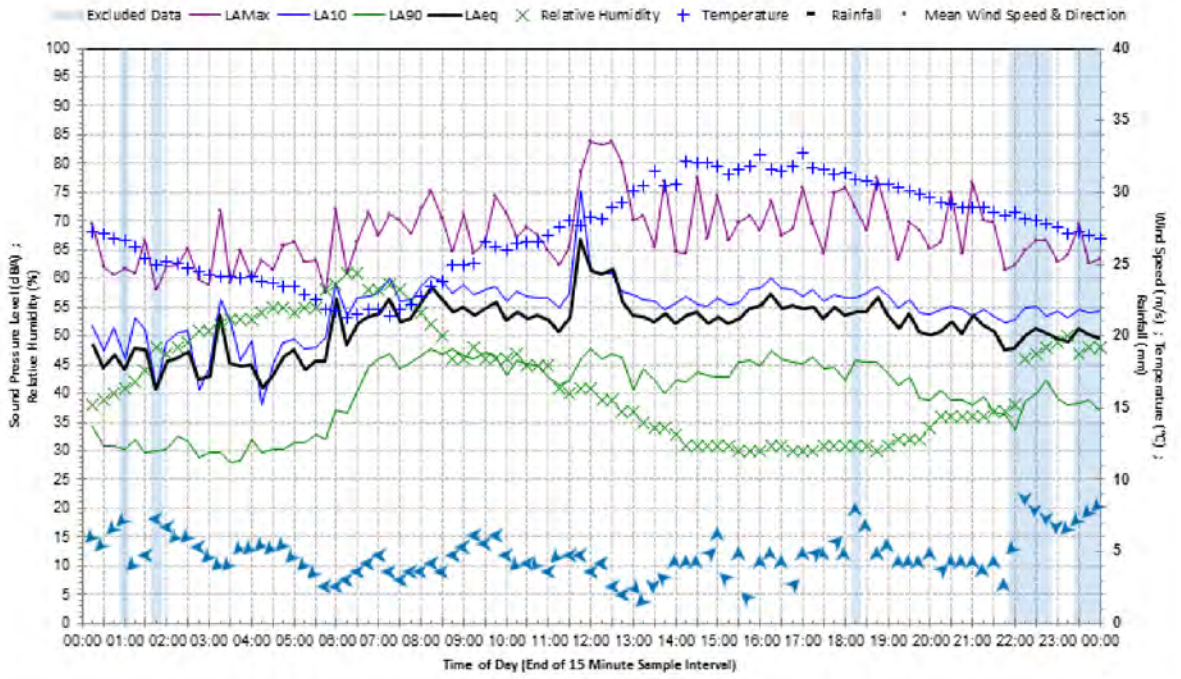
Statistical Ambient Noise Levels
Sunday 20 March 2016



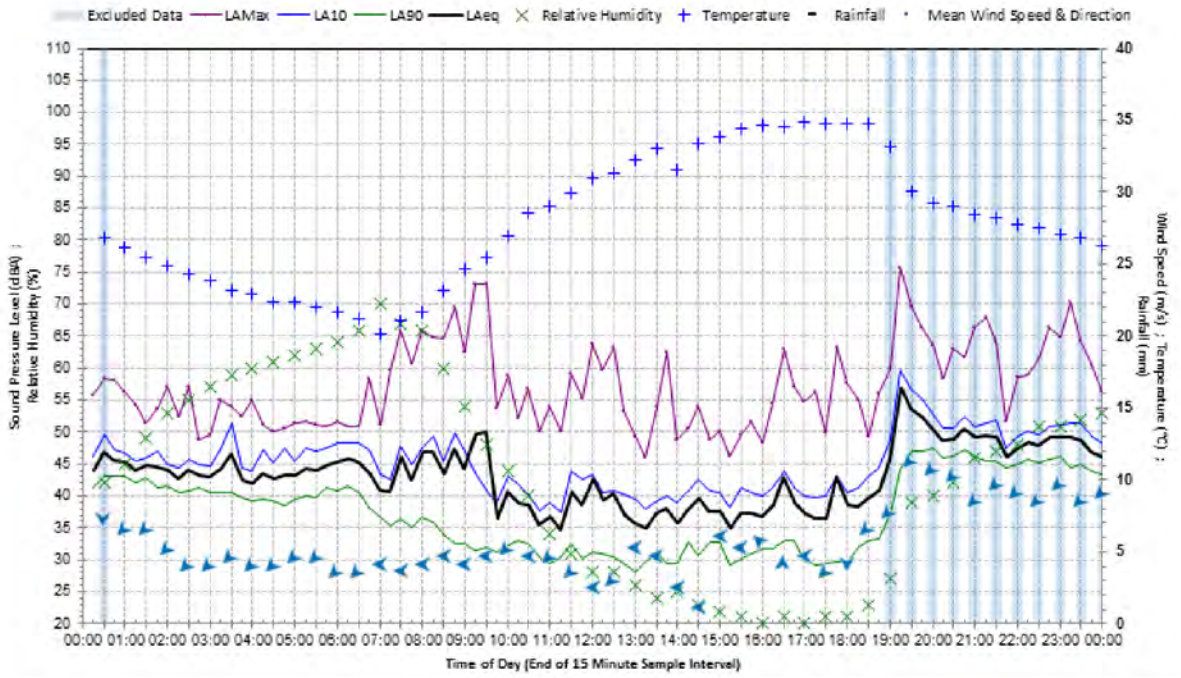
Statistical Ambient Noise Levels
Tuesday 15 March 2016



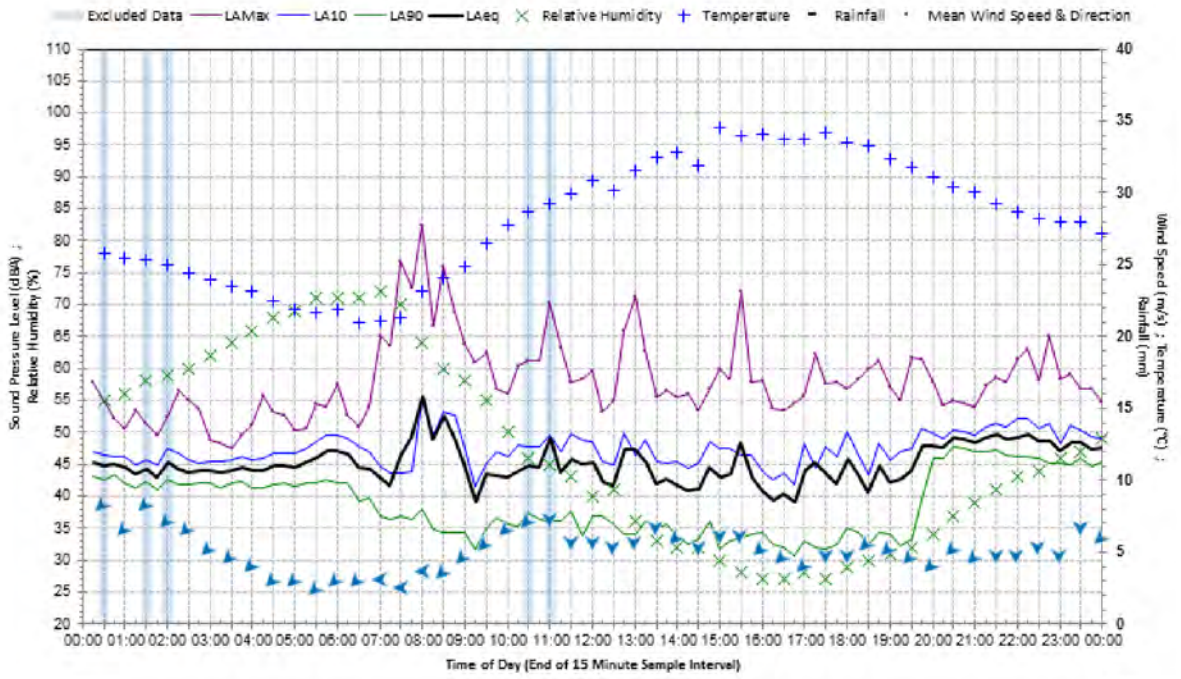
Statistical Ambient Noise Levels
Wednesday 16 March 2016



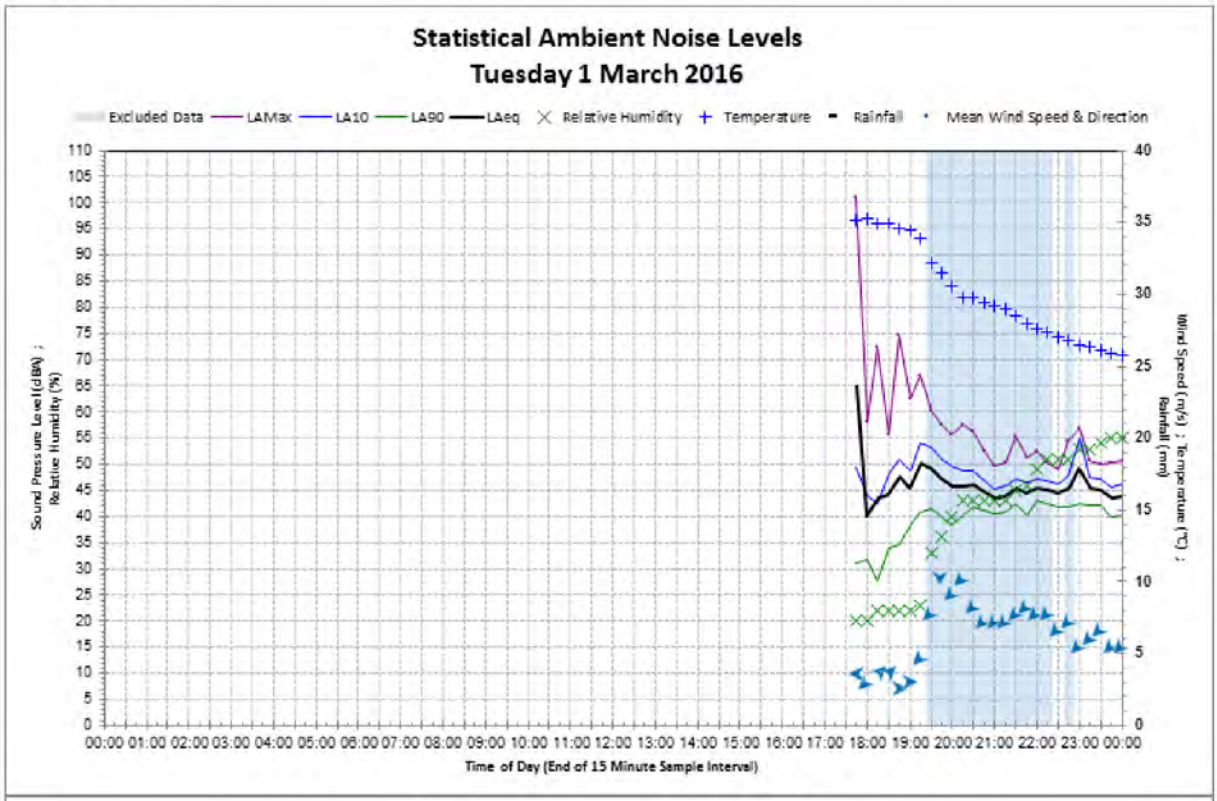
Statistical Ambient Noise Levels
Tuesday 8 March 2016

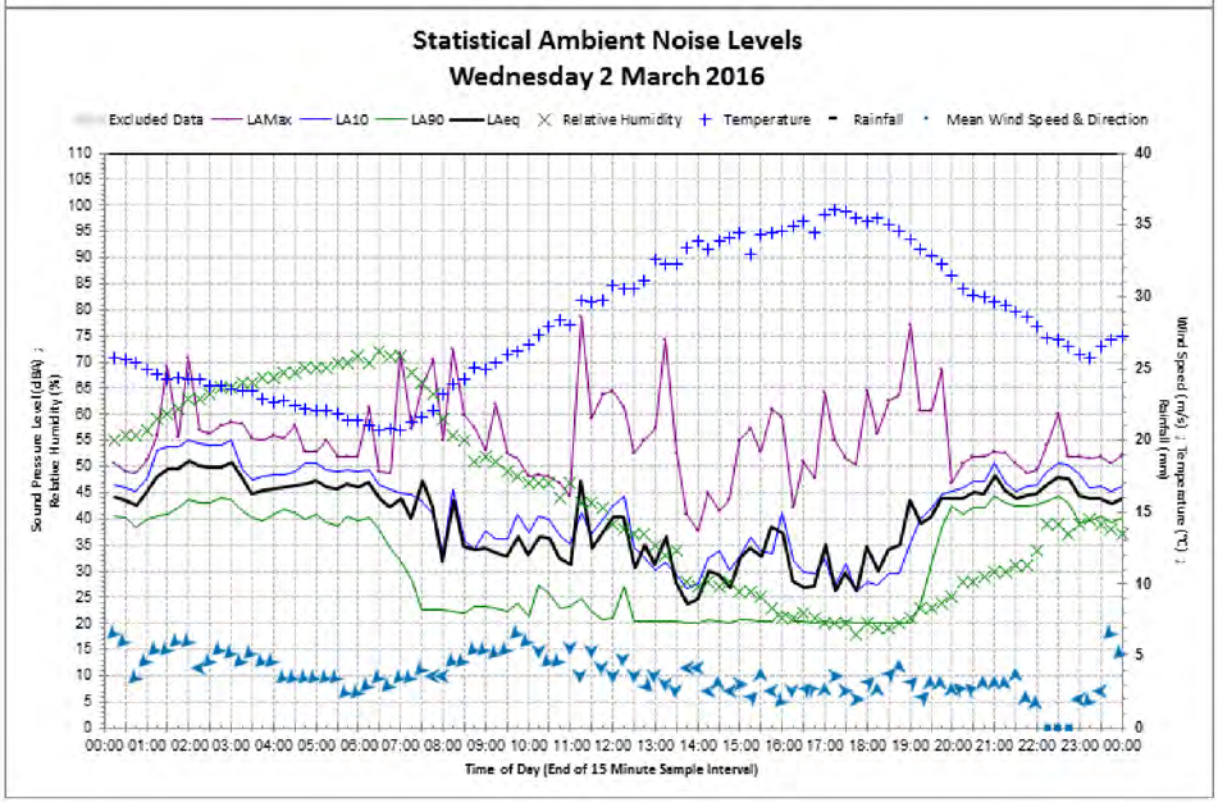


Statistical Ambient Noise Levels
Wednesday 9 March 2016

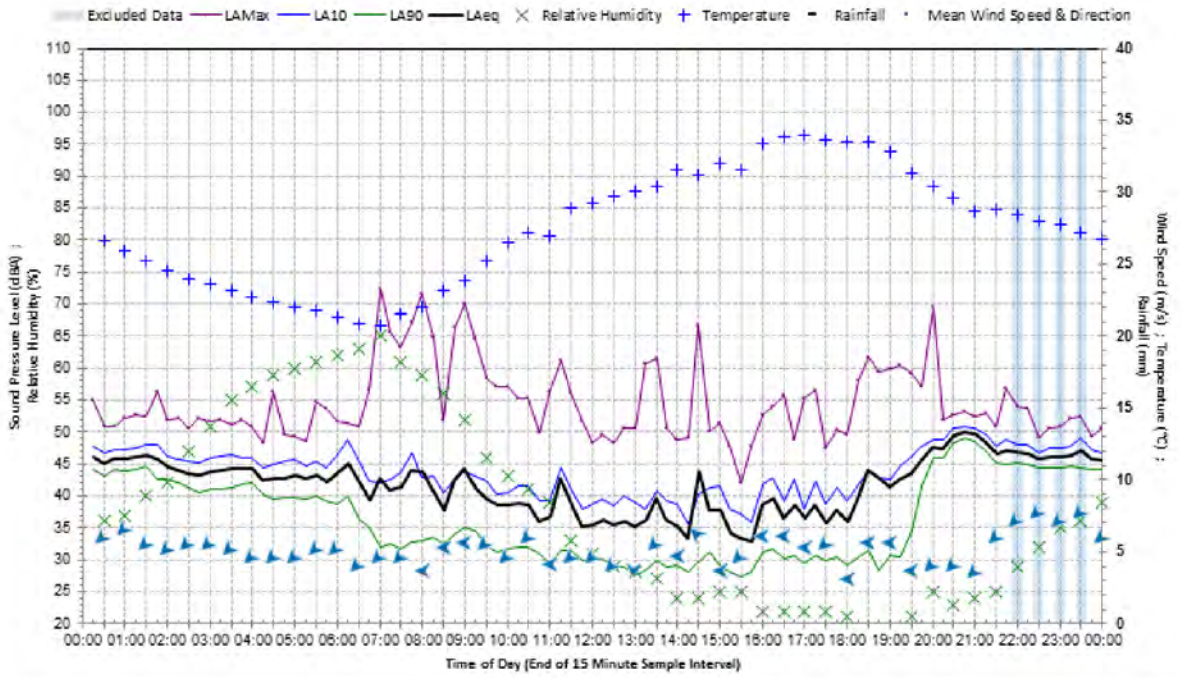


Logger L05NNS

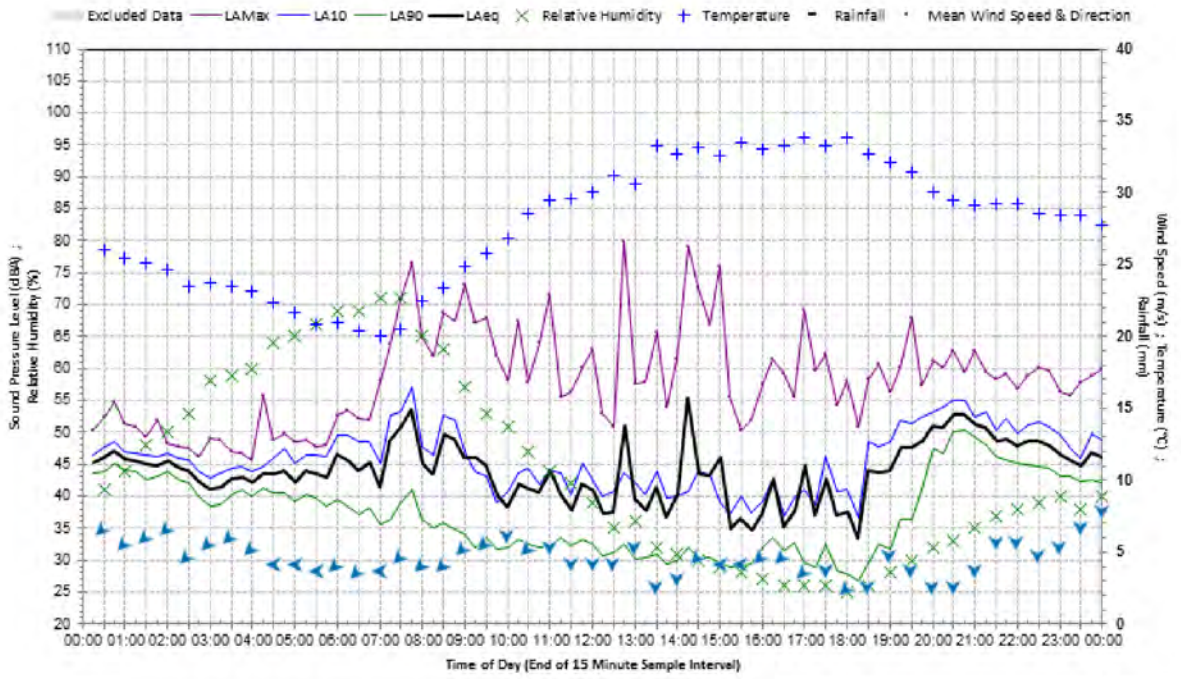




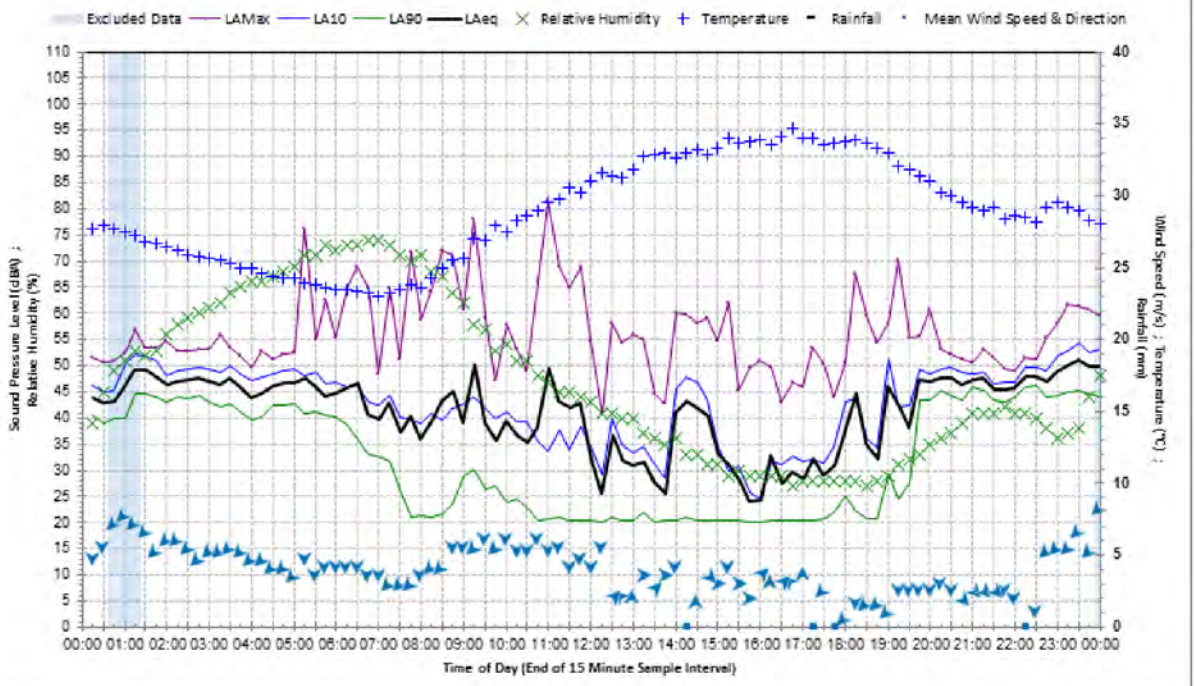
Statistical Ambient Noise Levels
Sunday 6 March 2016



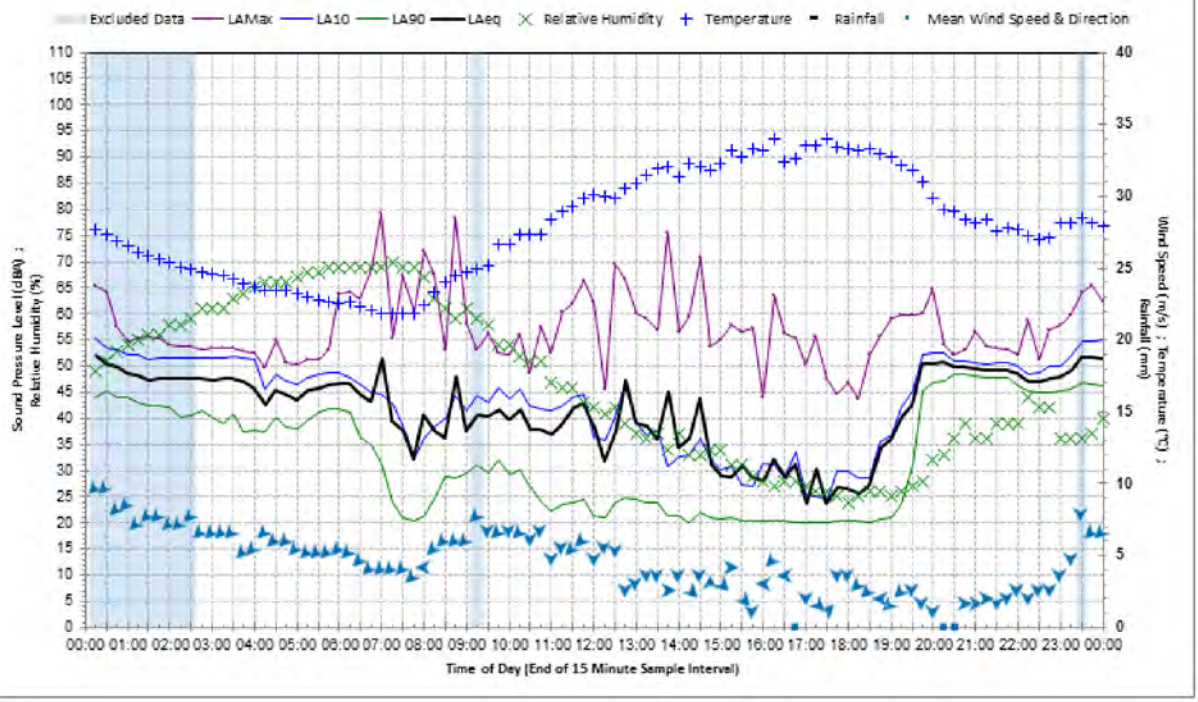
Statistical Ambient Noise Levels
Monday 7 March 2016



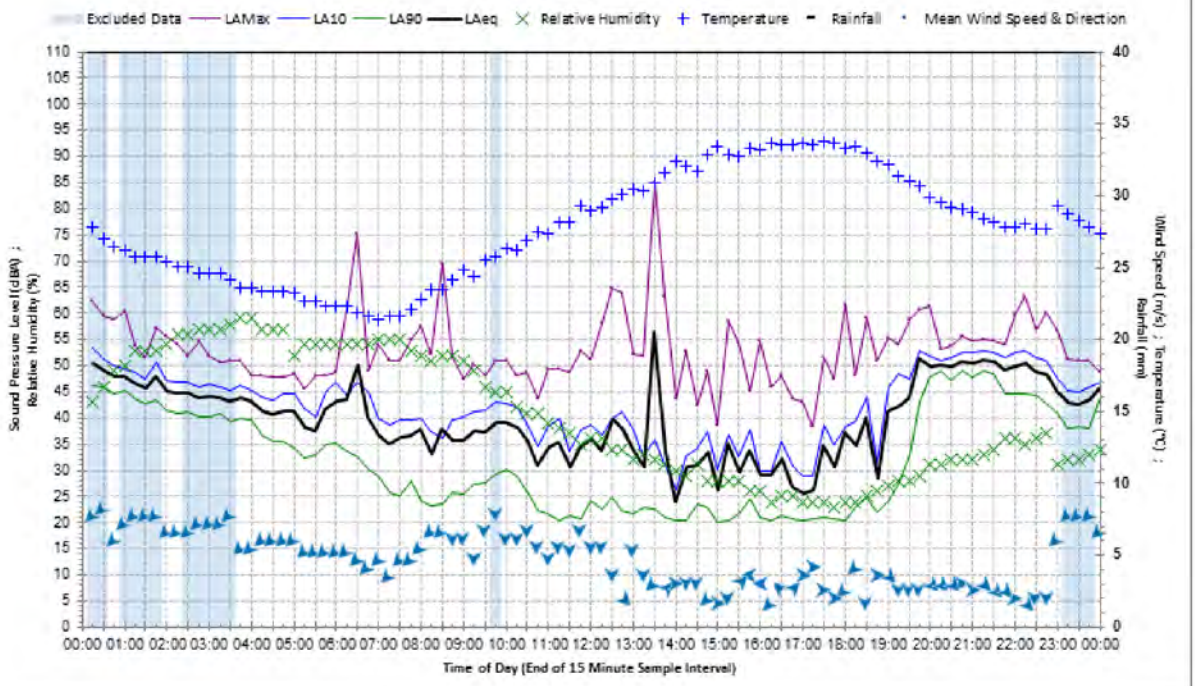
Statistical Ambient Noise Levels
Thursday 3 March 2016



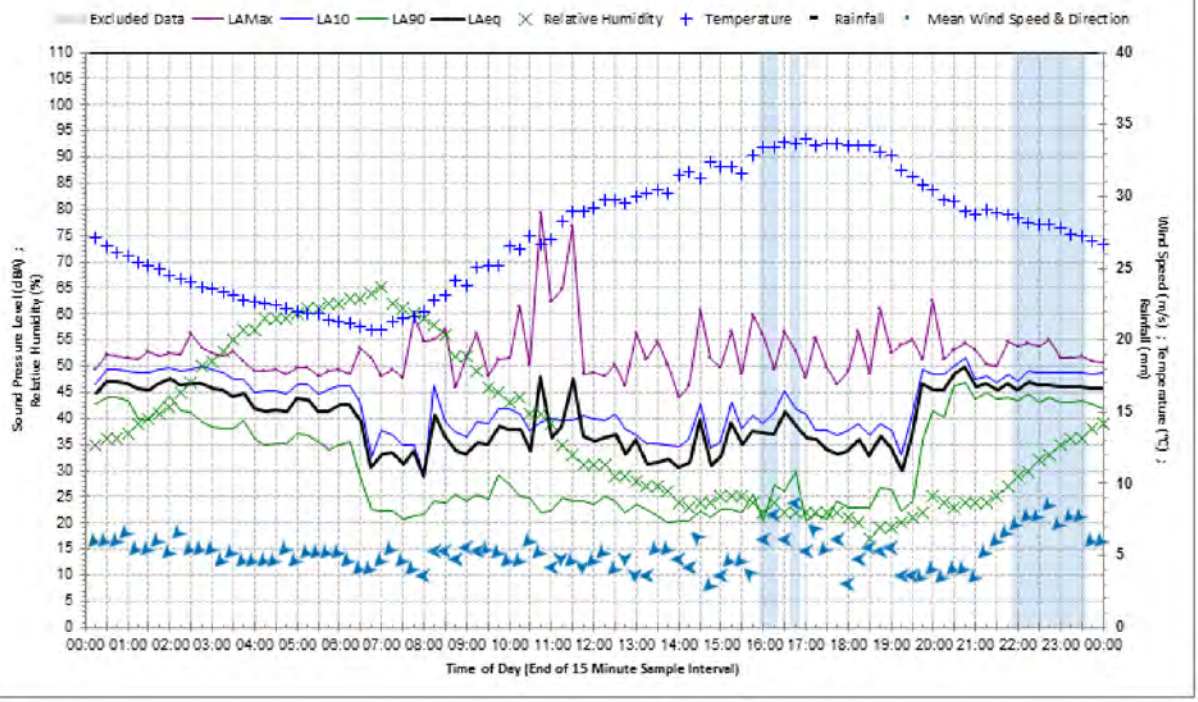
Statistical Ambient Noise Levels
Friday 4 March 2016



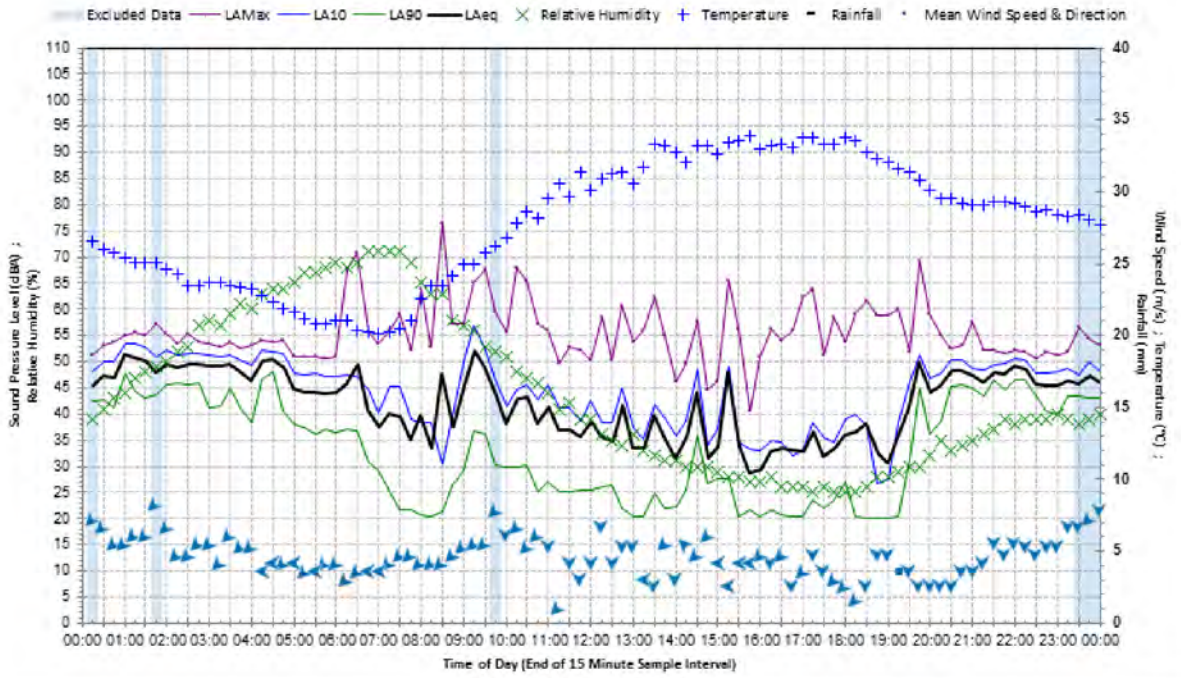
Statistical Ambient Noise Levels
Saturday 5 March 2016



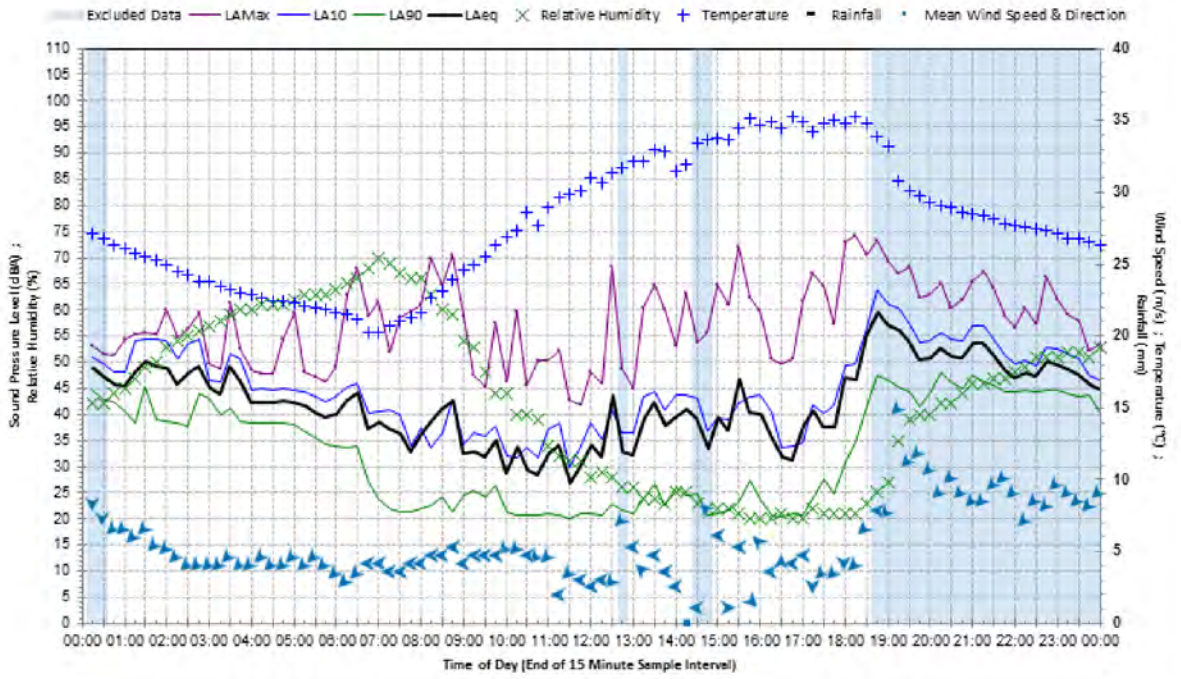
Statistical Ambient Noise Levels
Sunday 6 March 2016



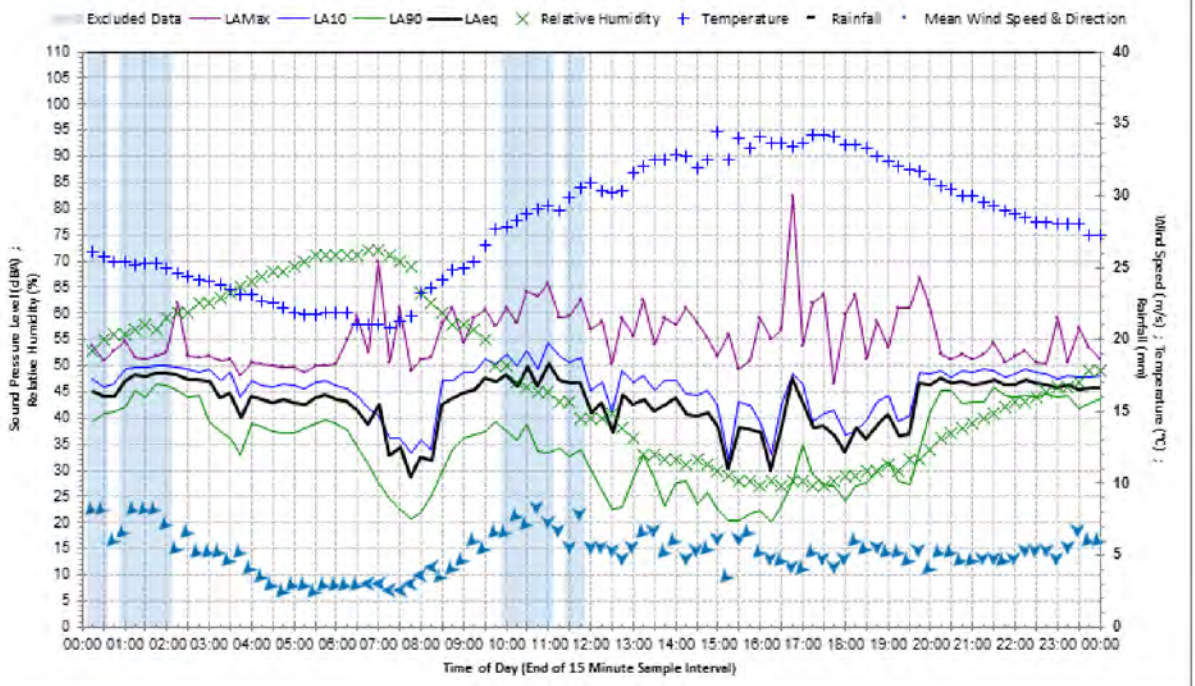
Statistical Ambient Noise Levels
Monday 7 March 2016



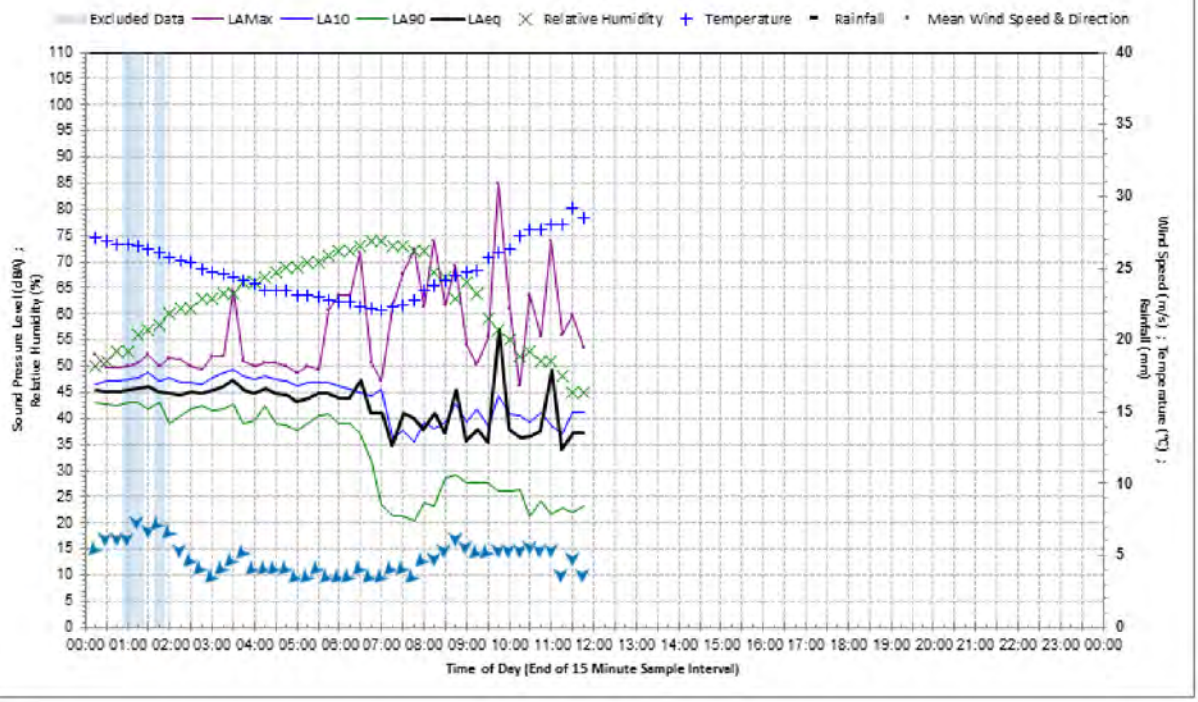
Statistical Ambient Noise Levels
Tuesday 8 March 2016



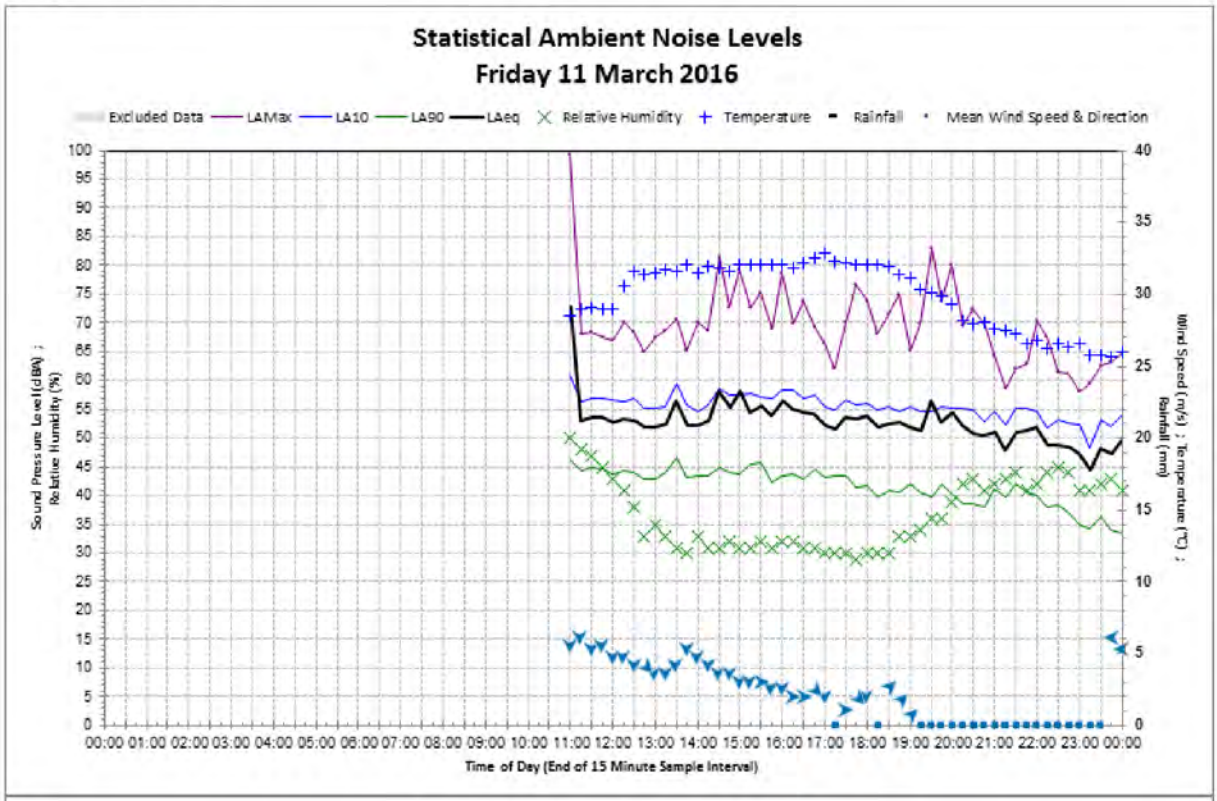
Statistical Ambient Noise Levels
Wednesday 9 March 2016

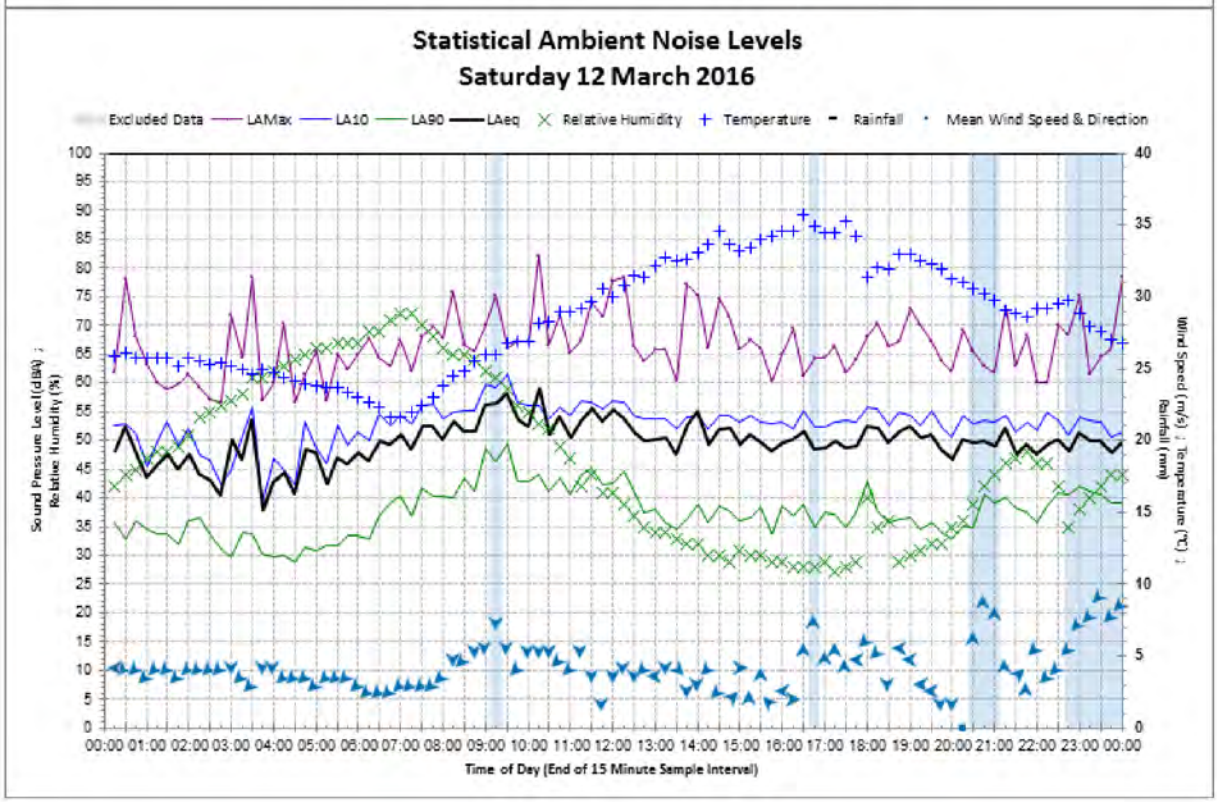


Statistical Ambient Noise Levels
Thursday 10 March 2016

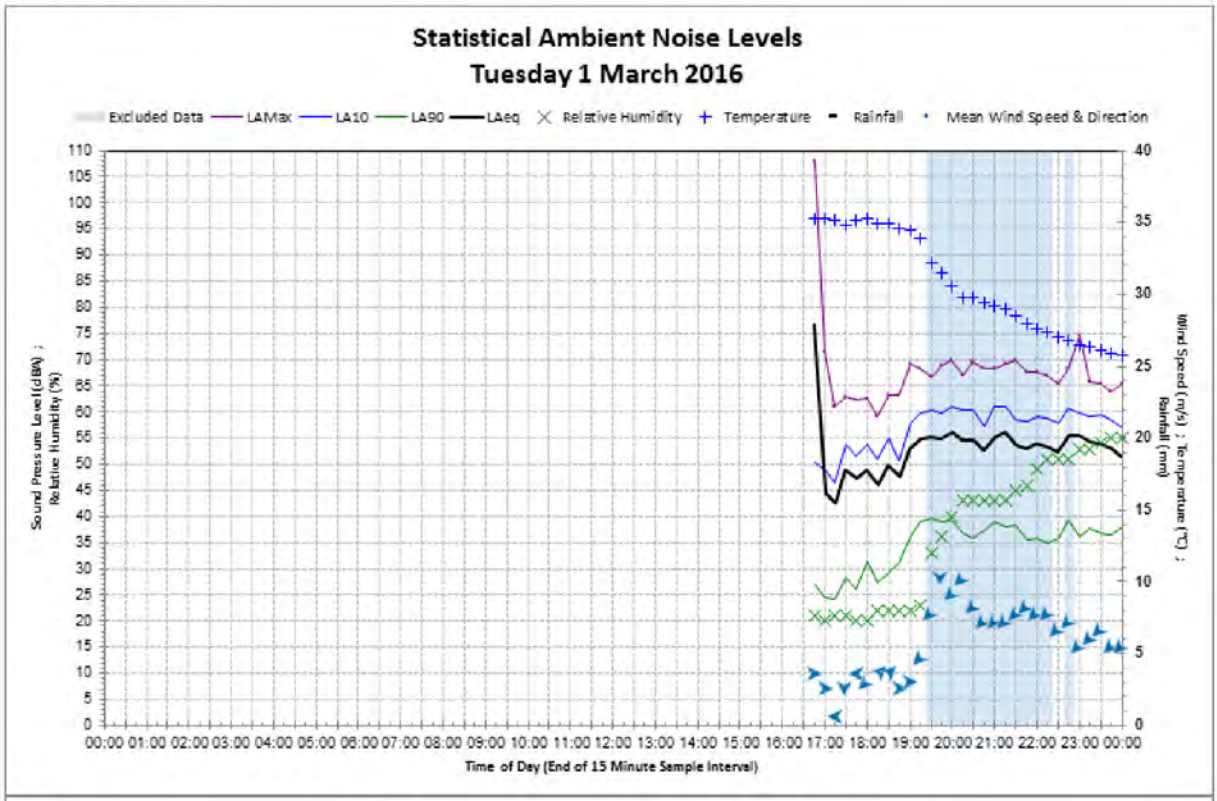


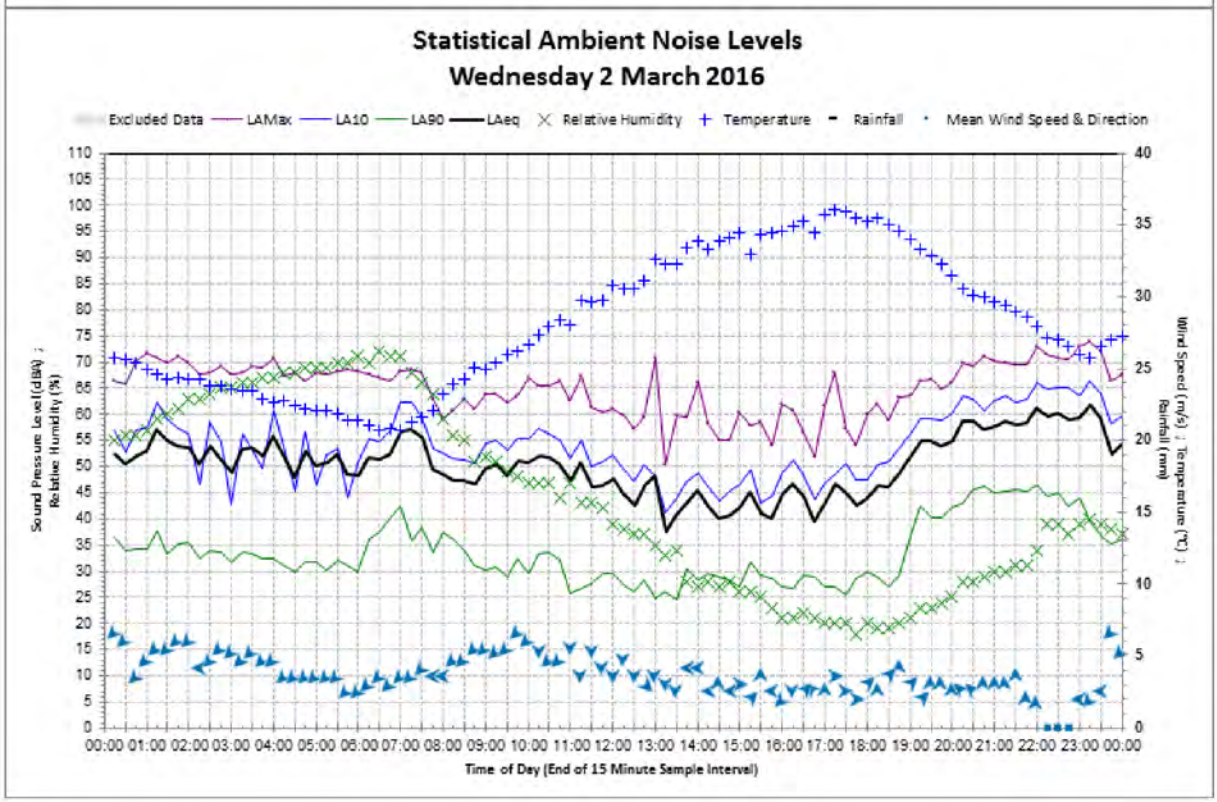
Logger L10NNS



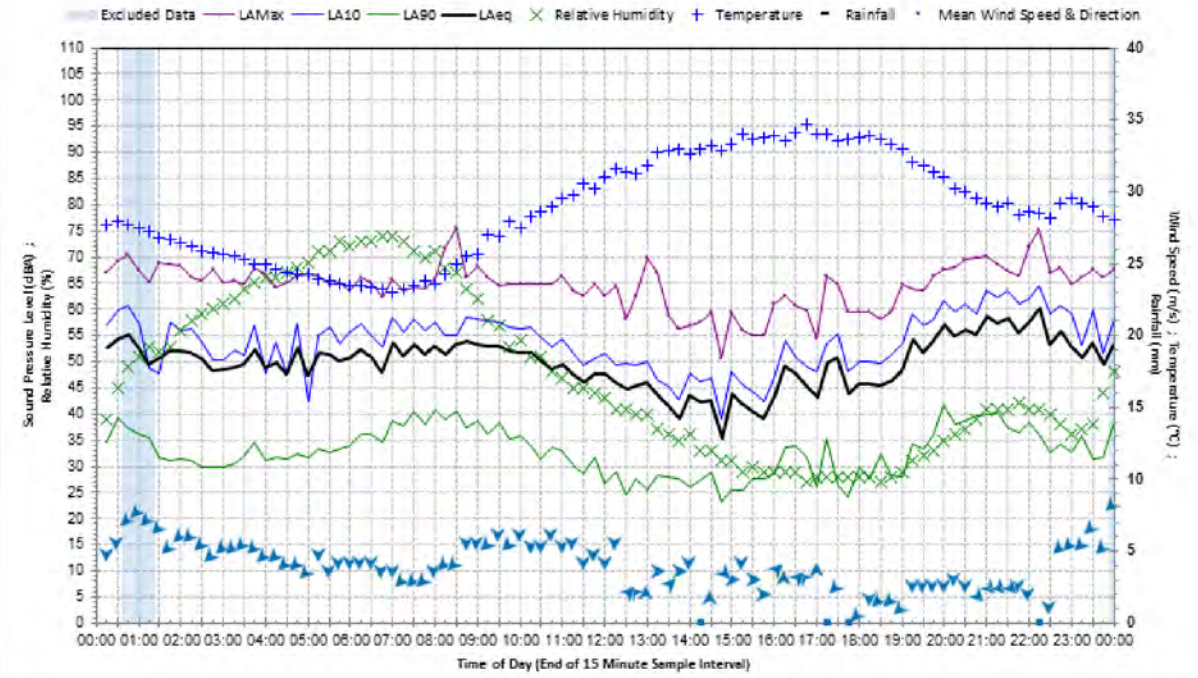


Logger L06NNS

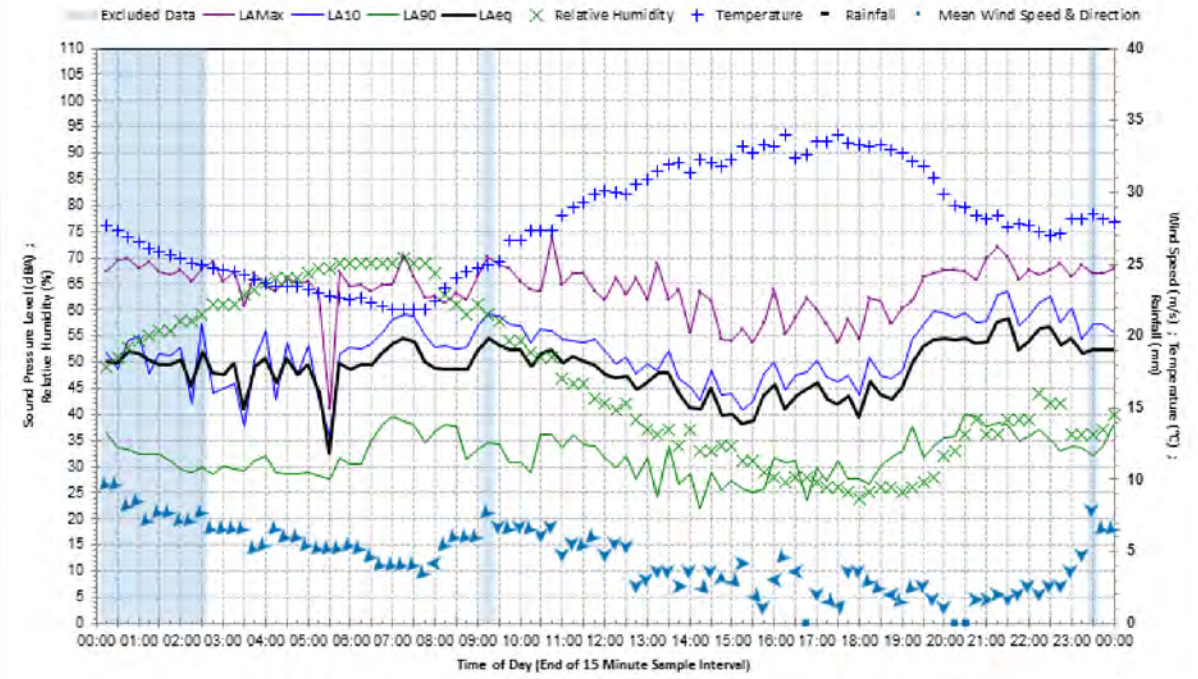




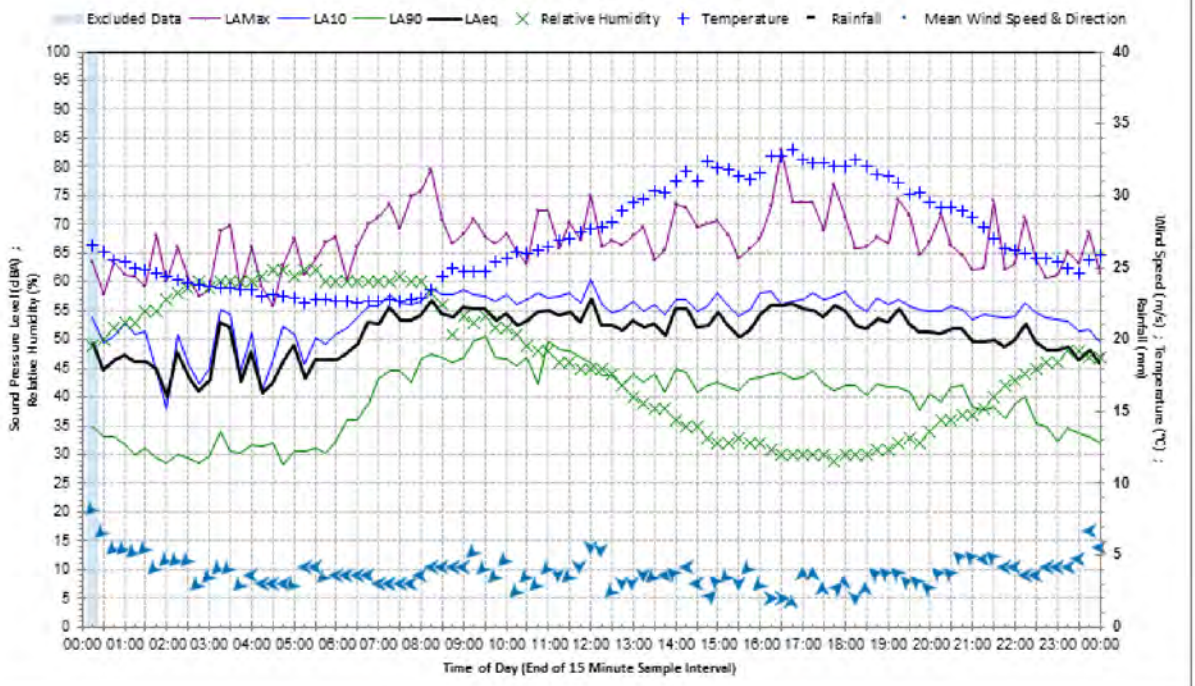
Statistical Ambient Noise Levels
Thursday 3 March 2016



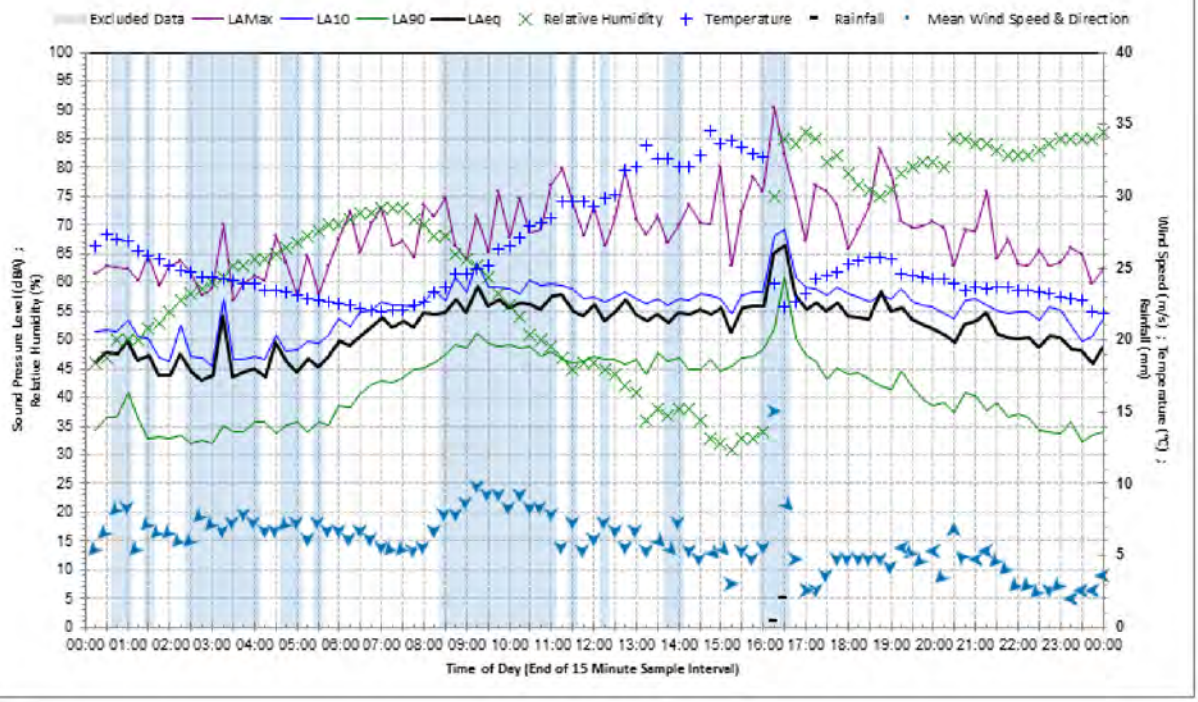
Statistical Ambient Noise Levels
Friday 4 March 2016



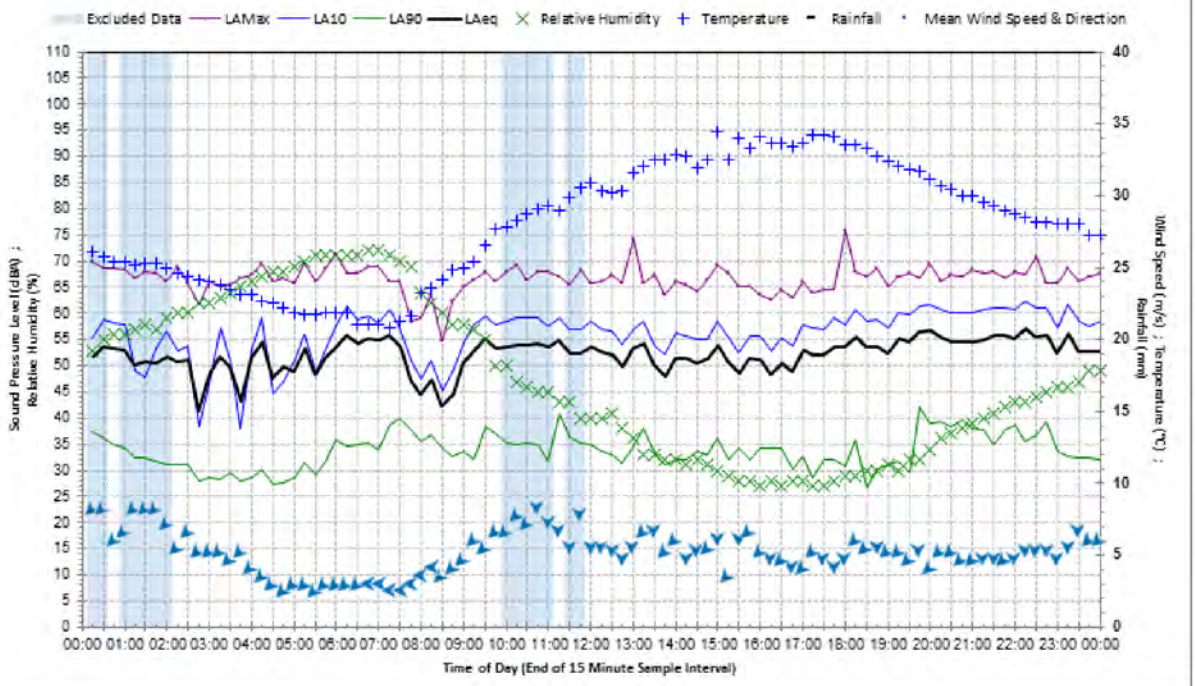
Statistical Ambient Noise Levels
Thursday 17 March 2016



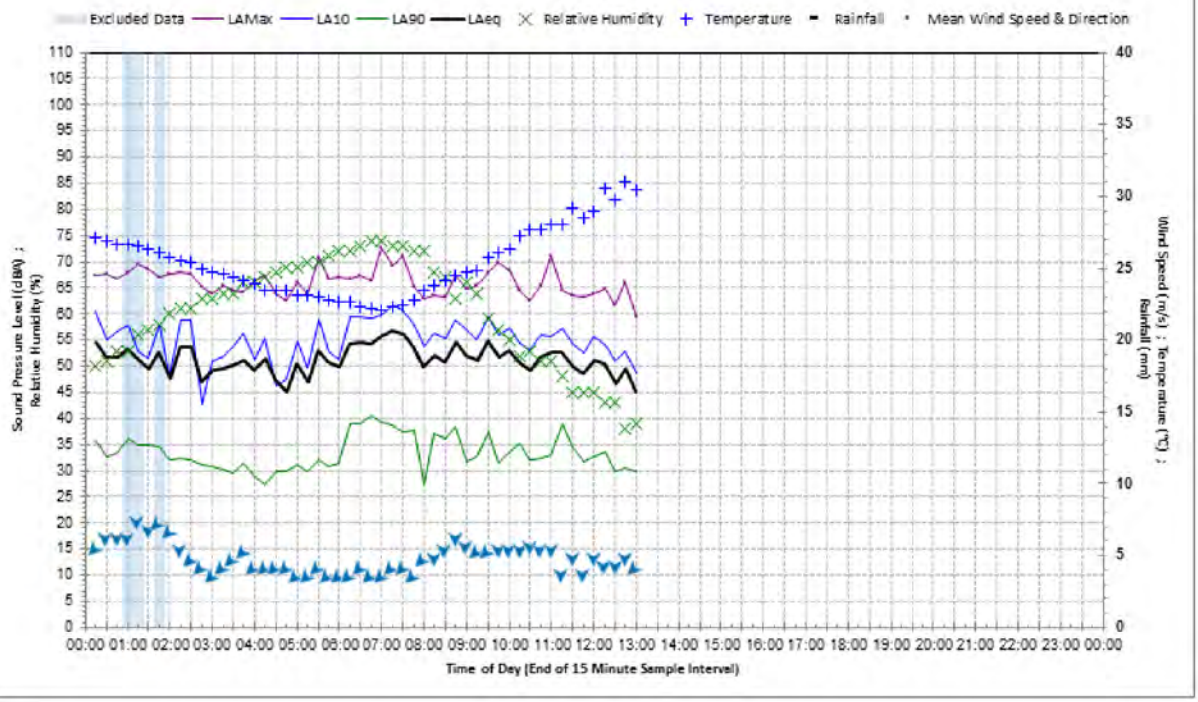
Statistical Ambient Noise Levels
Friday 18 March 2016



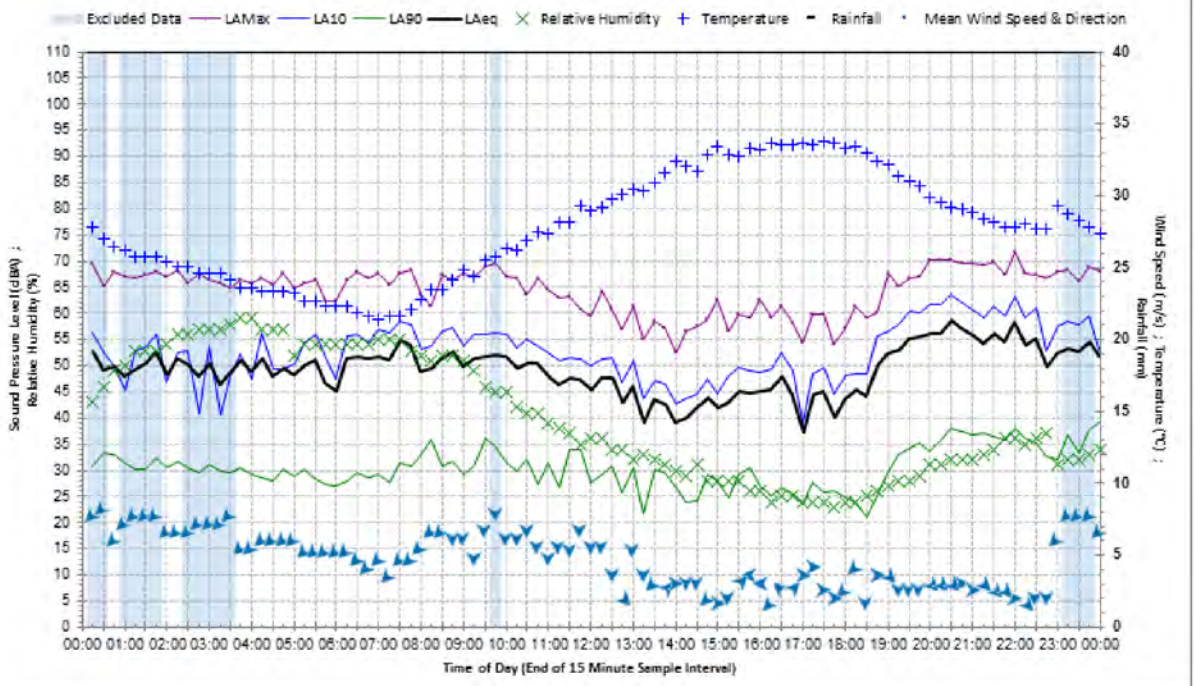
Statistical Ambient Noise Levels
Wednesday 9 March 2016



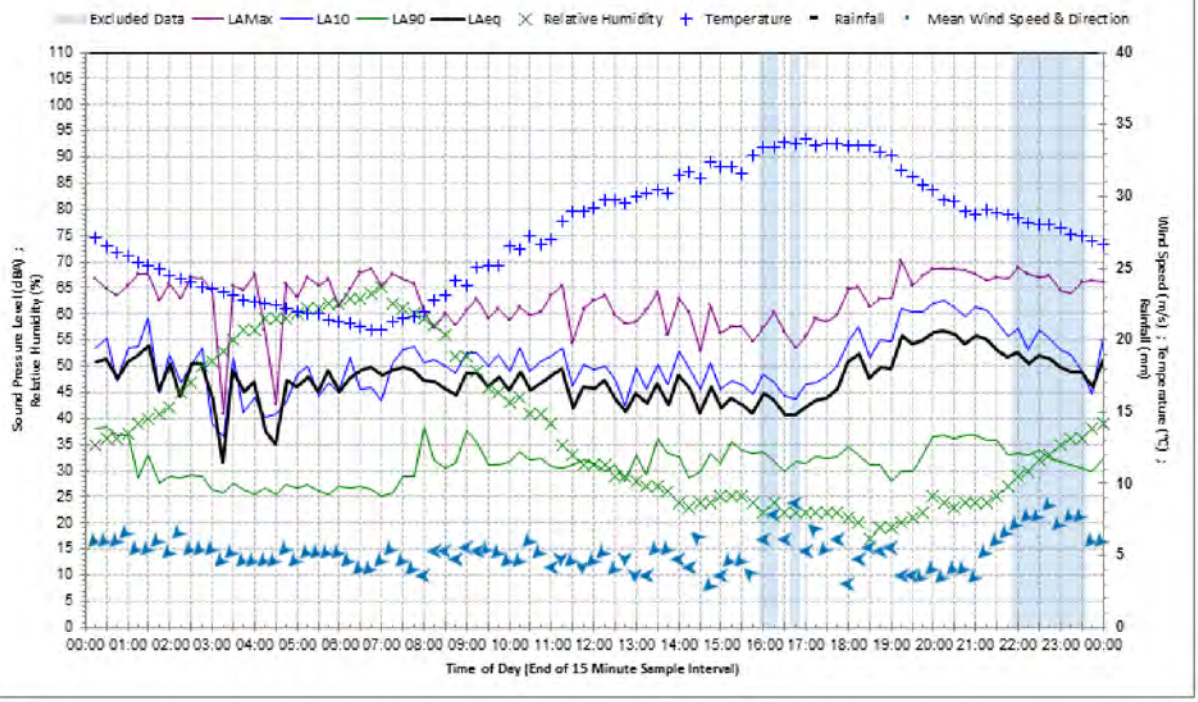
Statistical Ambient Noise Levels
Thursday 10 March 2016



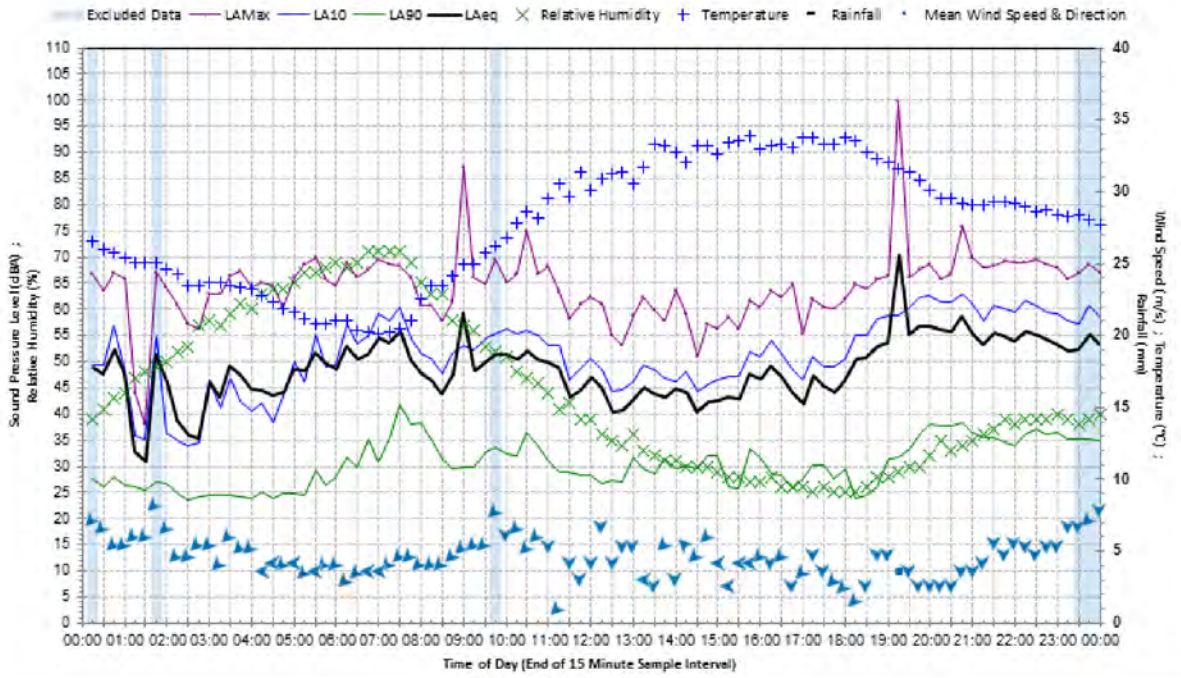
Statistical Ambient Noise Levels
Saturday 5 March 2016



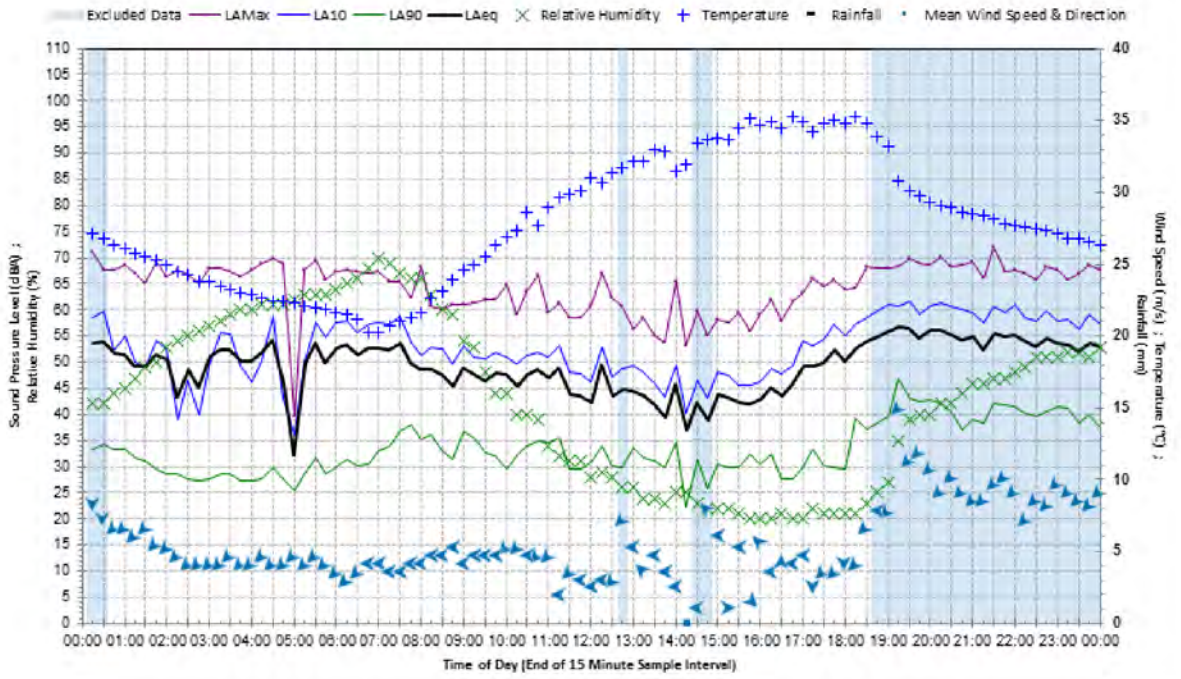
Statistical Ambient Noise Levels
Sunday 6 March 2016

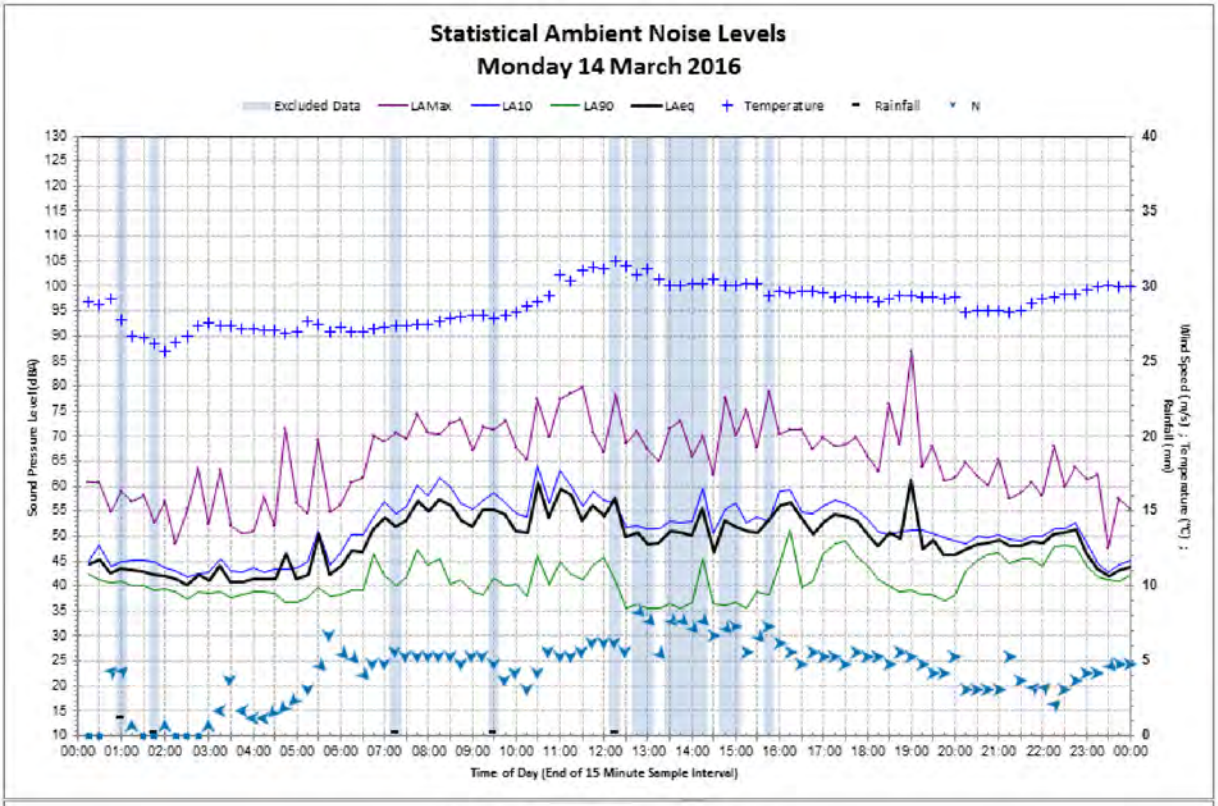


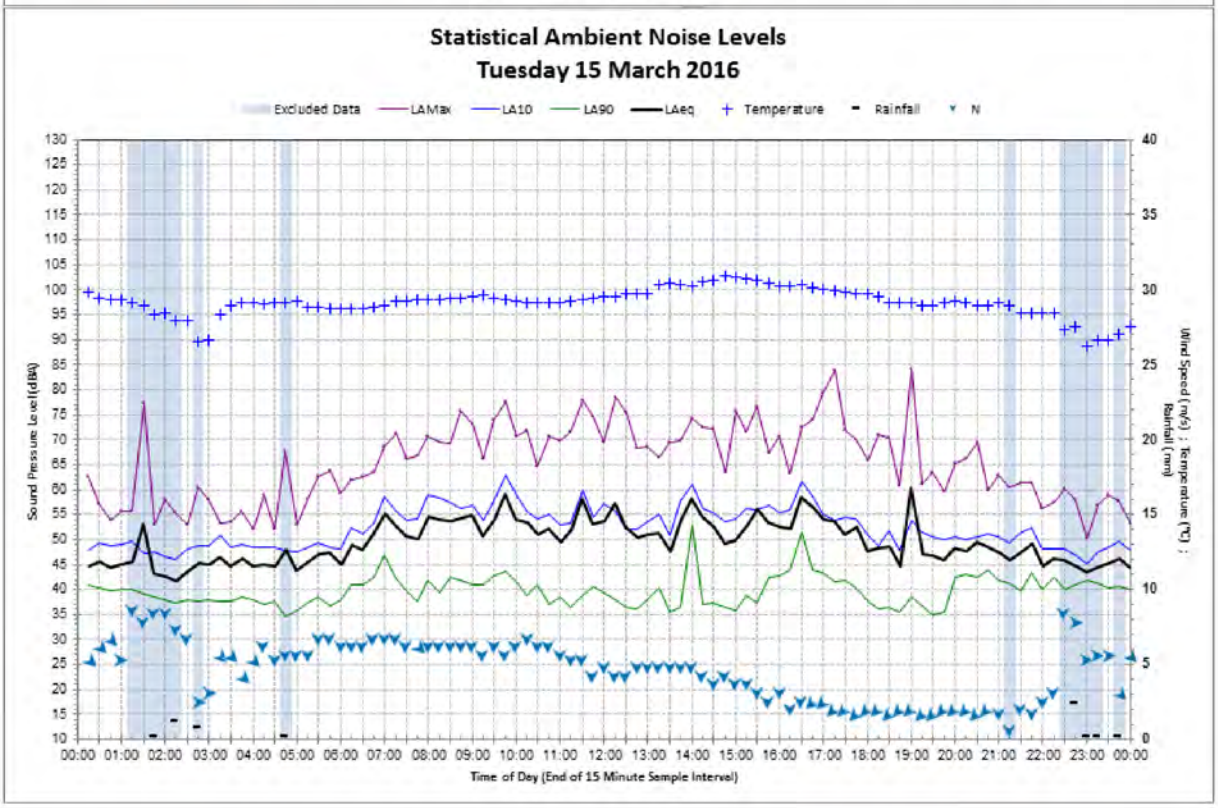
Statistical Ambient Noise Levels
Monday 7 March 2016



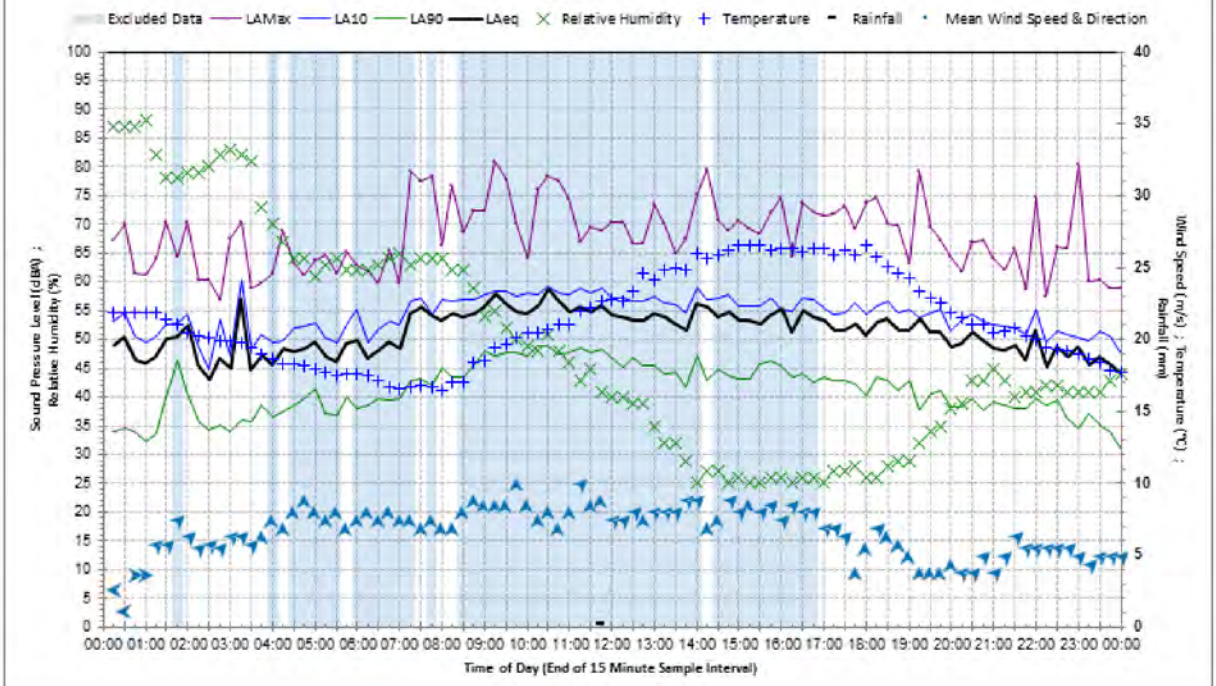
Statistical Ambient Noise Levels
Tuesday 8 March 2016



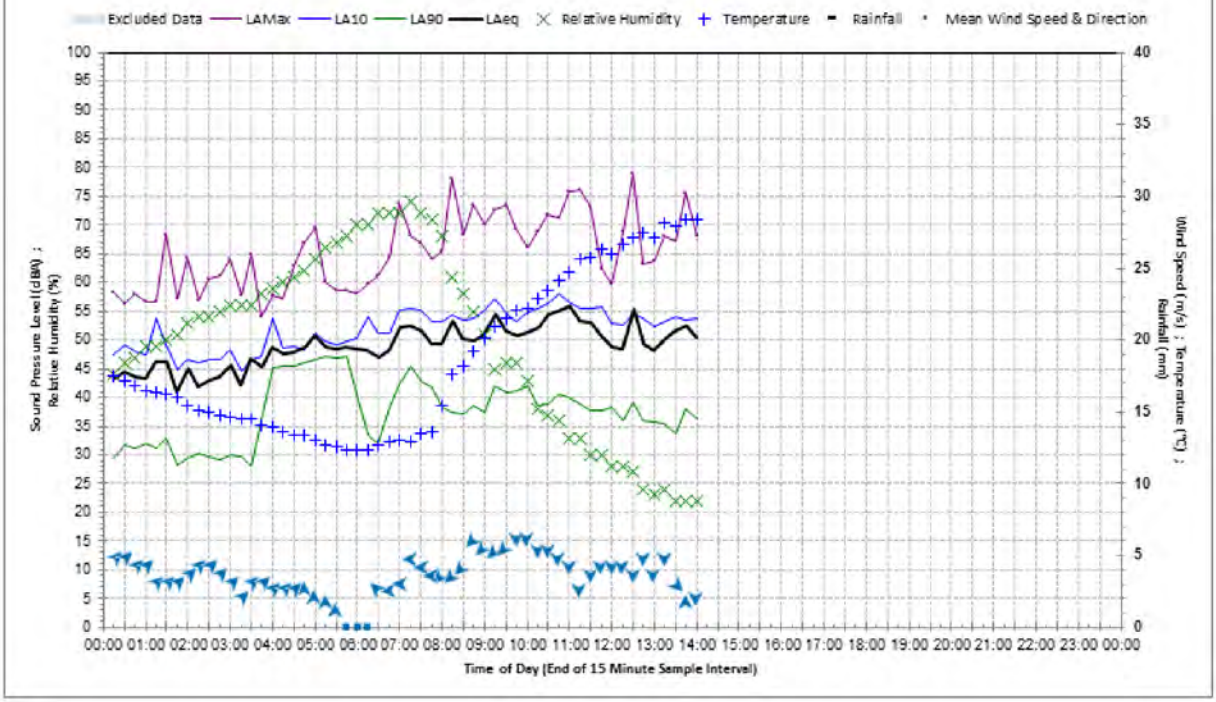

Statistical Ambient Noise Levels
Monday 14 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

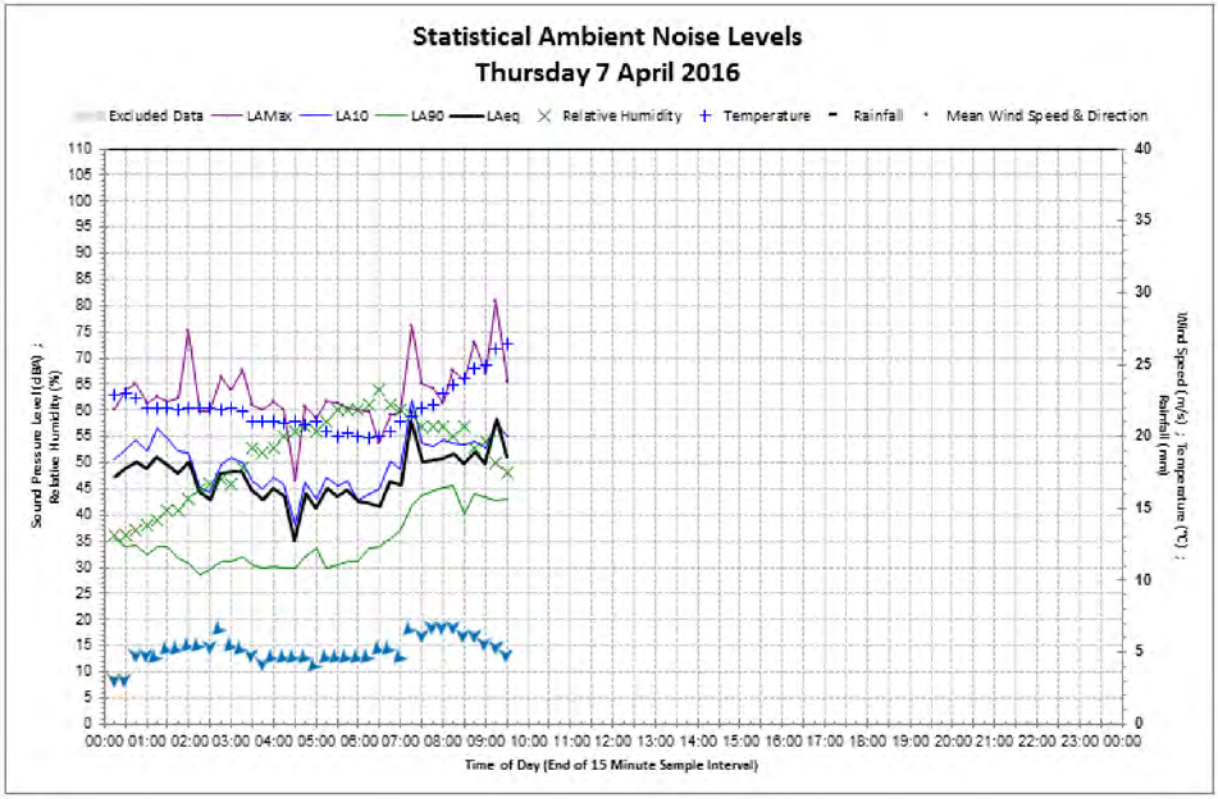

Statistical Ambient Noise Levels
Tuesday 15 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Statistical Ambient Noise Levels
Saturday 19 March 2016

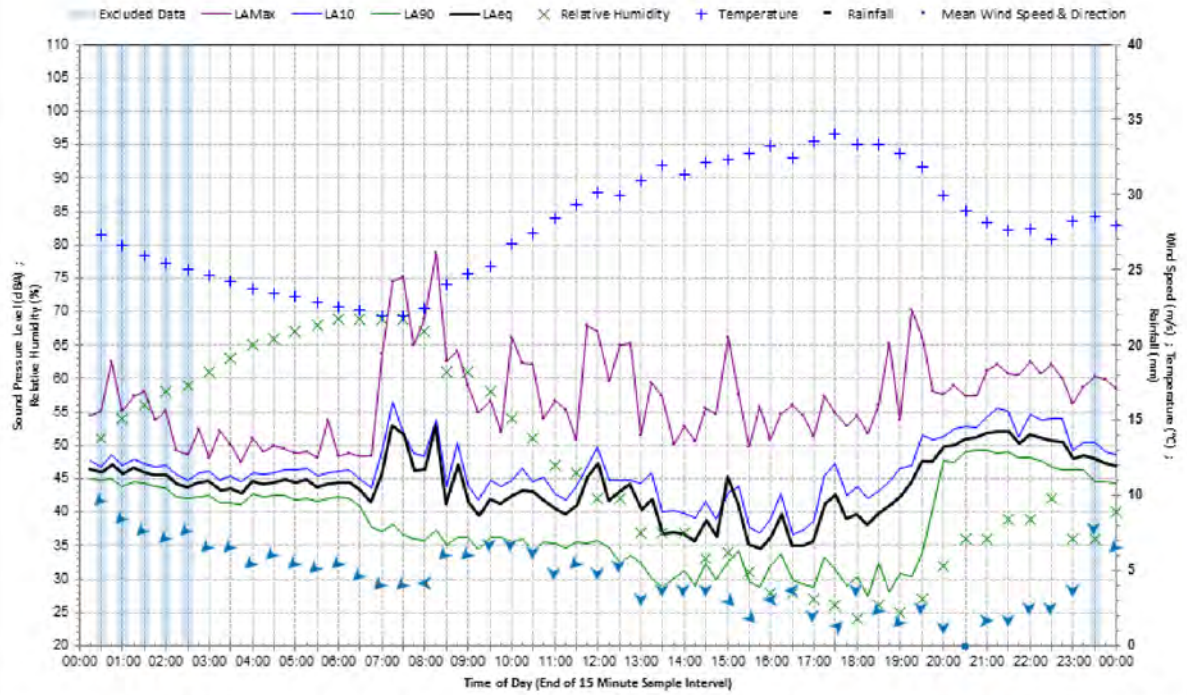


Statistical Ambient Noise Levels
Sunday 20 March 2016

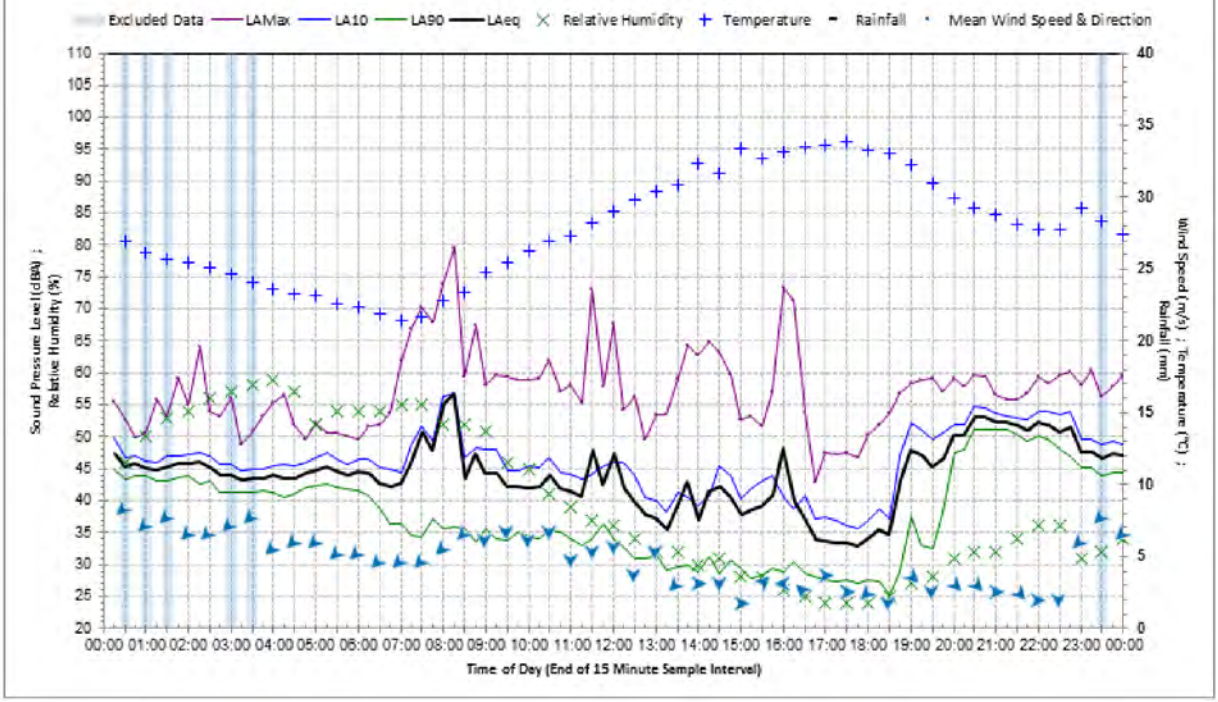


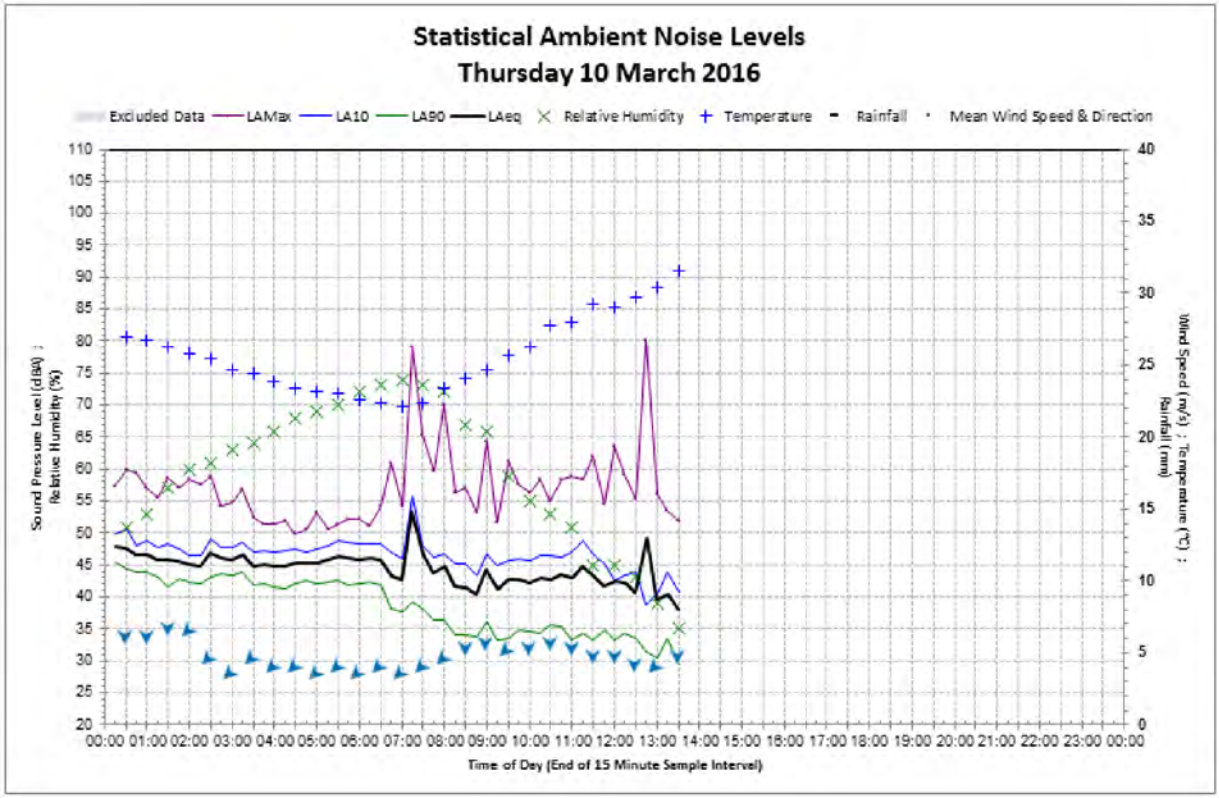

Statistical Ambient Noise Levels
Thursday 7 April 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dB) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Statistical Ambient Noise Levels
Friday 4 March 2016

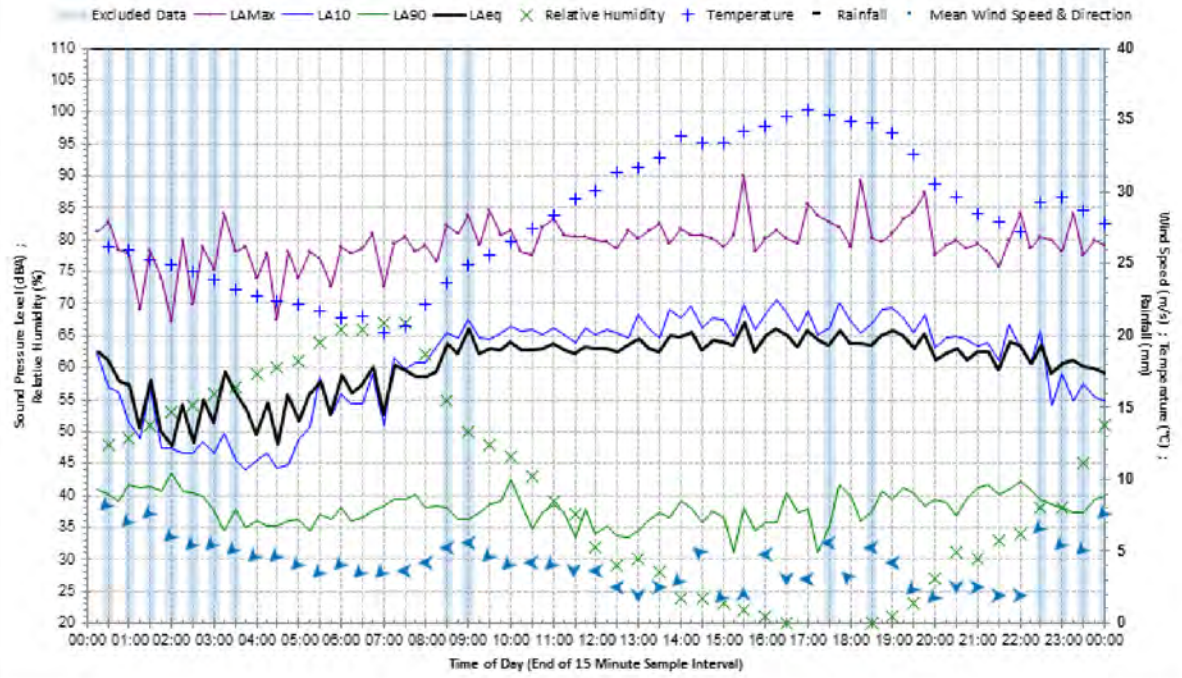


Statistical Ambient Noise Levels
Saturday 5 March 2016

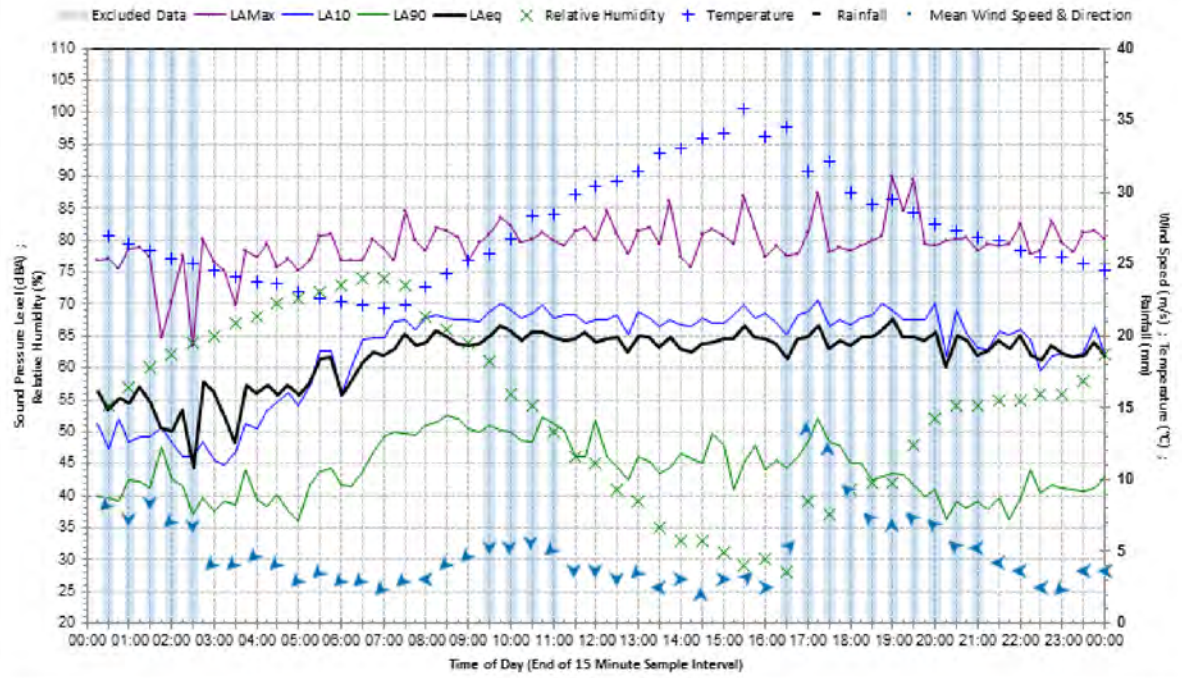



Statistical Ambient Noise Levels
Thursday 10 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

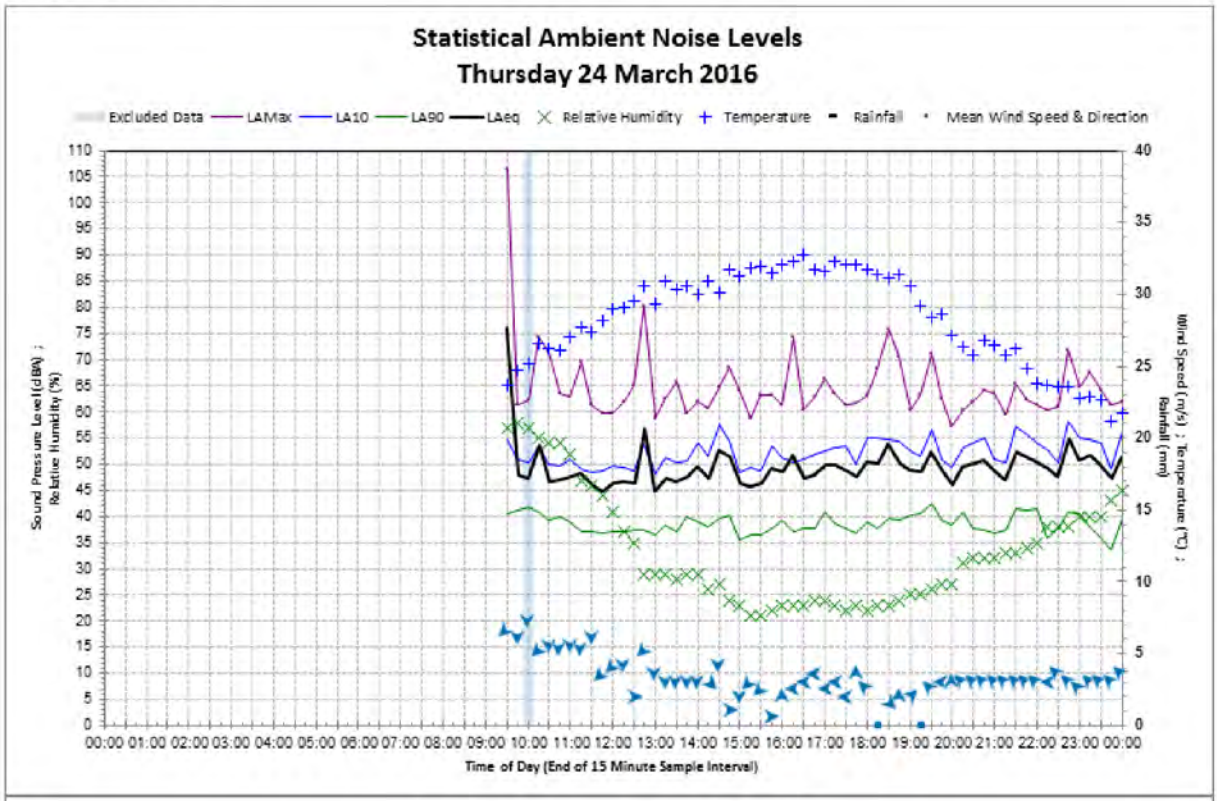
Statistical Ambient Noise Levels
Sunday 13 March 2016

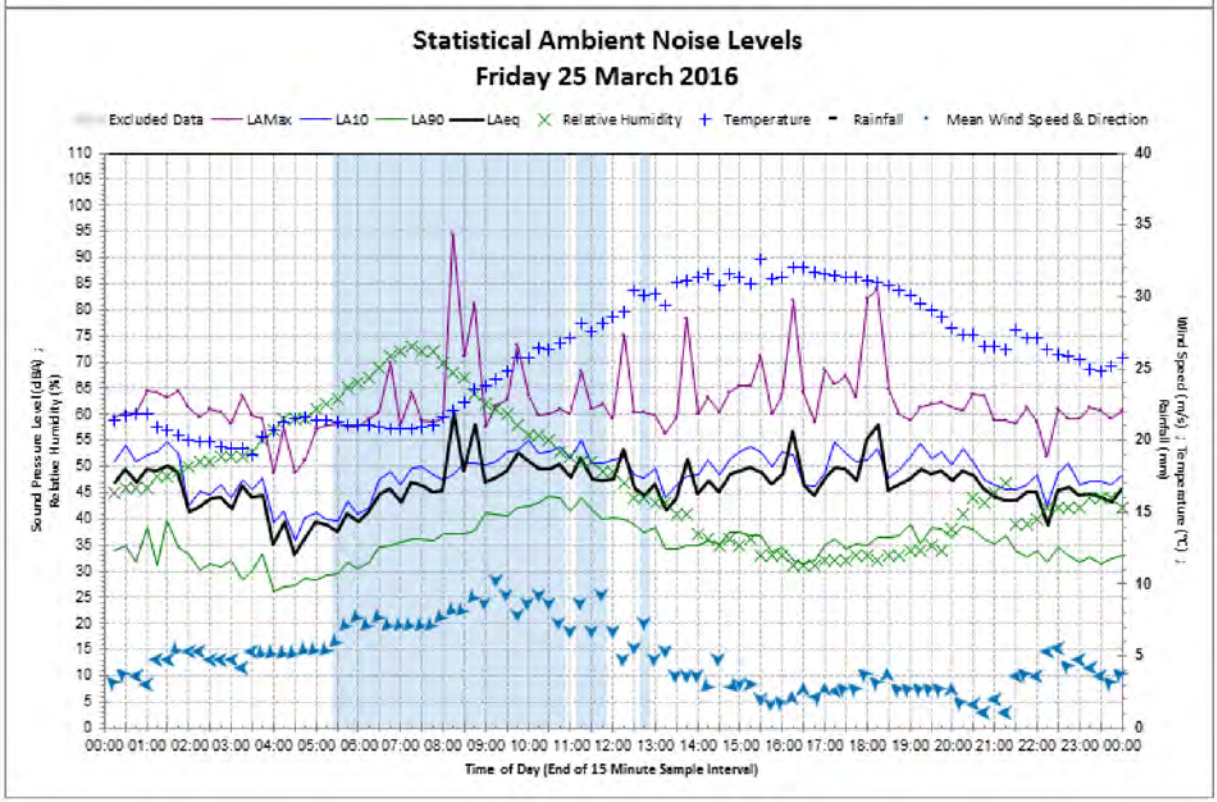


Statistical Ambient Noise Levels
Monday 14 March 2016

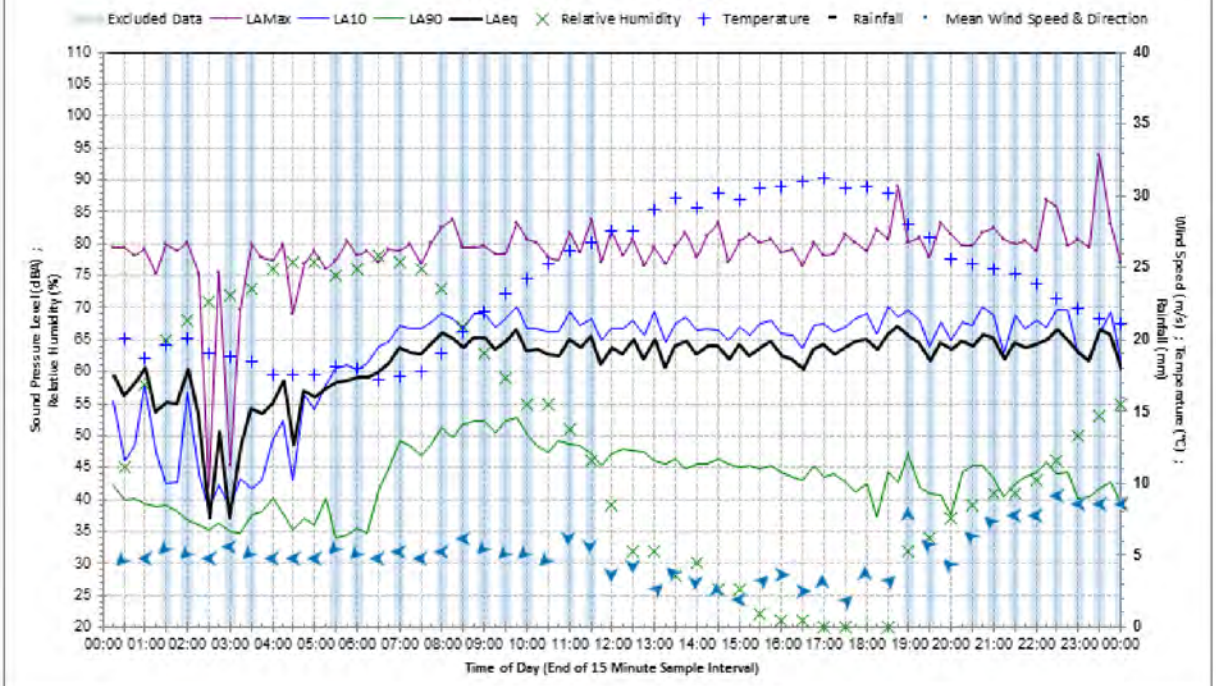


Logger L08NNS

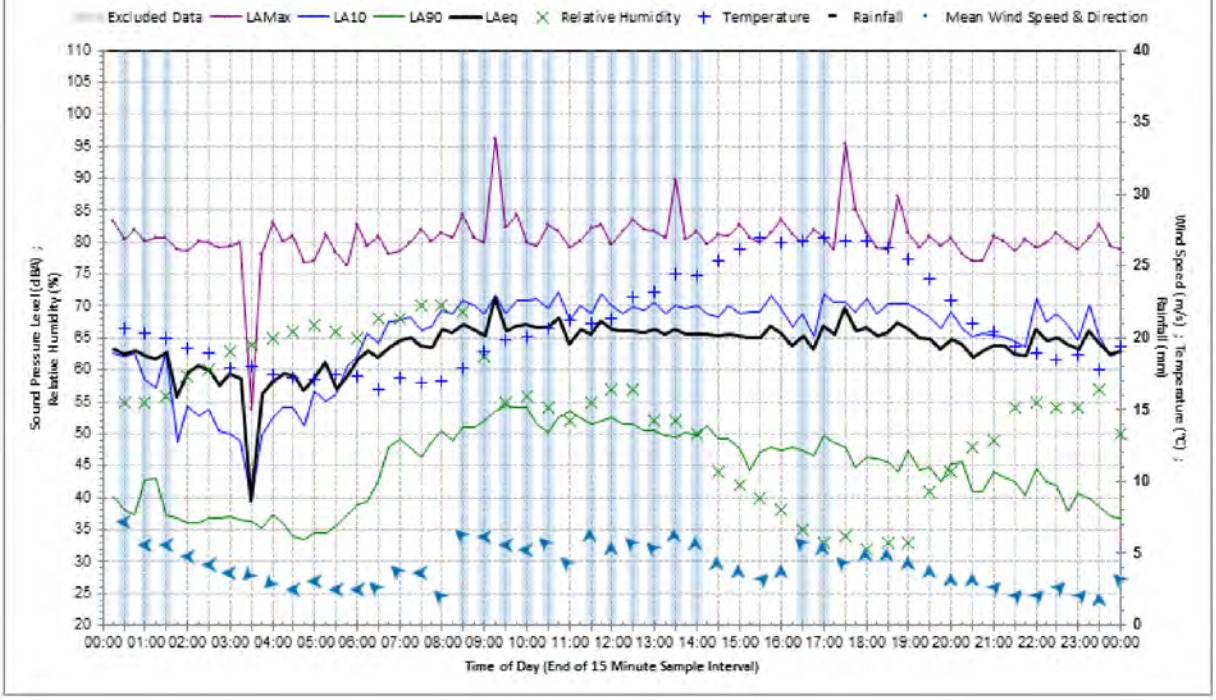




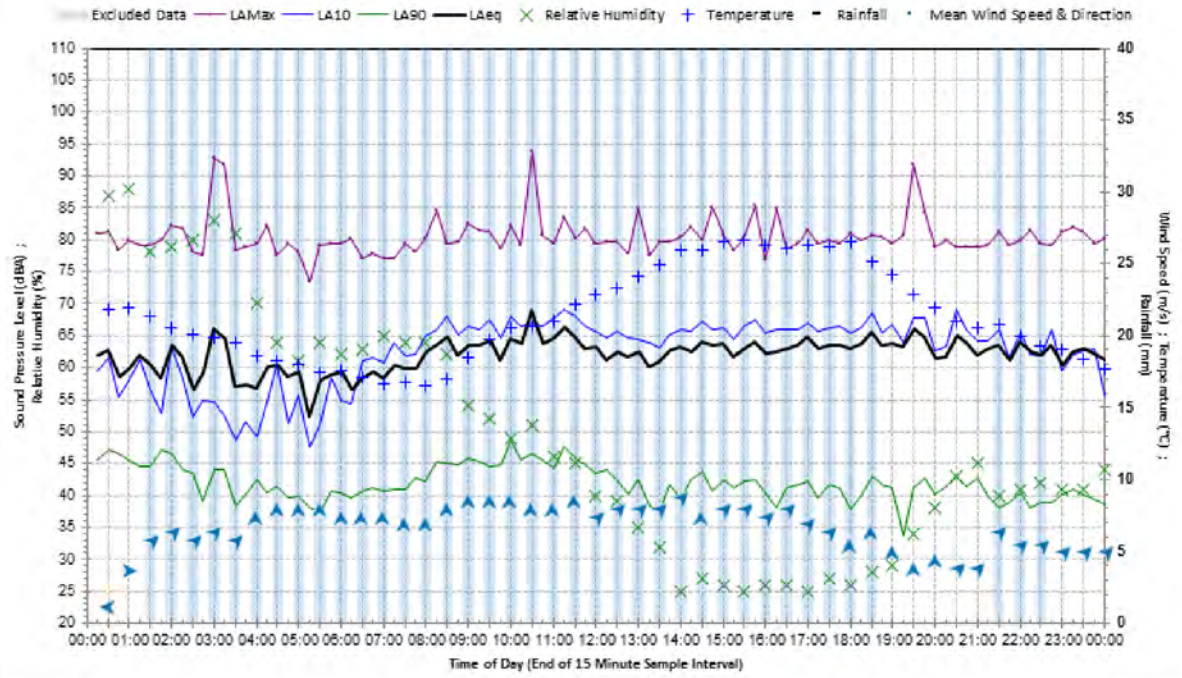
Statistical Ambient Noise Levels
Monday 21 March 2016



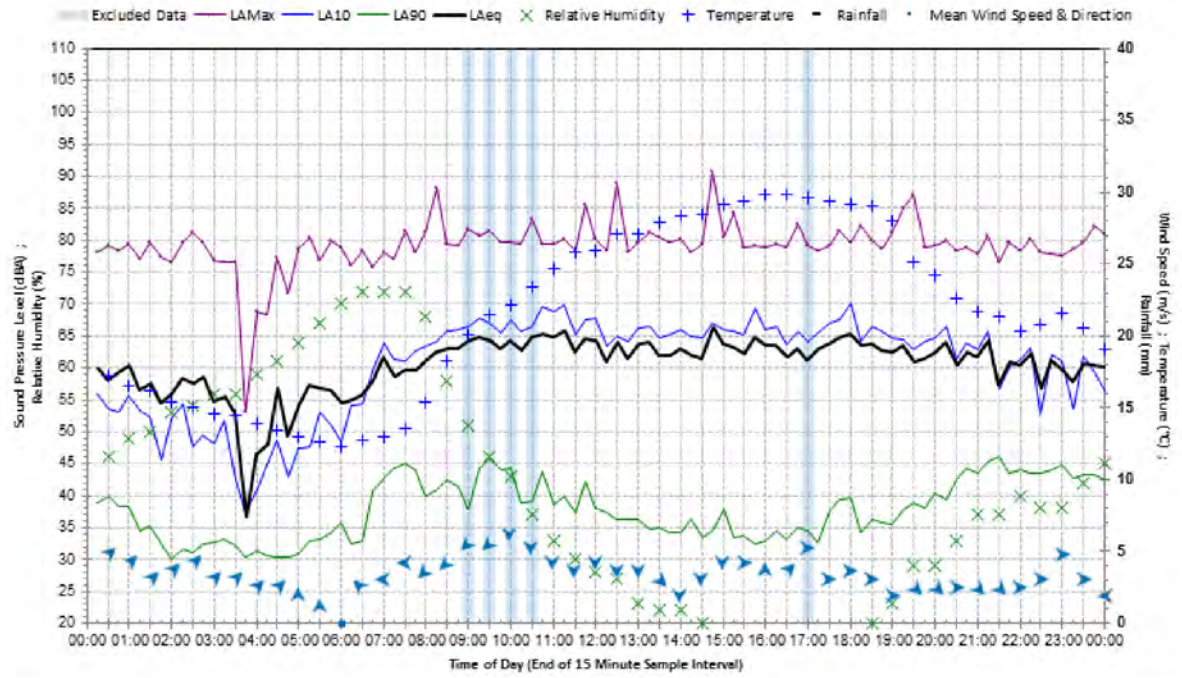
Statistical Ambient Noise Levels
Tuesday 22 March 2016



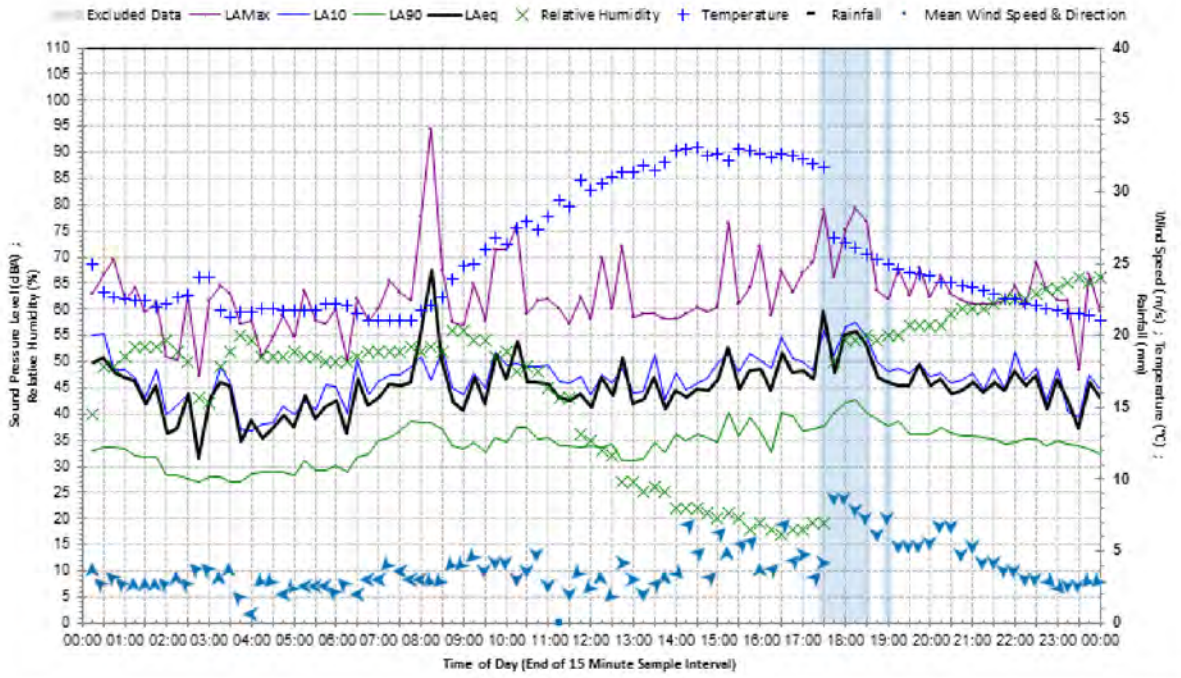
Statistical Ambient Noise Levels
Saturday 19 March 2016



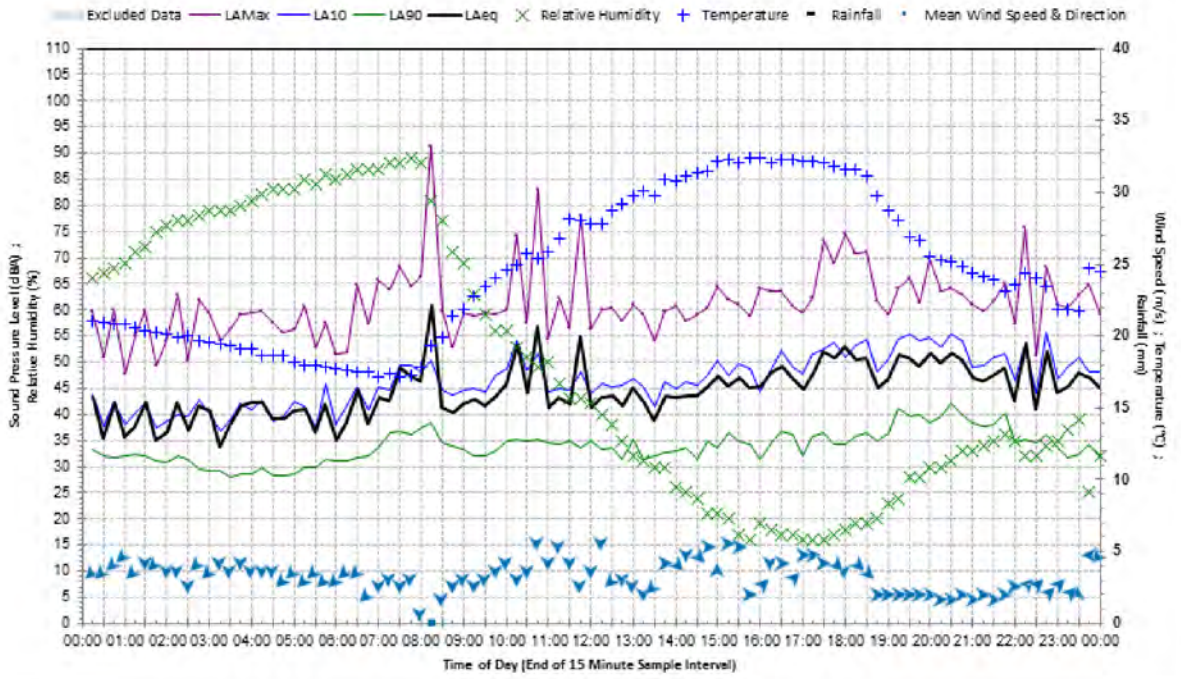
Statistical Ambient Noise Levels
Sunday 20 March 2016



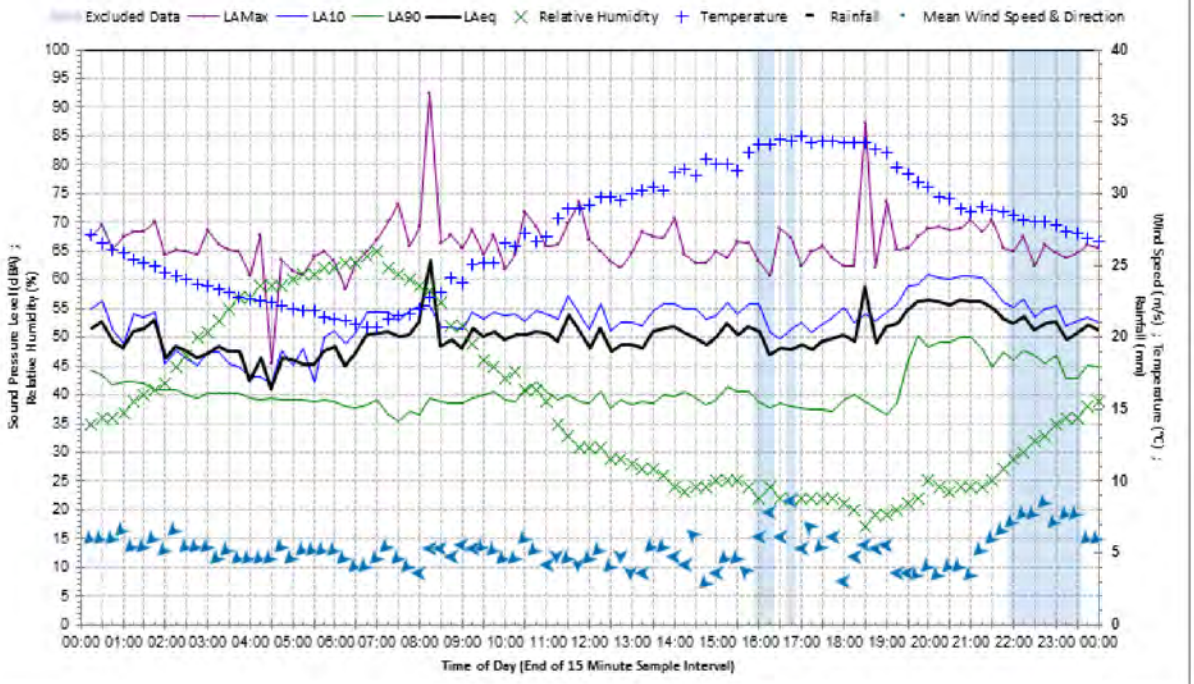
Statistical Ambient Noise Levels
Saturday 26 March 2016



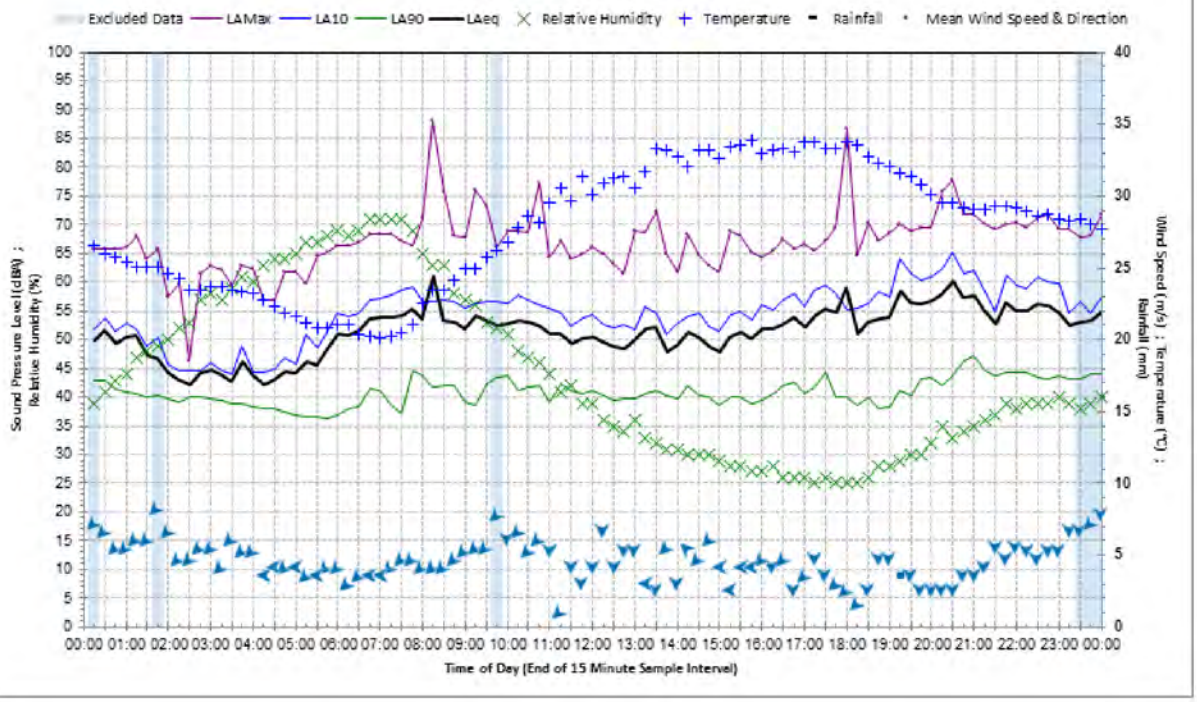
Statistical Ambient Noise Levels
Sunday 27 March 2016



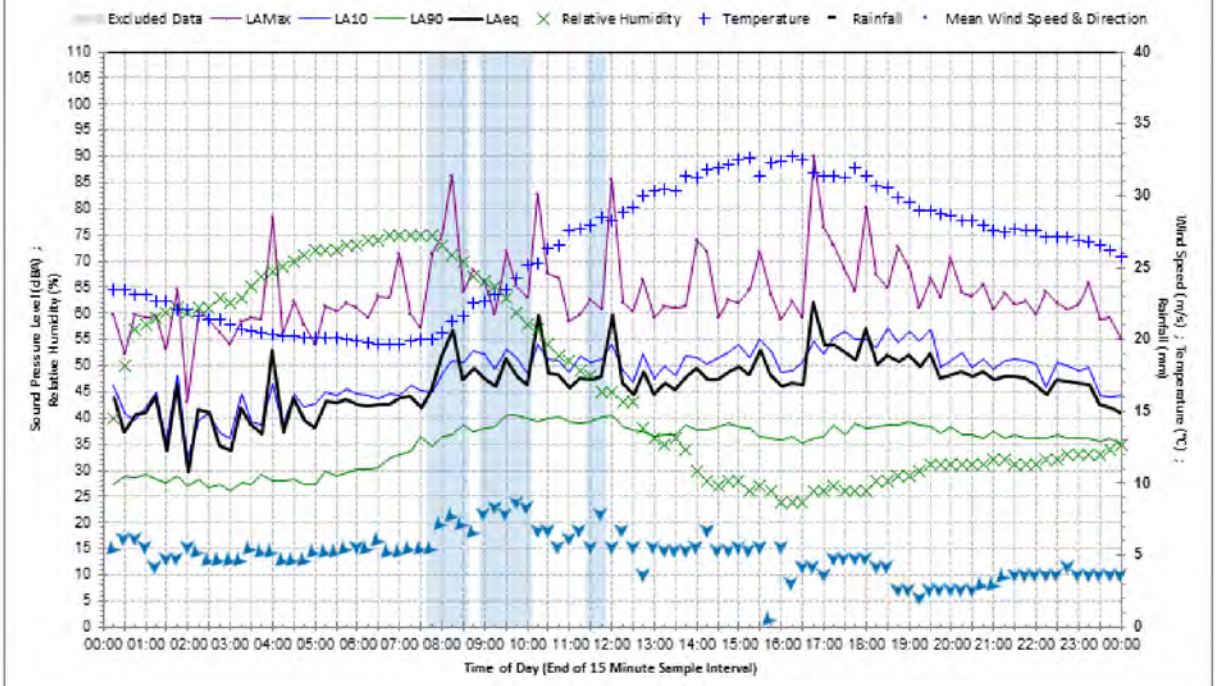
Statistical Ambient Noise Levels
Sunday 6 March 2016



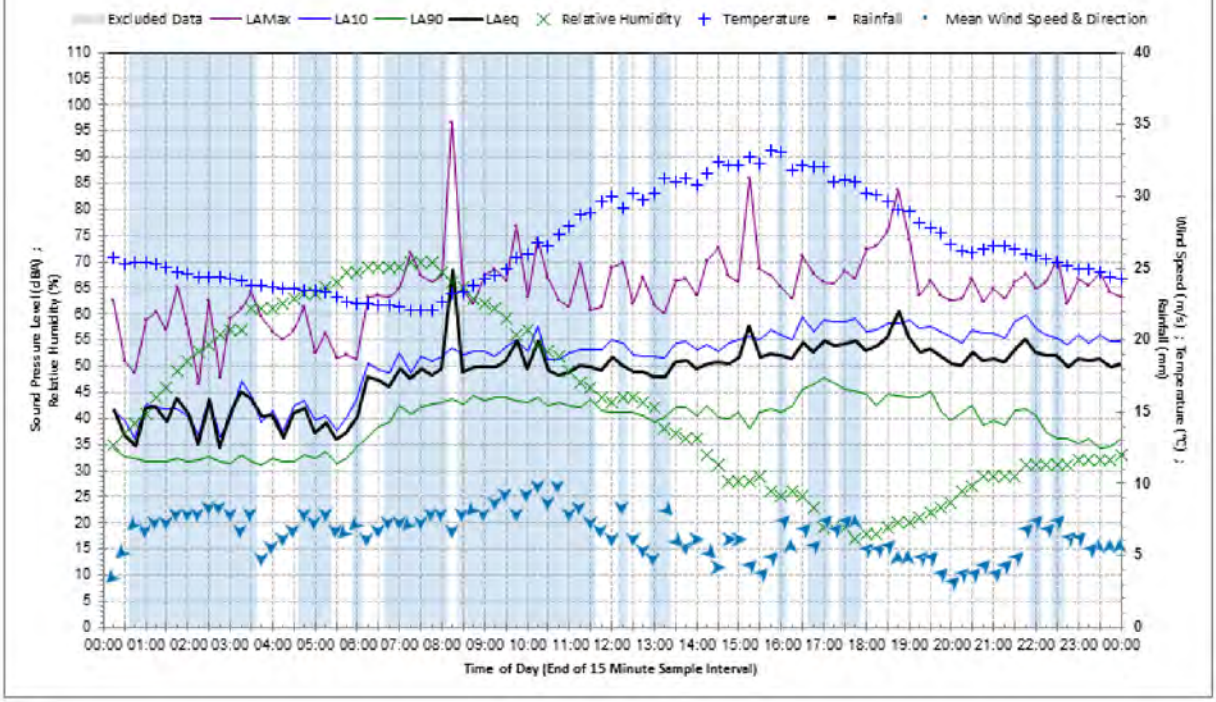
Statistical Ambient Noise Levels
Monday 7 March 2016



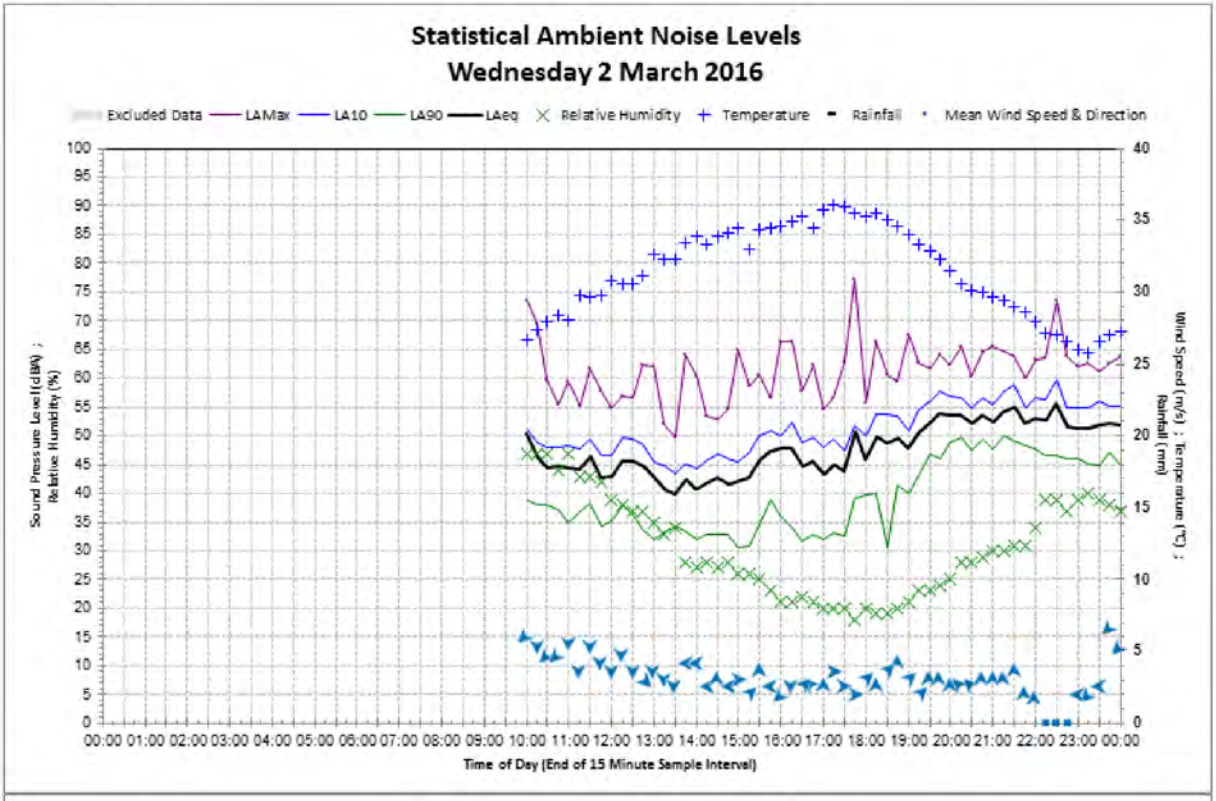
Statistical Ambient Noise Levels
Monday 28 March 2016

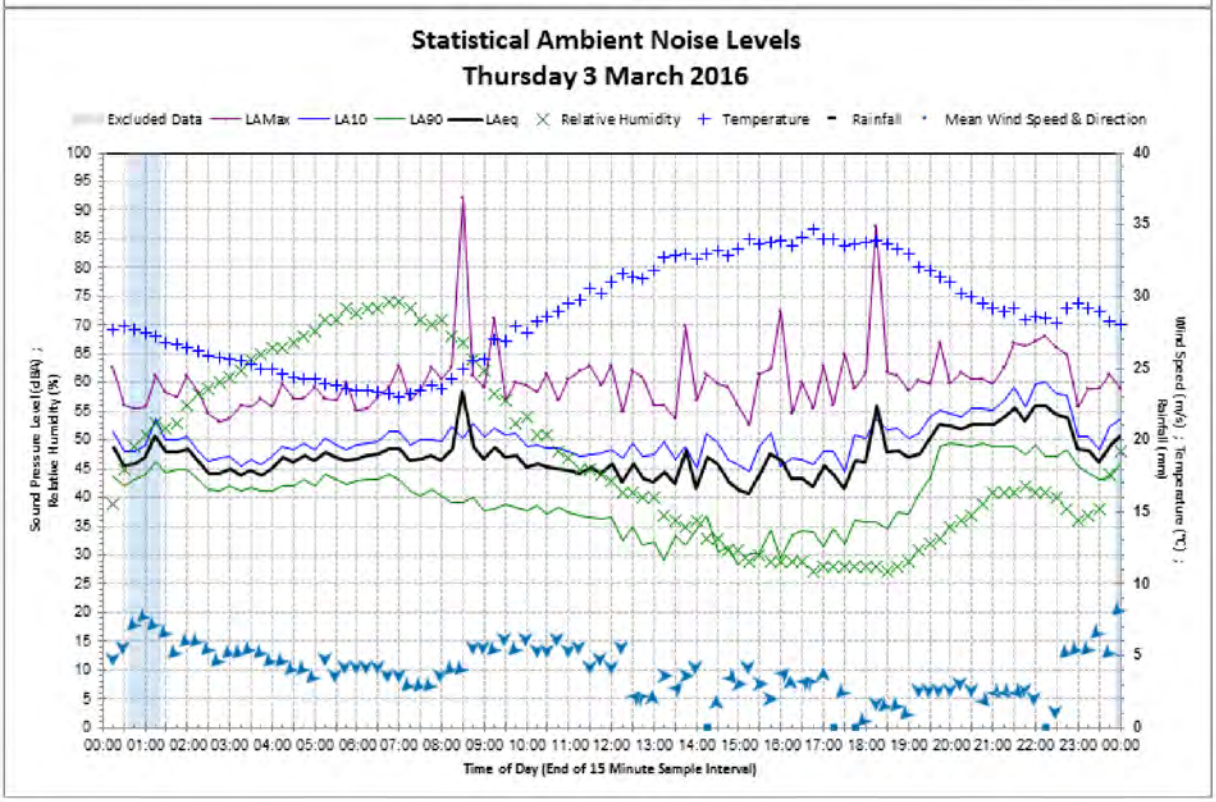


Statistical Ambient Noise Levels
Tuesday 29 March 2016

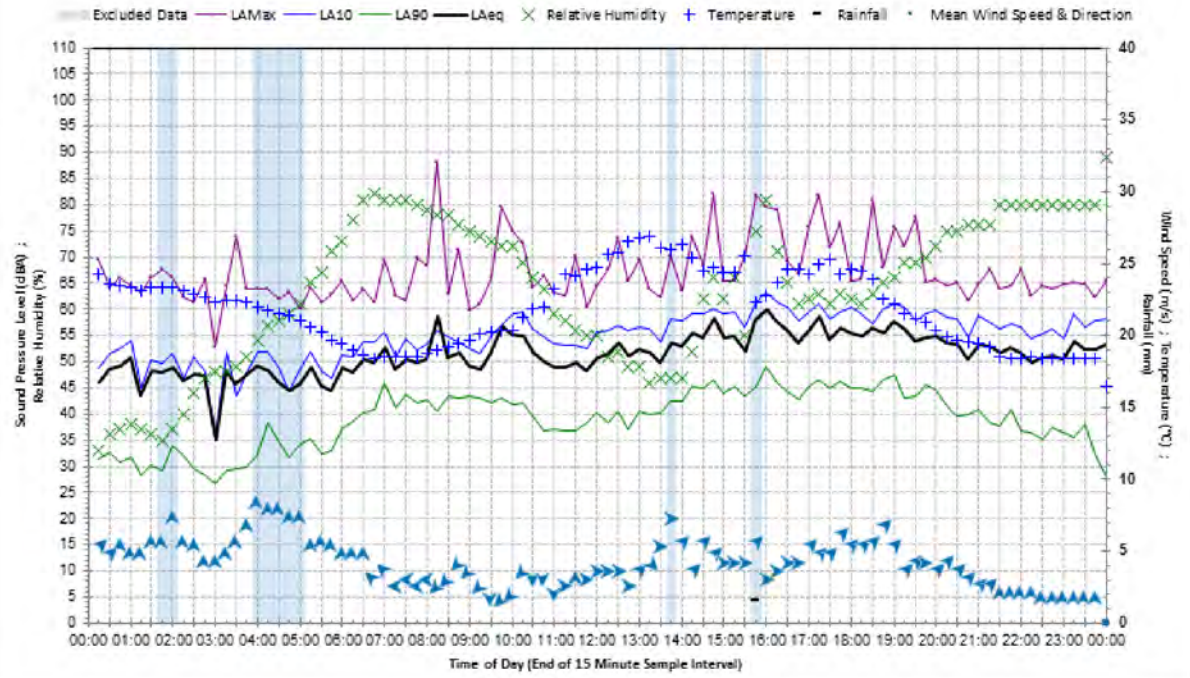


Logger L14NNS

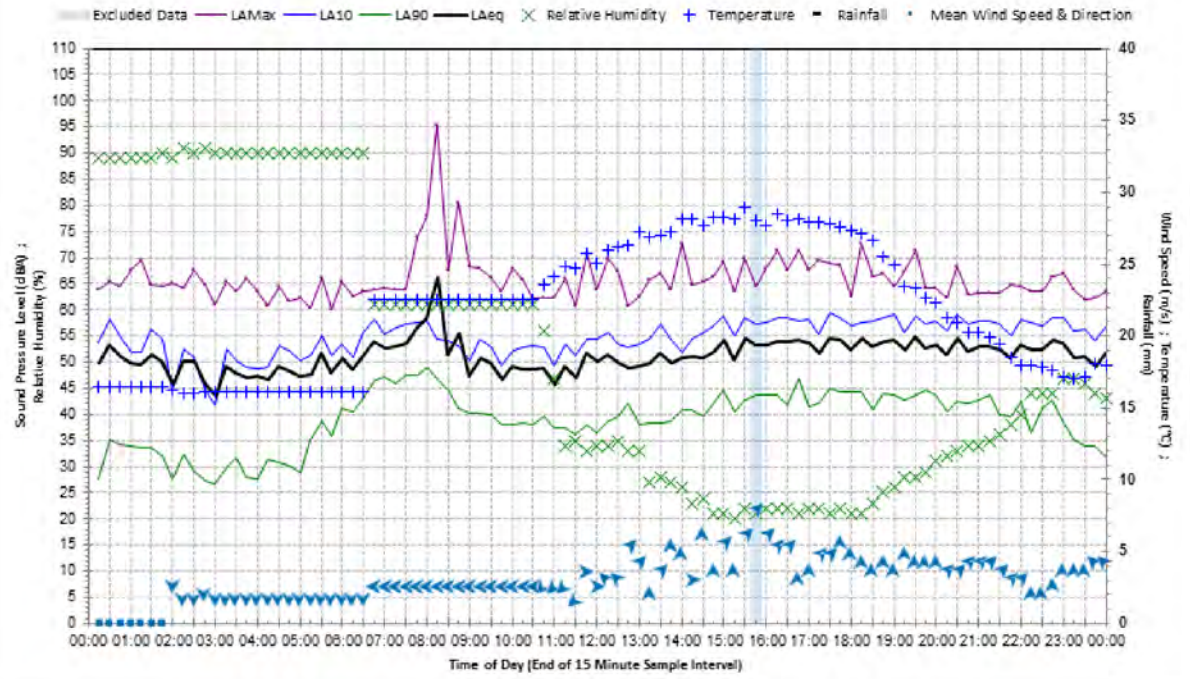




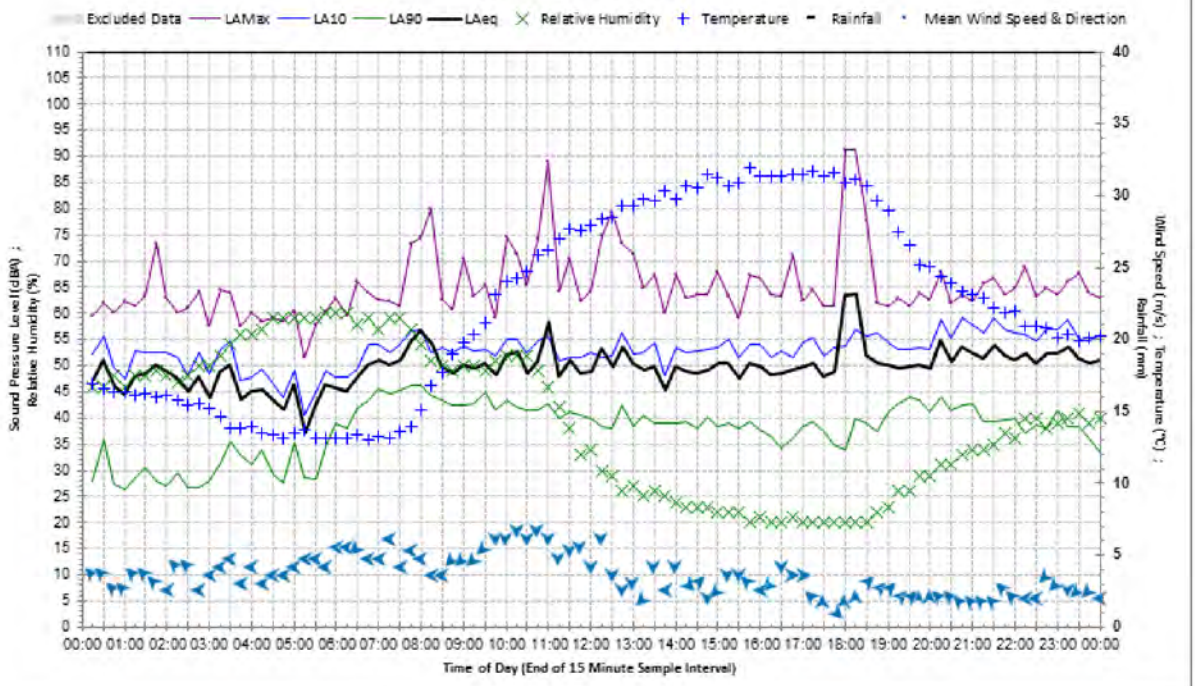
Statistical Ambient Noise Levels
Wednesday 30 March 2016



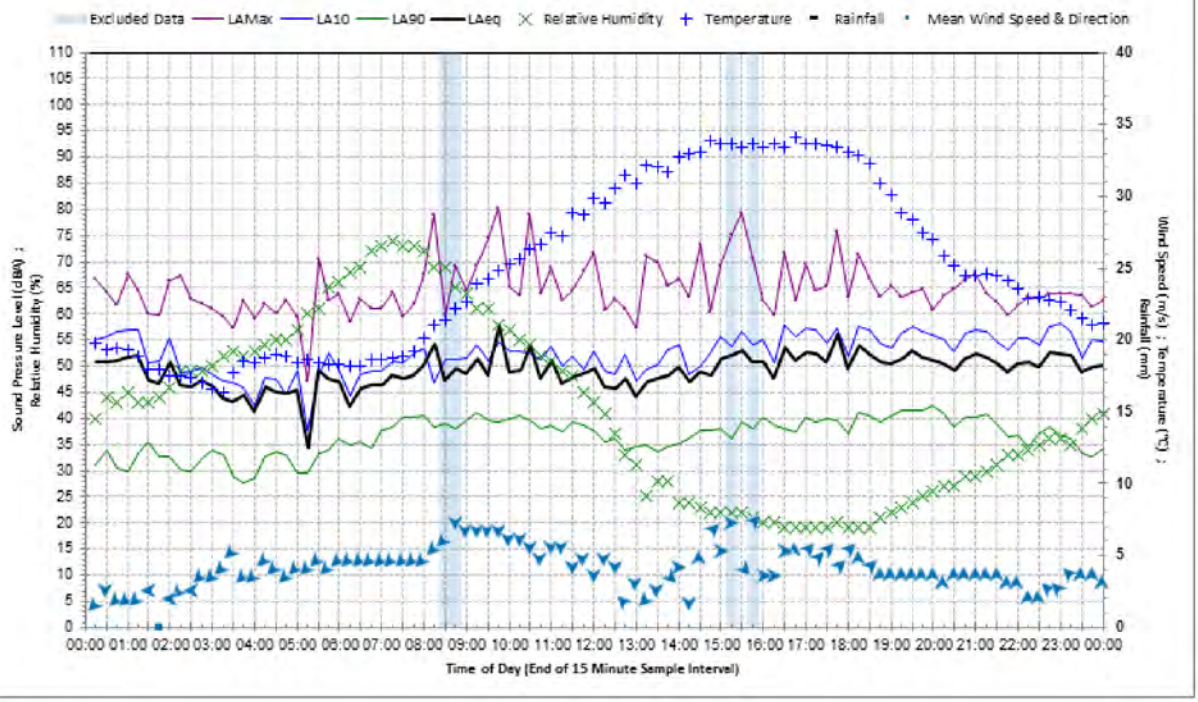
Statistical Ambient Noise Levels
Thursday 31 March 2016



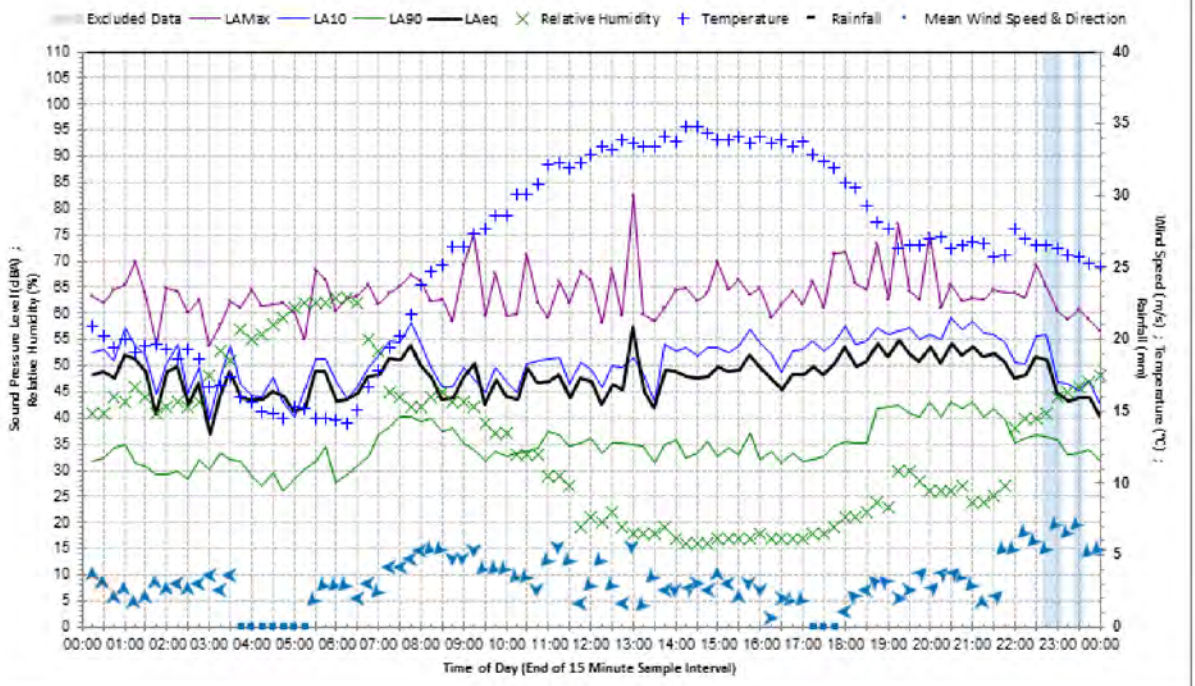
Statistical Ambient Noise Levels
Friday 1 April 2016



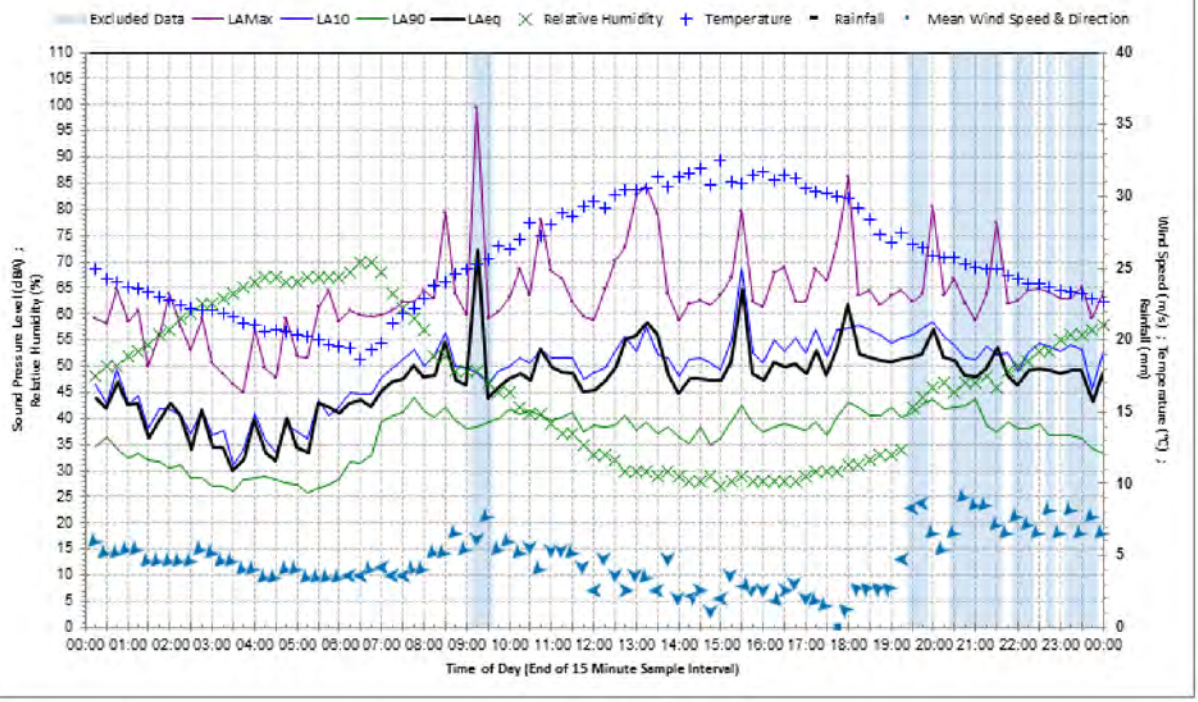
Statistical Ambient Noise Levels
Saturday 2 April 2016



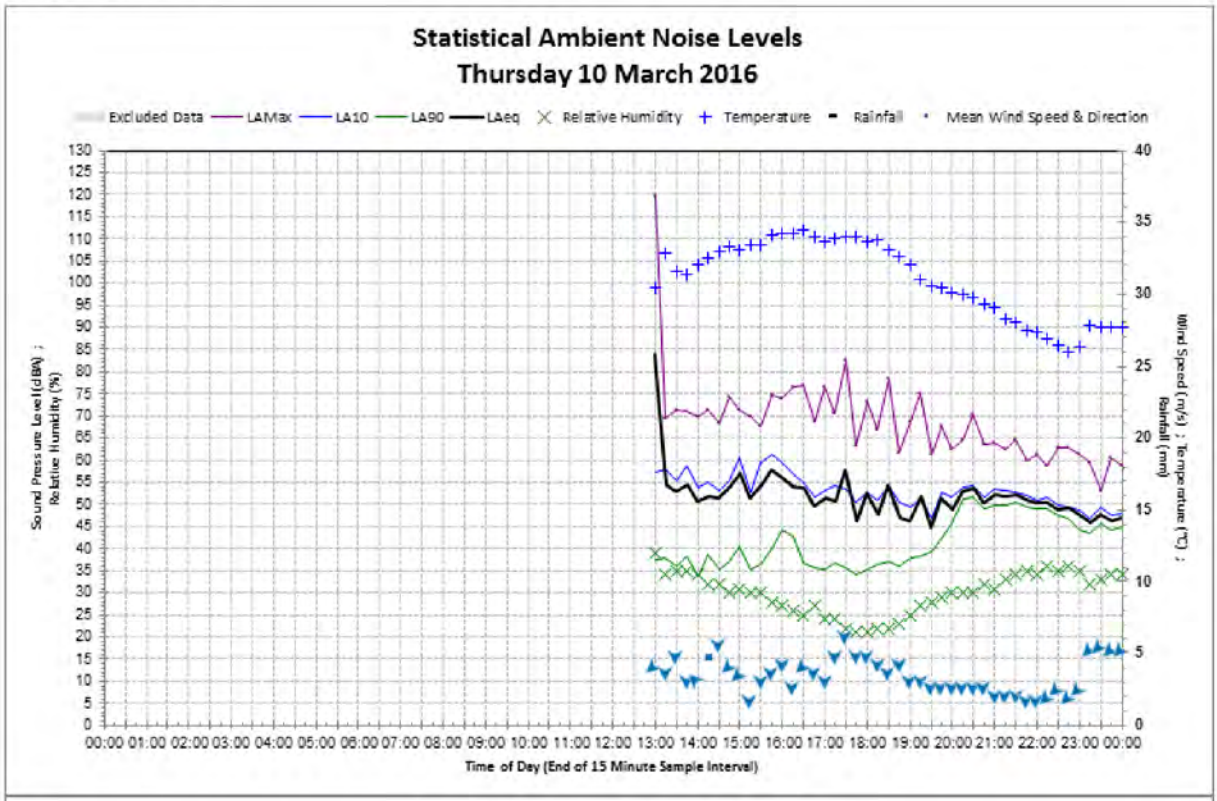
Statistical Ambient Noise Levels
Sunday 3 April 2016

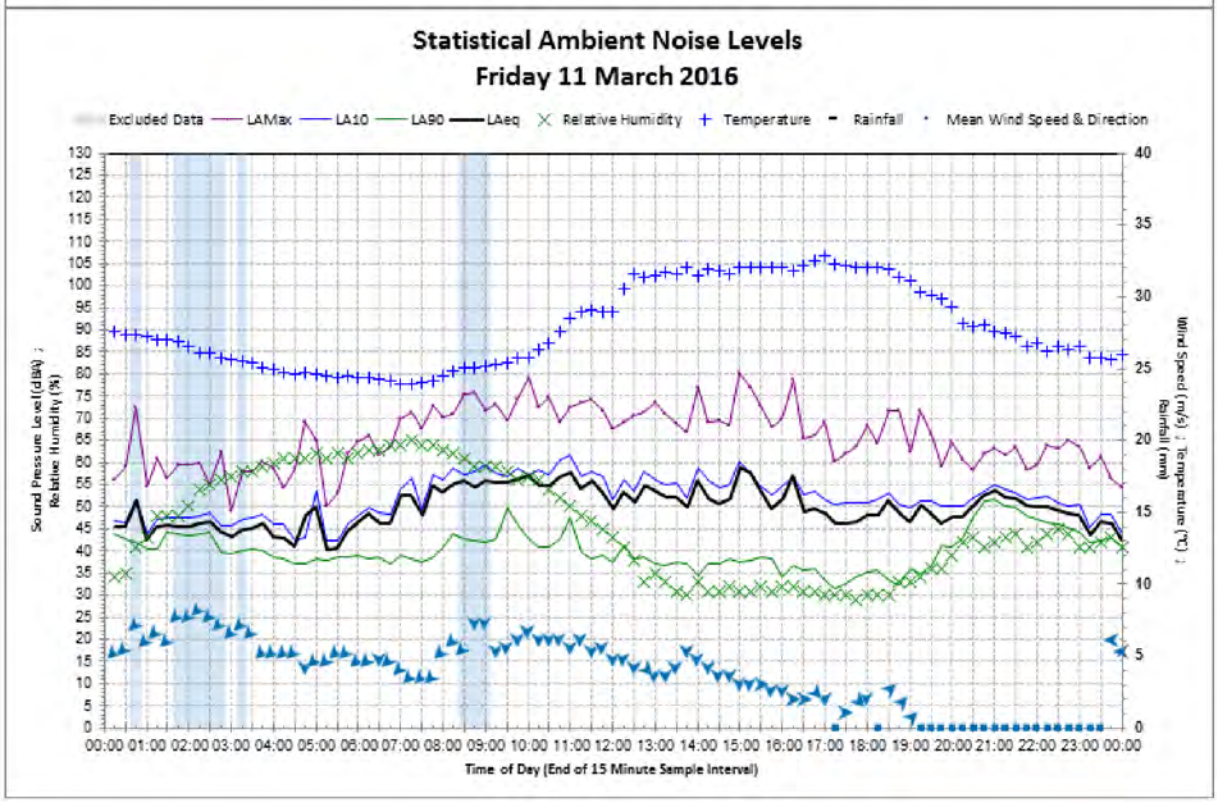


Statistical Ambient Noise Levels
Monday 4 April 2016

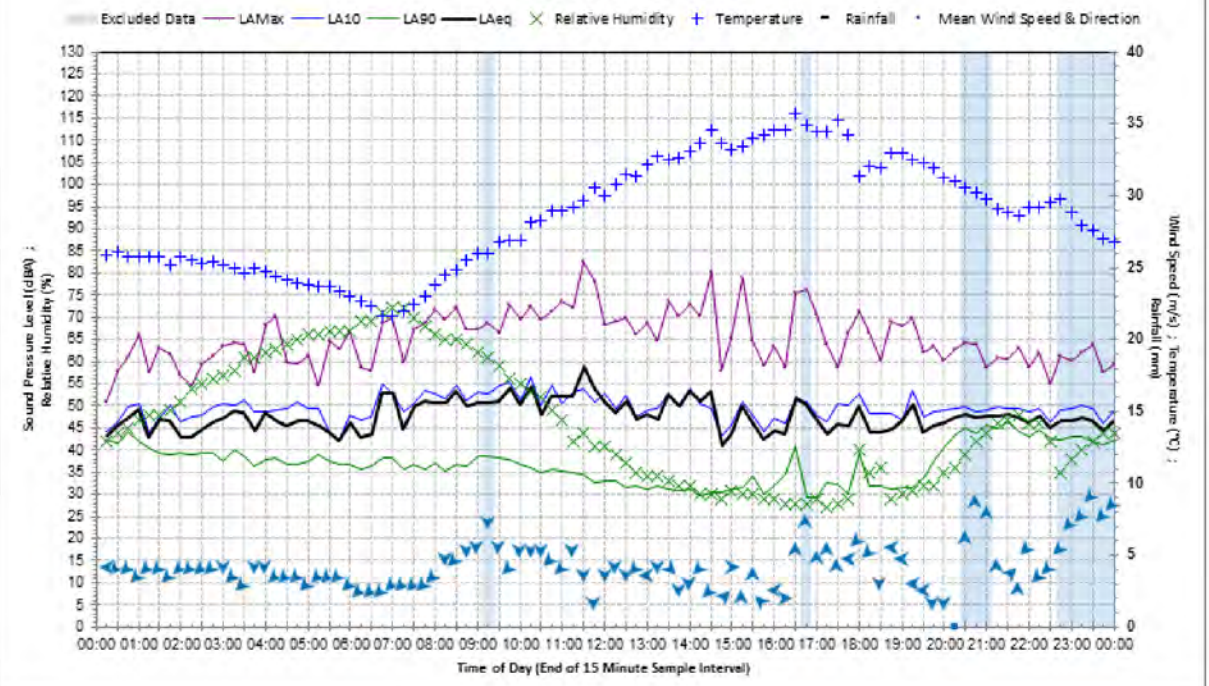


Logger L09NNS

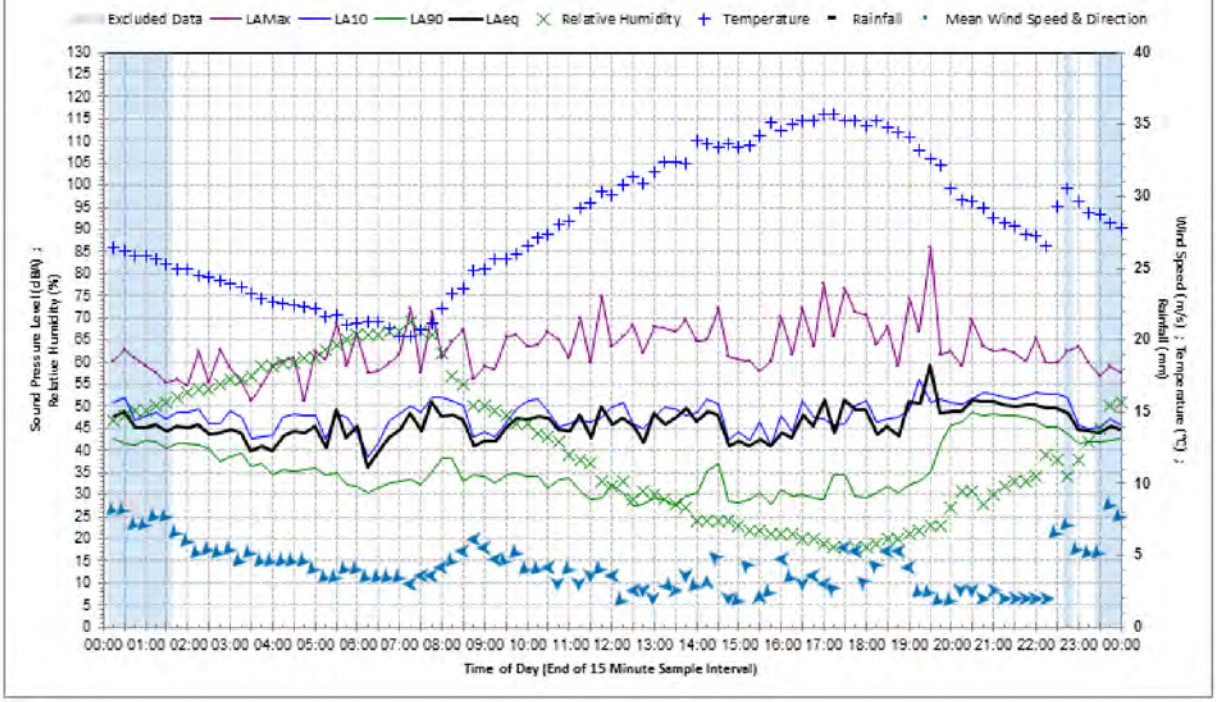




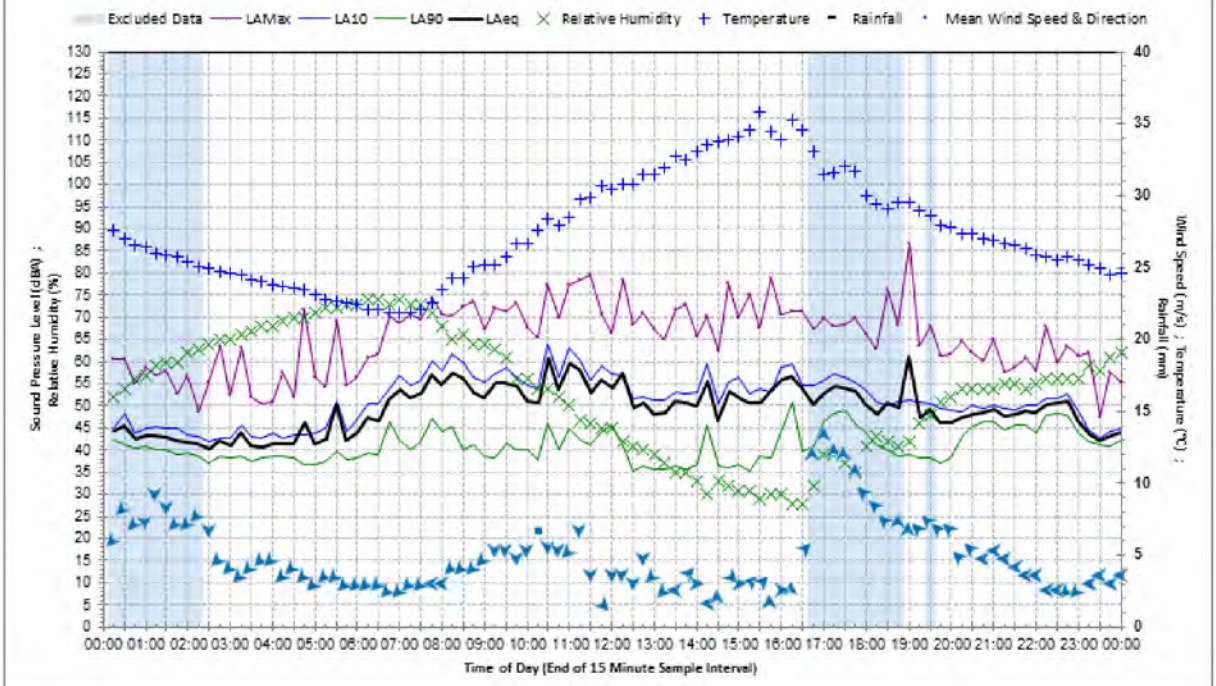
Statistical Ambient Noise Levels
Saturday 12 March 2016



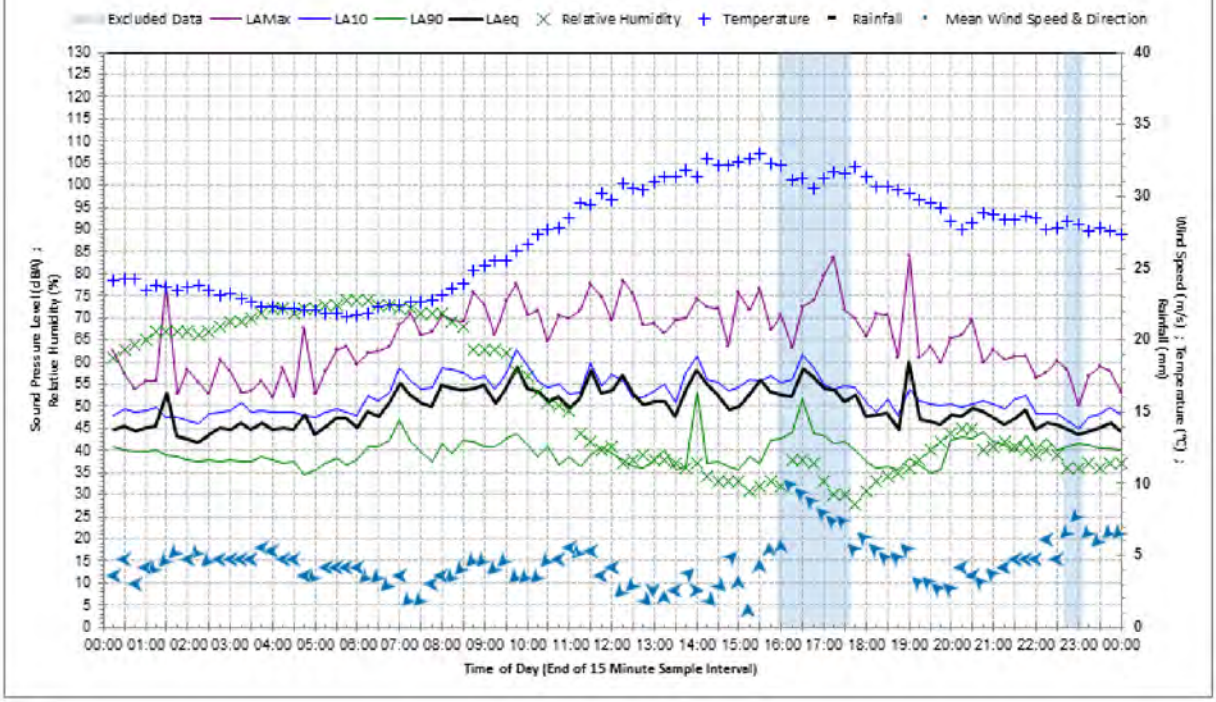
Statistical Ambient Noise Levels
Sunday 13 March 2016



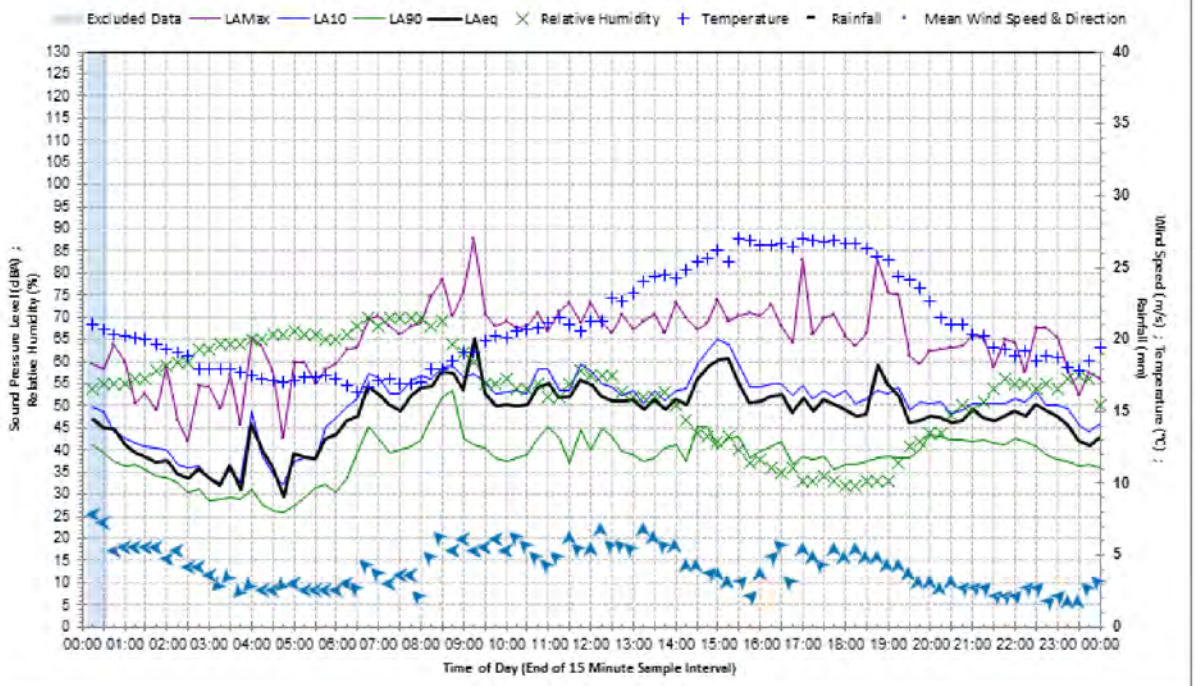
Statistical Ambient Noise Levels
Monday 14 March 2016



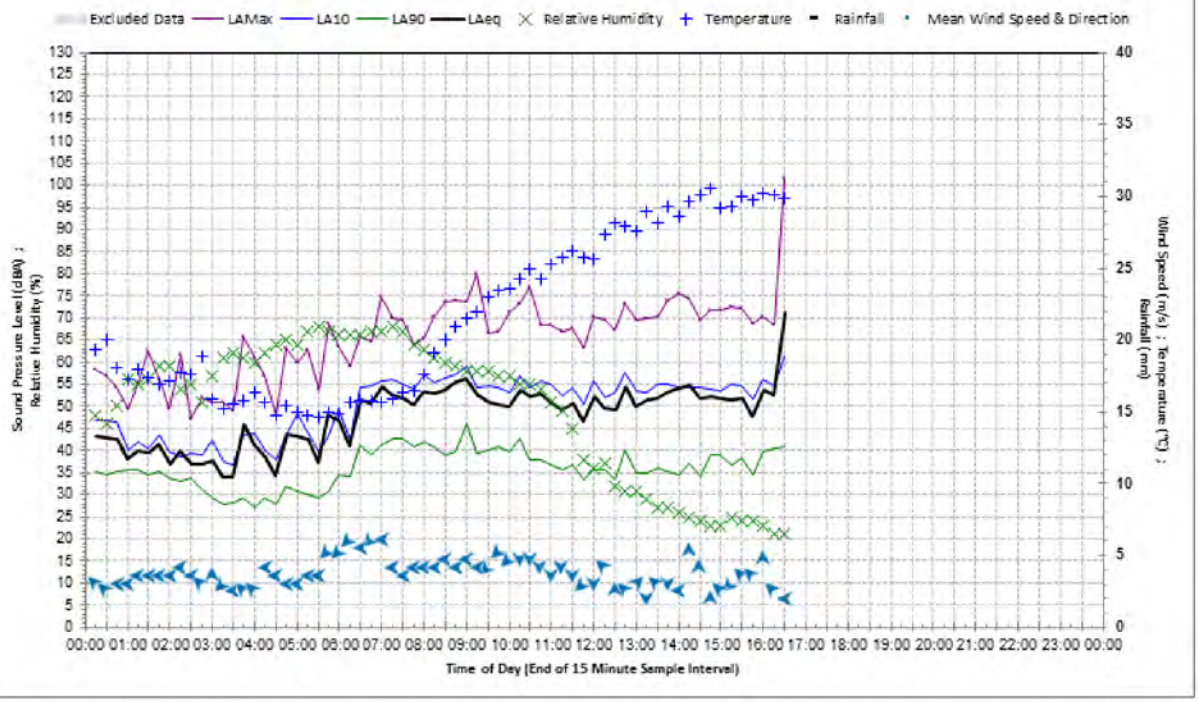
Statistical Ambient Noise Levels
Tuesday 15 March 2016



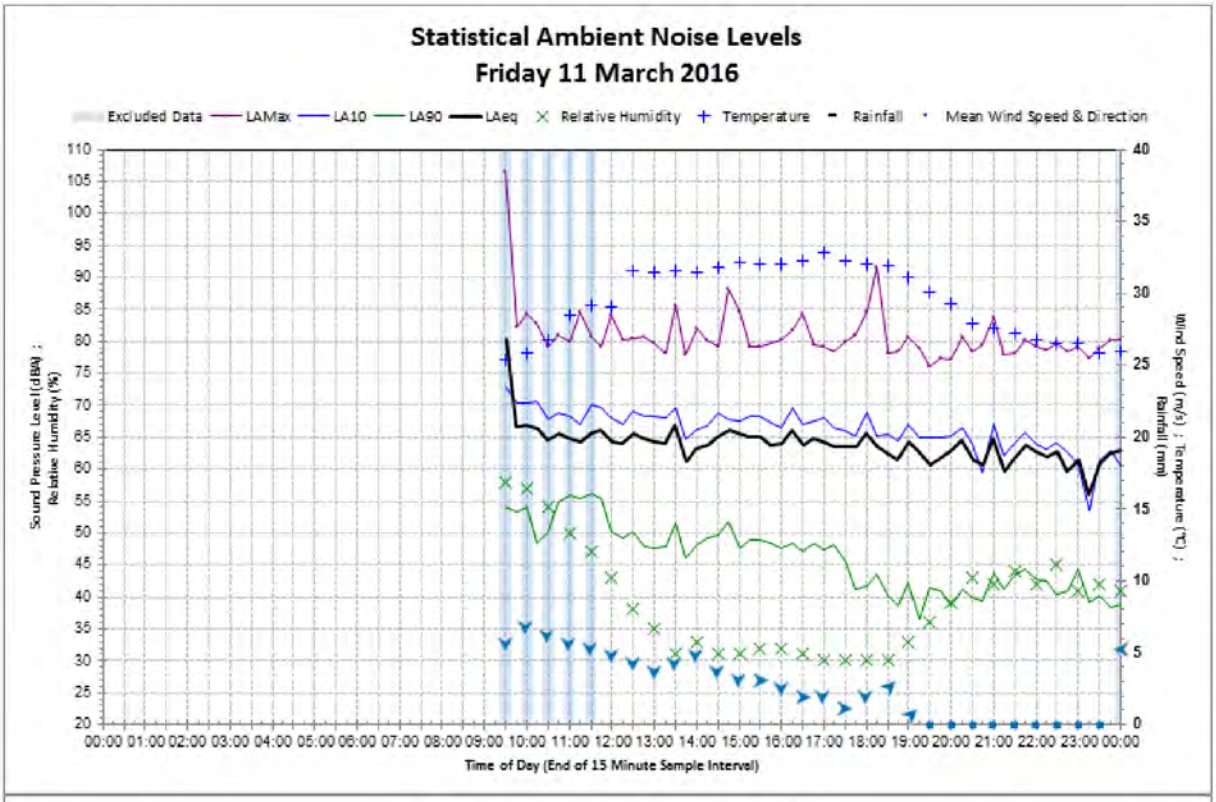
Statistical Ambient Noise Levels
Tuesday 22 March 2016

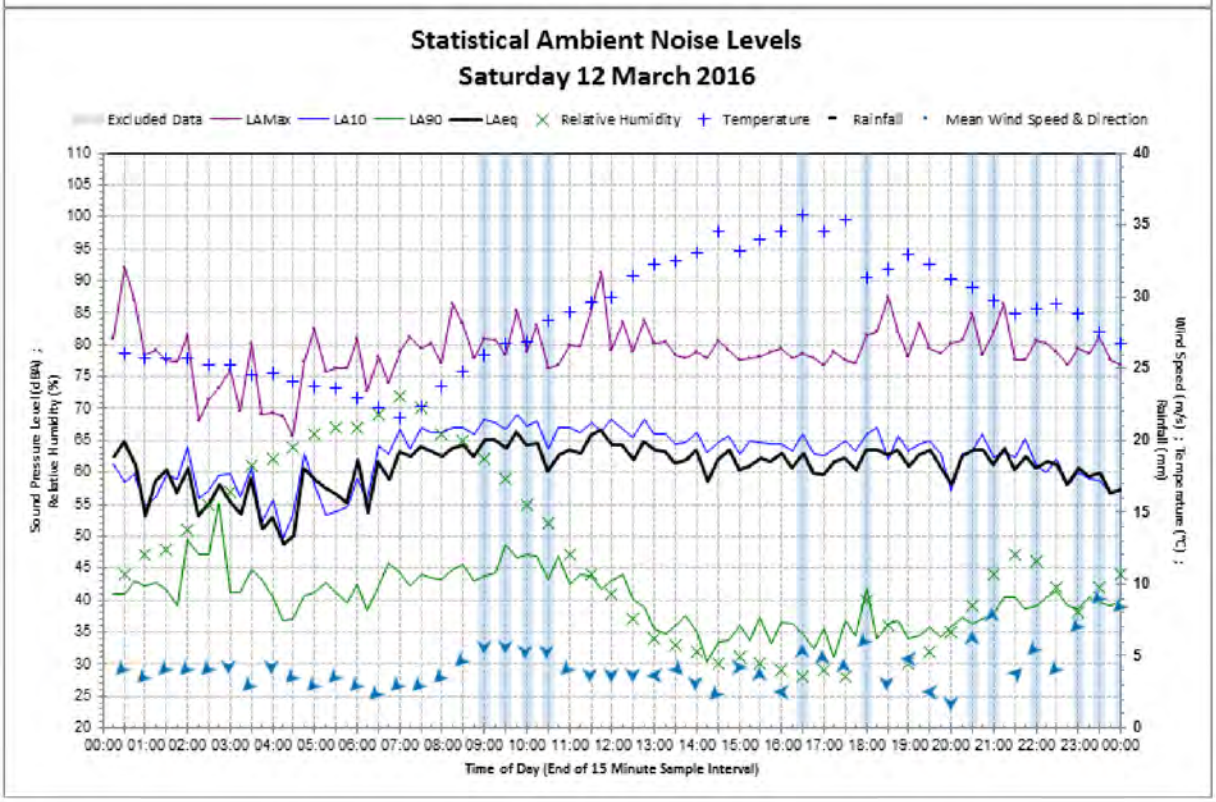


Statistical Ambient Noise Levels
Wednesday 23 March 2016

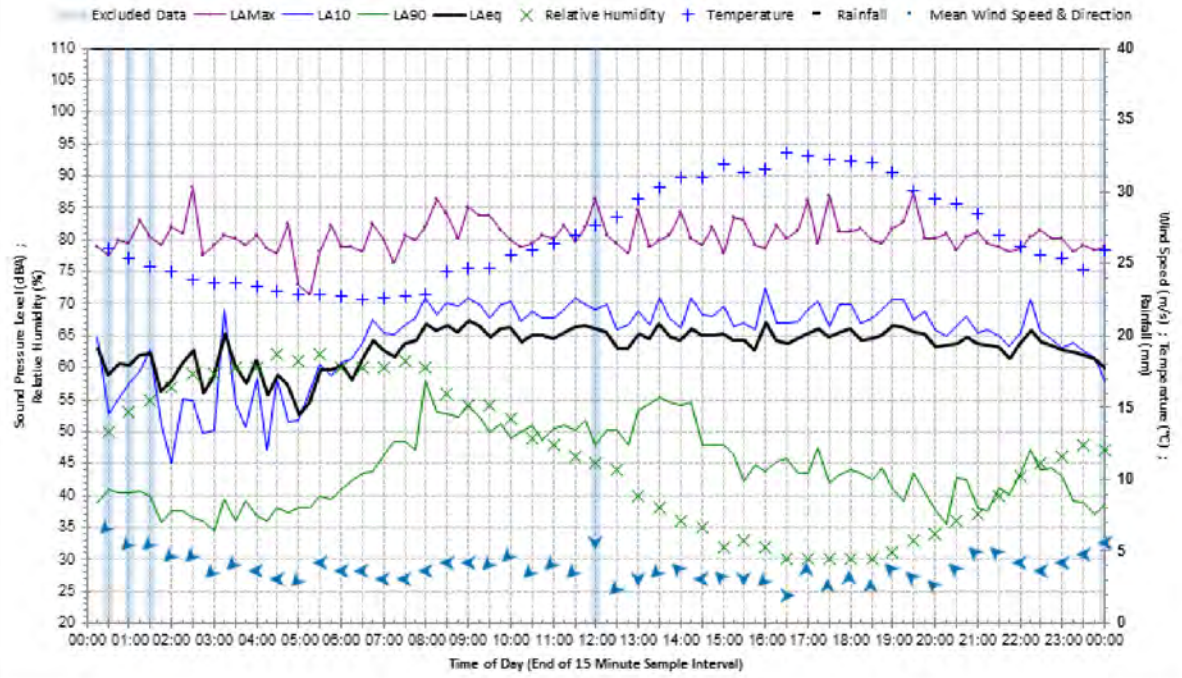


Logger L11NNS

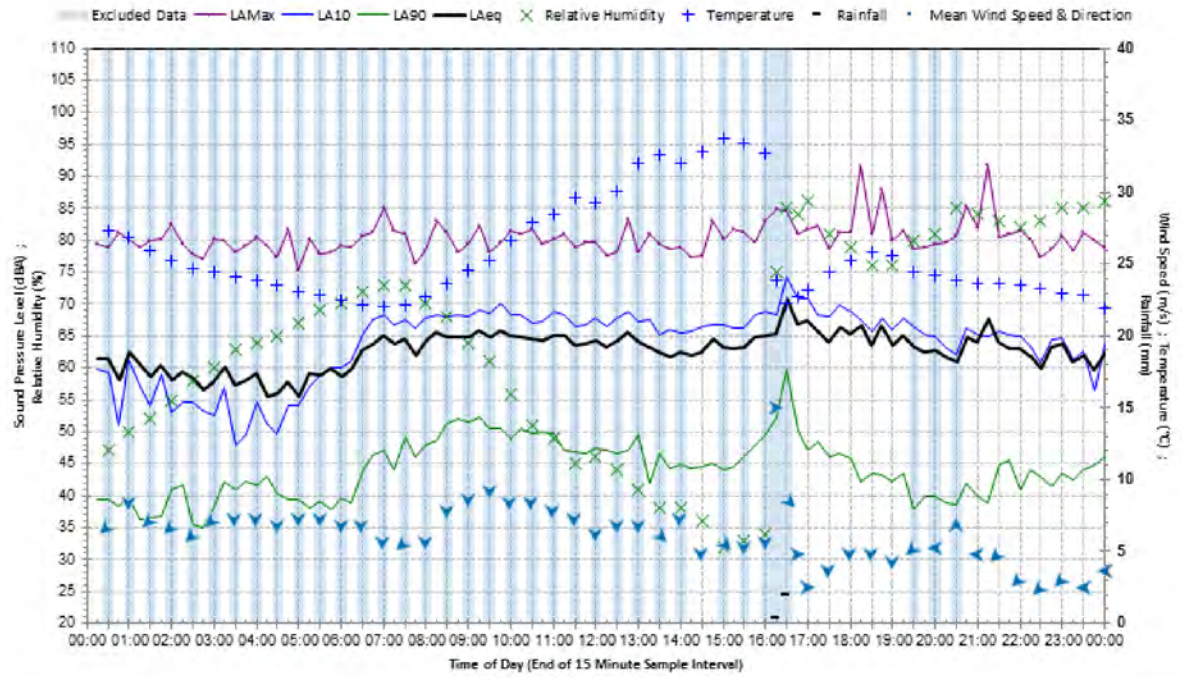


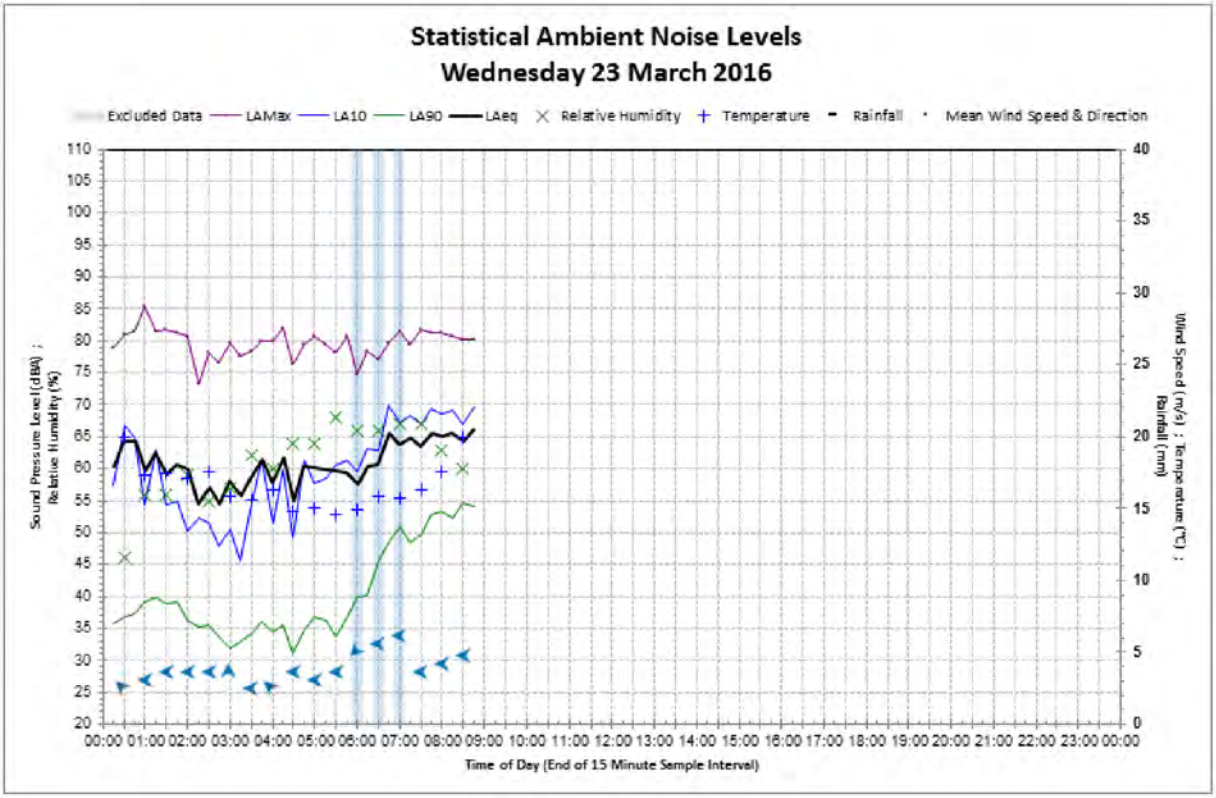


Statistical Ambient Noise Levels
Thursday 17 March 2016

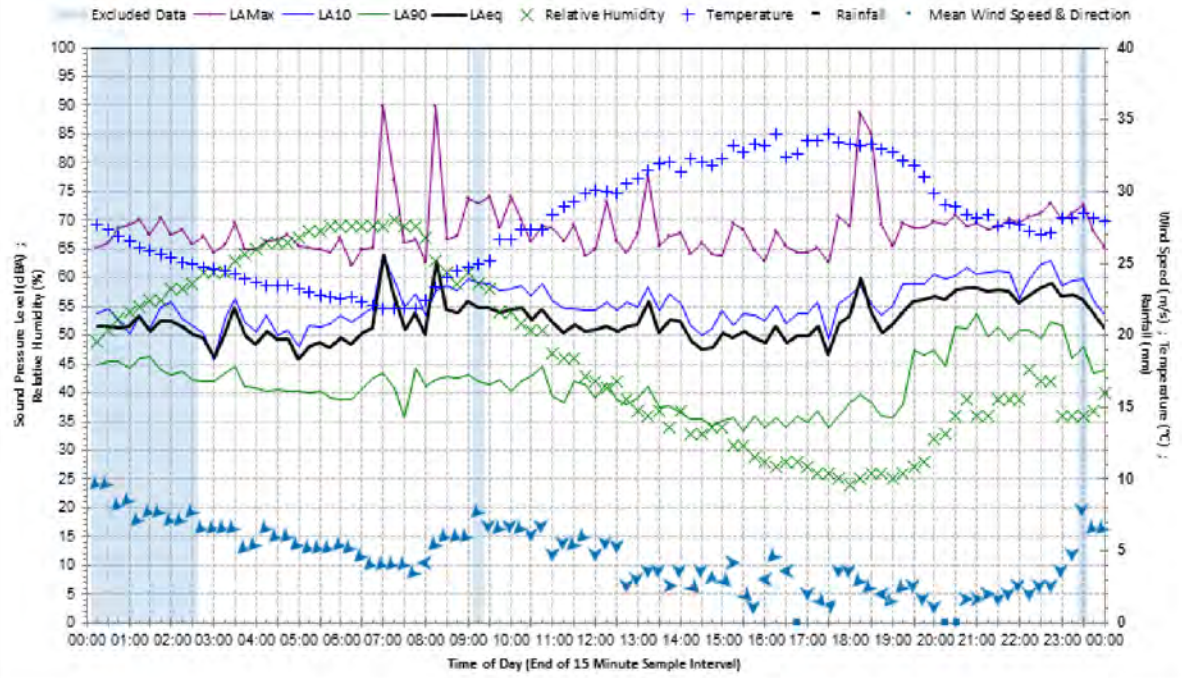


Statistical Ambient Noise Levels
Friday 18 March 2016

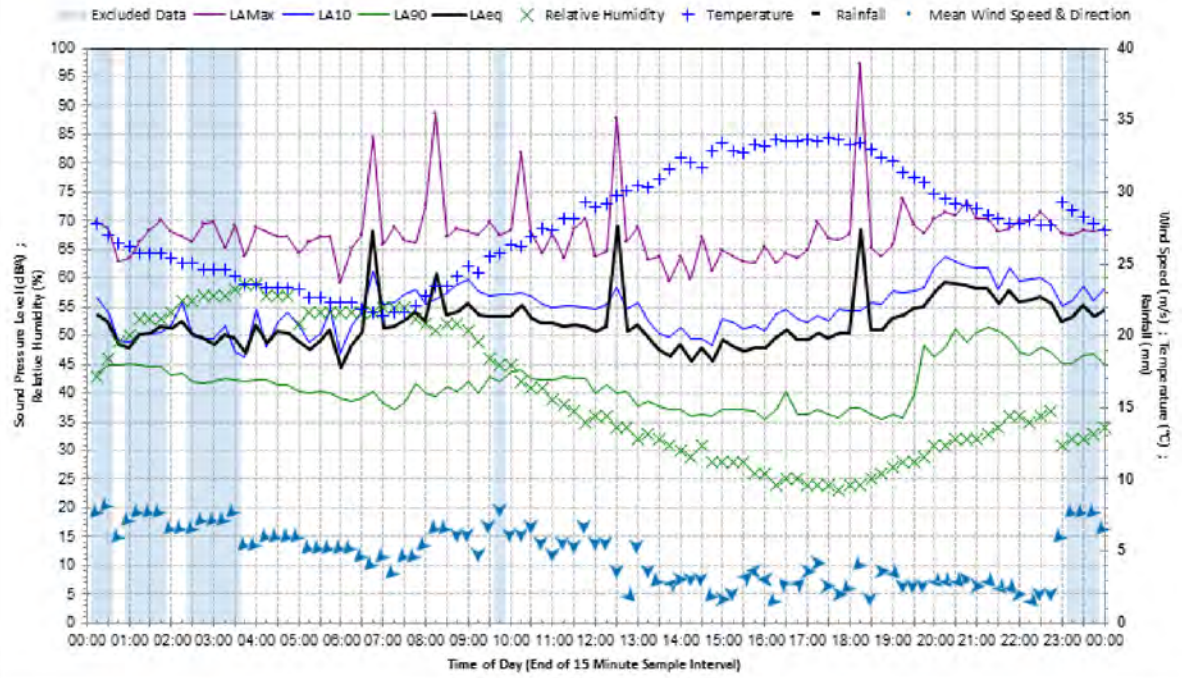



Statistical Ambient Noise Levels
Wednesday 23 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

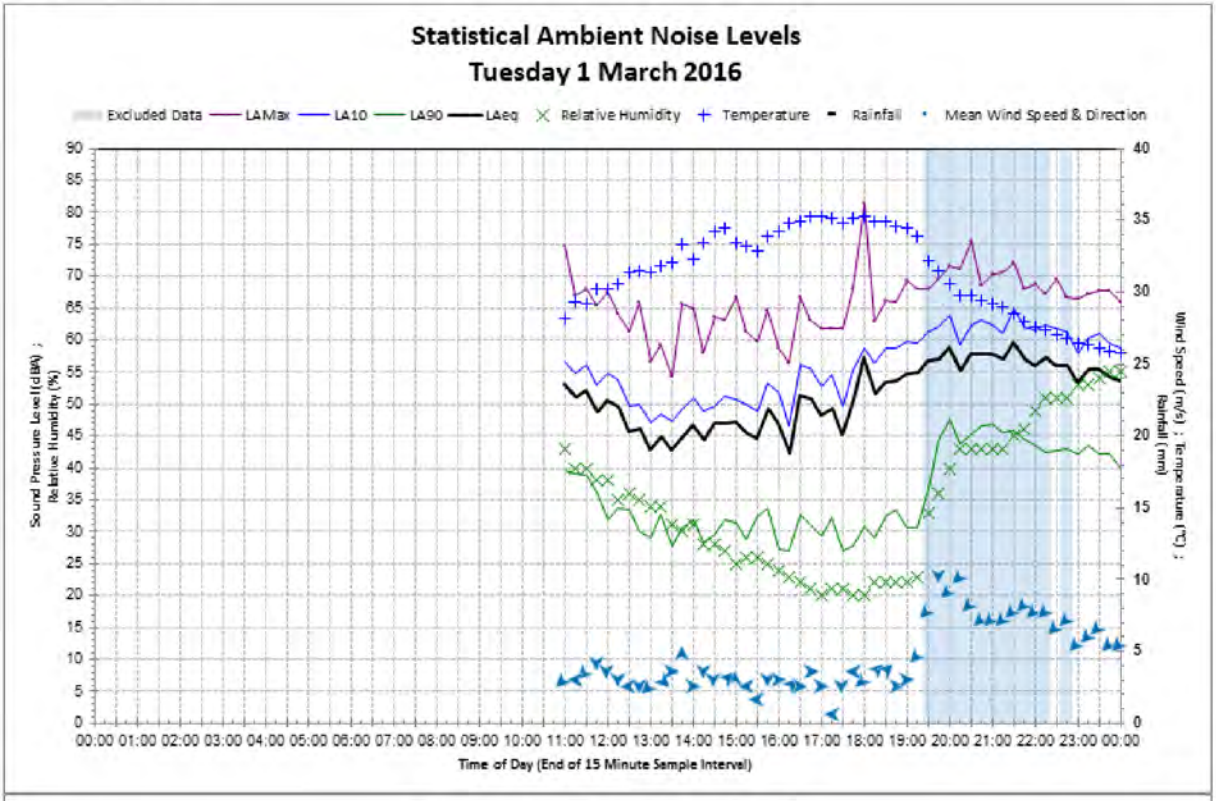
Statistical Ambient Noise Levels
Friday 4 March 2016

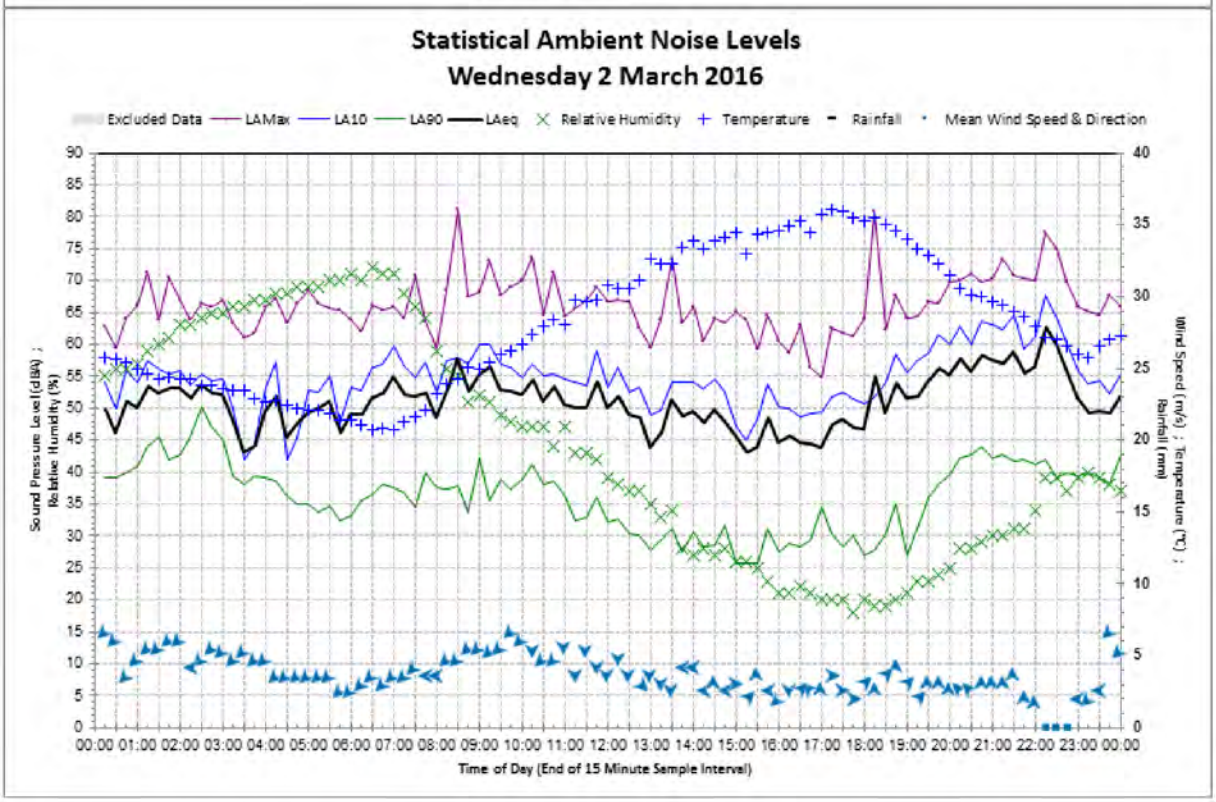


Statistical Ambient Noise Levels
Saturday 5 March 2016

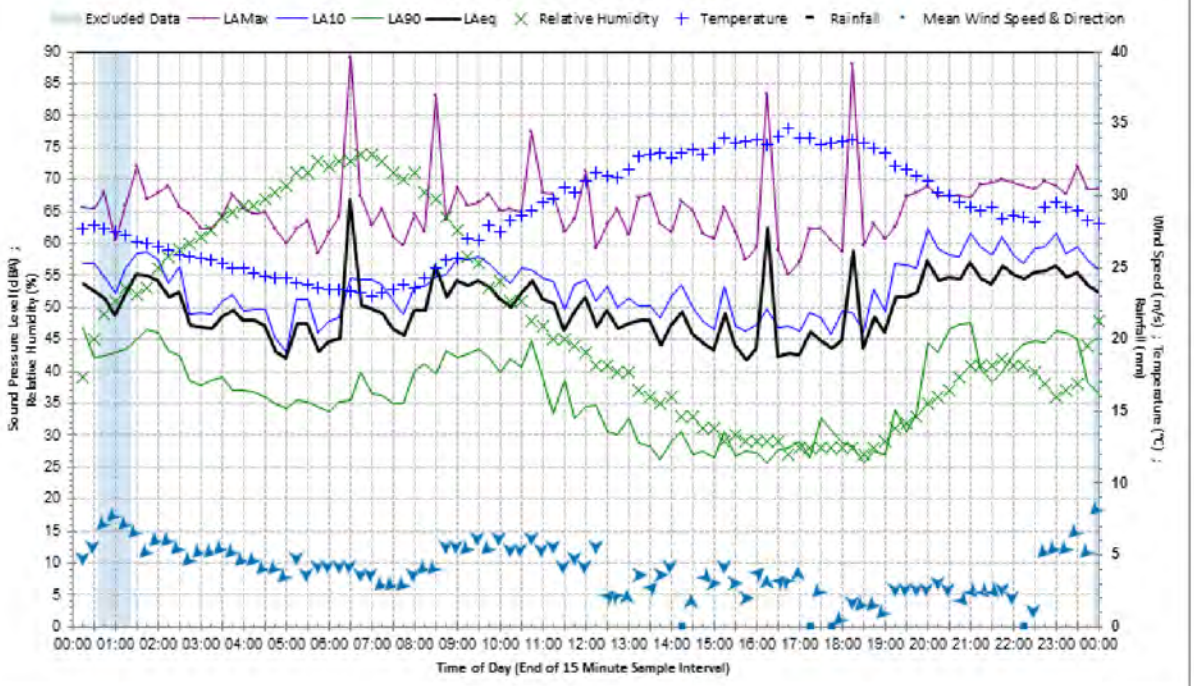


Logger L13NNS

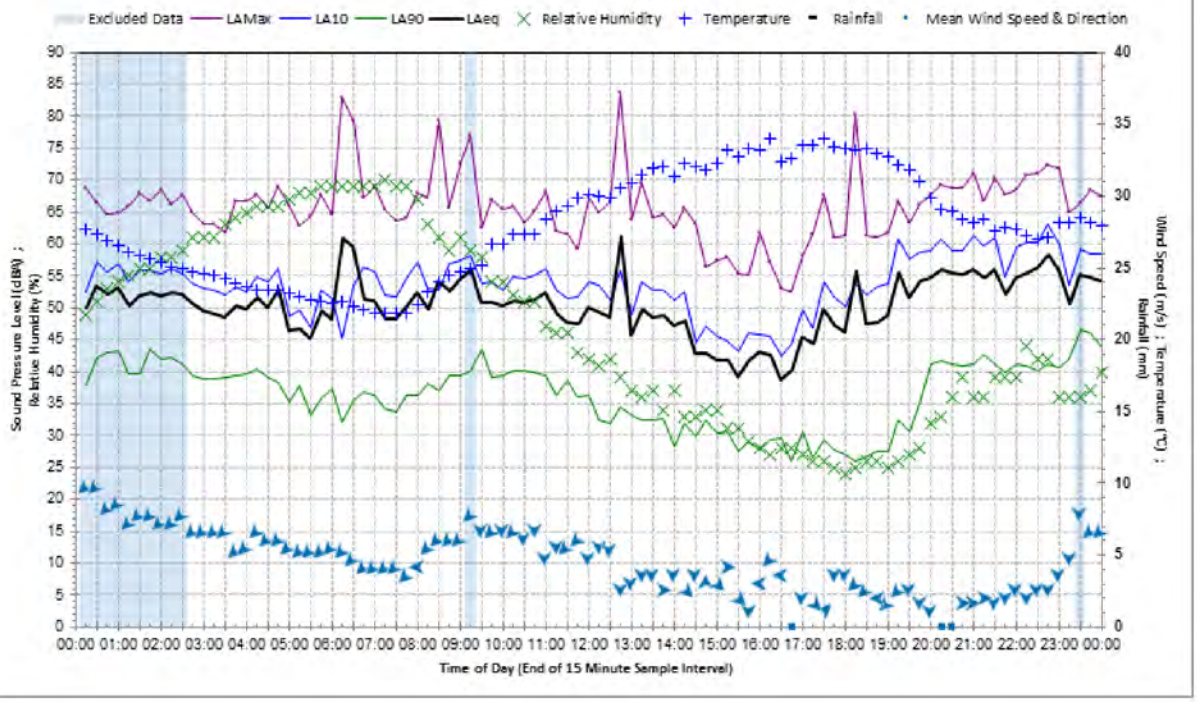




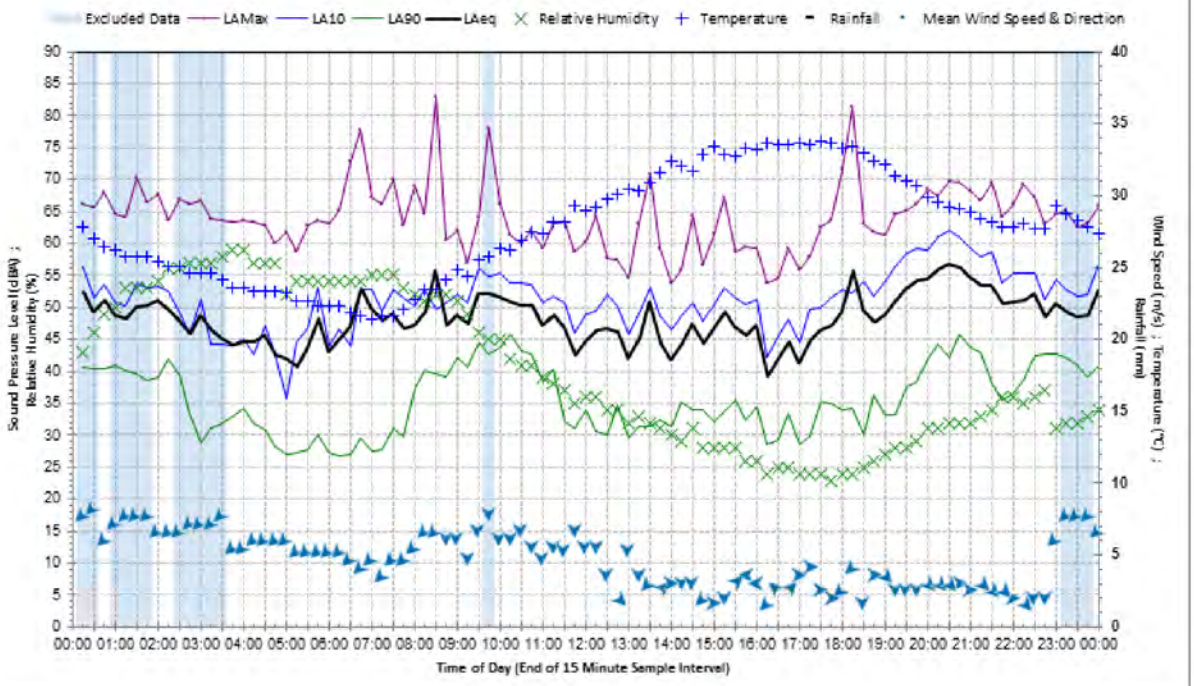
Statistical Ambient Noise Levels
Thursday 3 March 2016



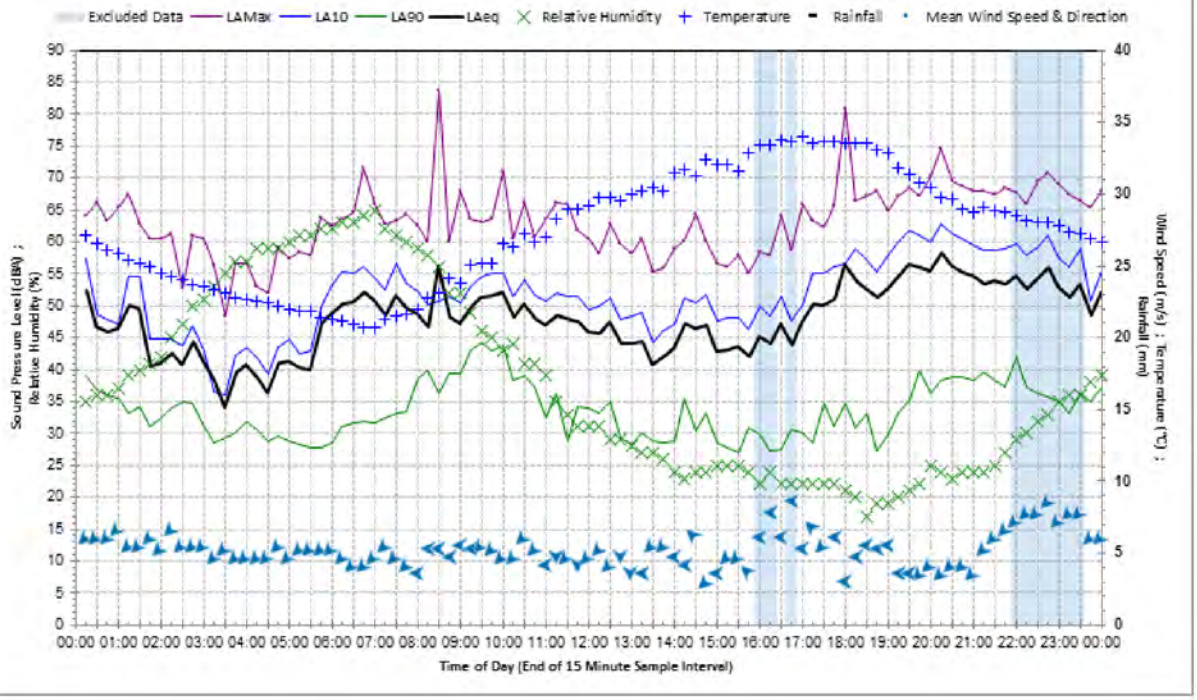
Statistical Ambient Noise Levels
Friday 4 March 2016



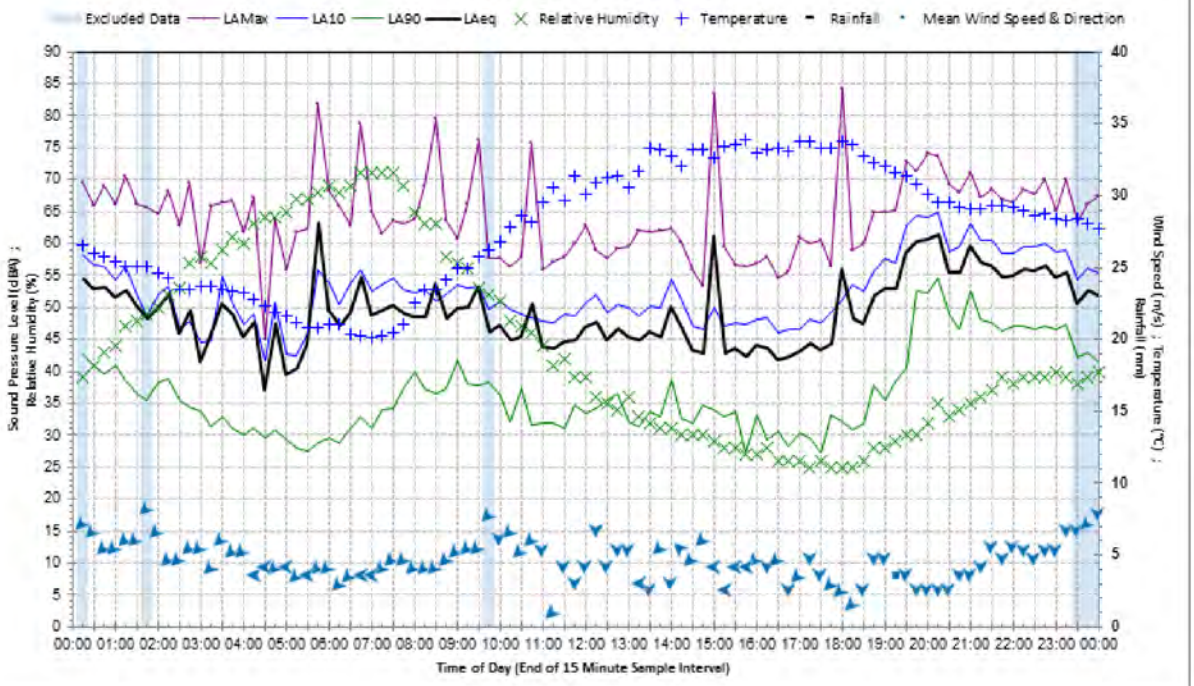
Statistical Ambient Noise Levels
Saturday 5 March 2016



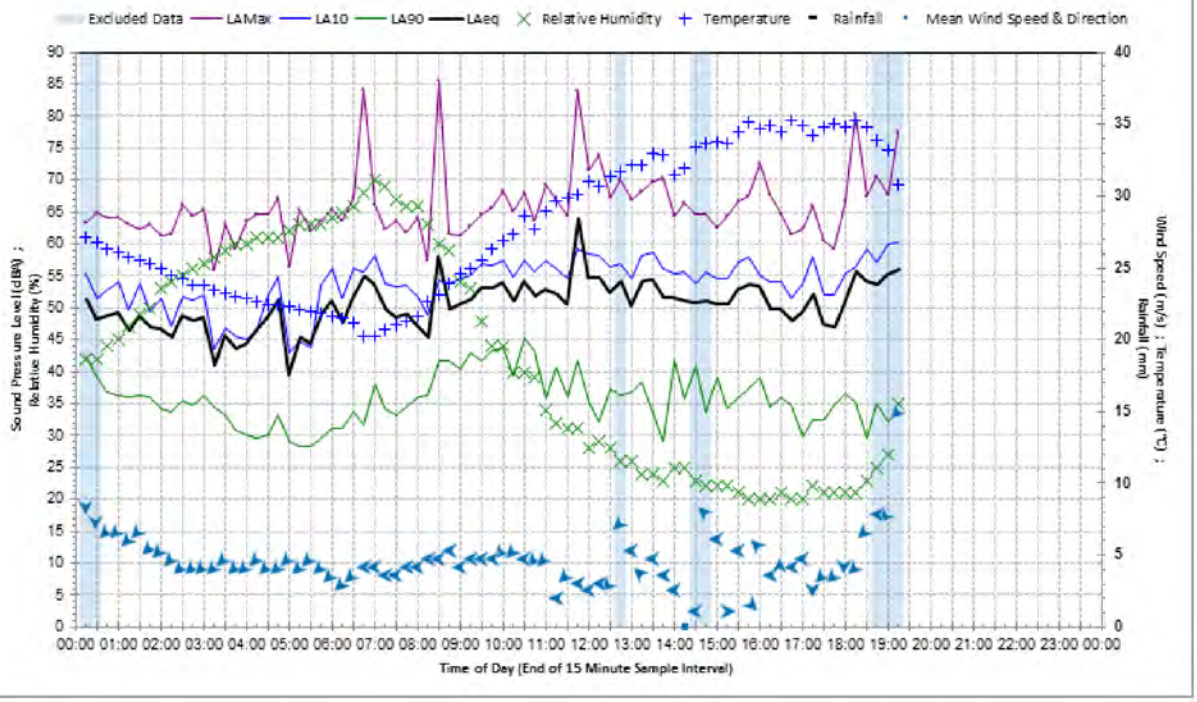
Statistical Ambient Noise Levels
Sunday 6 March 2016



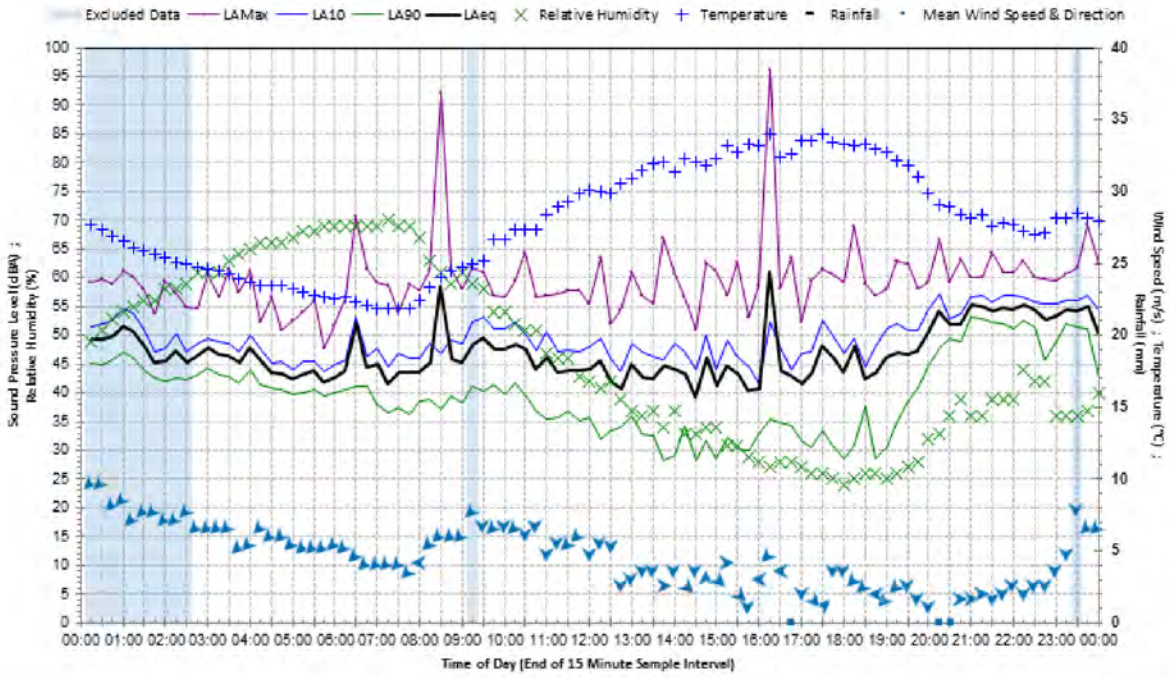
Statistical Ambient Noise Levels
Monday 7 March 2016



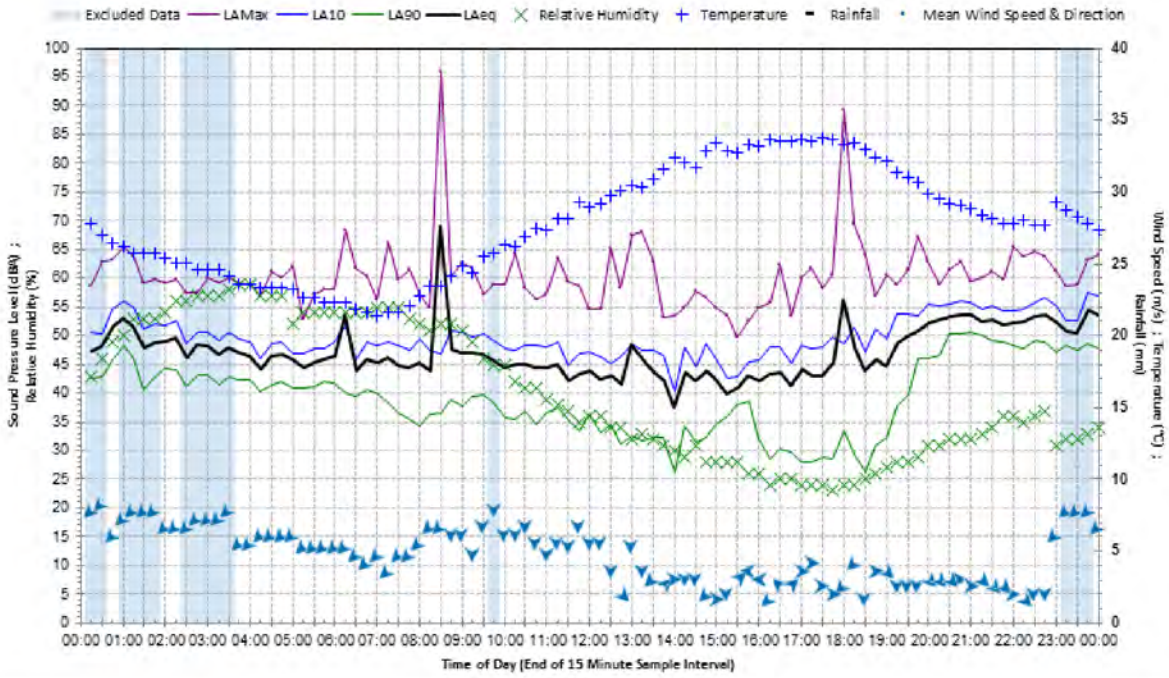
Statistical Ambient Noise Levels
Tuesday 8 March 2016



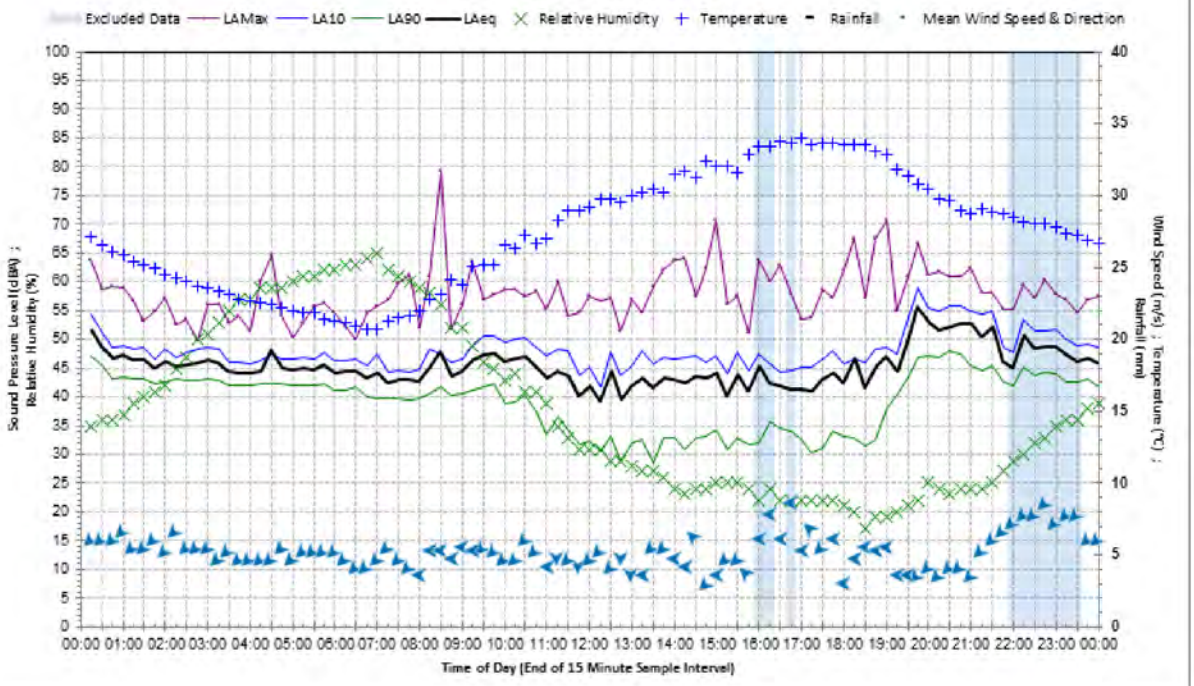
Statistical Ambient Noise Levels
Friday 4 March 2016



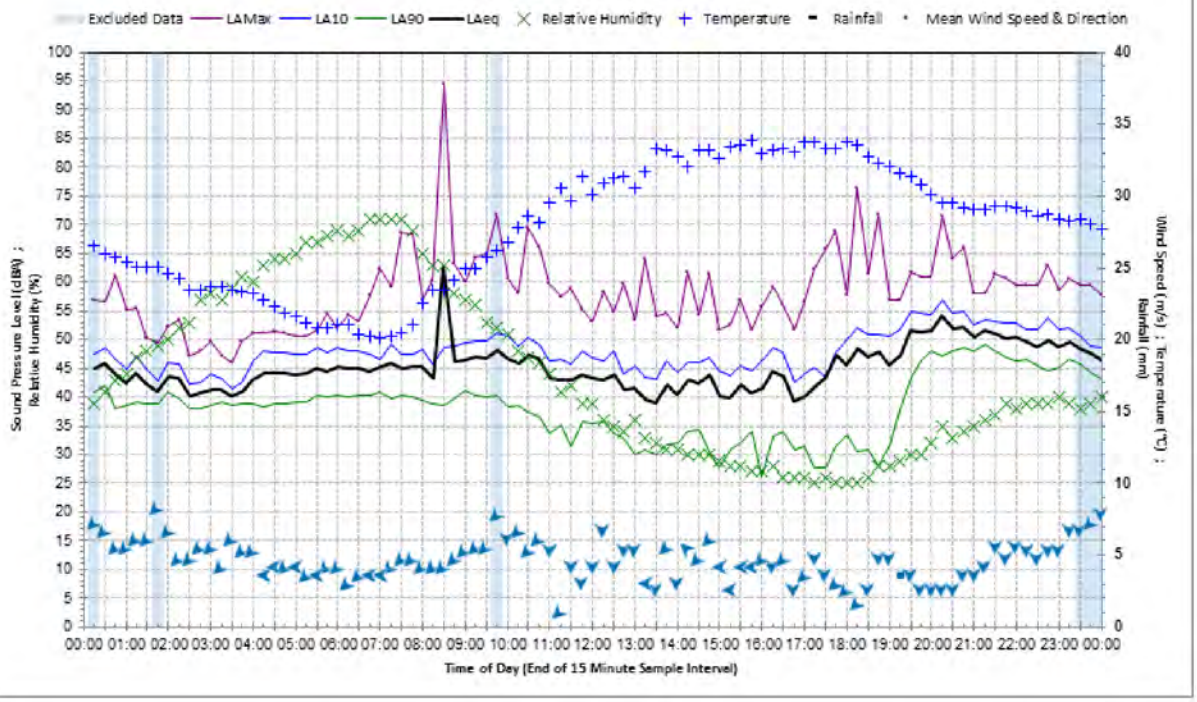
Statistical Ambient Noise Levels
Saturday 5 March 2016



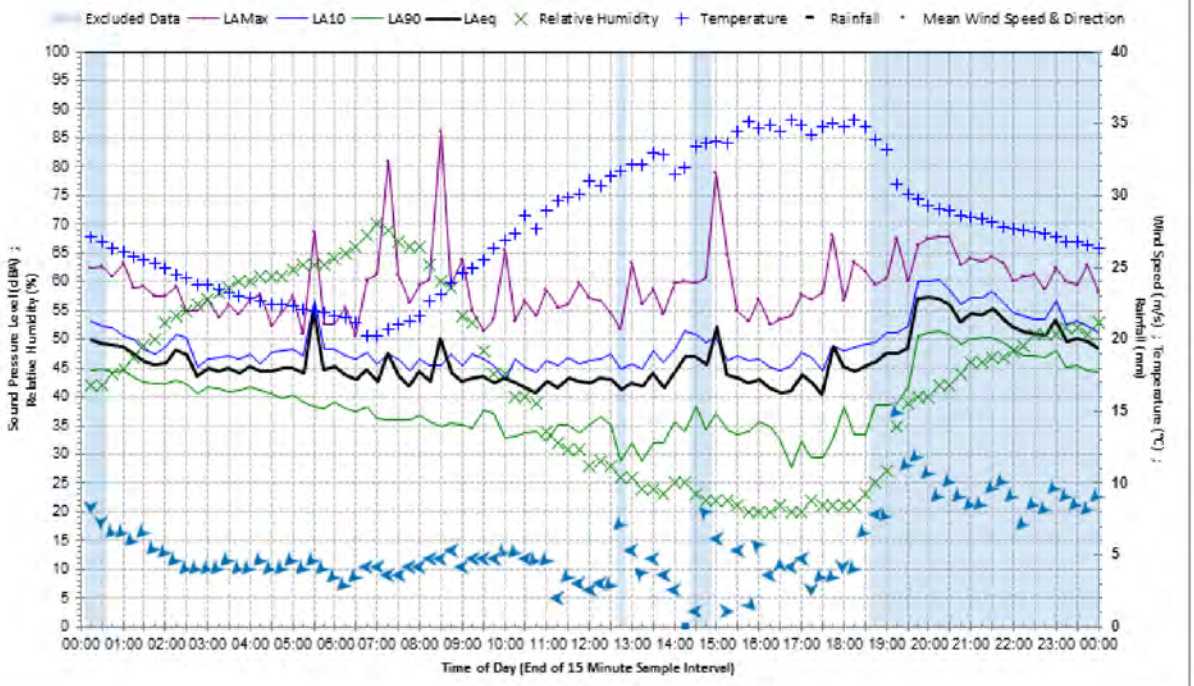
Statistical Ambient Noise Levels
Sunday 6 March 2016



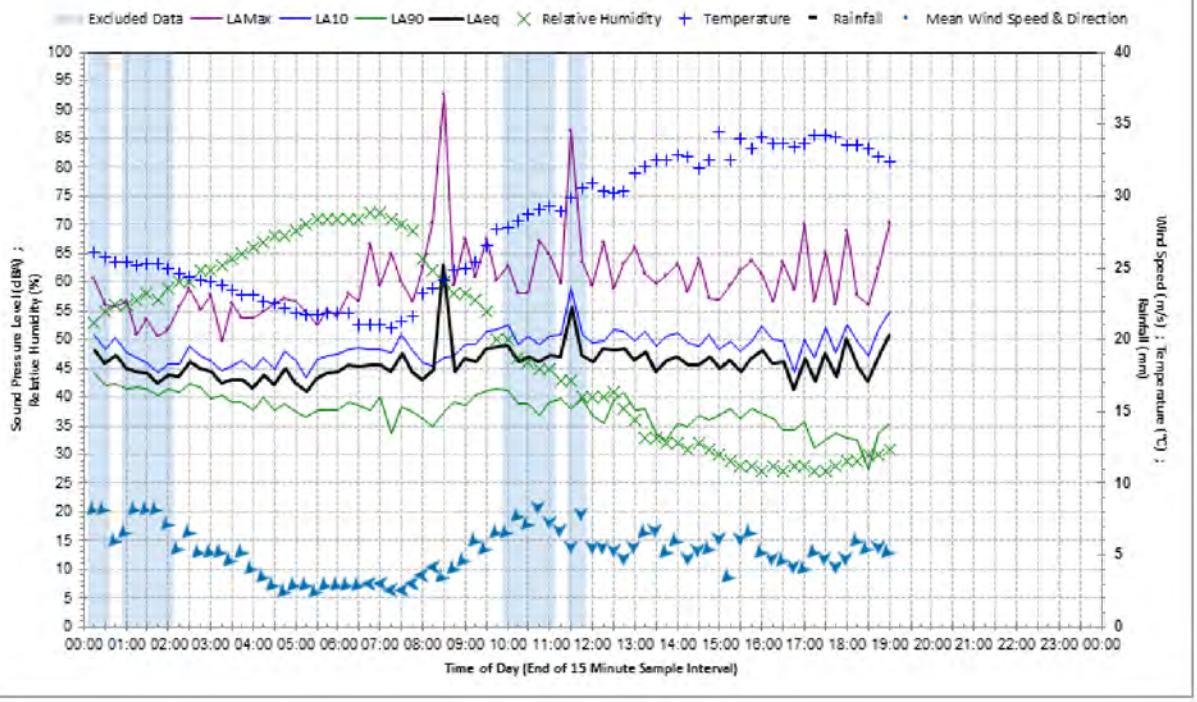
Statistical Ambient Noise Levels
Monday 7 March 2016



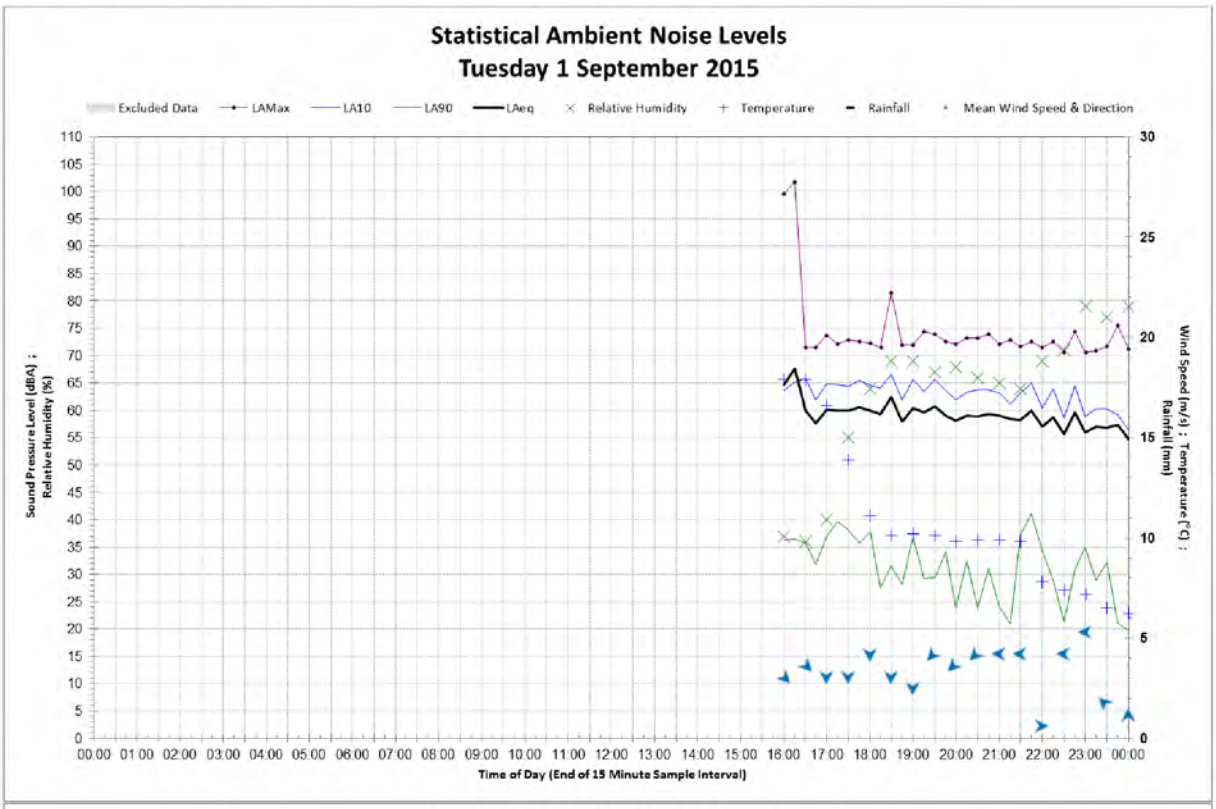
Statistical Ambient Noise Levels
Tuesday 8 March 2016

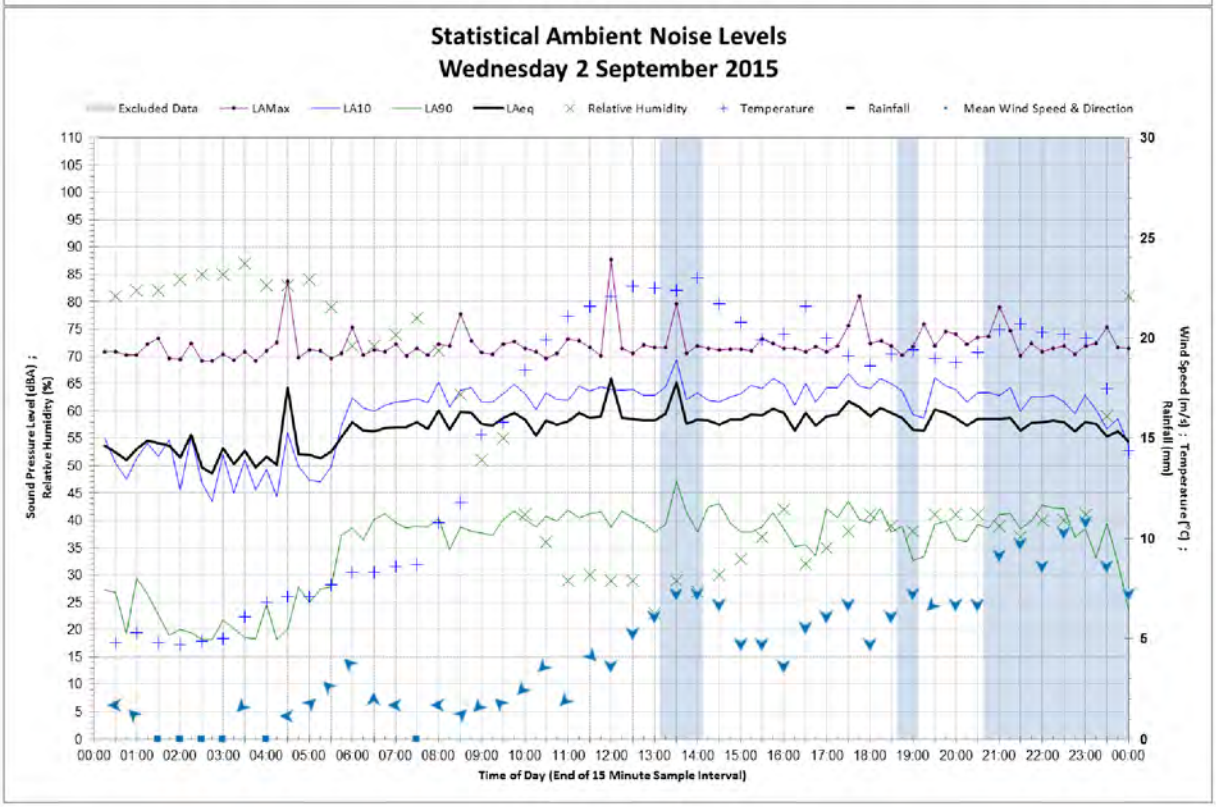


Statistical Ambient Noise Levels
Wednesday 9 March 2016

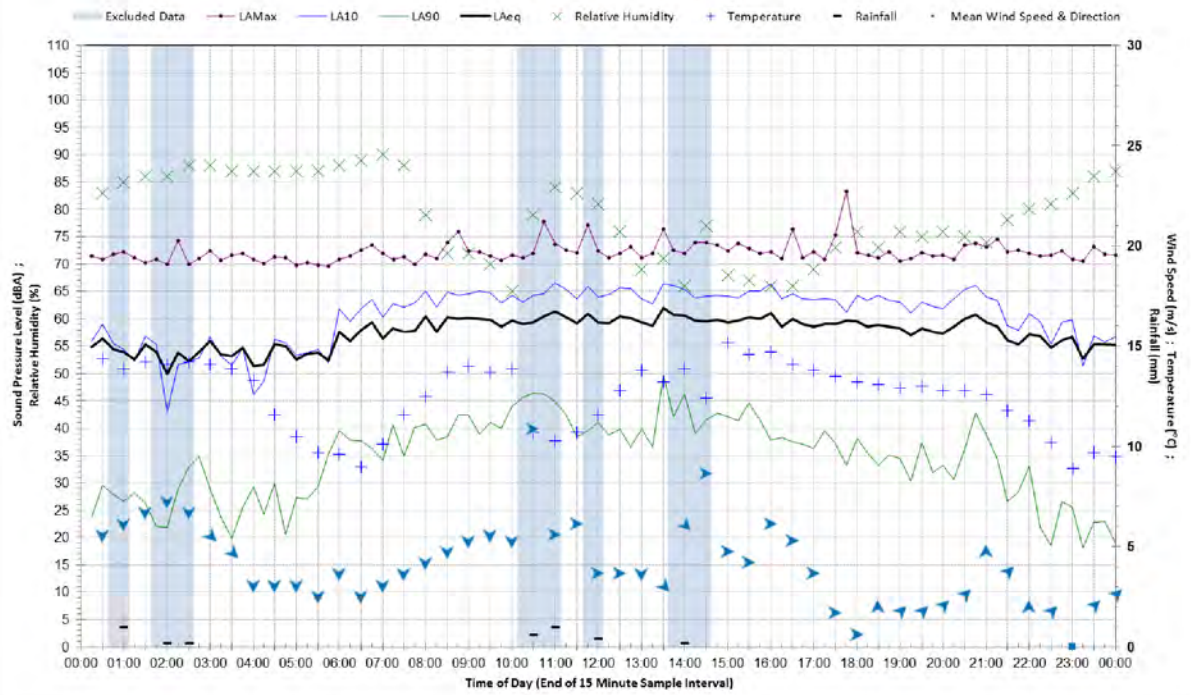


Logger L15NNS

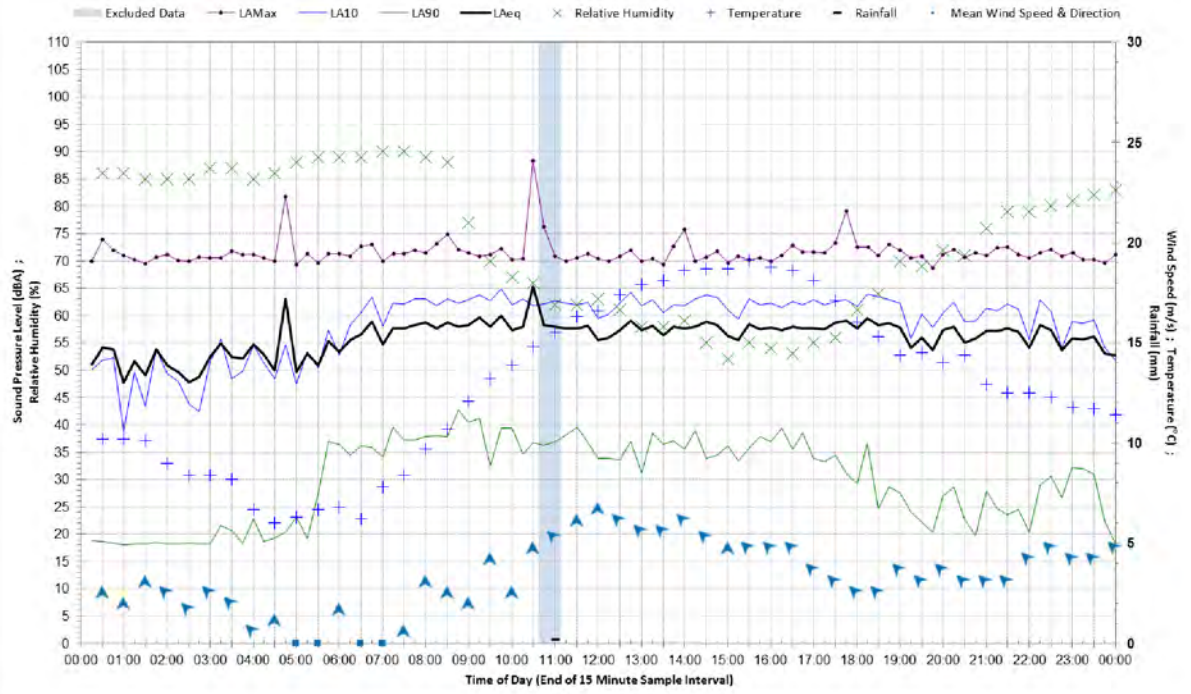




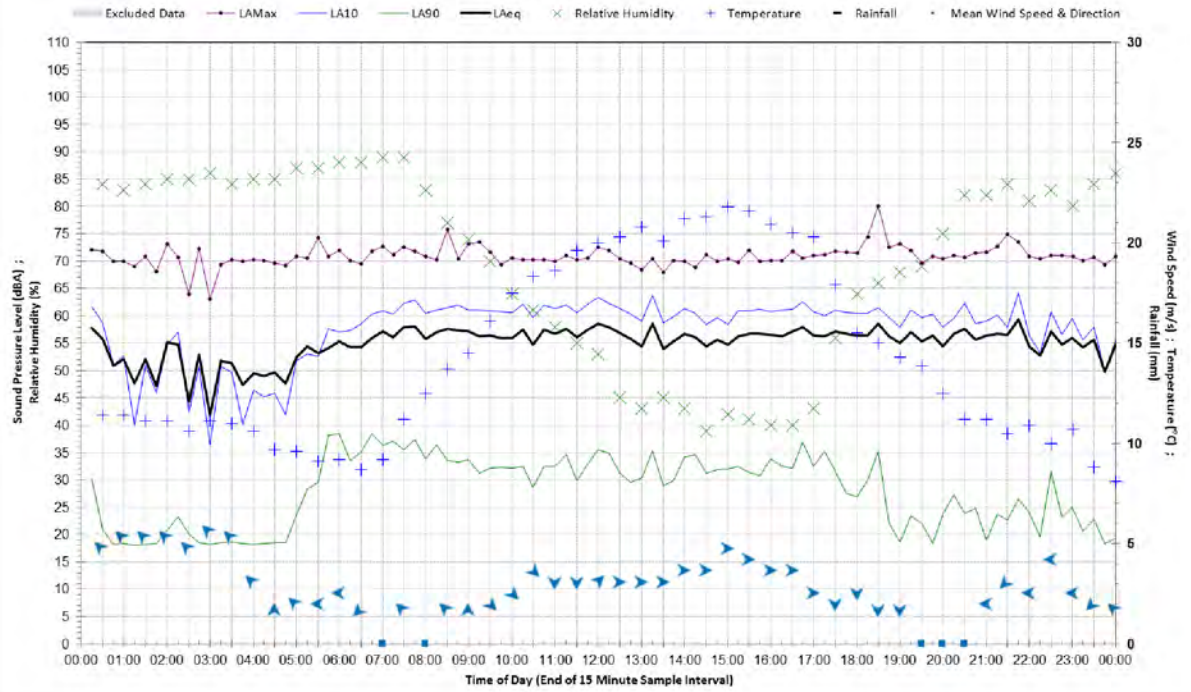
Statistical Ambient Noise Levels
Thursday 3 September 2015



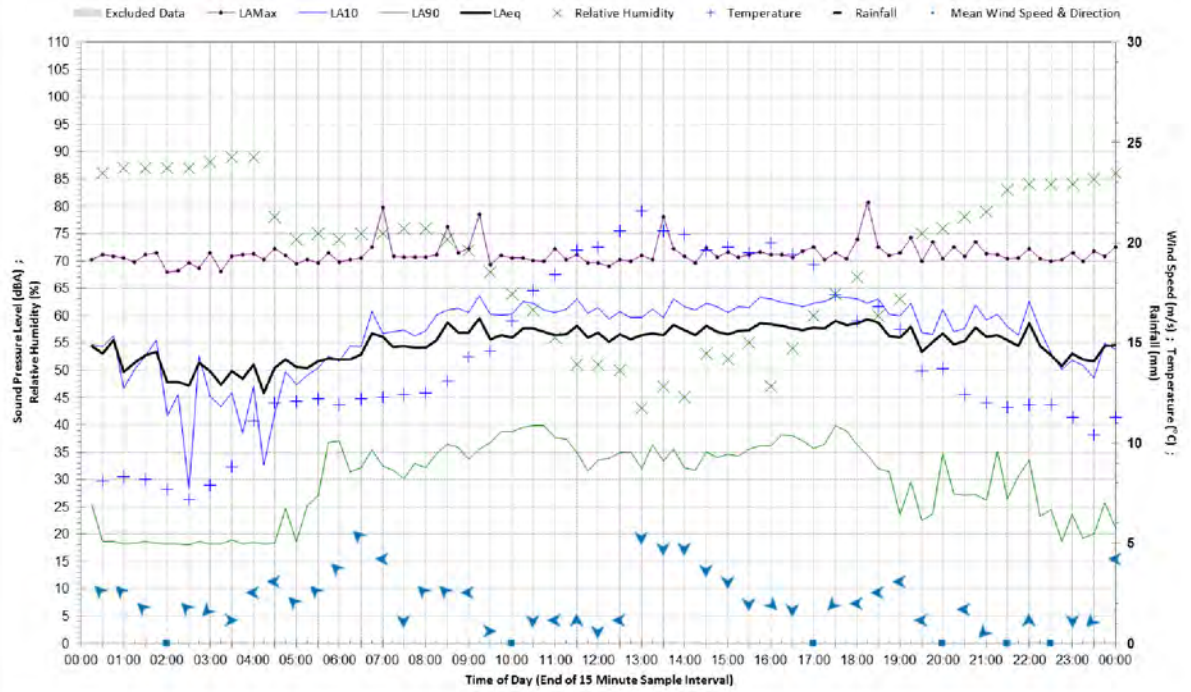
Statistical Ambient Noise Levels
Friday 4 September 2015



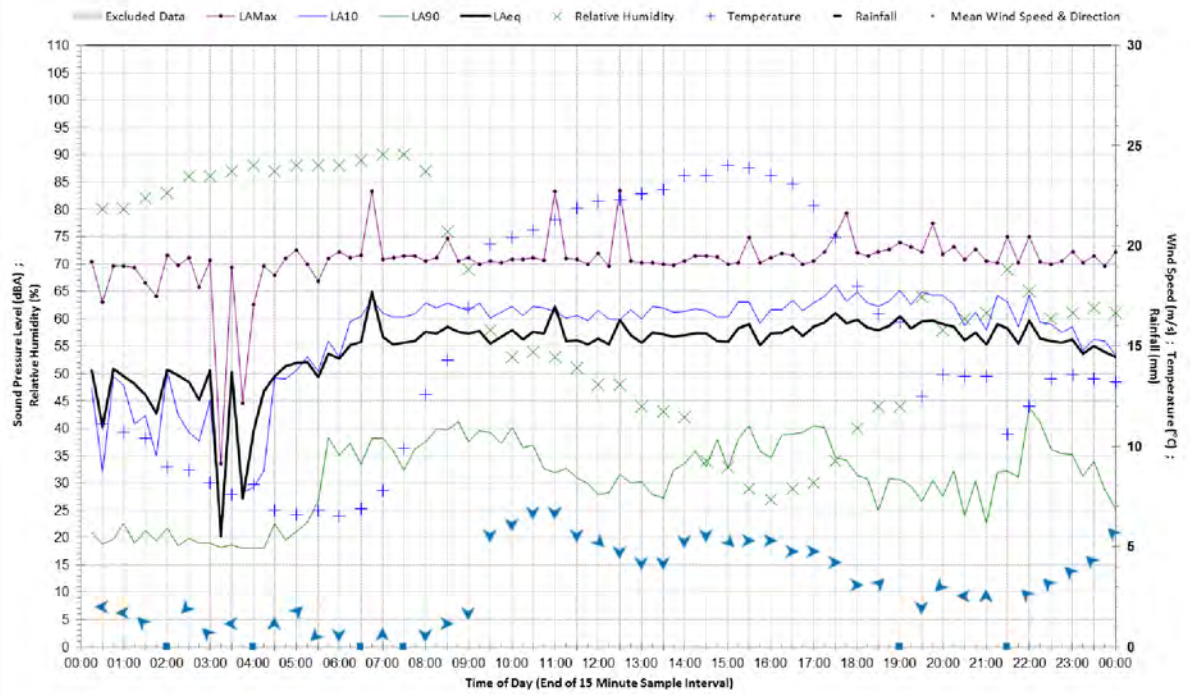
Statistical Ambient Noise Levels
Saturday 5 September 2015



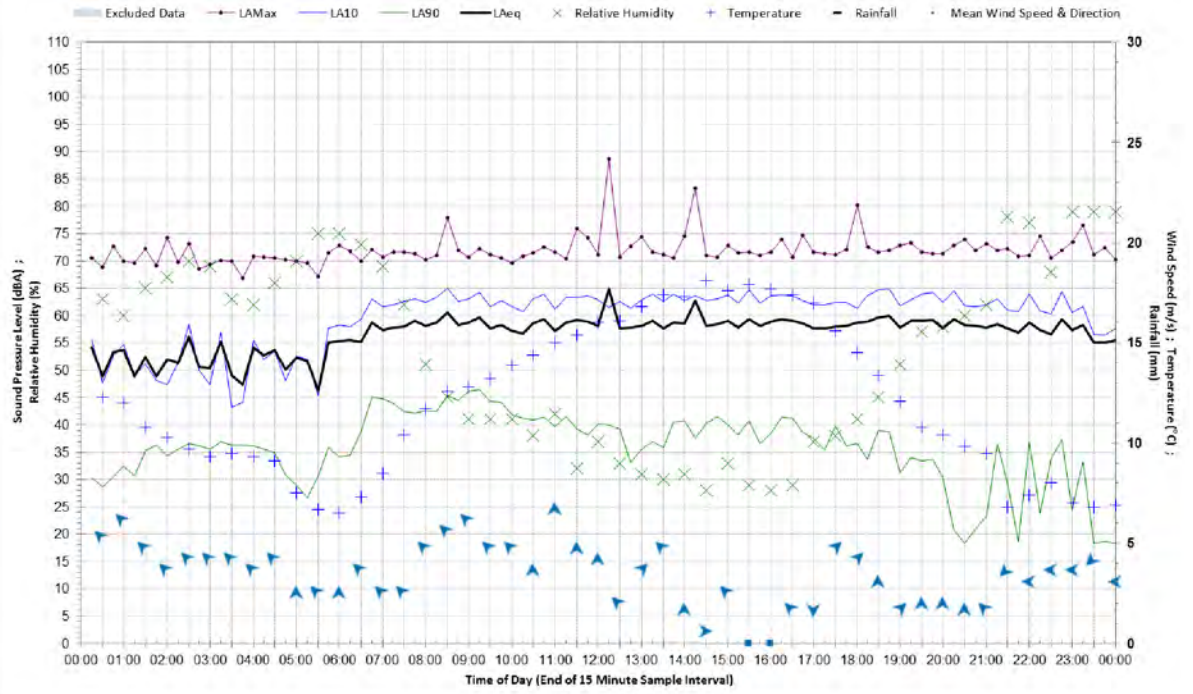
Statistical Ambient Noise Levels
Sunday 6 September 2015



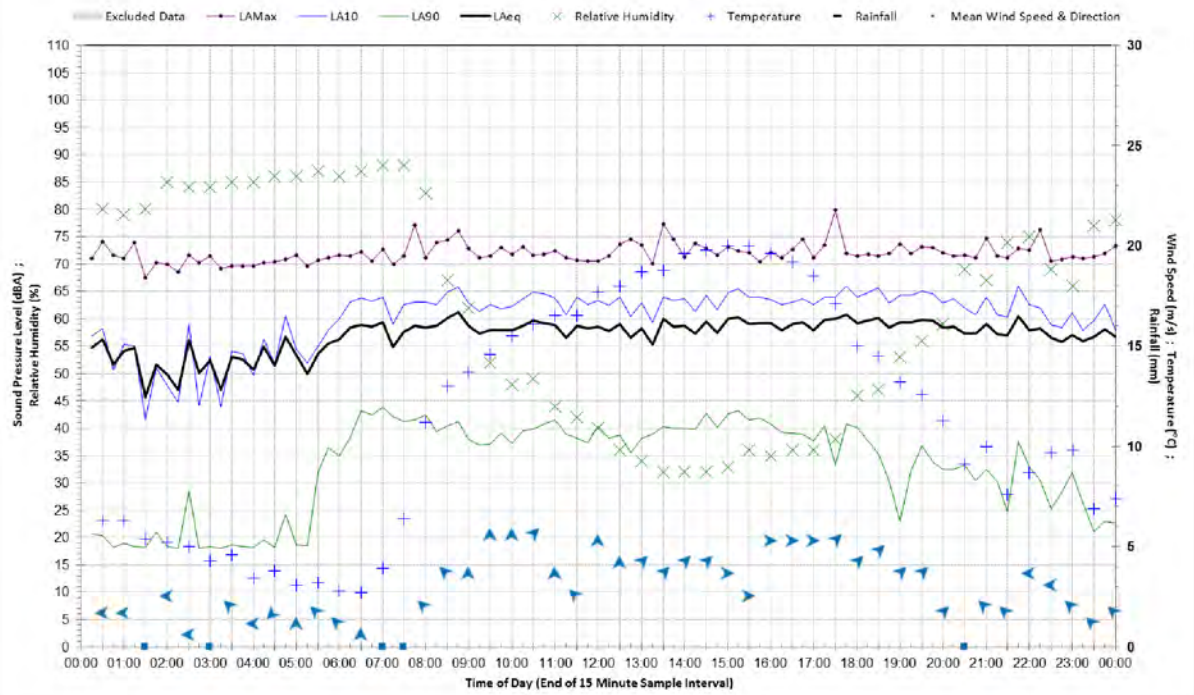
Statistical Ambient Noise Levels
Monday 7 September 2015



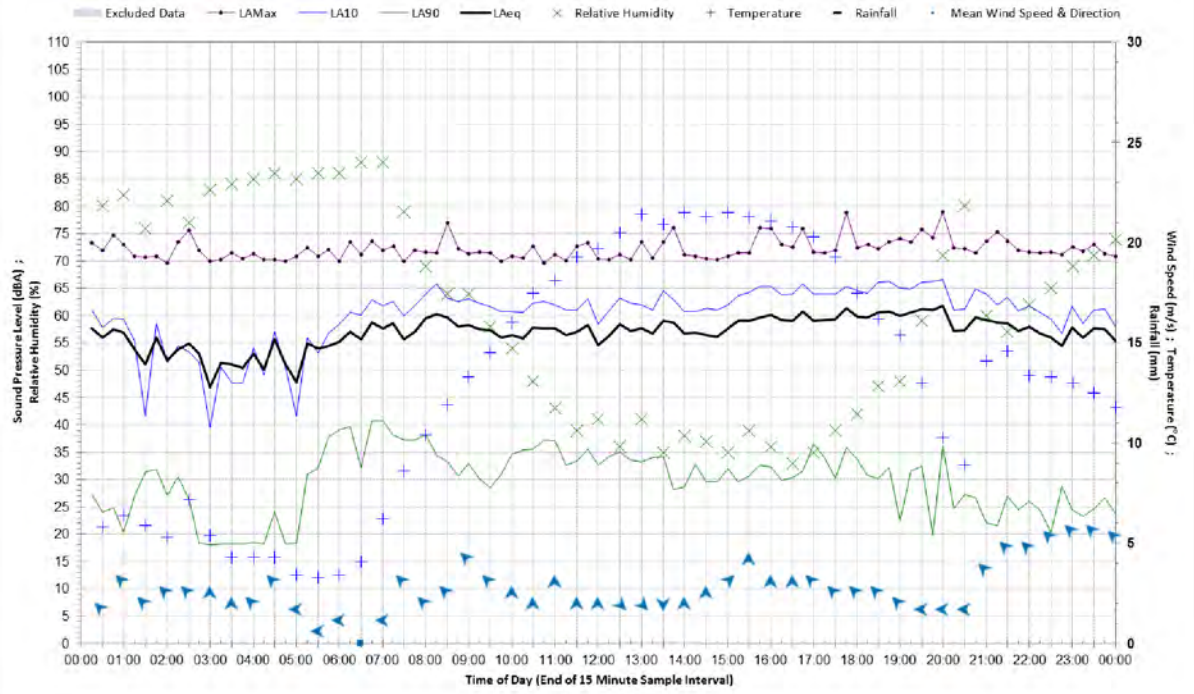
Statistical Ambient Noise Levels
Tuesday 8 September 2015



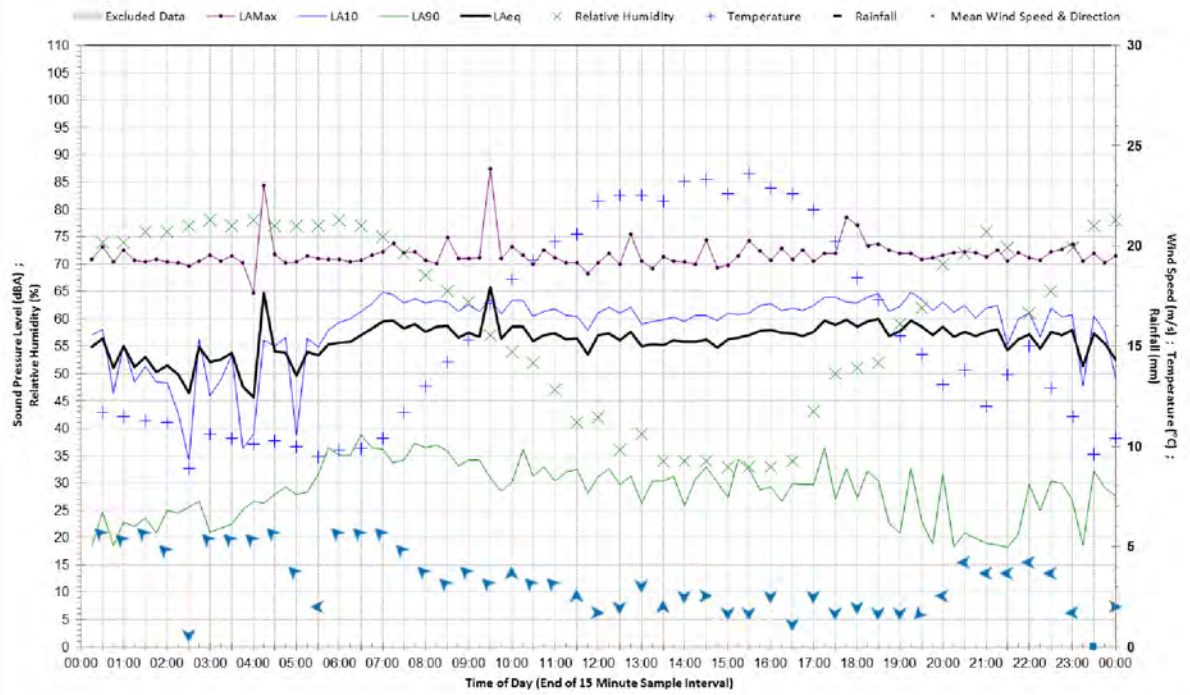
Statistical Ambient Noise Levels
Wednesday 9 September 2015



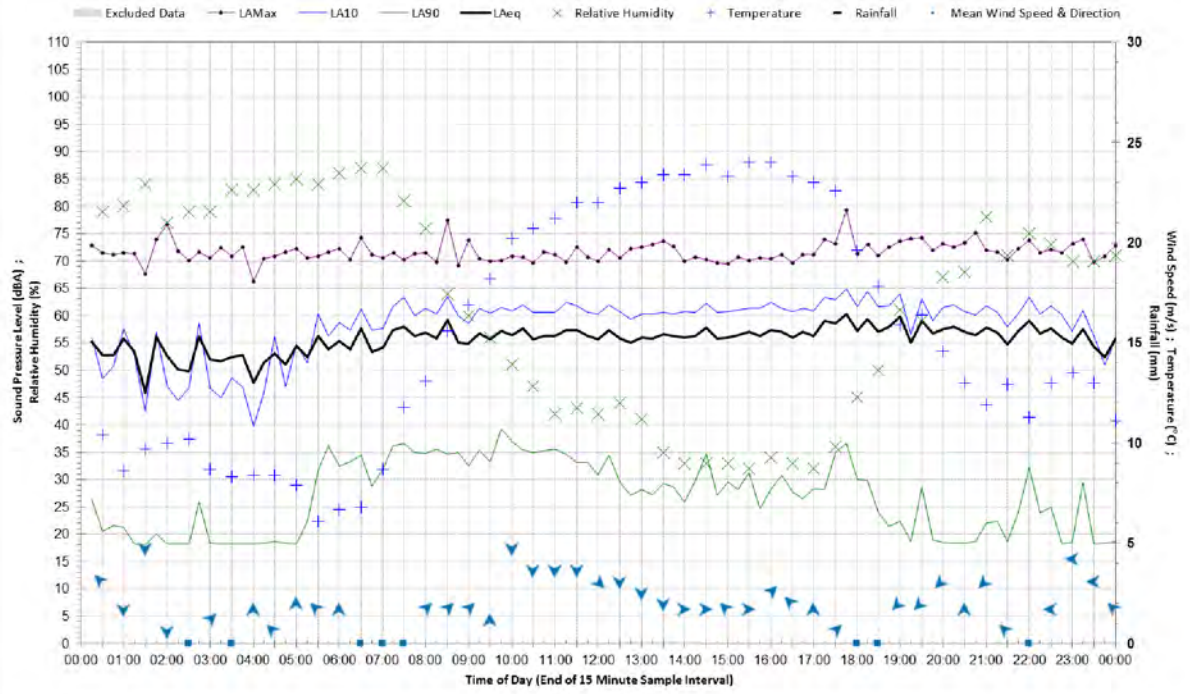
Statistical Ambient Noise Levels
Thursday 10 September 2015



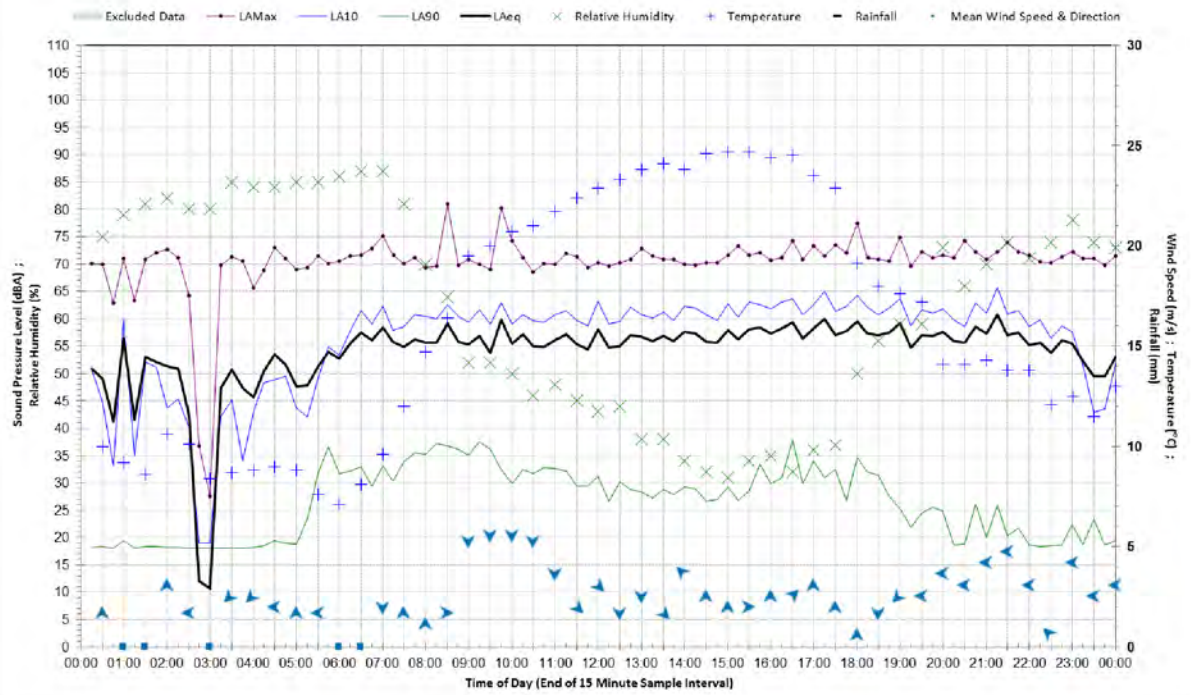
Statistical Ambient Noise Levels
Friday 11 September 2015



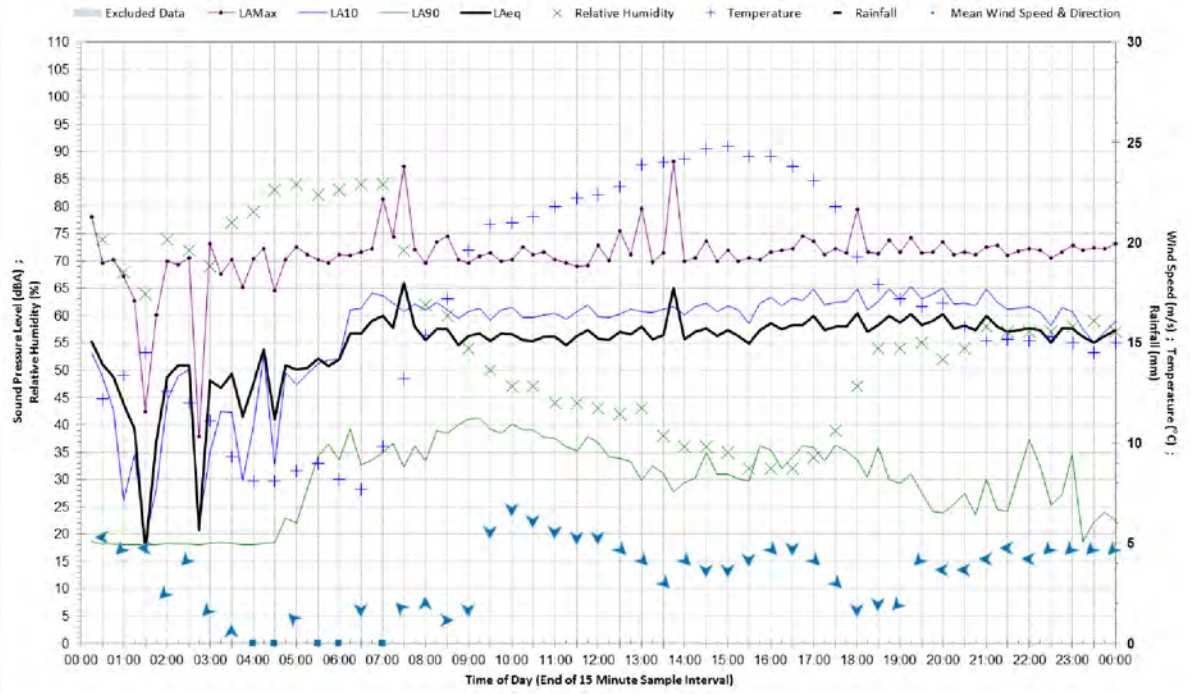
Statistical Ambient Noise Levels
Saturday 12 September 2015

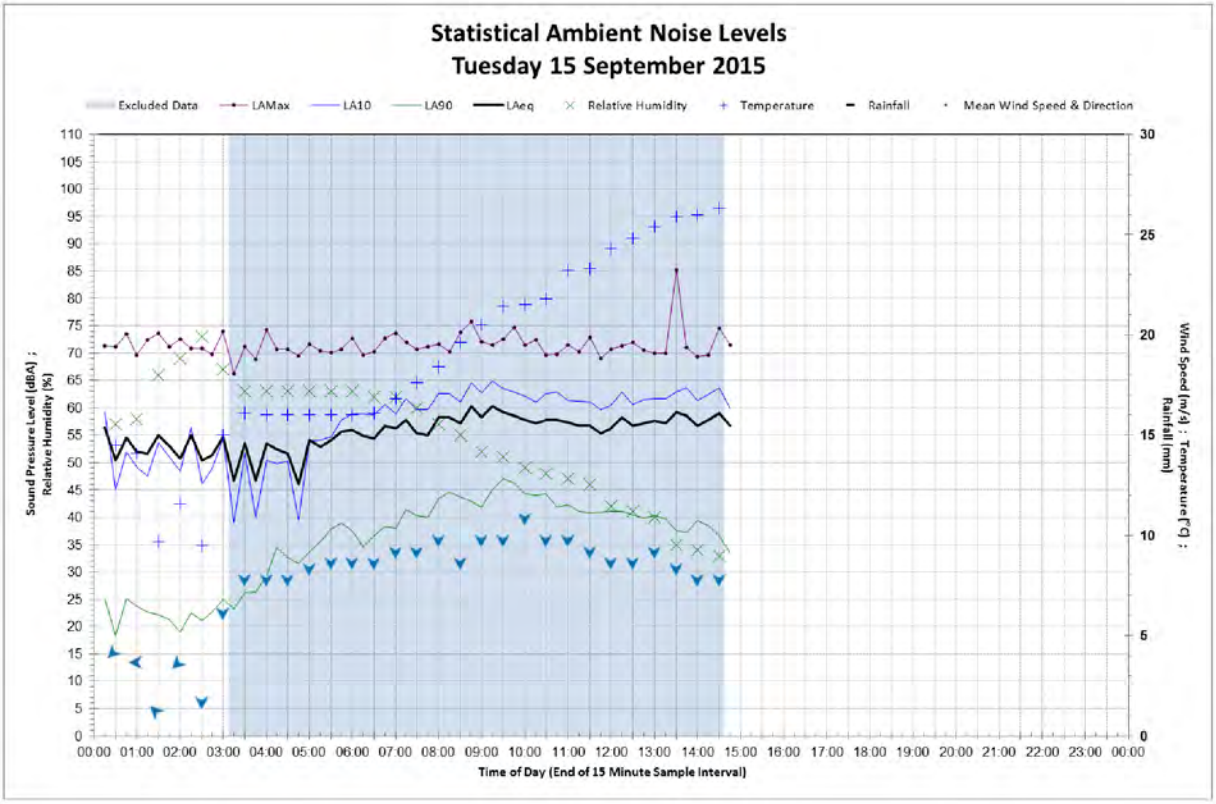


Statistical Ambient Noise Levels
Sunday 13 September 2015

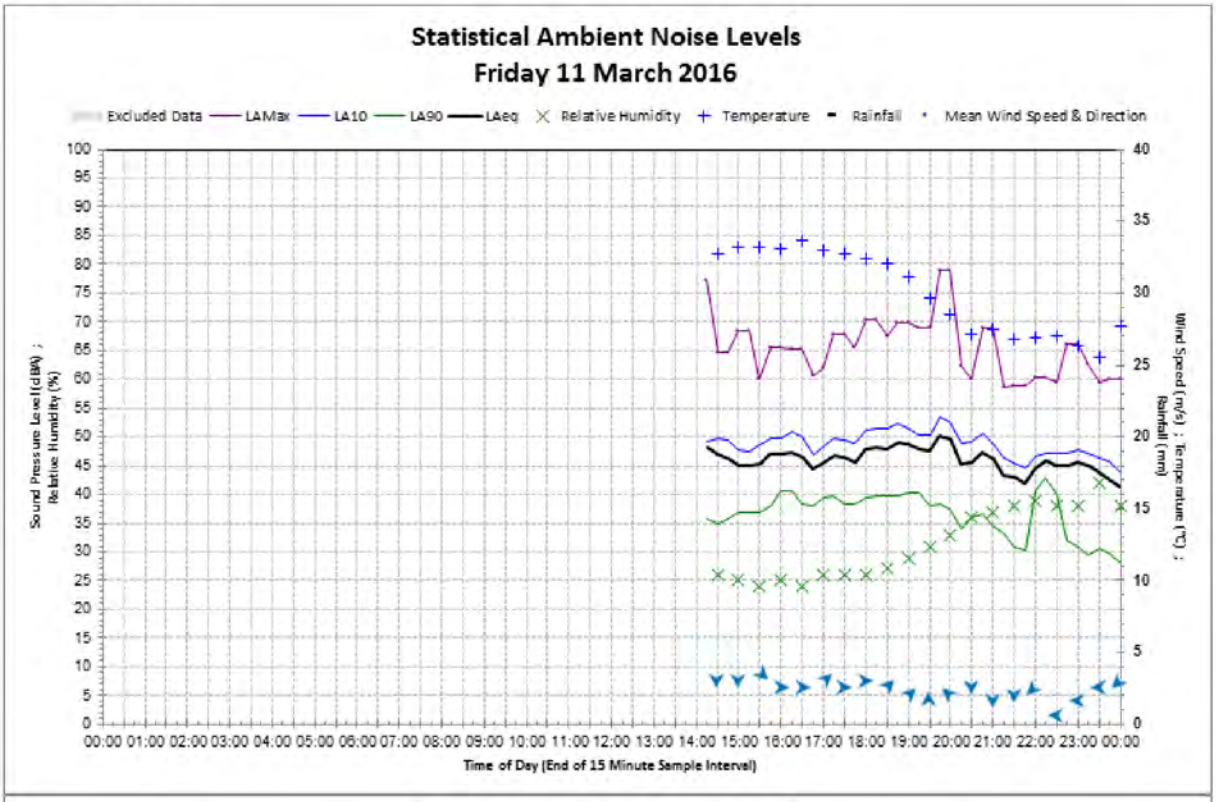


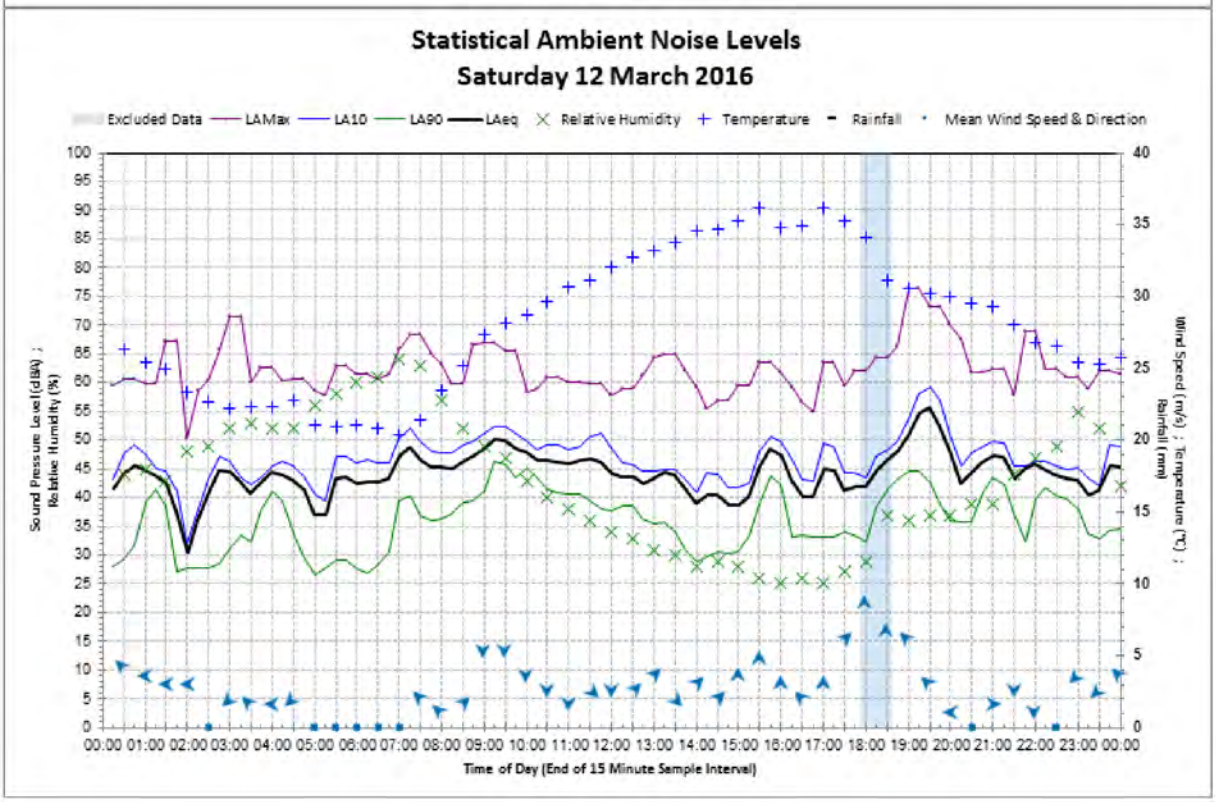
Statistical Ambient Noise Levels
Monday 14 September 2015



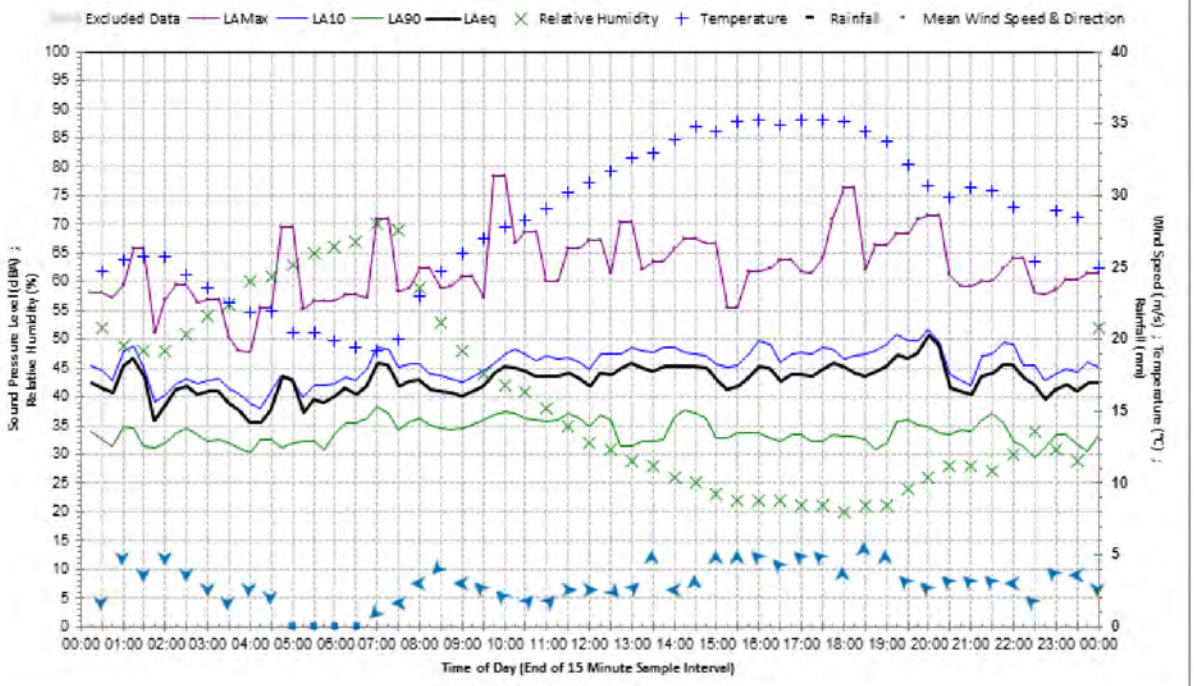

Statistical Ambient Noise Levels
Tuesday 15 September 2015
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Logger L16NNS

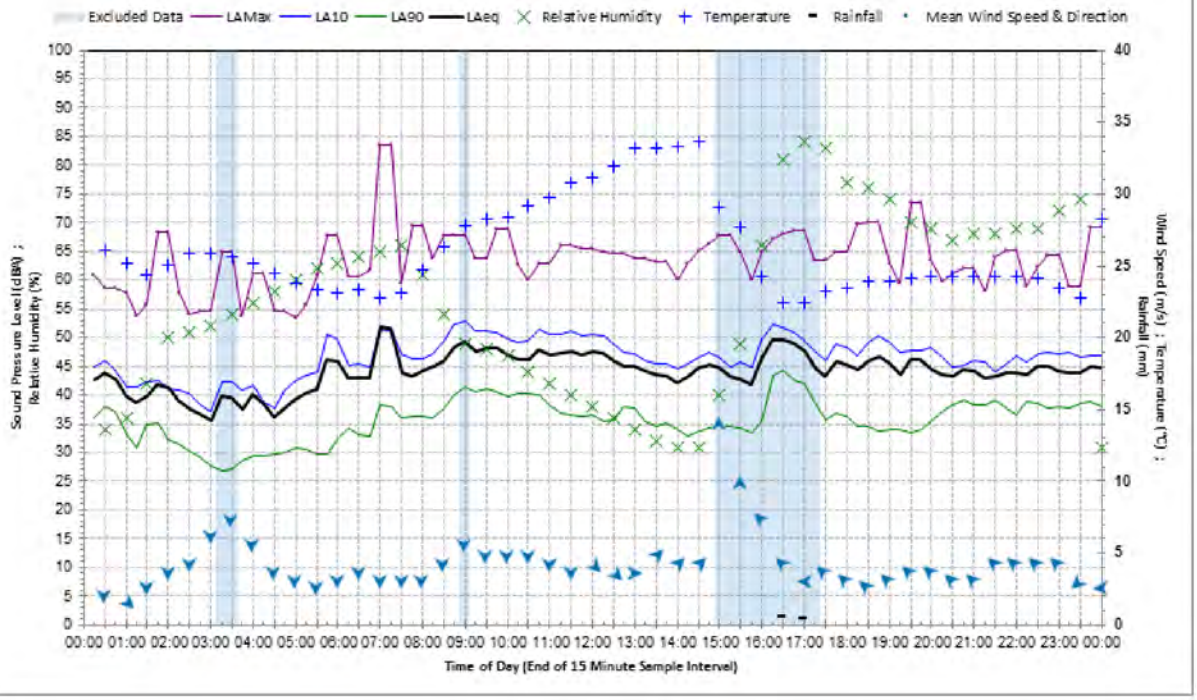




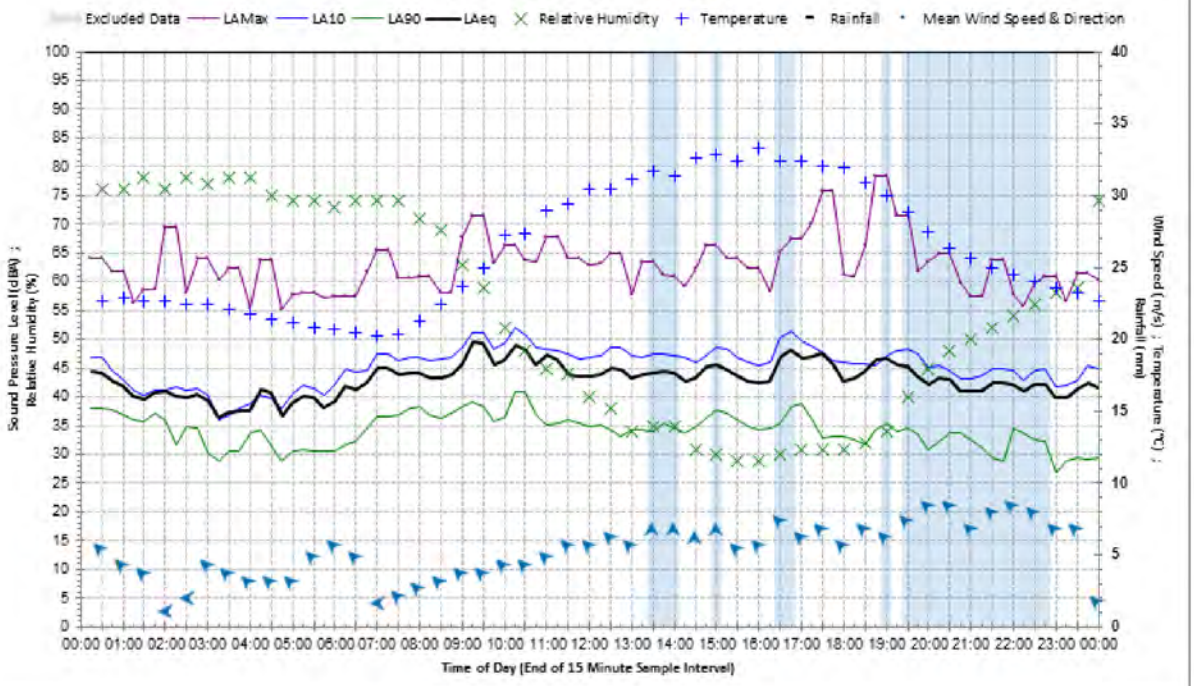
Statistical Ambient Noise Levels
Sunday 13 March 2016



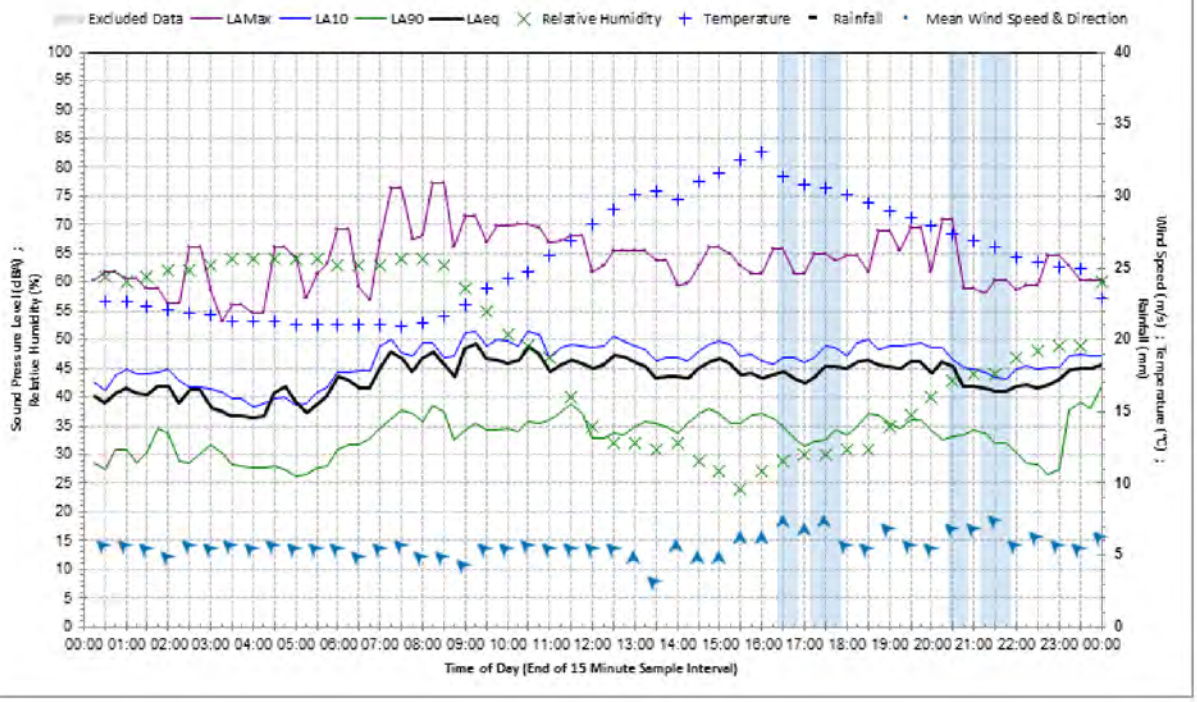
Statistical Ambient Noise Levels
Monday 14 March 2016



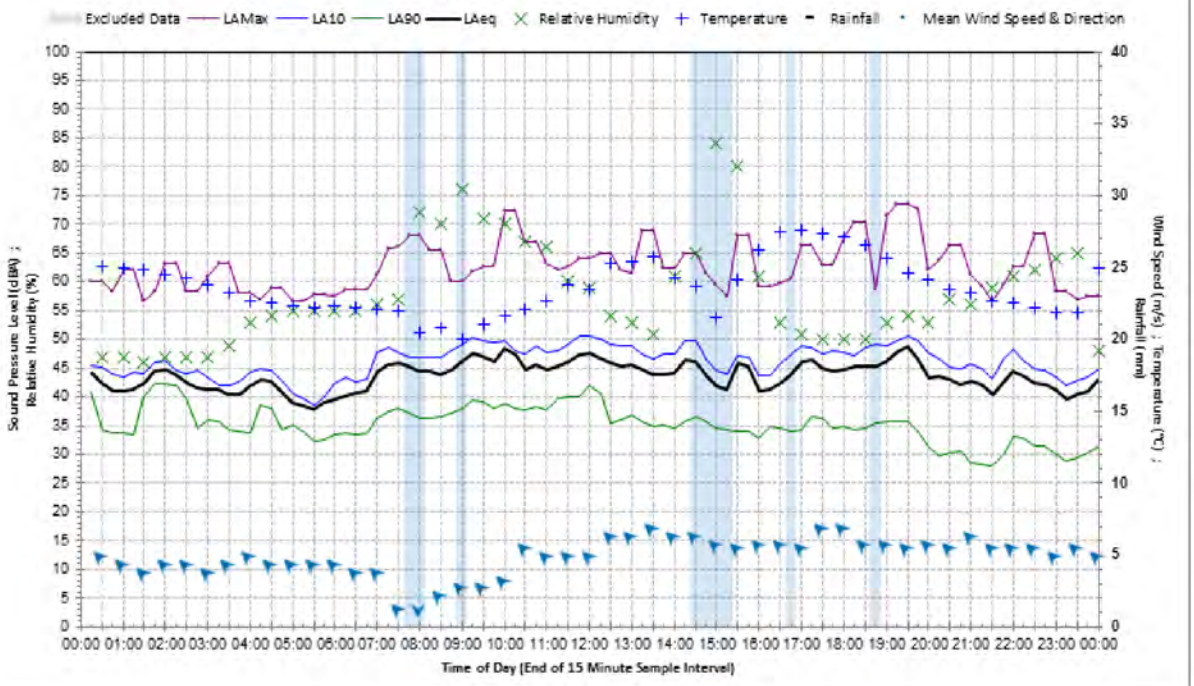
Statistical Ambient Noise Levels
Tuesday 15 March 2016



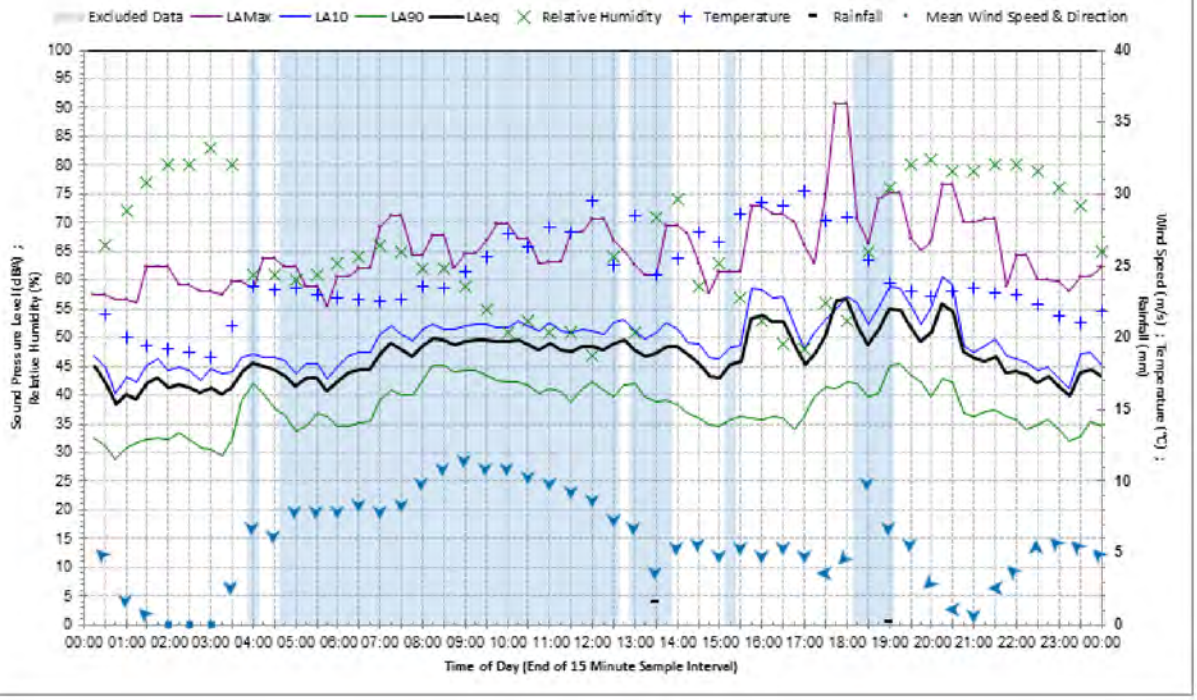
Statistical Ambient Noise Levels
Wednesday 16 March 2016



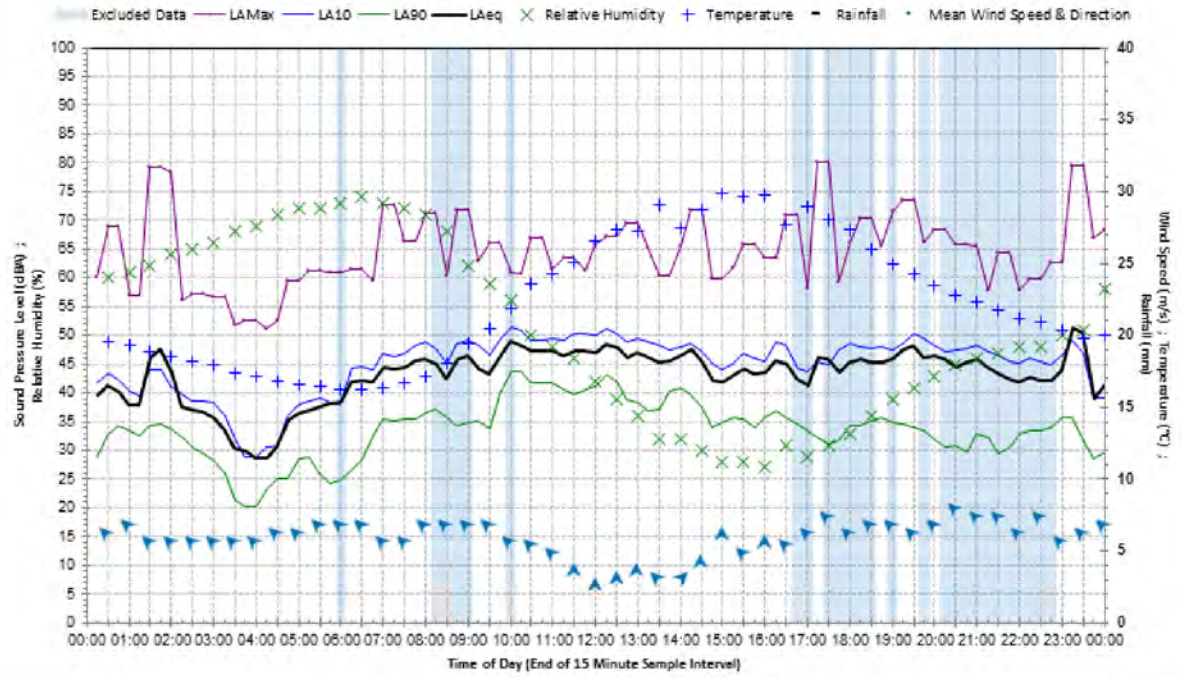
Statistical Ambient Noise Levels
Thursday 17 March 2016



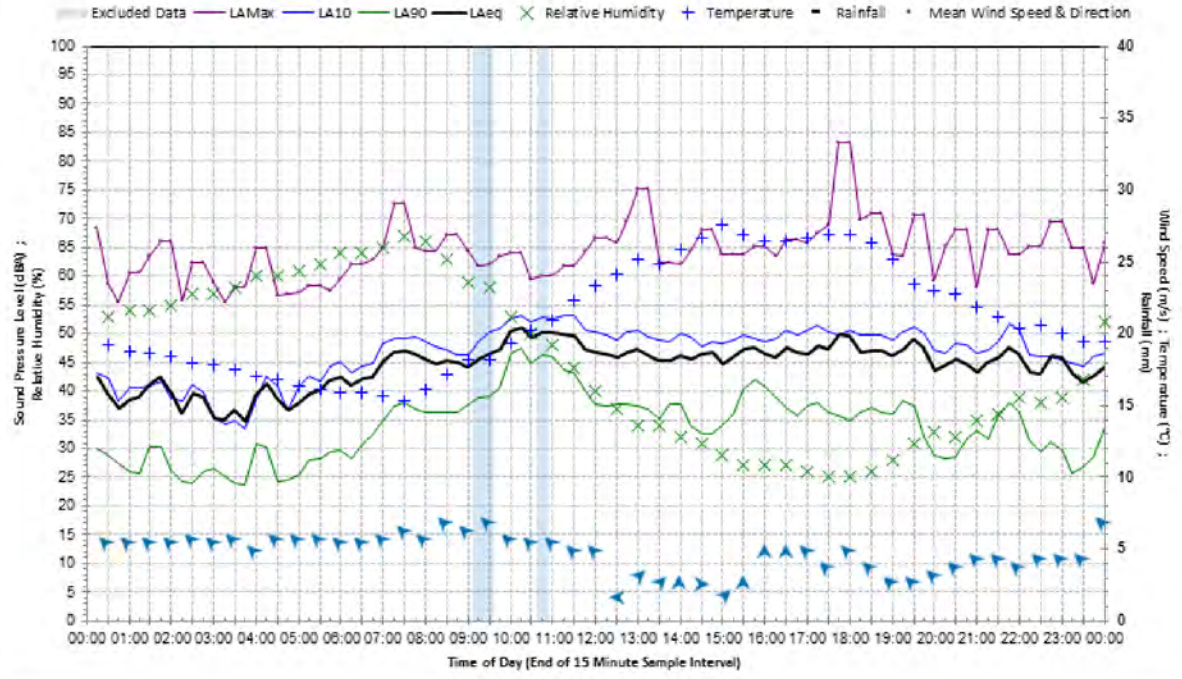
Statistical Ambient Noise Levels
Friday 18 March 2016



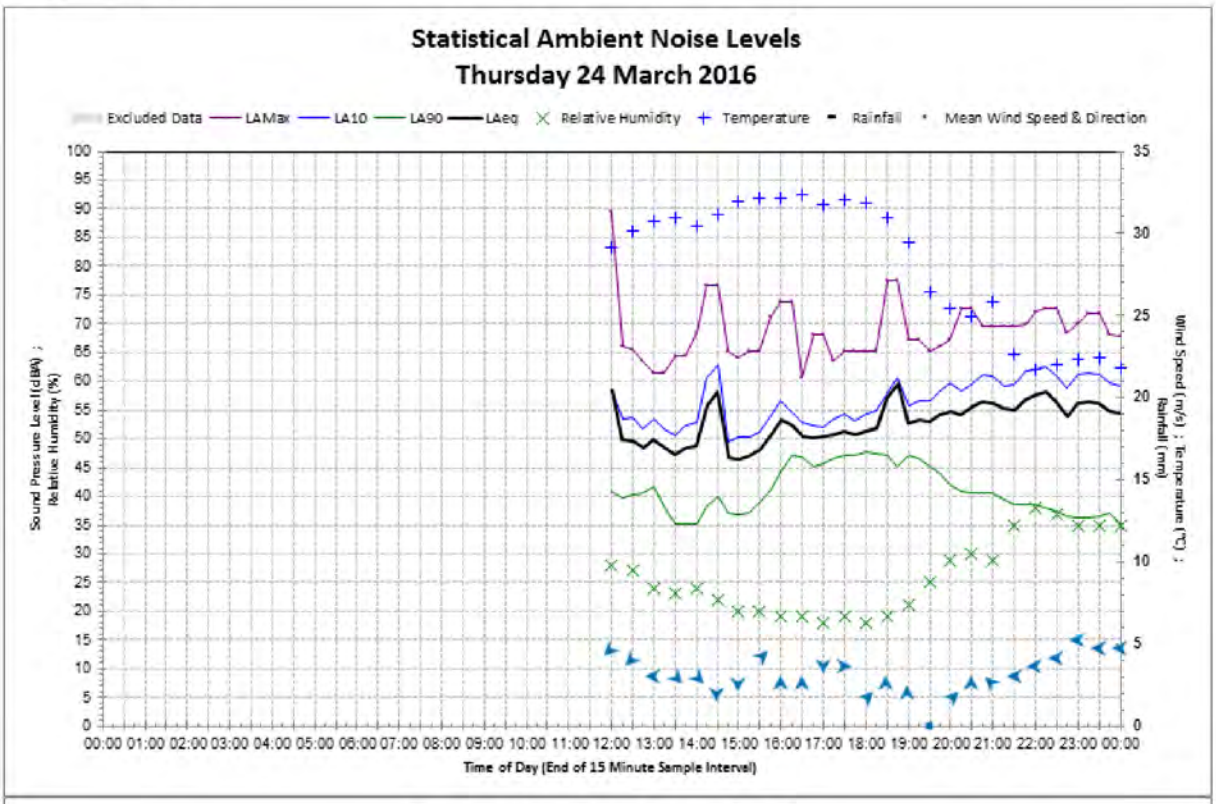
Statistical Ambient Noise Levels
Monday 21 March 2016

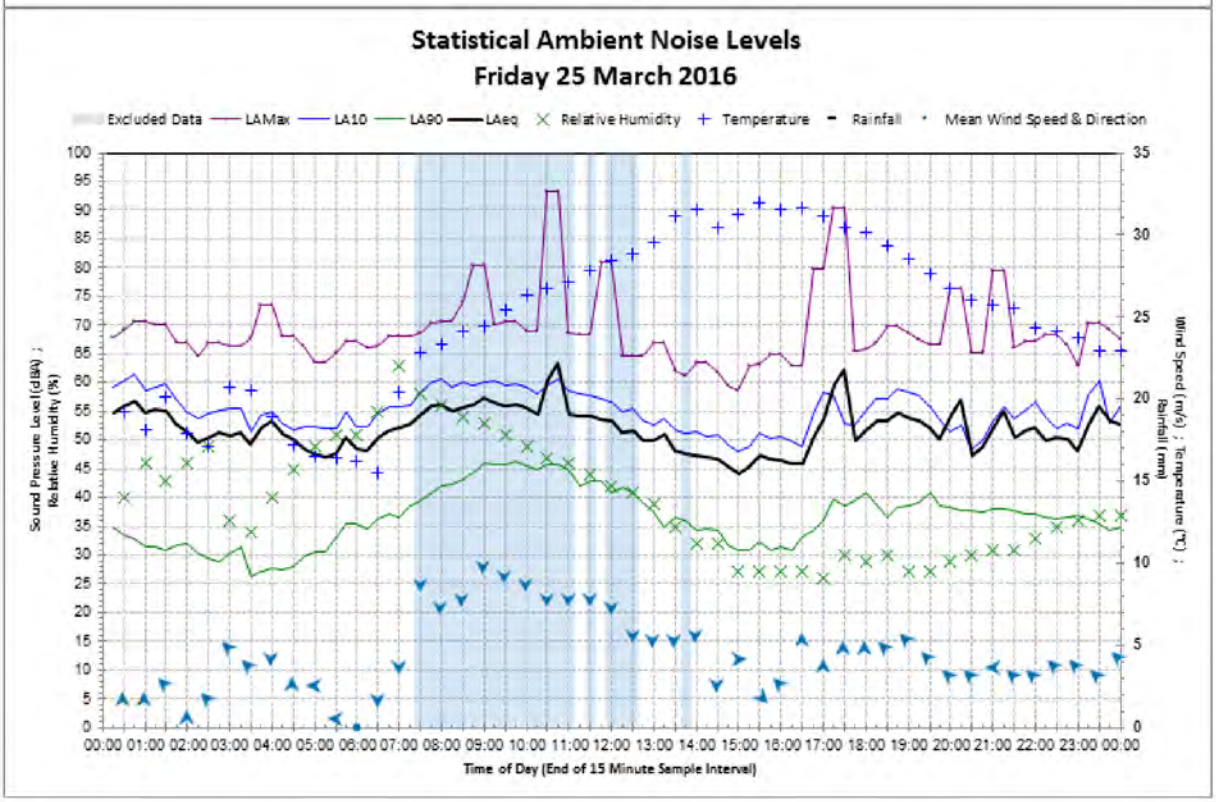


Statistical Ambient Noise Levels
Tuesday 22 March 2016

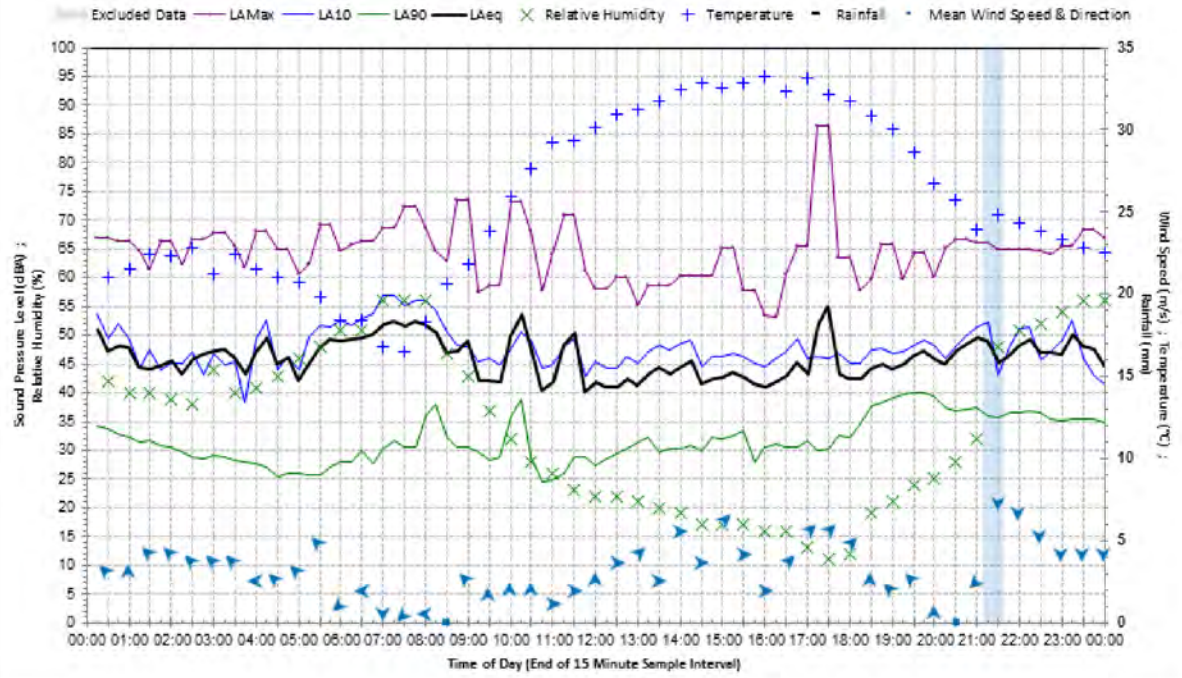


Logger L17NNS

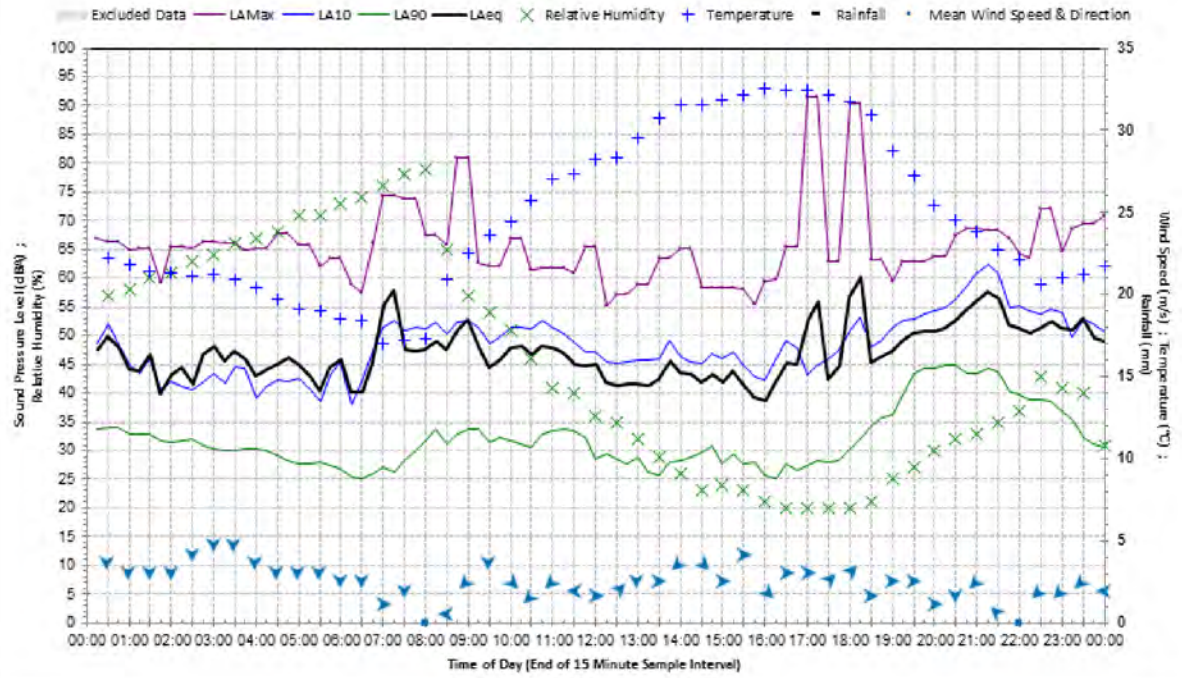




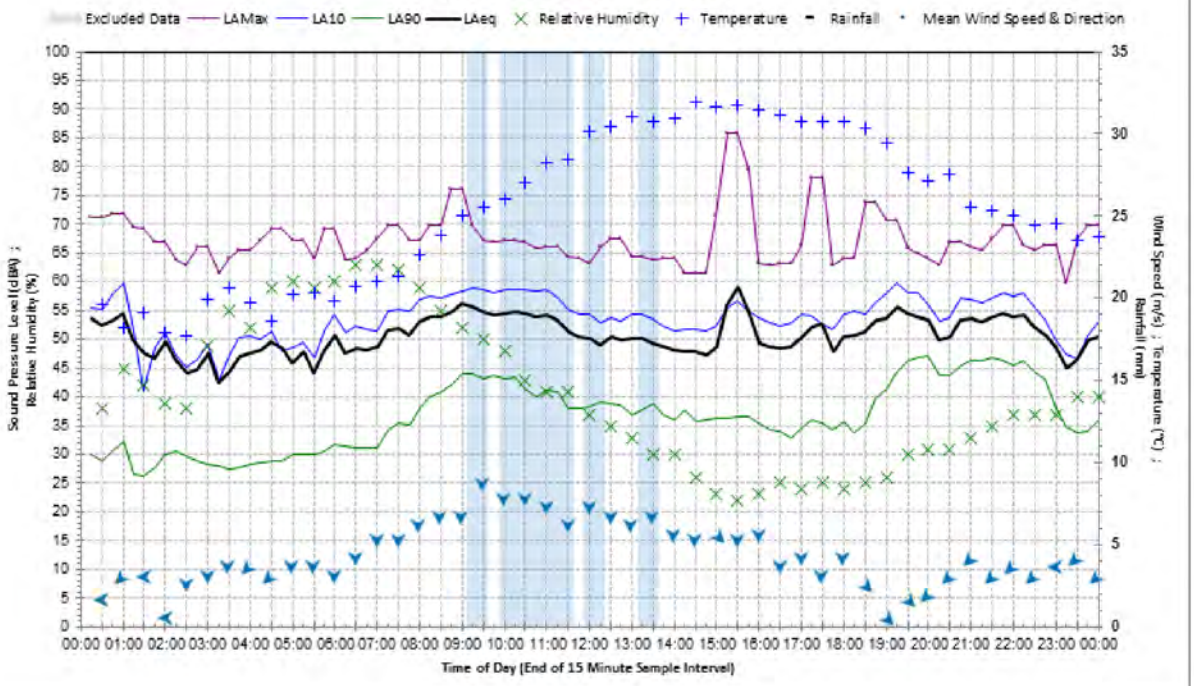
Statistical Ambient Noise Levels
Saturday 26 March 2016



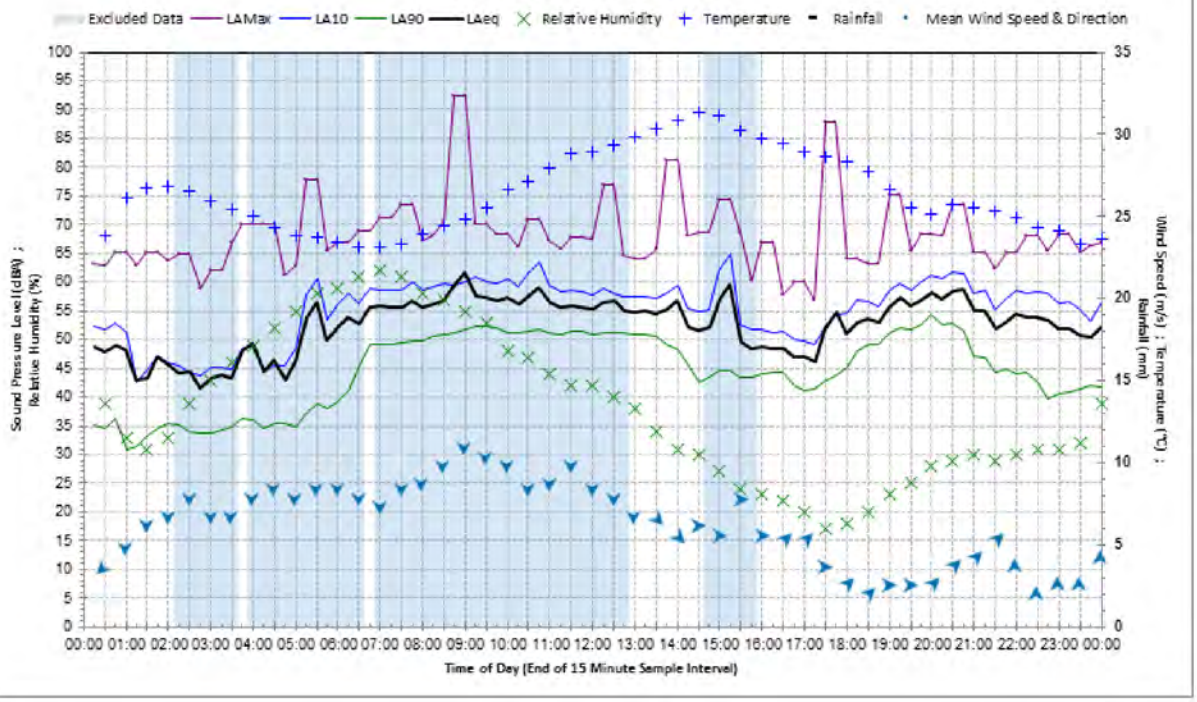
Statistical Ambient Noise Levels
Sunday 27 March 2016



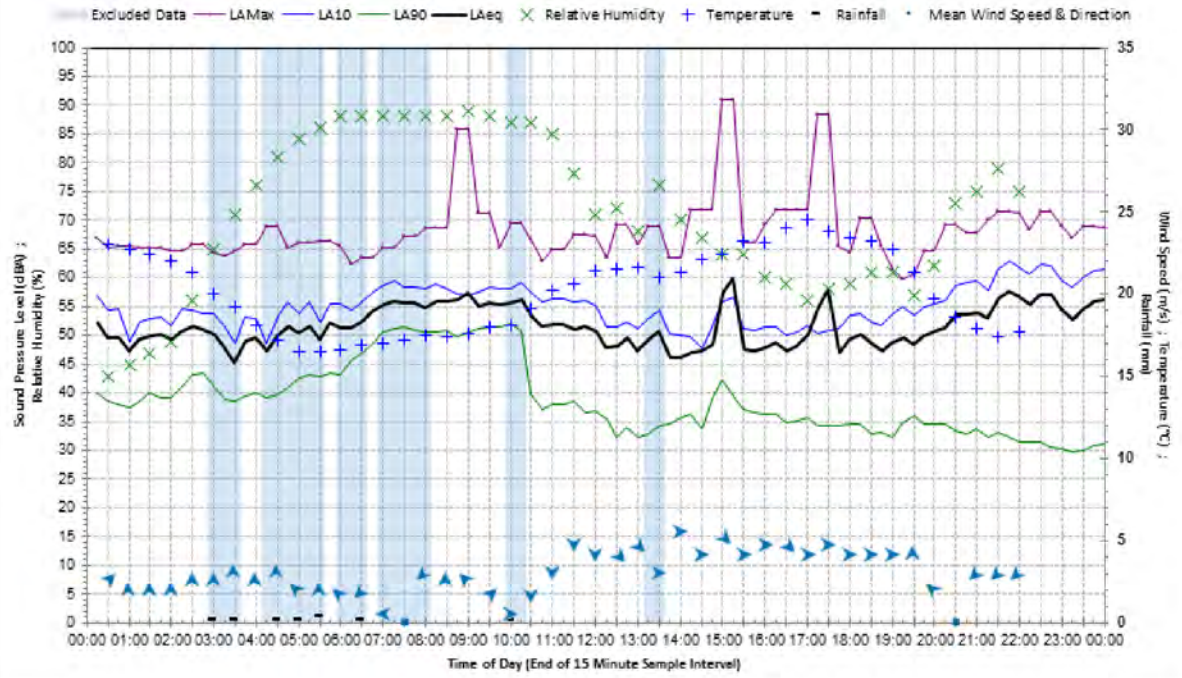
Statistical Ambient Noise Levels
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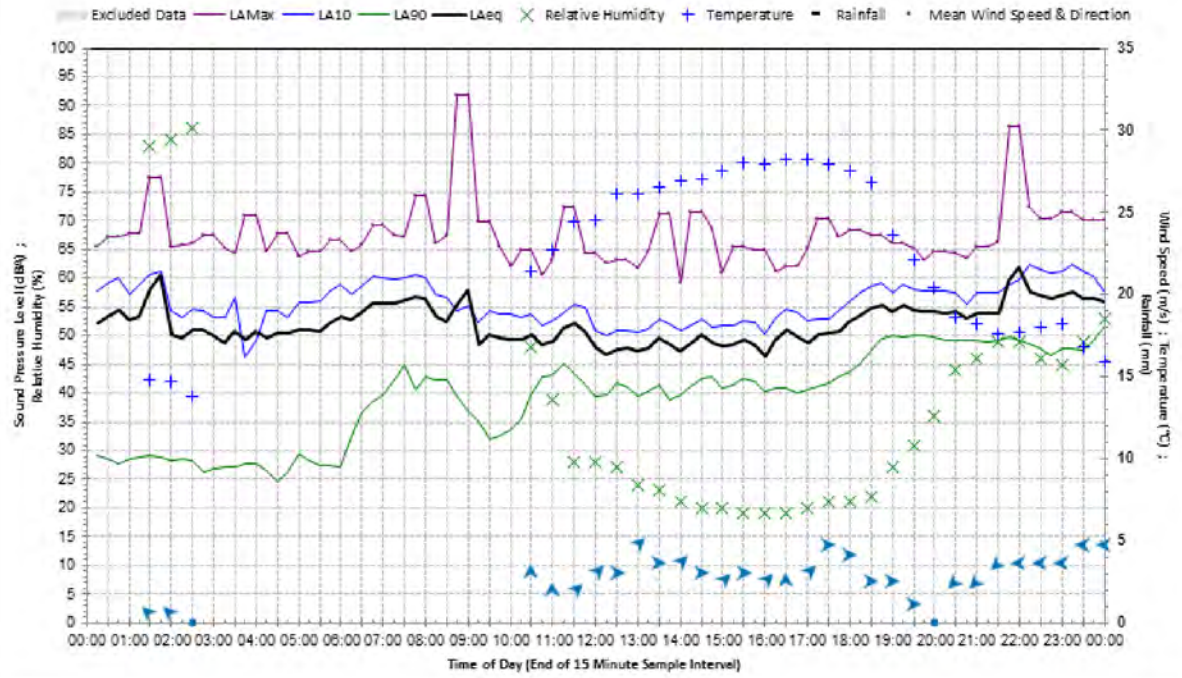
Statistical Ambient Noise Levels
Tuesday 29 March 2016



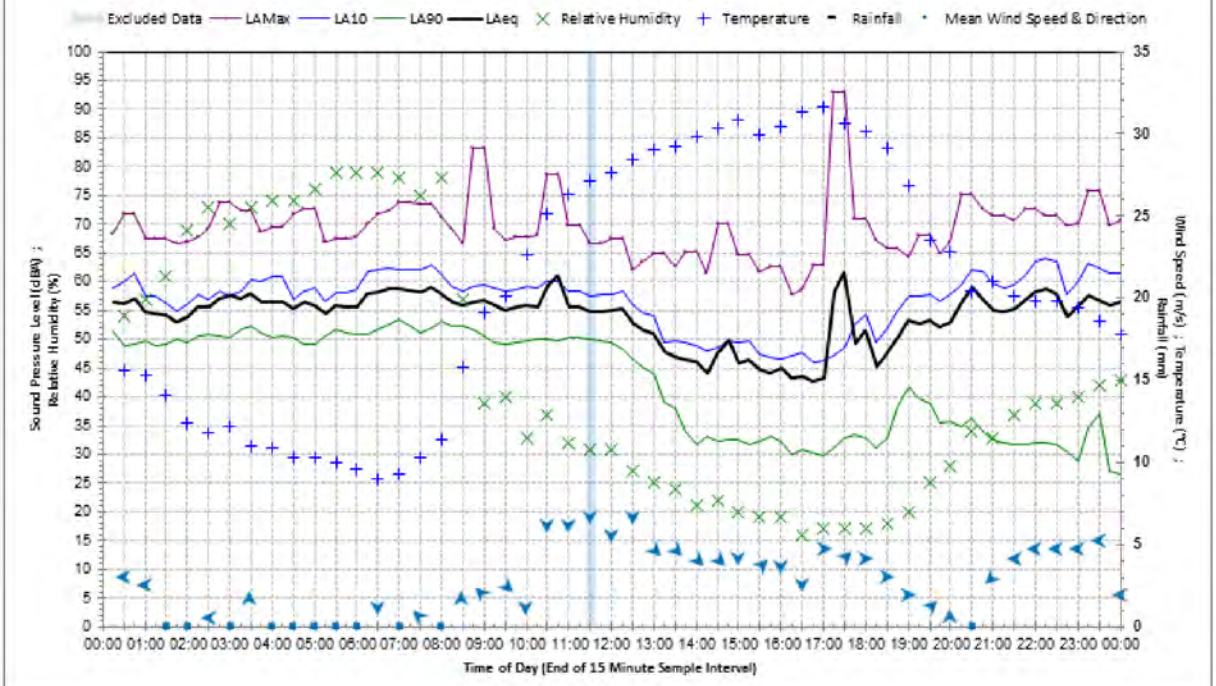
Statistical Ambient Noise Levels
Wednesday 30 March 2016



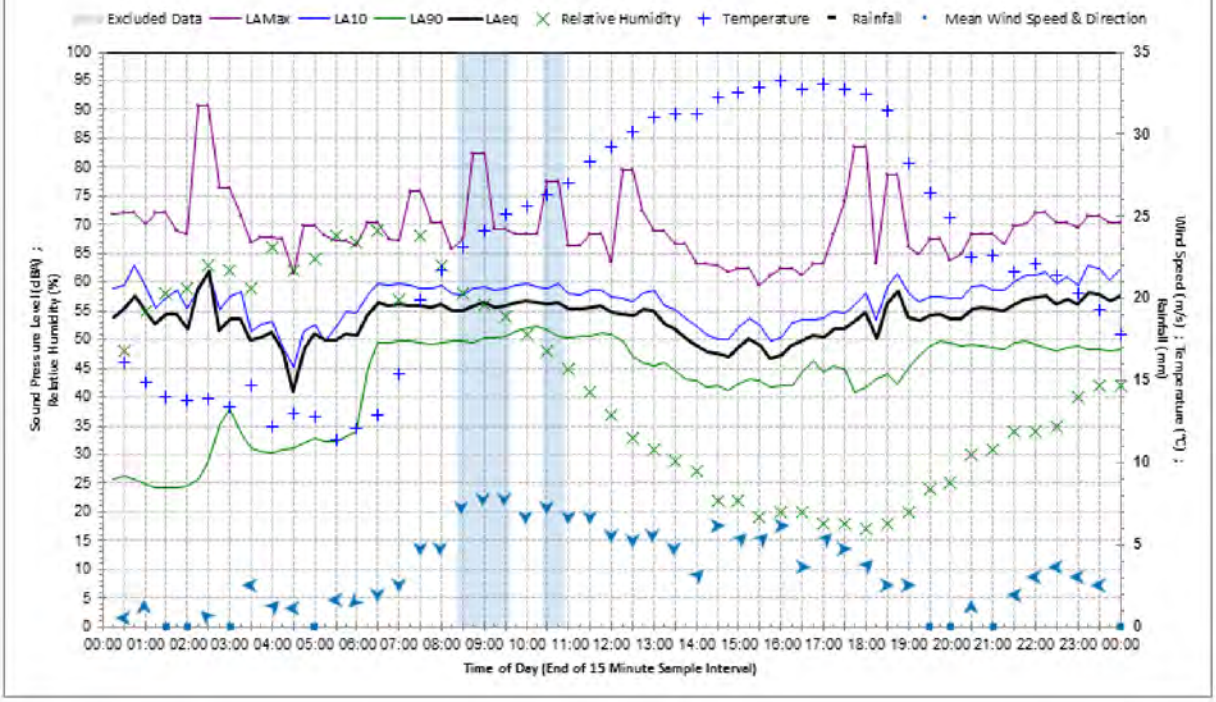
Statistical Ambient Noise Levels
Thursday 31 March 2016



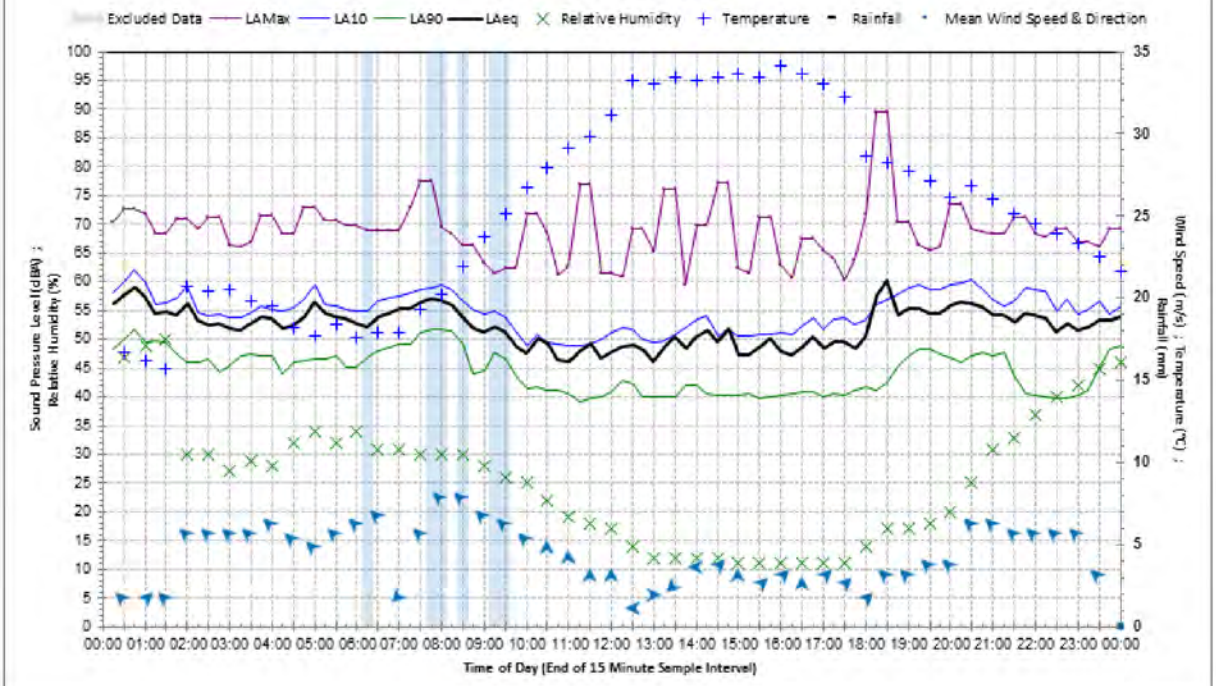
Statistical Ambient Noise Levels
Friday 1 April 2016



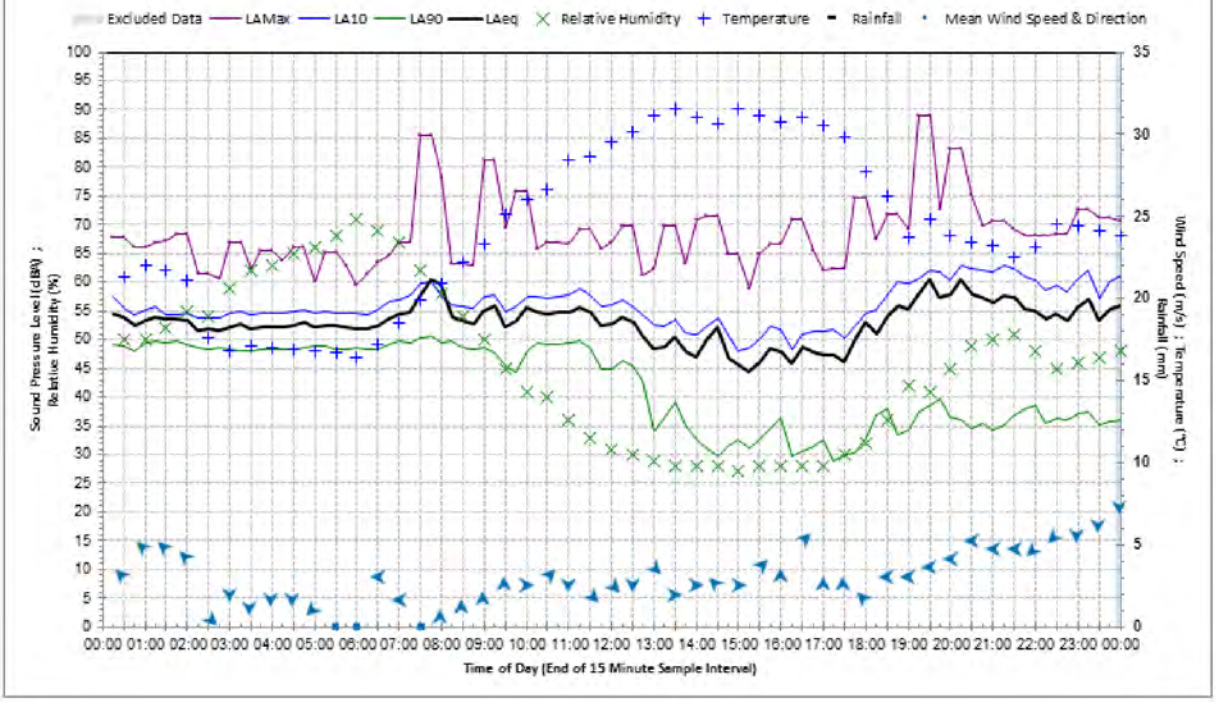
Statistical Ambient Noise Levels
Saturday 2 April 2016

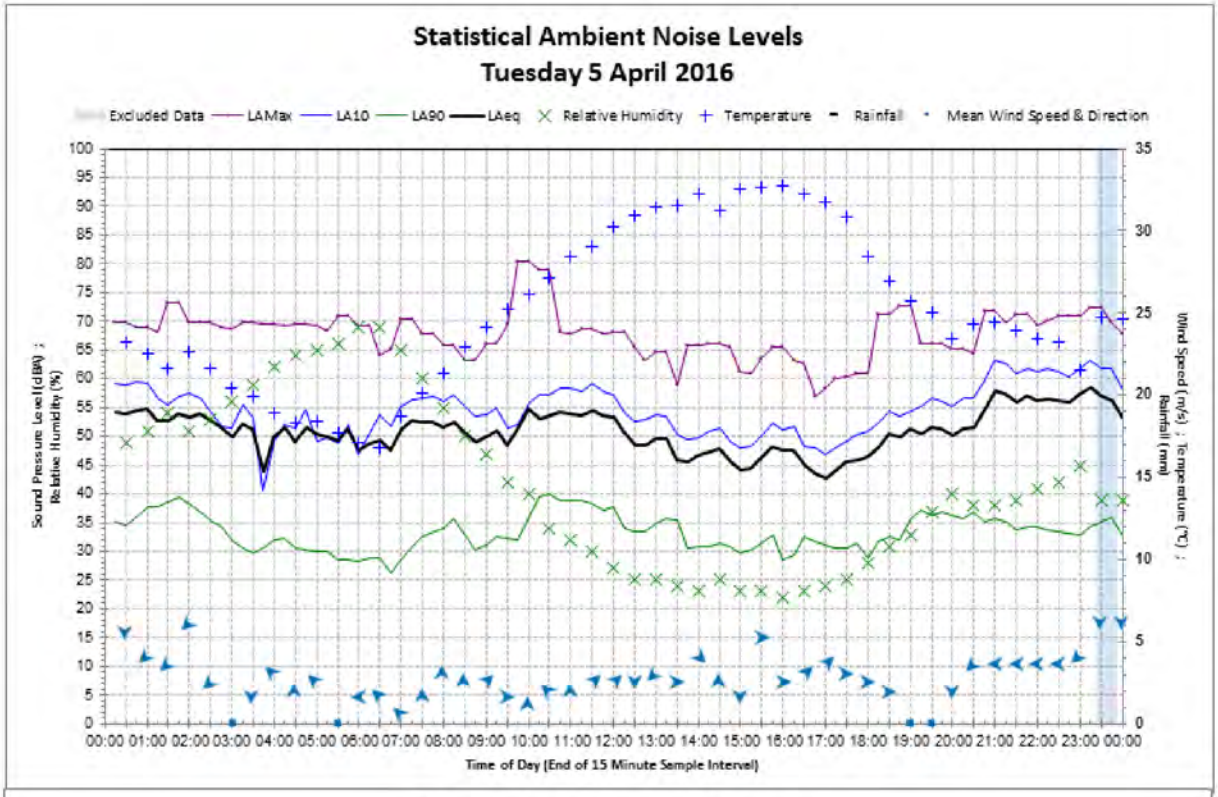


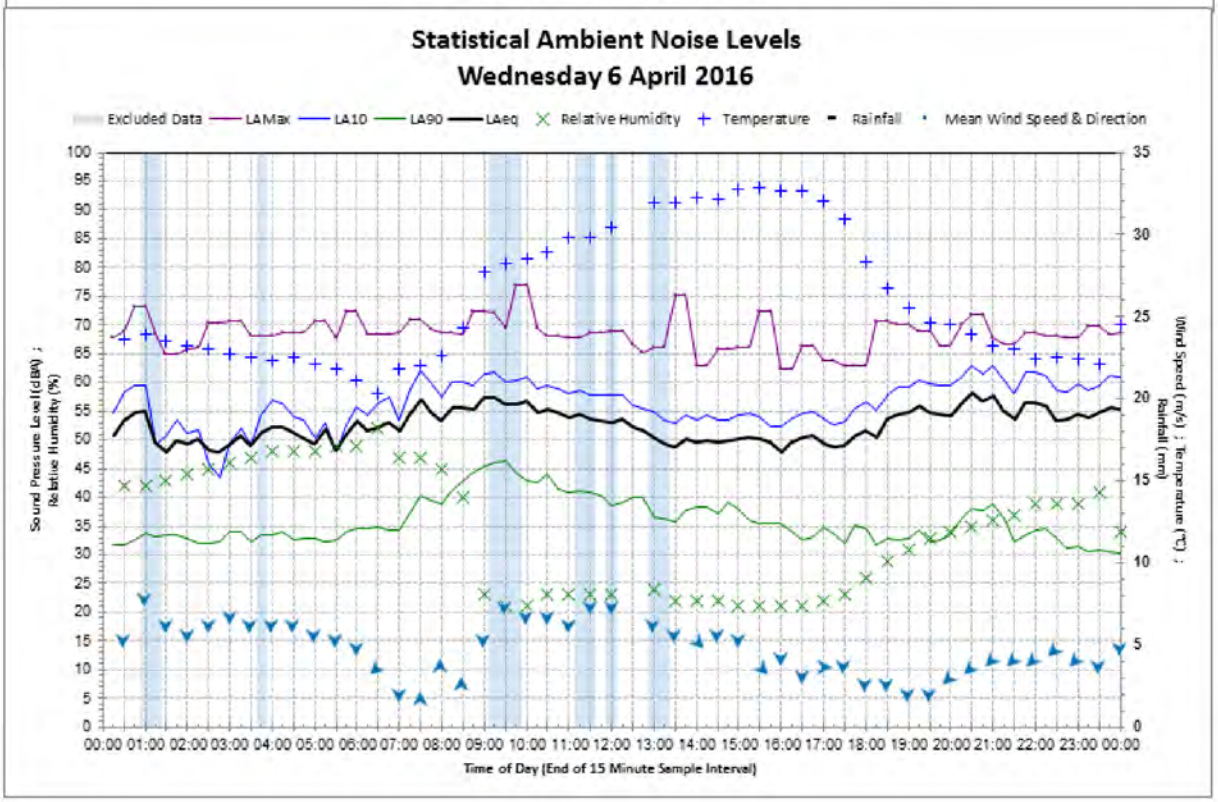
Statistical Ambient Noise Levels
Sunday 3 April 2016

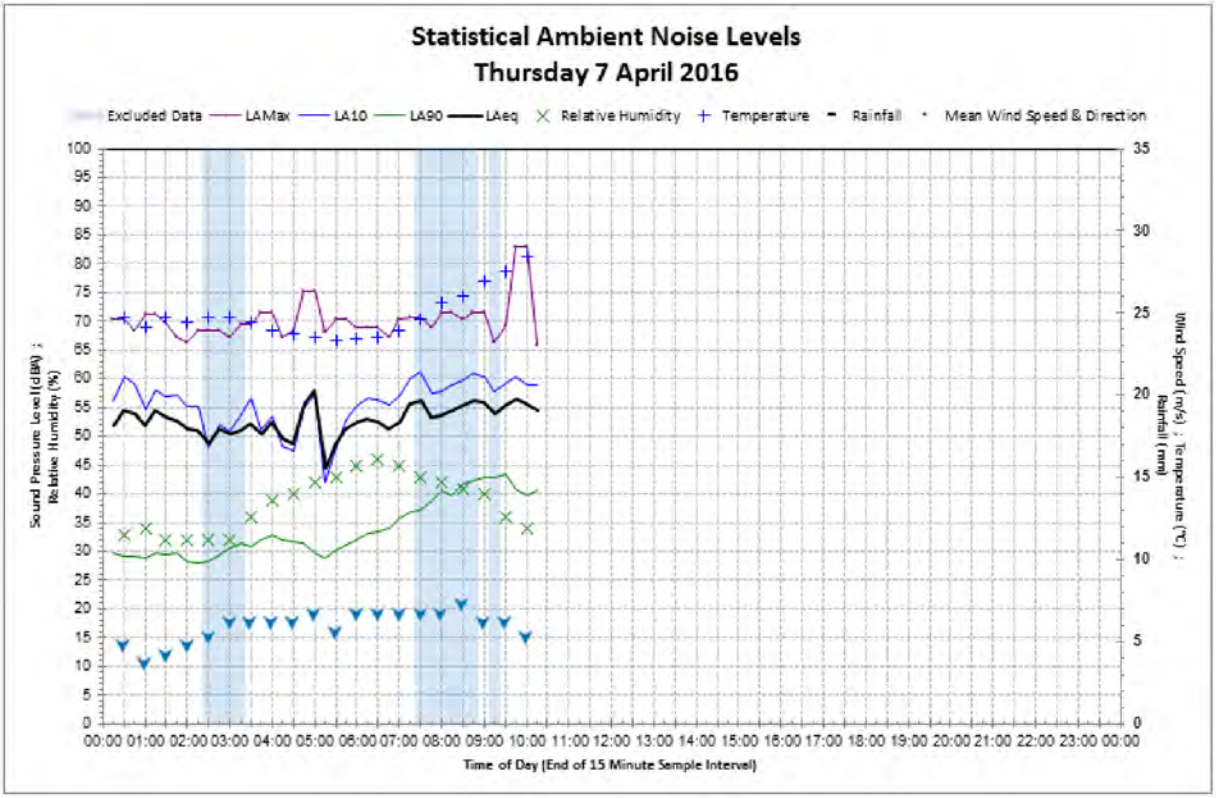


Statistical Ambient Noise Levels
Monday 4 April 2016

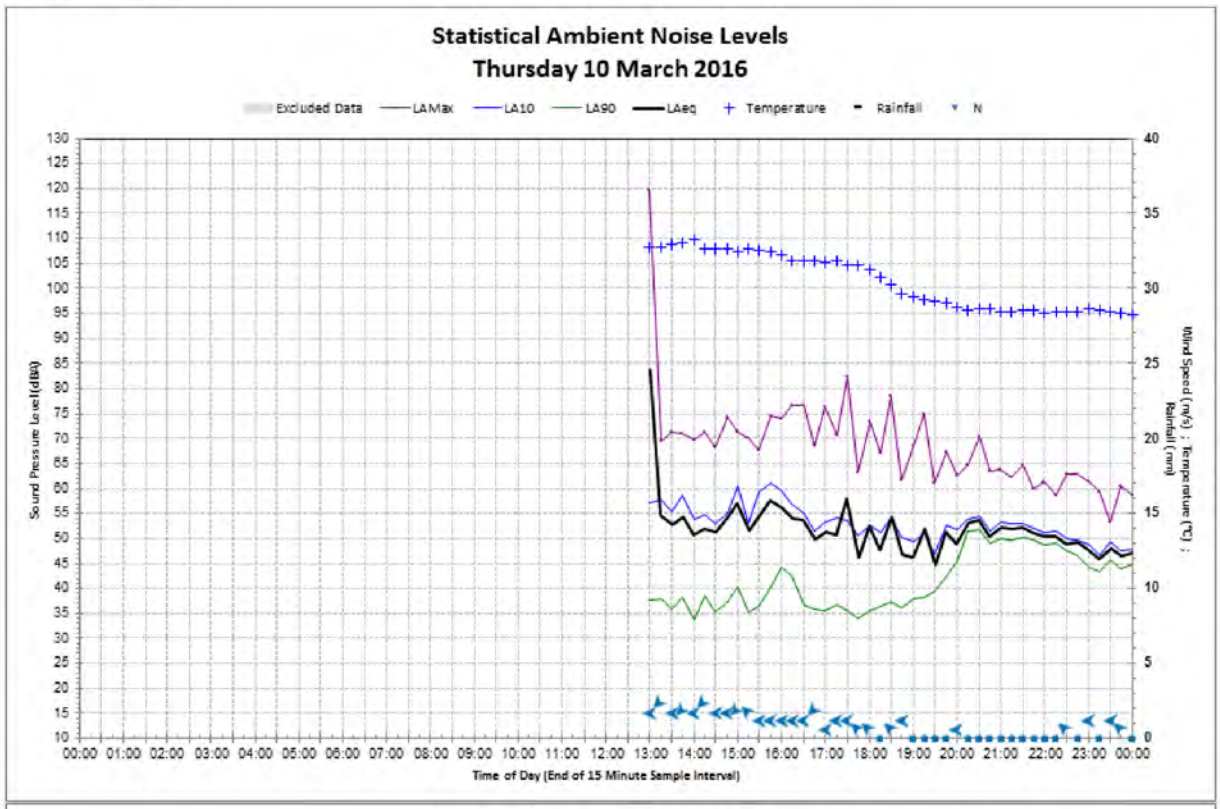


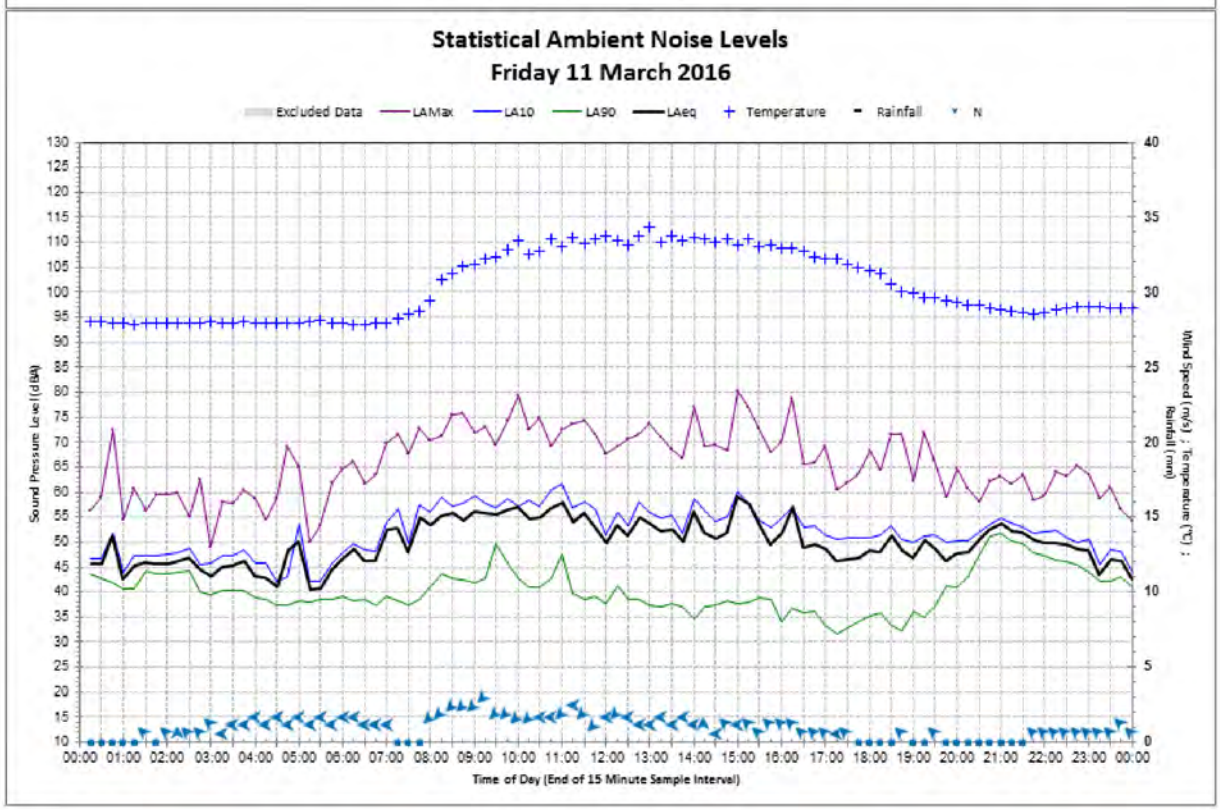

Statistical Ambient Noise Levels
Tuesday 5 April 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Wednesday 6 April 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

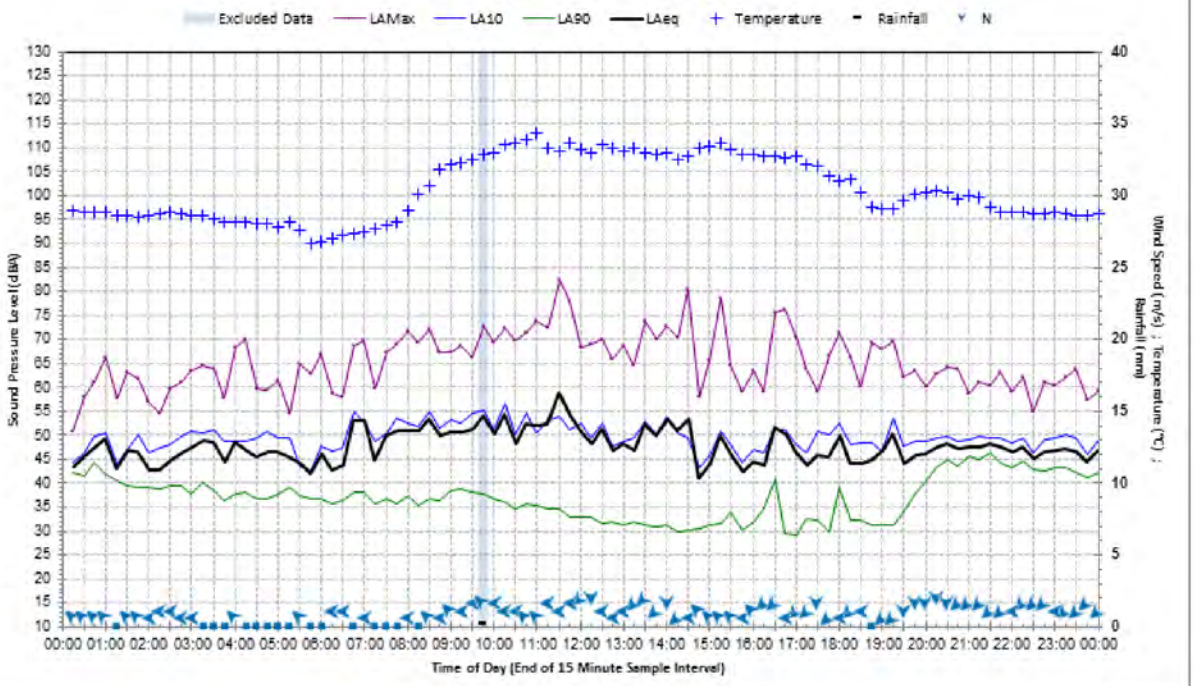

Statistical Ambient Noise Levels
Thursday 7 April 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Logger L18NNS

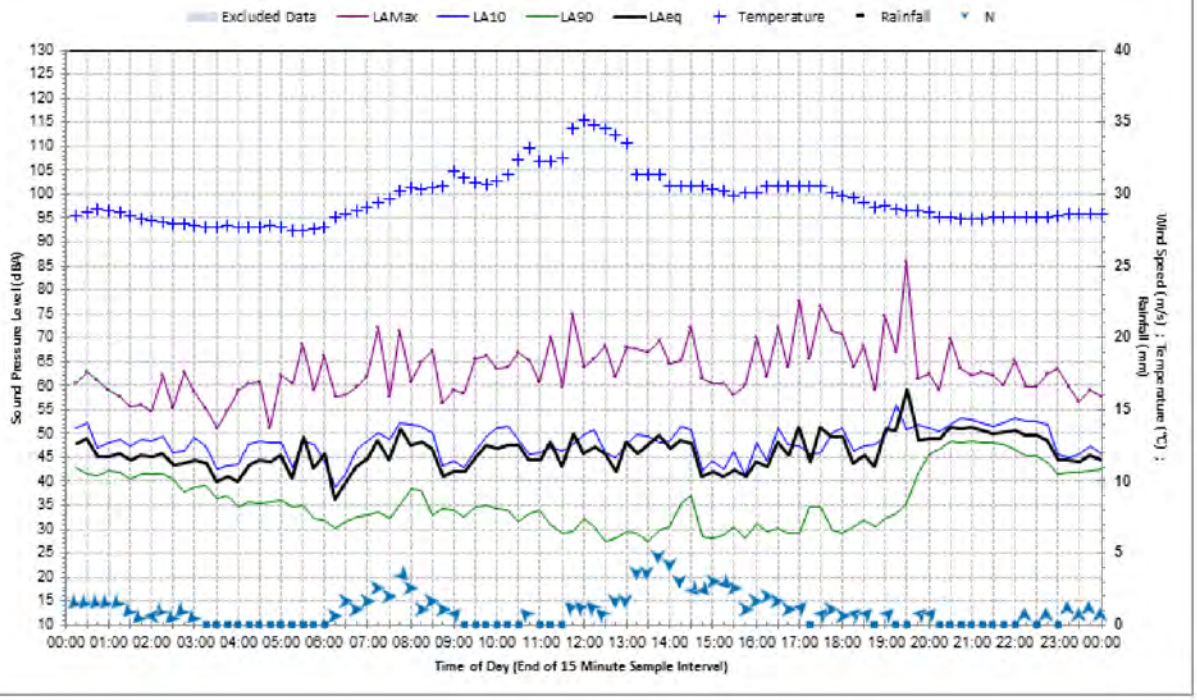


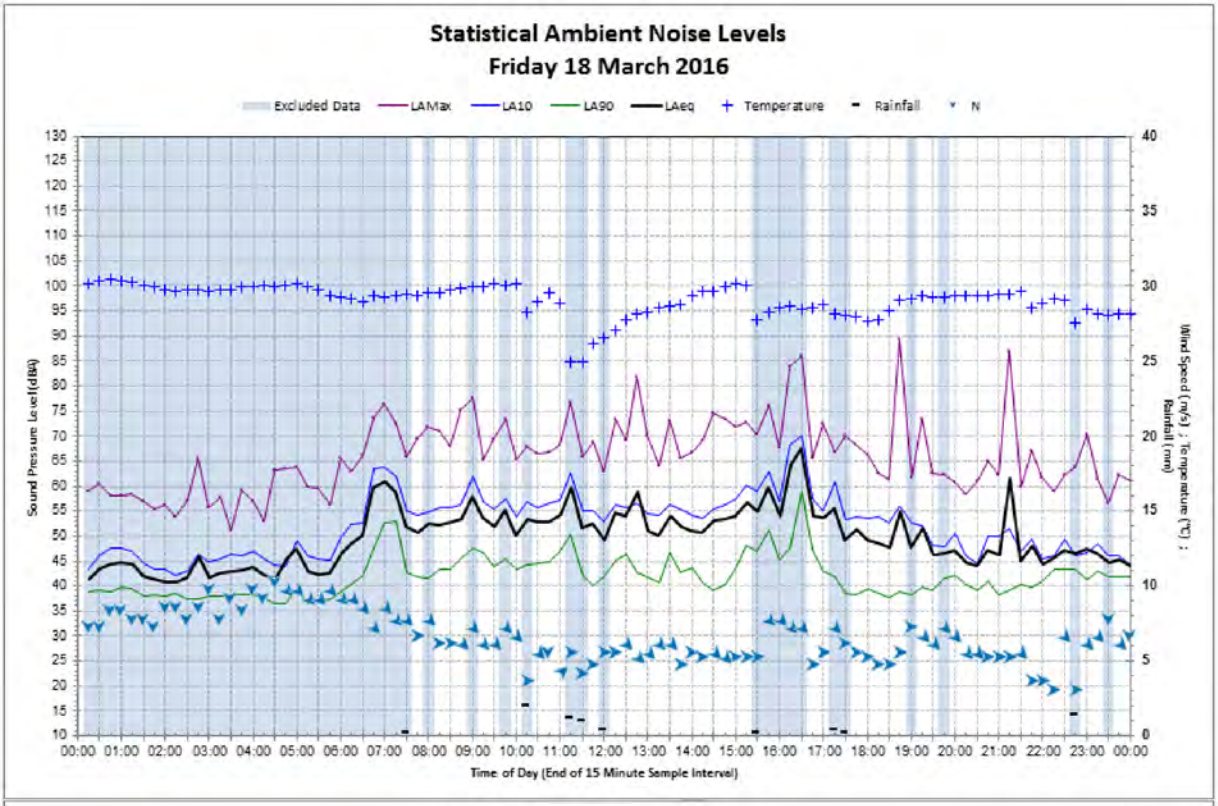


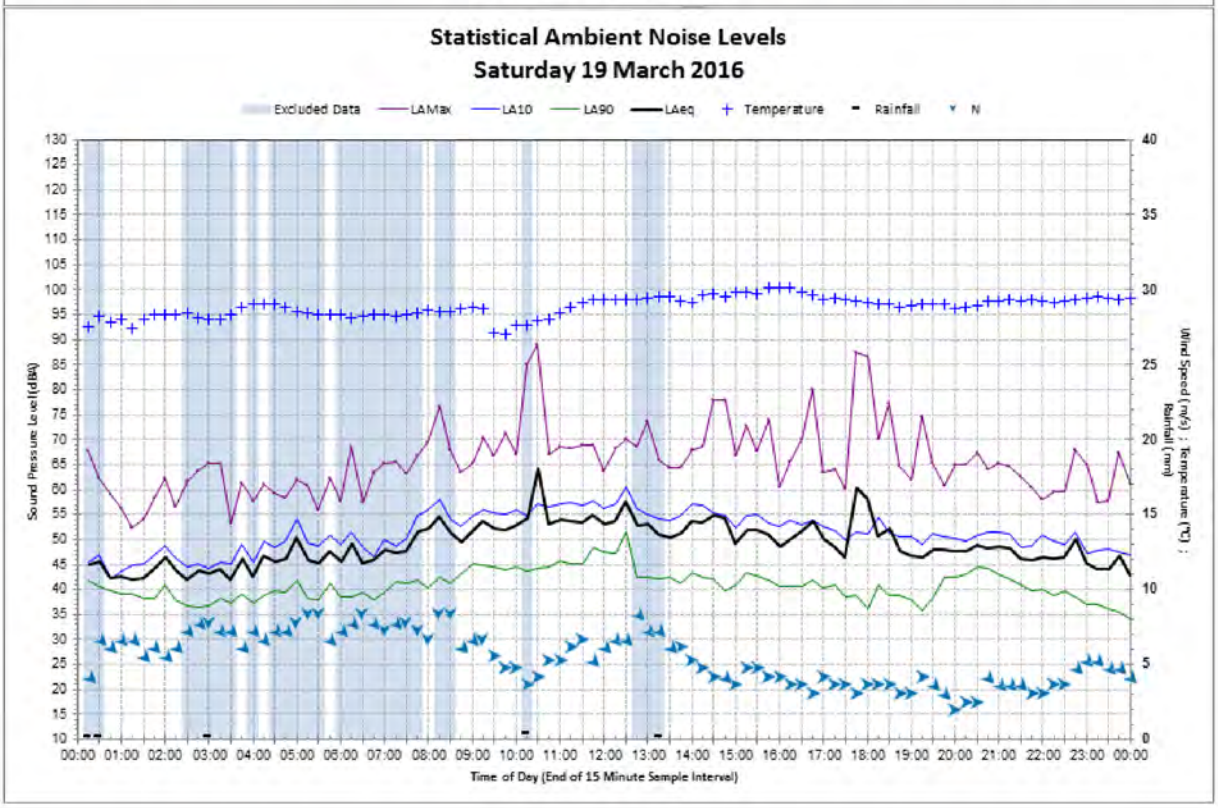
Statistical Ambient Noise Levels
Saturday 12 March 2016



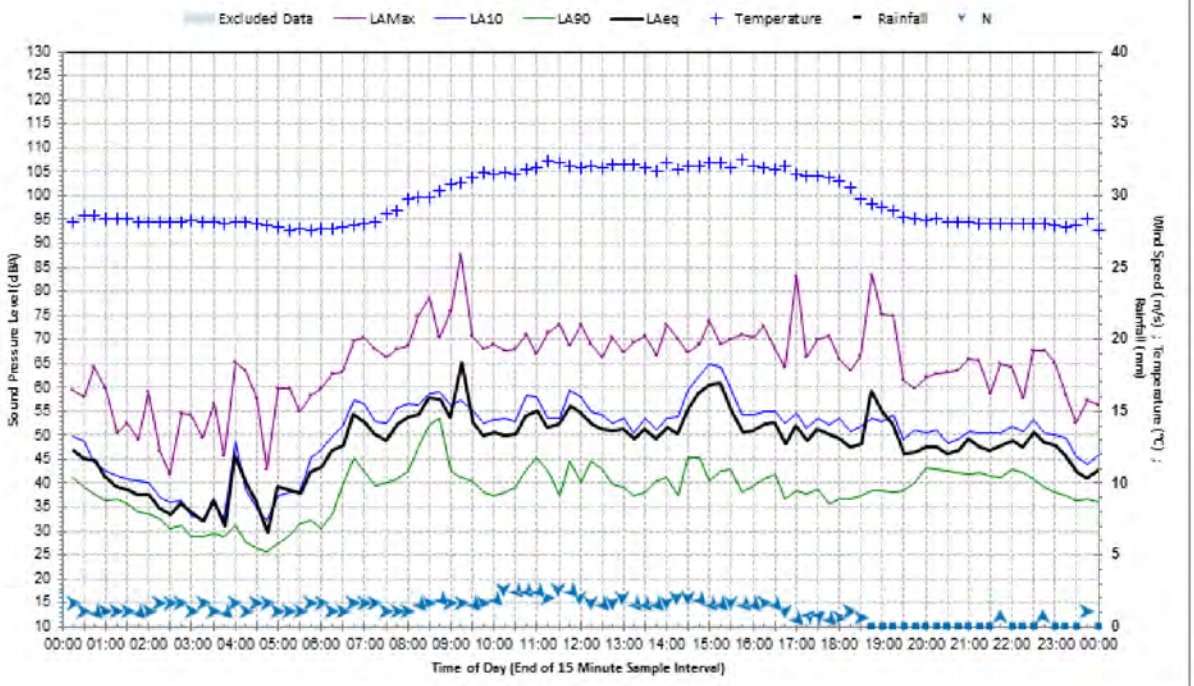
Statistical Ambient Noise Levels
Sunday 13 March 2016



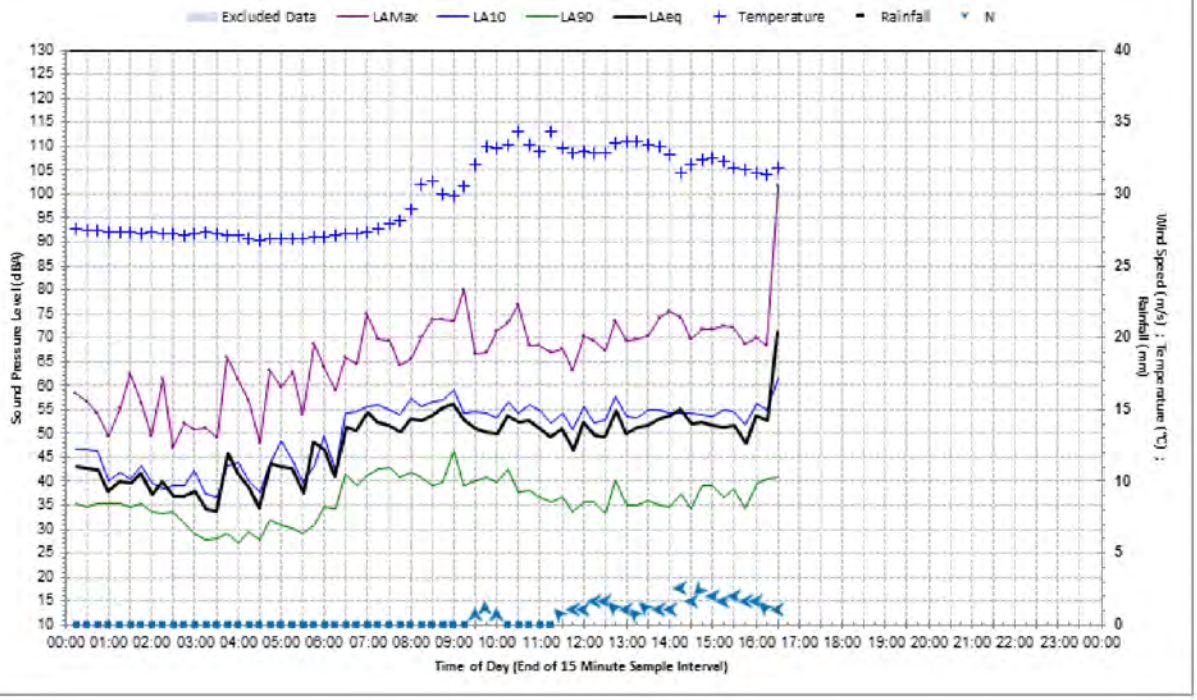

Statistical Ambient Noise Levels
Friday 18 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Saturday 19 March 2016
Excluded Data
LAMax
LA10
LA90
LAeq
Temperature
Rainfall
N
Sound Pressure Level (dBA)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

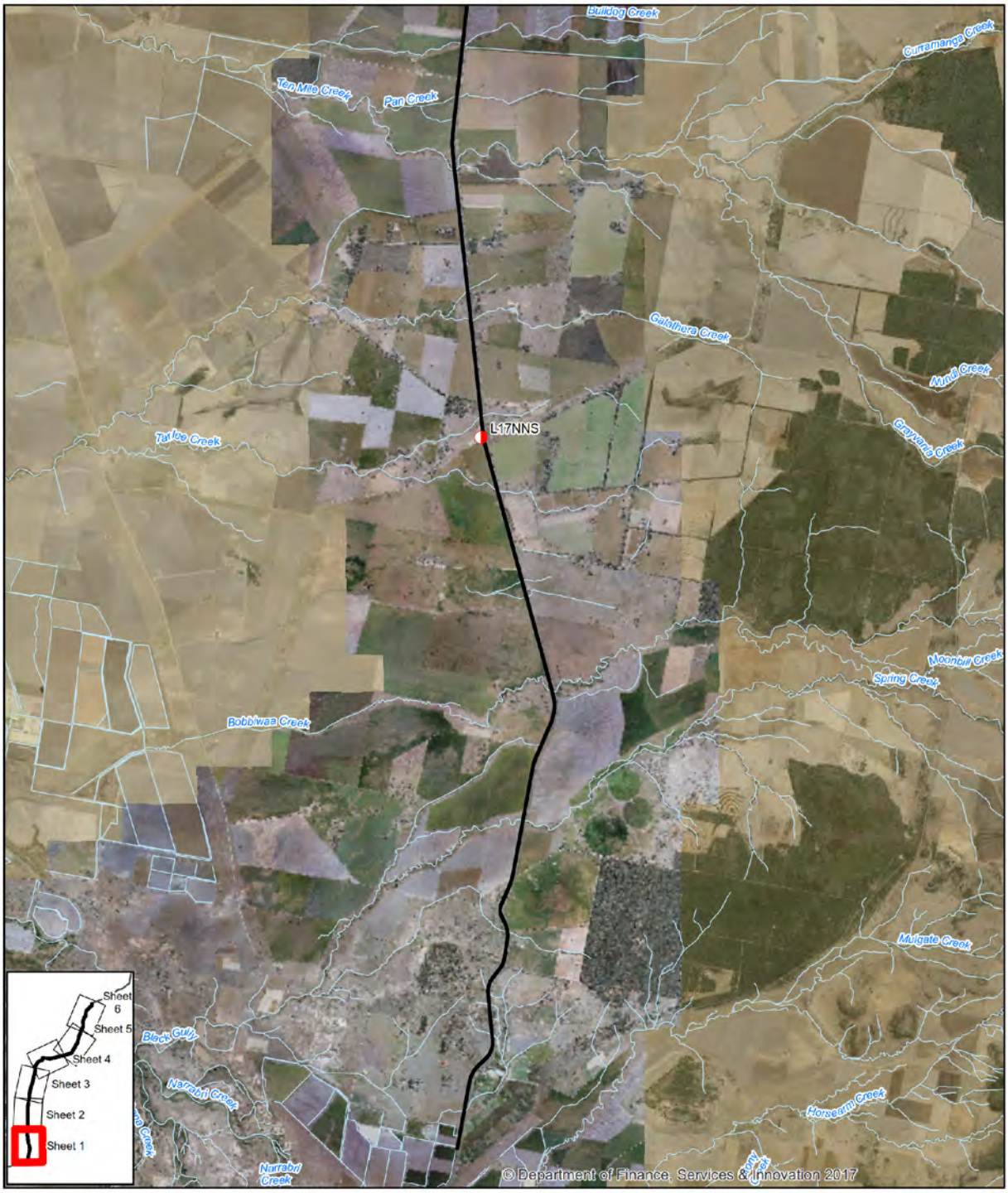
Statistical Ambient Noise Levels
Tuesday 22 March 2016



Statistical Ambient Noise Levels
Wednesday 23 March 2016



Appendix B – Monitoring locations



LEGEND
- Noise logger
- The proposal
- Watercourse

Paper Size A4
0 500 1,000 2,000 3,000 4,000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Monitoring locations

Figure B1- Sheet 1

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N001_NNS_NoiseLoggers_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntimail@ghd.com W www.ghd.com.au

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba



LEGEND

- Noise logger
- The proposal
- Watercourse

Paper Size A4

0 500 1,000 2,000 3,000 4,000

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Monitoring locations

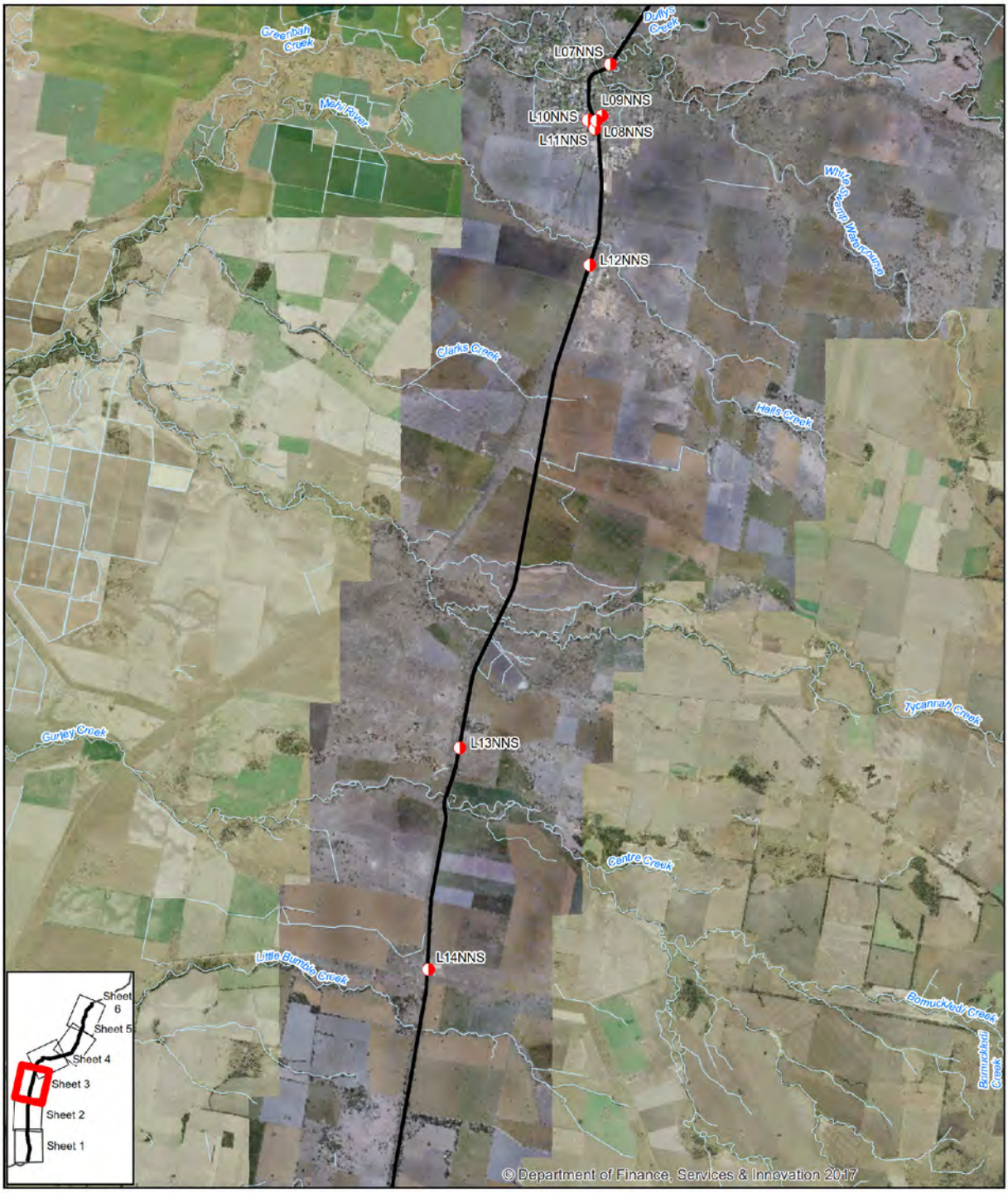
Figure B1- Sheet 2

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntimail@ghd.com W www.ghd.com.au

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba



LEGEND

- Noise logger
- The proposal
- Watercourse

Paper Size A4

0 625 1,250 2,500 3,750 5,000

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number | 22-17916
Revision | 0
Date | 02 Jun 2017

Monitoring locations

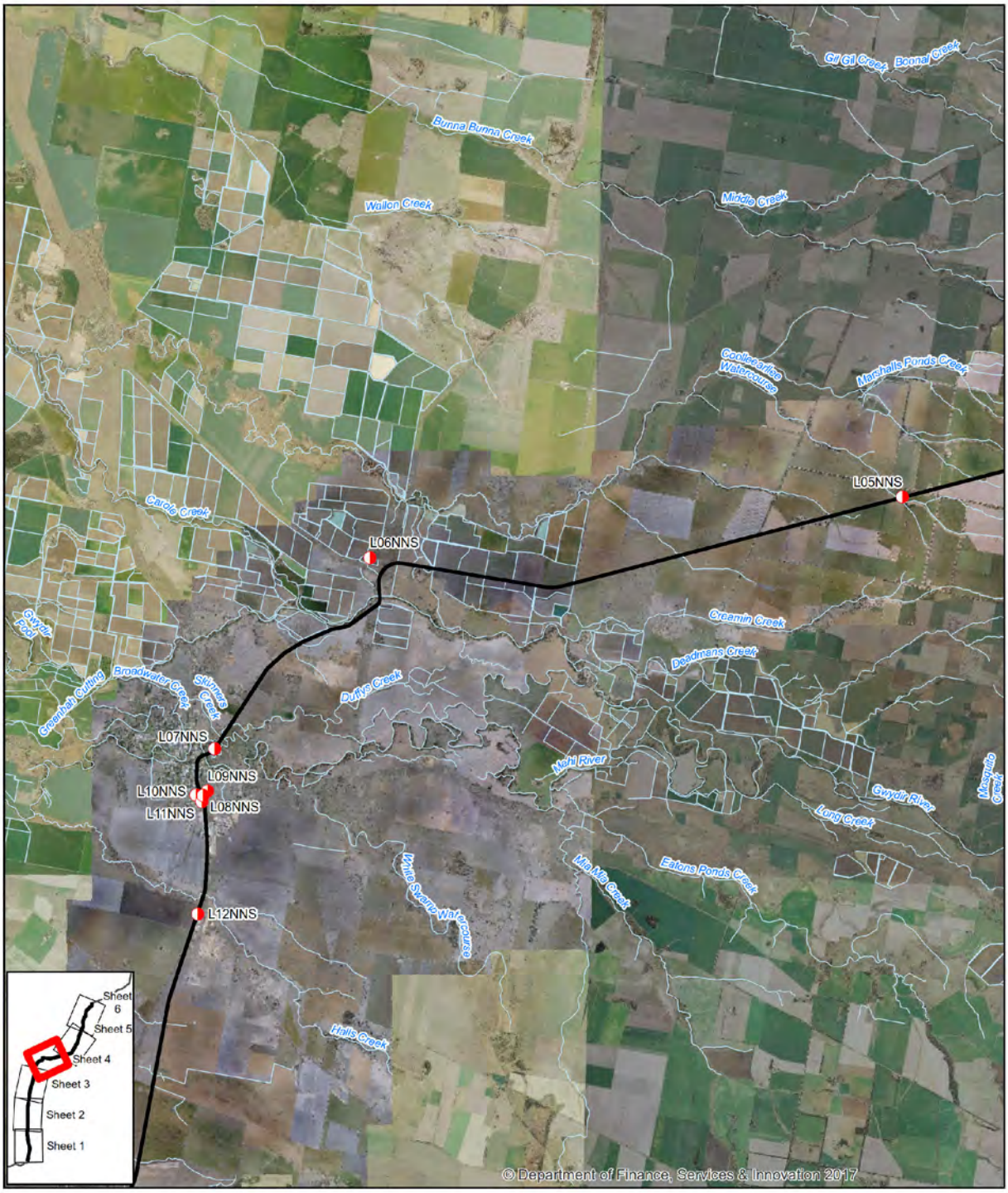
Figure B1- Sheet 3

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntimail@ghd.com W www.ghd.com.au

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba



LEGEND
- Noise logger
- The proposal
- Watercourse

Paper Size A4
0 750 1,500 3,000 4,500 6,000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number | 22-17916
Revision | 0
Date | 02 Jun 2017

Monitoring locations

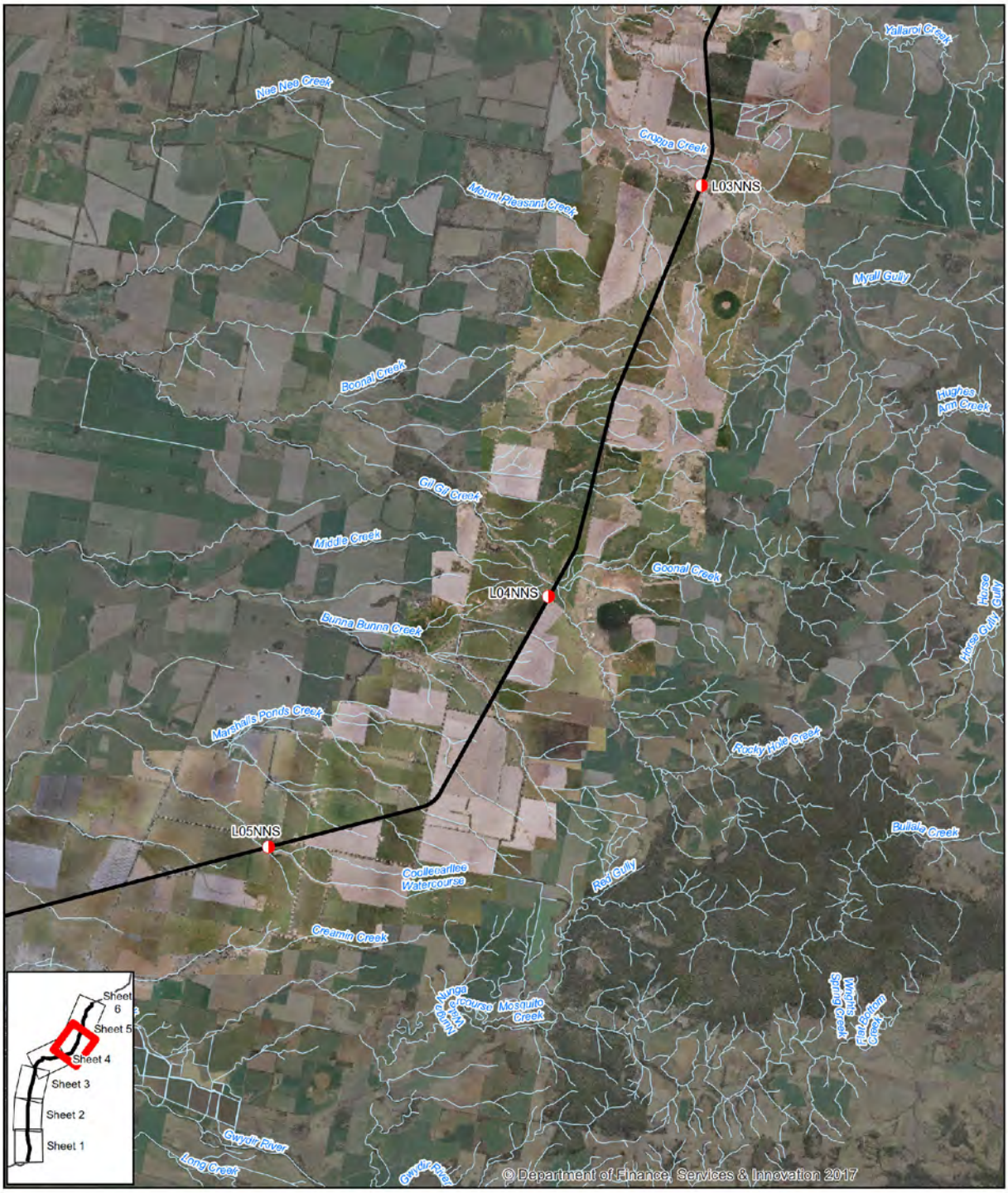
Figure B1- Sheet 4

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntimail@ghd.com W www.ghd.com.au

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba



LEGEND
- Noise logger
- The proposal
- Watercourse

Paper Size A4
0 750 1,500 3,000 4,500 6,000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Monitoring locations

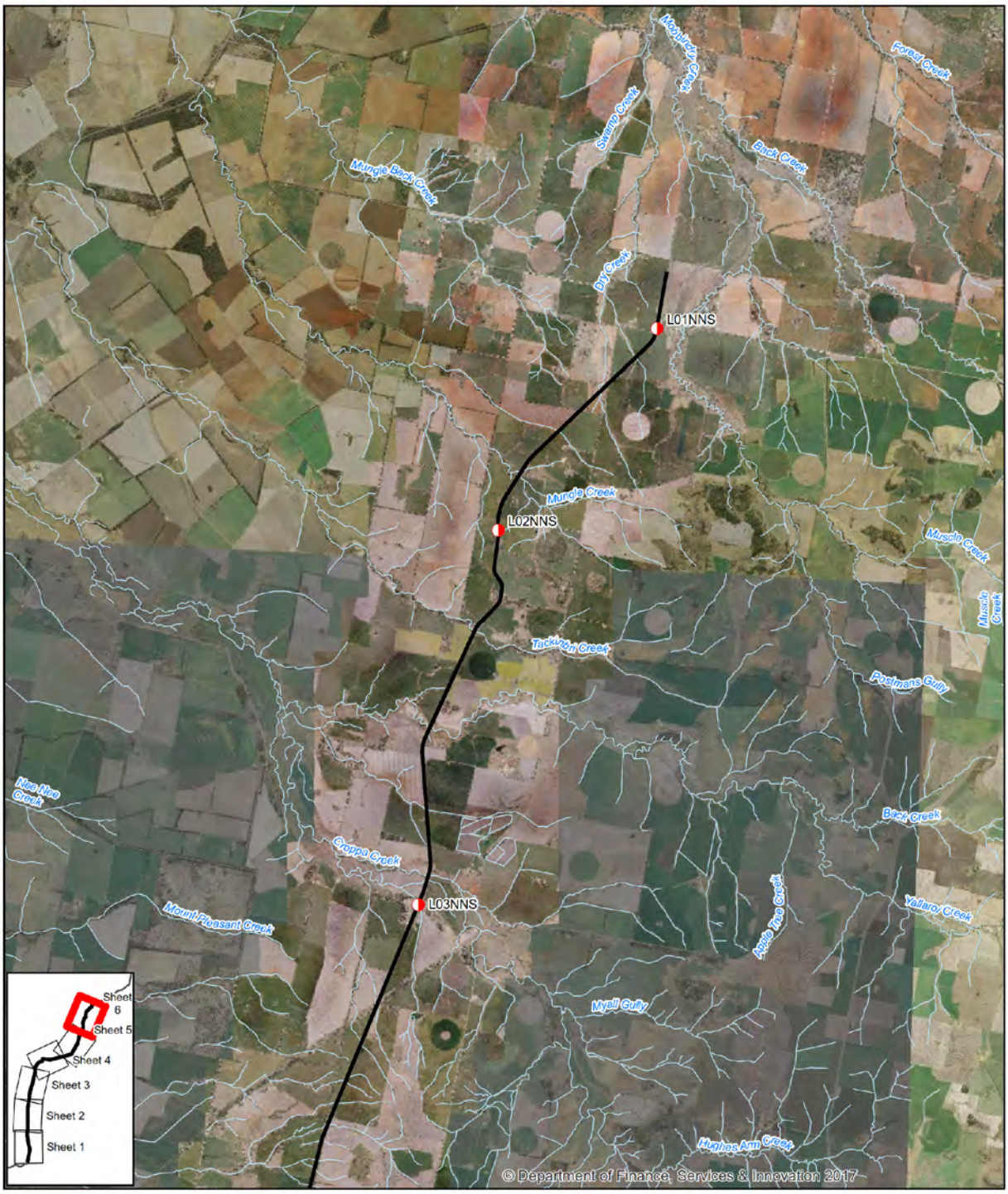
Figure B1- Sheet 5

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N001_NNS_NoiseLoggers_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntimail@ghd.com W www.ghd.com.au

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba



LEGEND
- Noise logger
- The proposal
- Watercourse

Paper Size A4
0 7001,400 2,800 4,200 5,600
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number | 22-17916
Revision | 0
Date | 02 Jun 2017

Monitoring locations

Figure B1- Sheet 6

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N001_NNS_NoiseLoggers_0.mxd

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Data source: LPI, DCDB, 2012. ARTC, Imagery, 2015. Created by: kpsroba

Appendix C – Study area and noise sensitive receivers



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 1

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 2

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 3

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

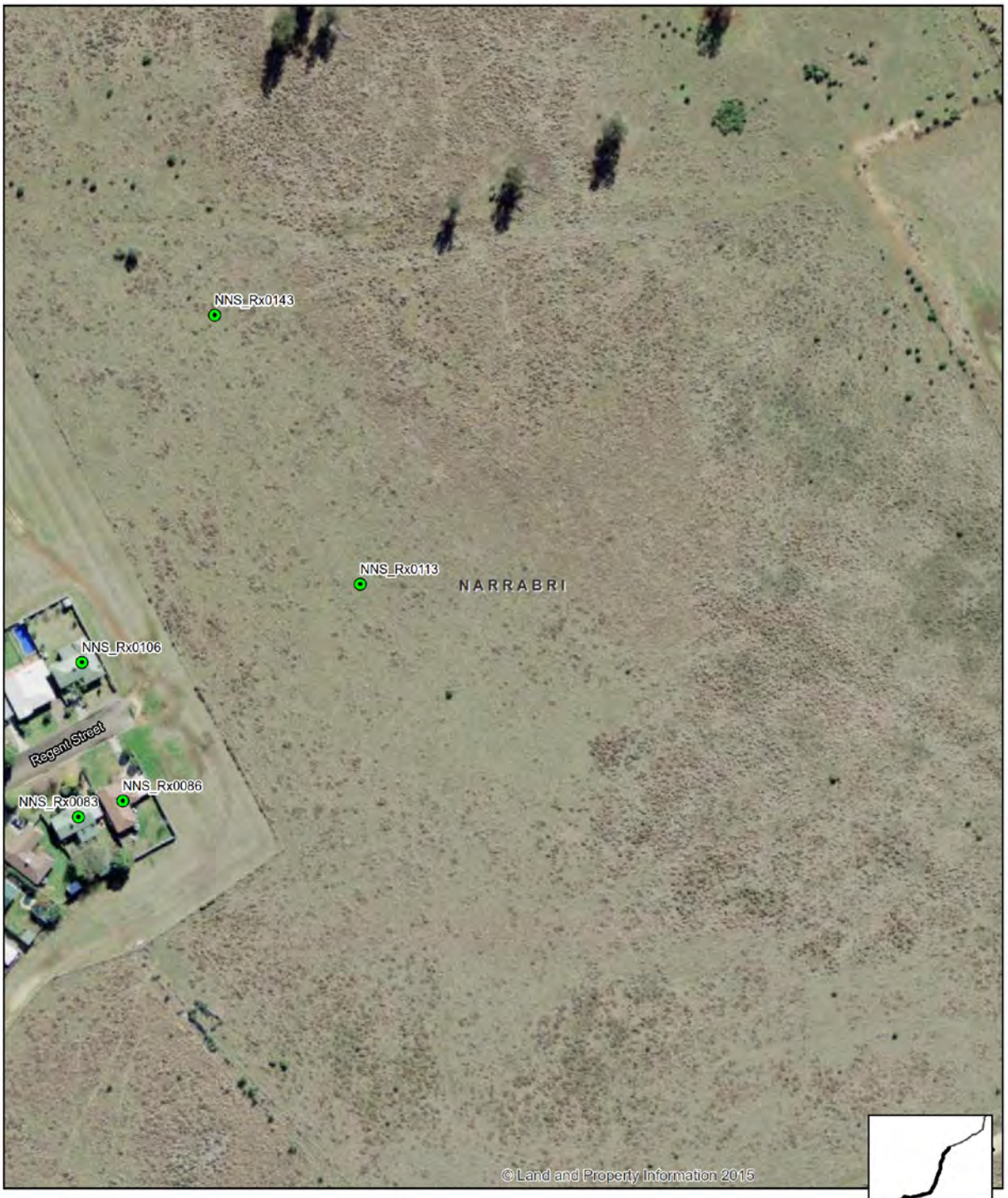
Study area and noise sensitive receivers

Figure C1- Sheet 4

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 5

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 6

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 7

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 8

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 9

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 10

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 11

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 12

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 13

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 14

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 15

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 16

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 17

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 18

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 19

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

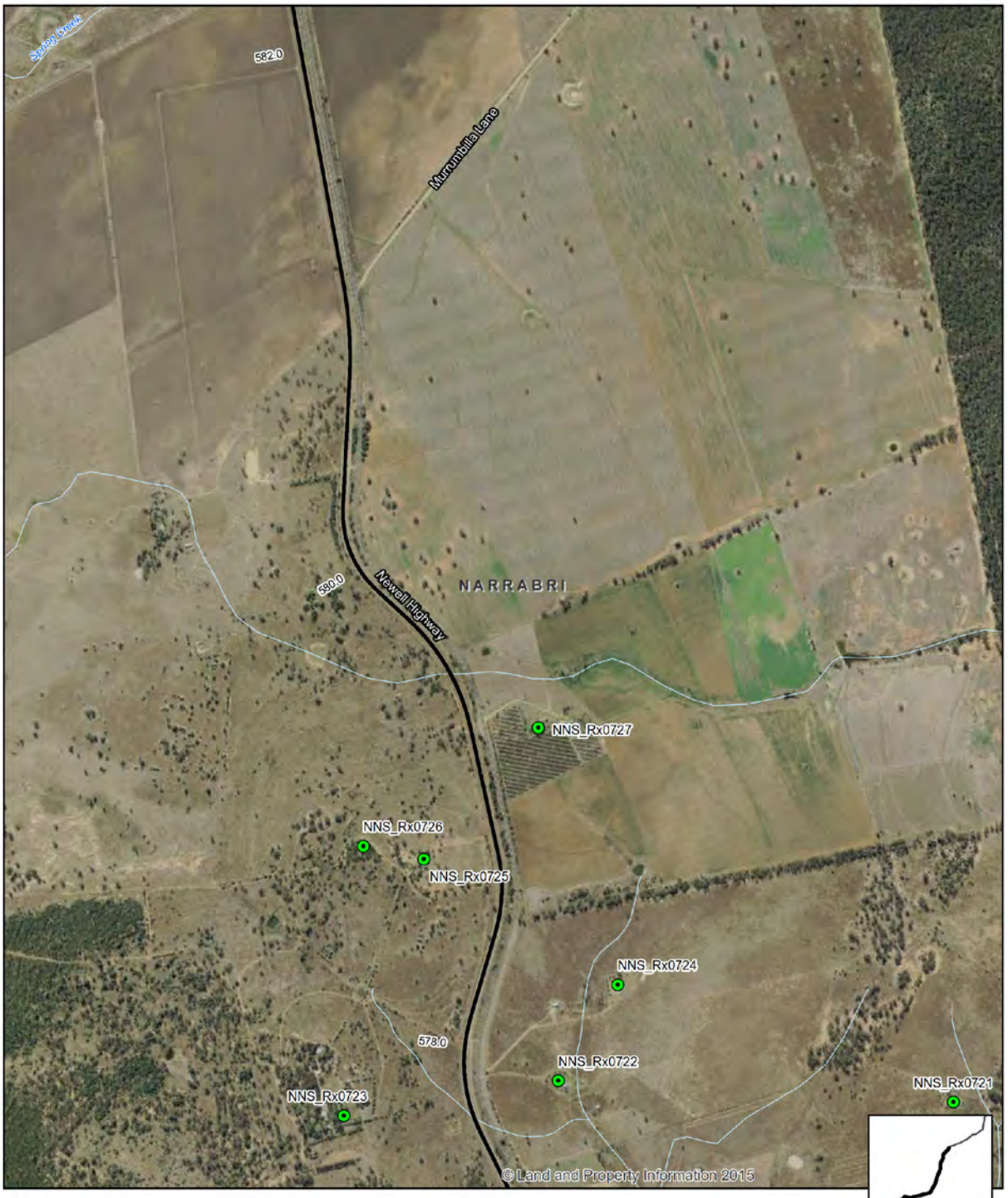
Study area and noise sensitive receivers

Figure C1- Sheet 20

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

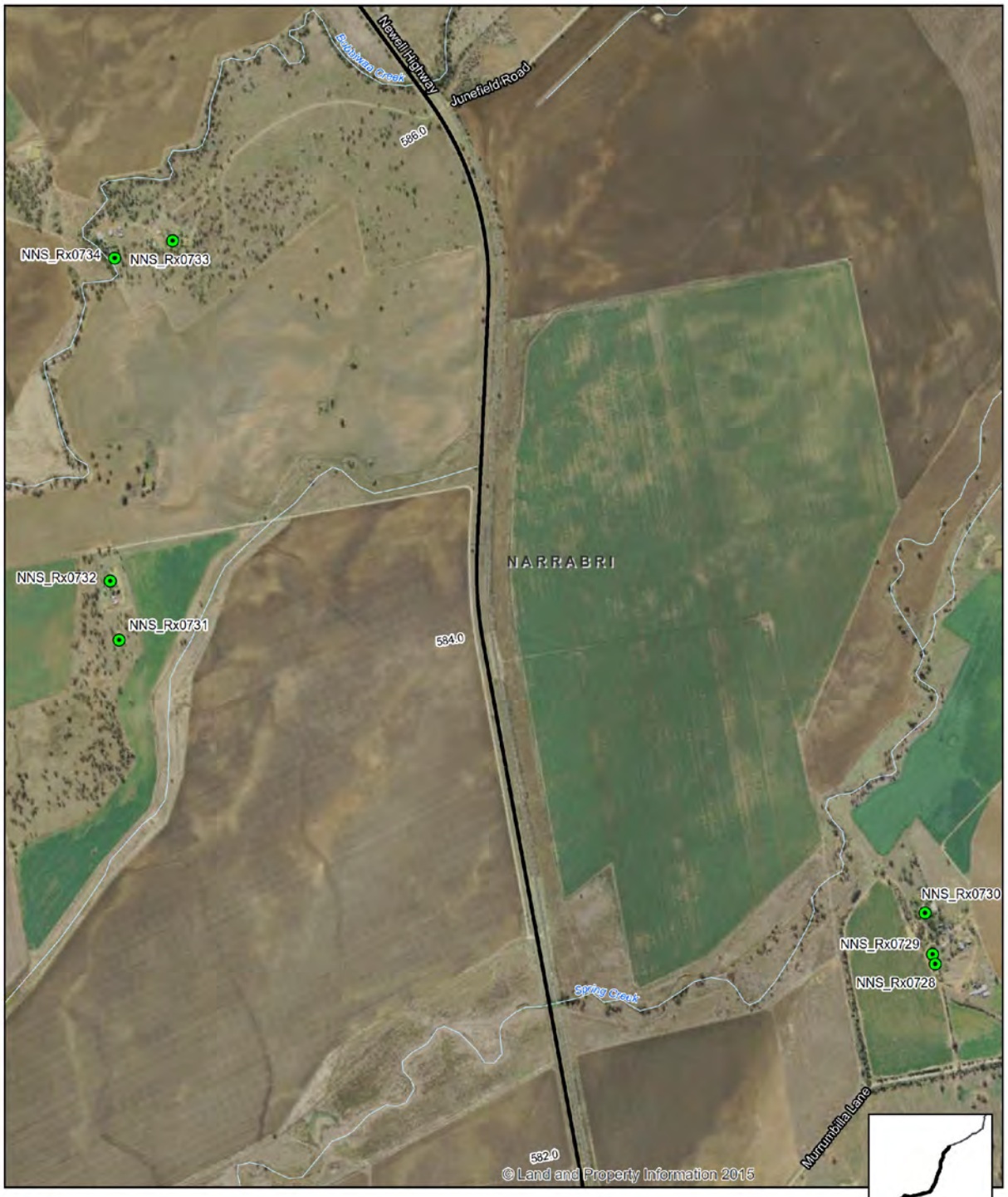
Study area and noise sensitive receivers

Figure C1- Sheet 21

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 22

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 23

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 24

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 25

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 26

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 27

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 28

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

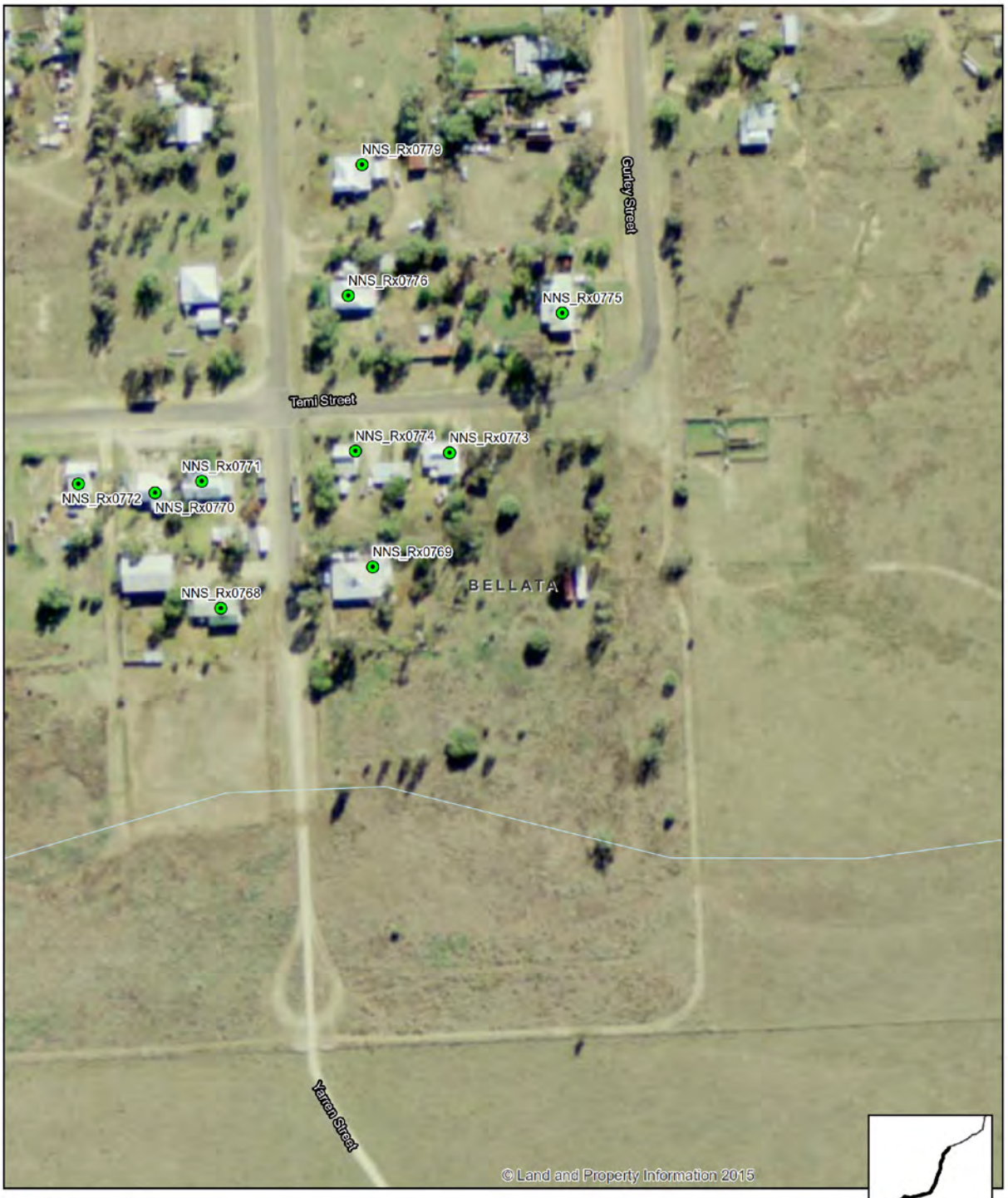
Study area and noise sensitive receivers

Figure C1- Sheet 29

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 30

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LEGEND

- Residential receiver
- Active recreation
- Education
- Religous
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 31

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- Religous
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 32

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 33

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 34

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 35

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

The proposal

Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 36

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 37

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 38

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

The proposal

Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

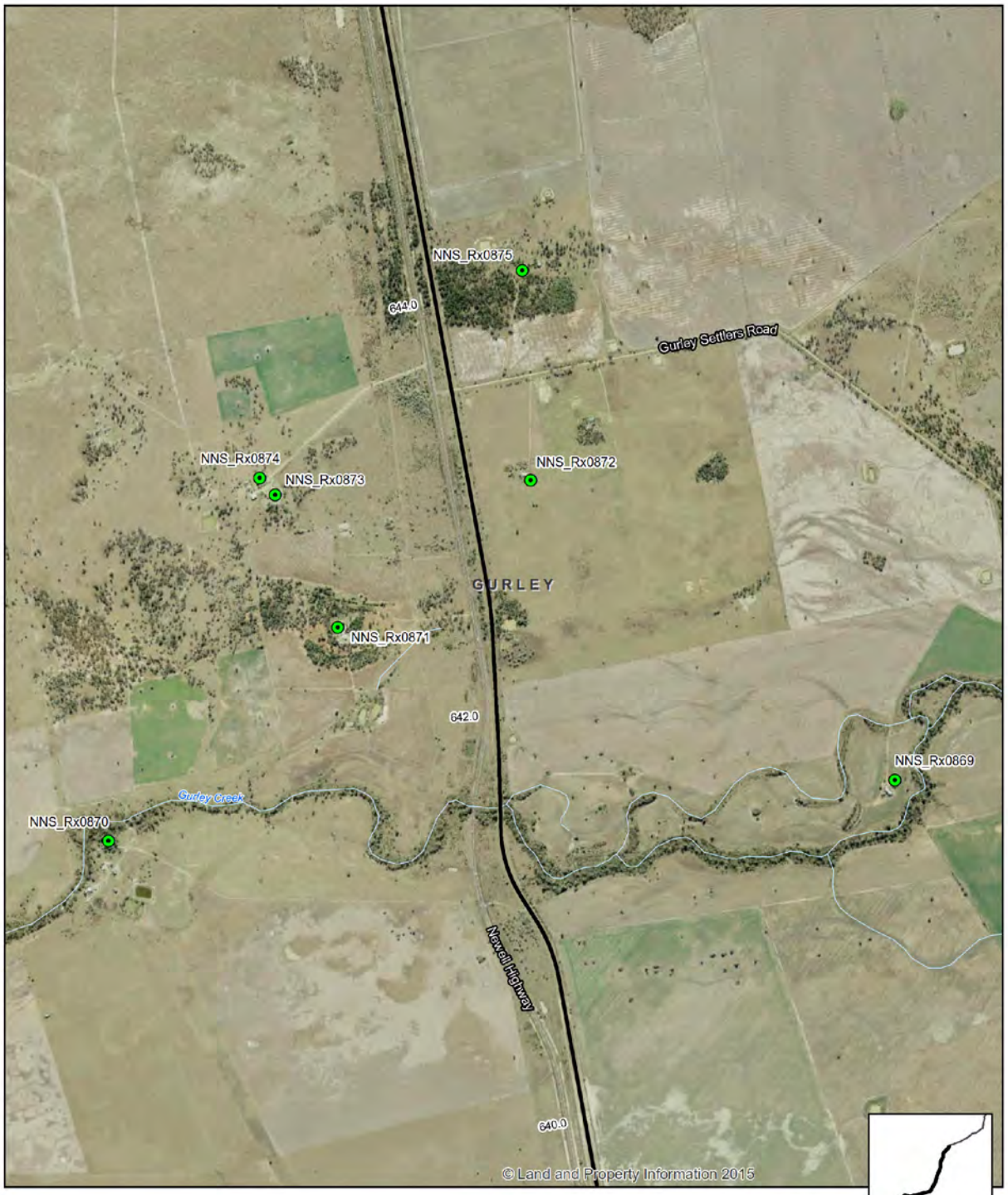
Study area and noise sensitive receivers

Figure C1- Sheet 39

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 90 180 360 540 720

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

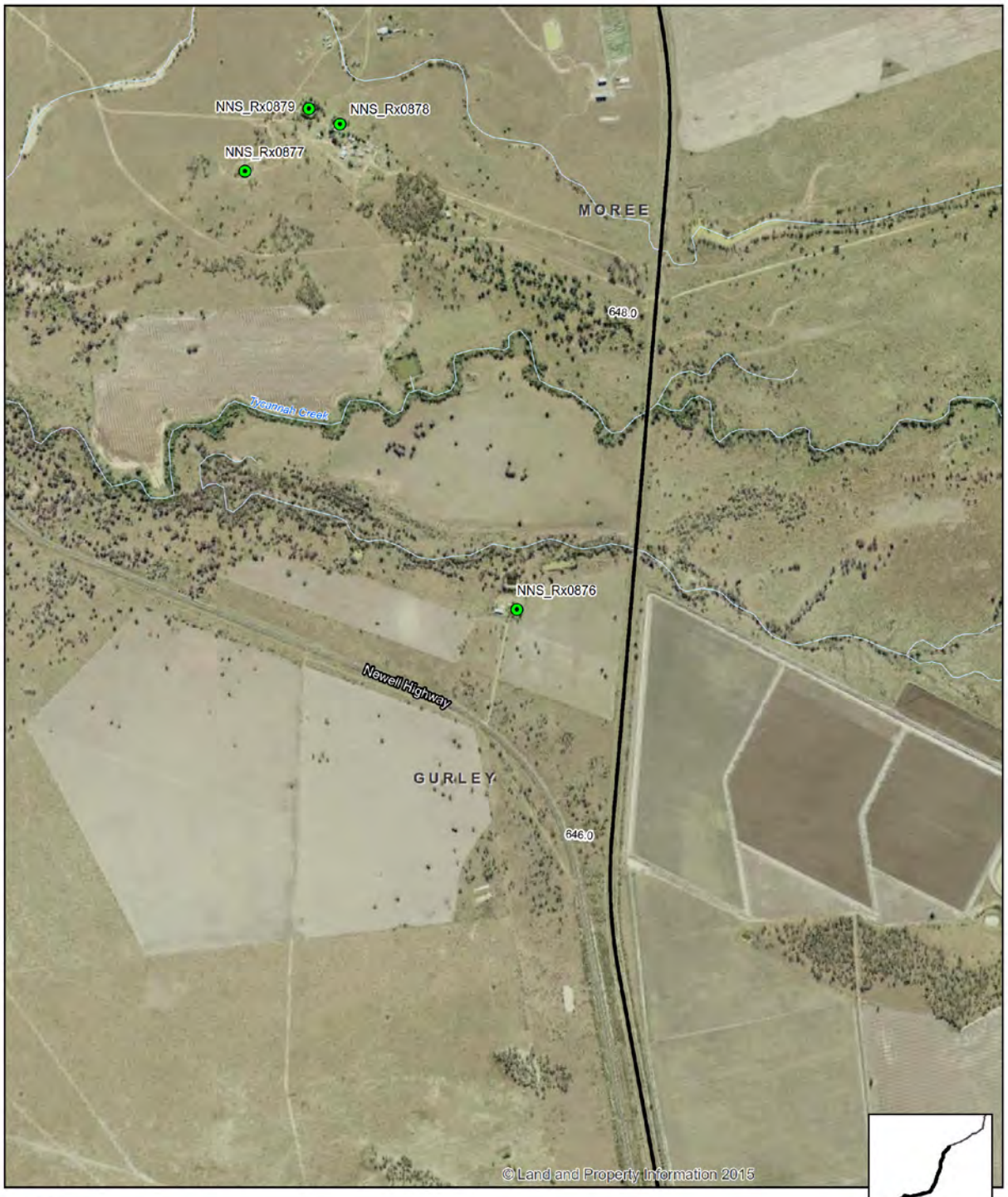
Study area and noise sensitive receivers

Figure C1- Sheet 40

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 41

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 42

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 43

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 44

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Passive recreation
- Religous
- The proposal
- Watercourse

Paper Size A4

0 55 110 220 330 440

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 45

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 46

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
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Study area and noise sensitive receivers

Figure C1- Sheet 47

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 48

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 49

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 50

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 51

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 52

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 53

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 54

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 55

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd

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LEGEND

- Residential receiver
- Religous
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 56

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd

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LEGEND

- Residential receiver
- Passive recreation
- Religous
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 57

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Religous
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 58

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 59

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 60

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Education
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 61

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 62

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 63

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 64

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 65

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 66

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Health
- Passive recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
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Study area and noise sensitive receivers

Figure C1- Sheet 67

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Health
- Passive recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Revision 0
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Study area and noise sensitive receivers

Figure C1- Sheet 68

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 69

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

Job Number 22-17916
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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 70

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Passive recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

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Study area and noise sensitive receivers

Figure C1- Sheet 71

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Active recreation
- Aged care
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 72

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 73

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Active recreation
- Education
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 74

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Health
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 75

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd

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LEGEND

- Residential receiver
- Education
- Passive recreation
- Religous
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 76

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

Job Number 22-17916
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Study area and noise sensitive receivers

Figure C1- Sheet 77

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Active recreation
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 78

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 79

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
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Study area and noise sensitive receivers

Figure C1- Sheet 80

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

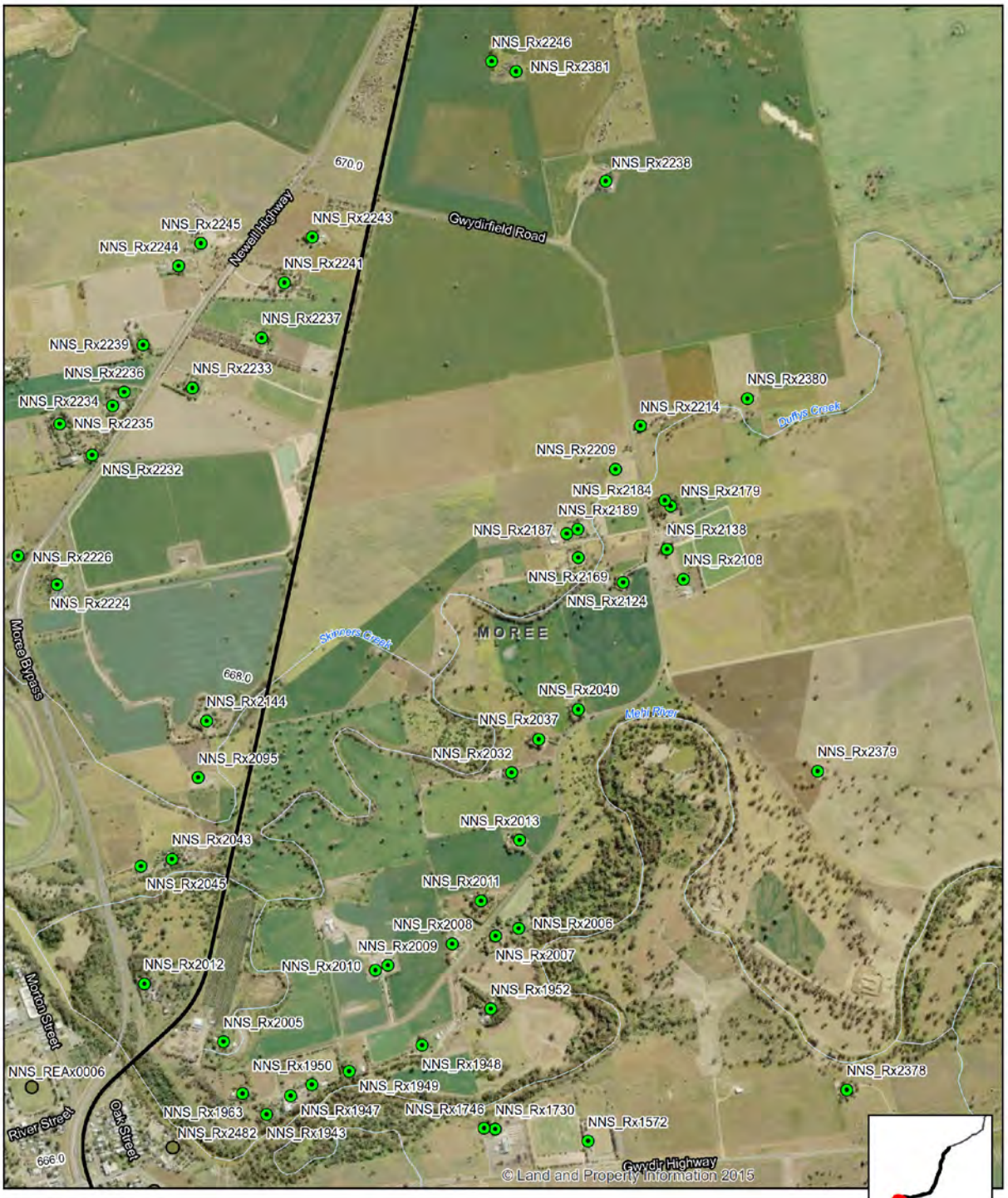
Study area and noise sensitive receivers

Figure C1- Sheet 81

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

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Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 82

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

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Inland Rail - Narrabri to North Star

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Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 83

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 84

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd

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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

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Inland Rail - Narrabri to North Star

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Study area and noise sensitive receivers

Figure C1- Sheet 85

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 86

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

The proposal

Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 87

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

The proposal

Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 88

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

The proposal

Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 89

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 90

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 91

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 92

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

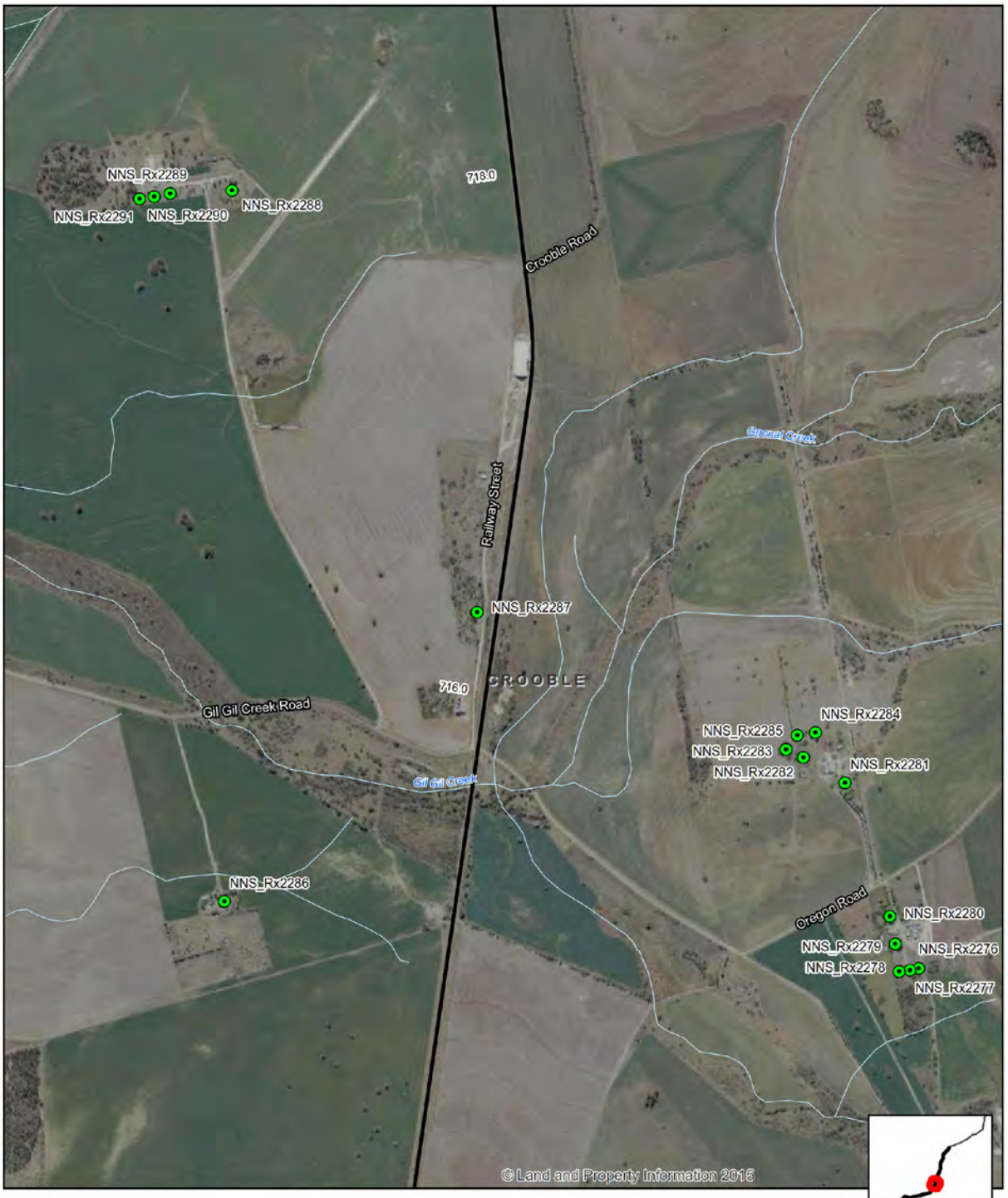
Study area and noise sensitive receivers

Figure C1- Sheet 93

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 94

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 95

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 96

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 97

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 98

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers

Figure C1- Sheet 99

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

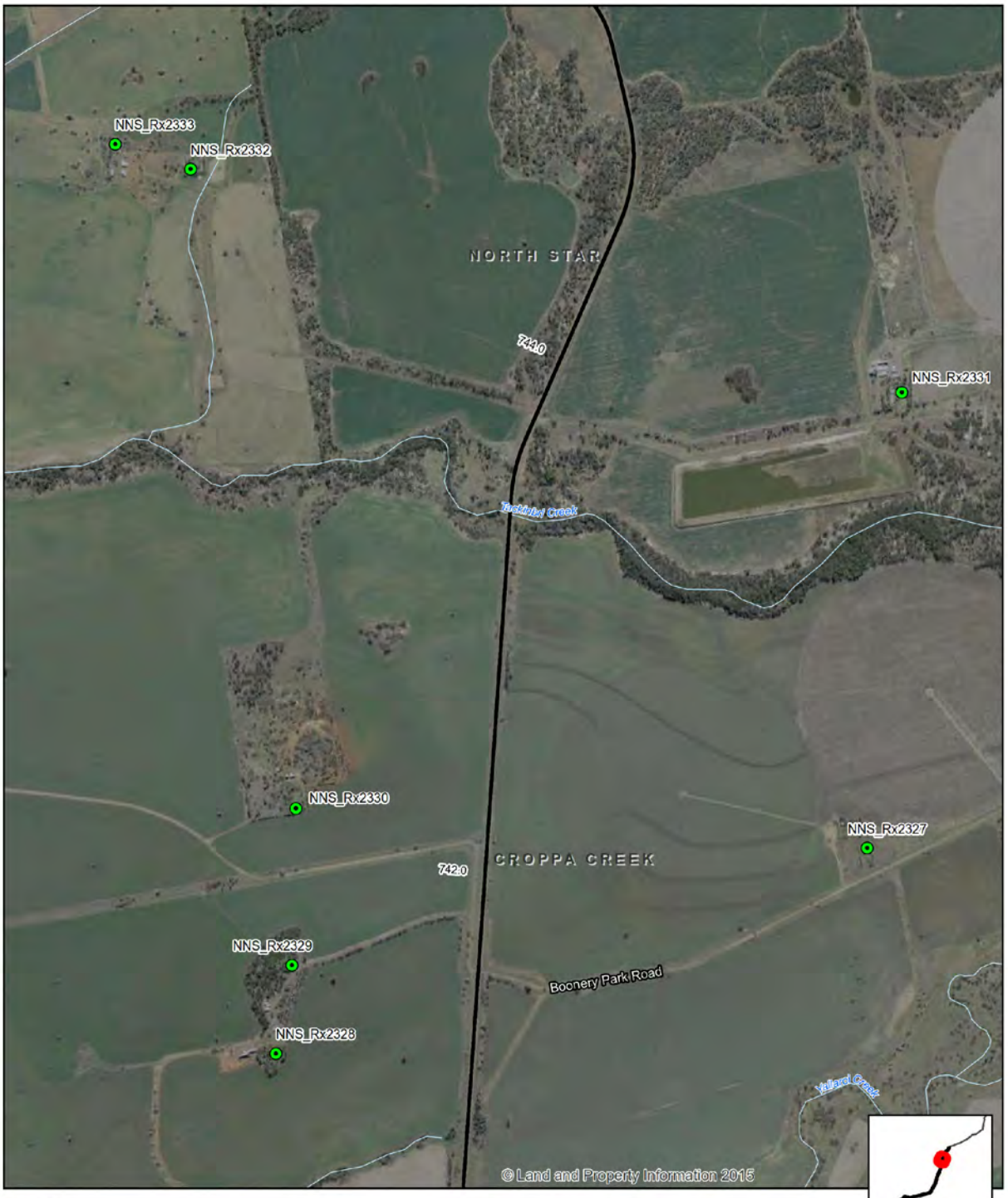
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Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers Figure C1- Sheet 100

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

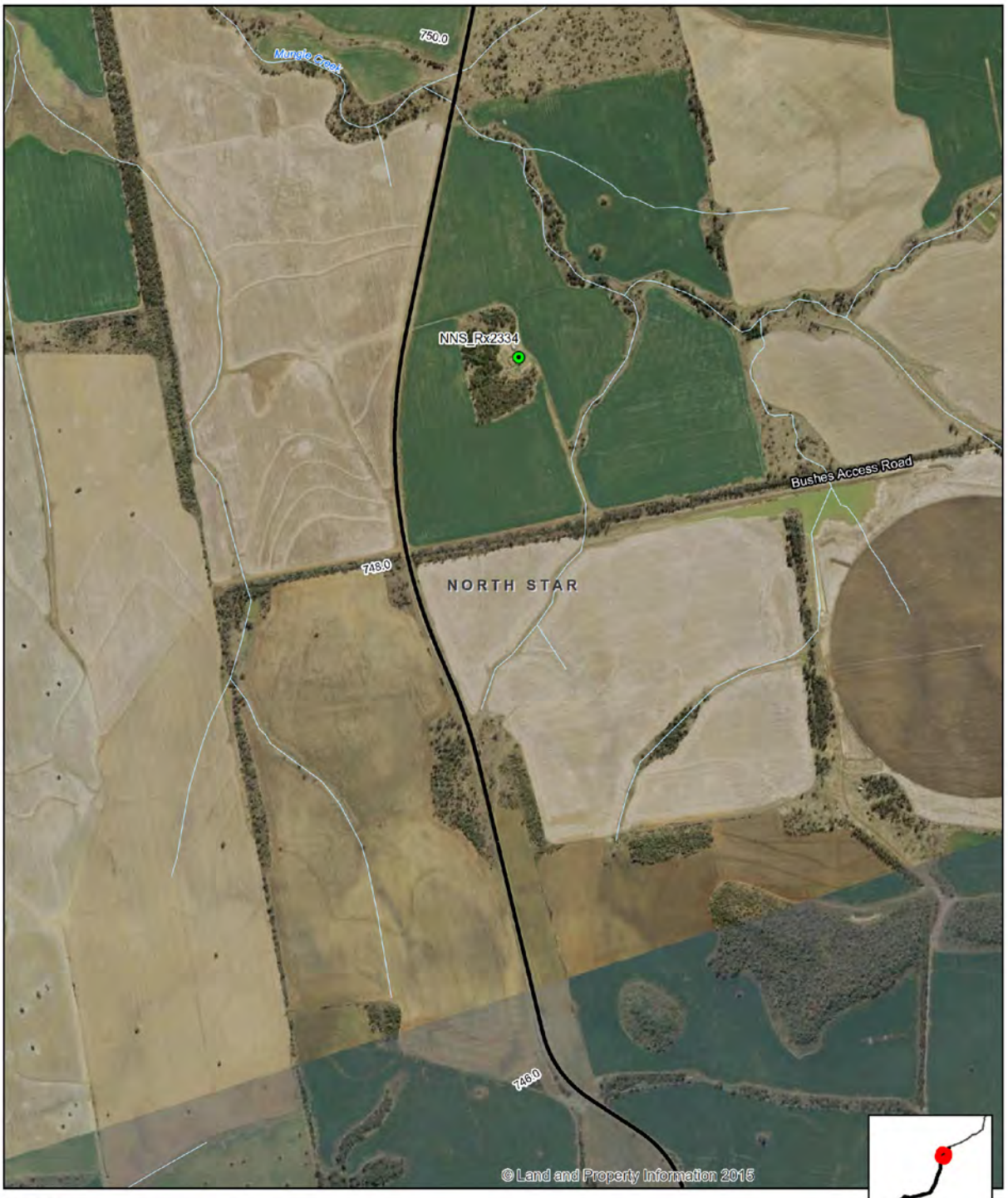
Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers Figure C1- Sheet 101

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers Figure C1- Sheet 102

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and
noise sensitive receivers Figure C1- Sheet 103

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse

Paper Size A4

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers Figure C1- Sheet 104

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Religous
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and
noise sensitive receivers Figure C1- Sheet 105

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse

Paper Size A4

0 5 10 20 30 40

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Study area and noise sensitive receivers Figure C1- Sheet 106

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N002_NNS_SensitiveReceivers_0.mxd Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number | 22-17916
Revision | 0
Date | 02 Jun 2017

Moree noise sensitive receivers

Figure C2- Sheet 1

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

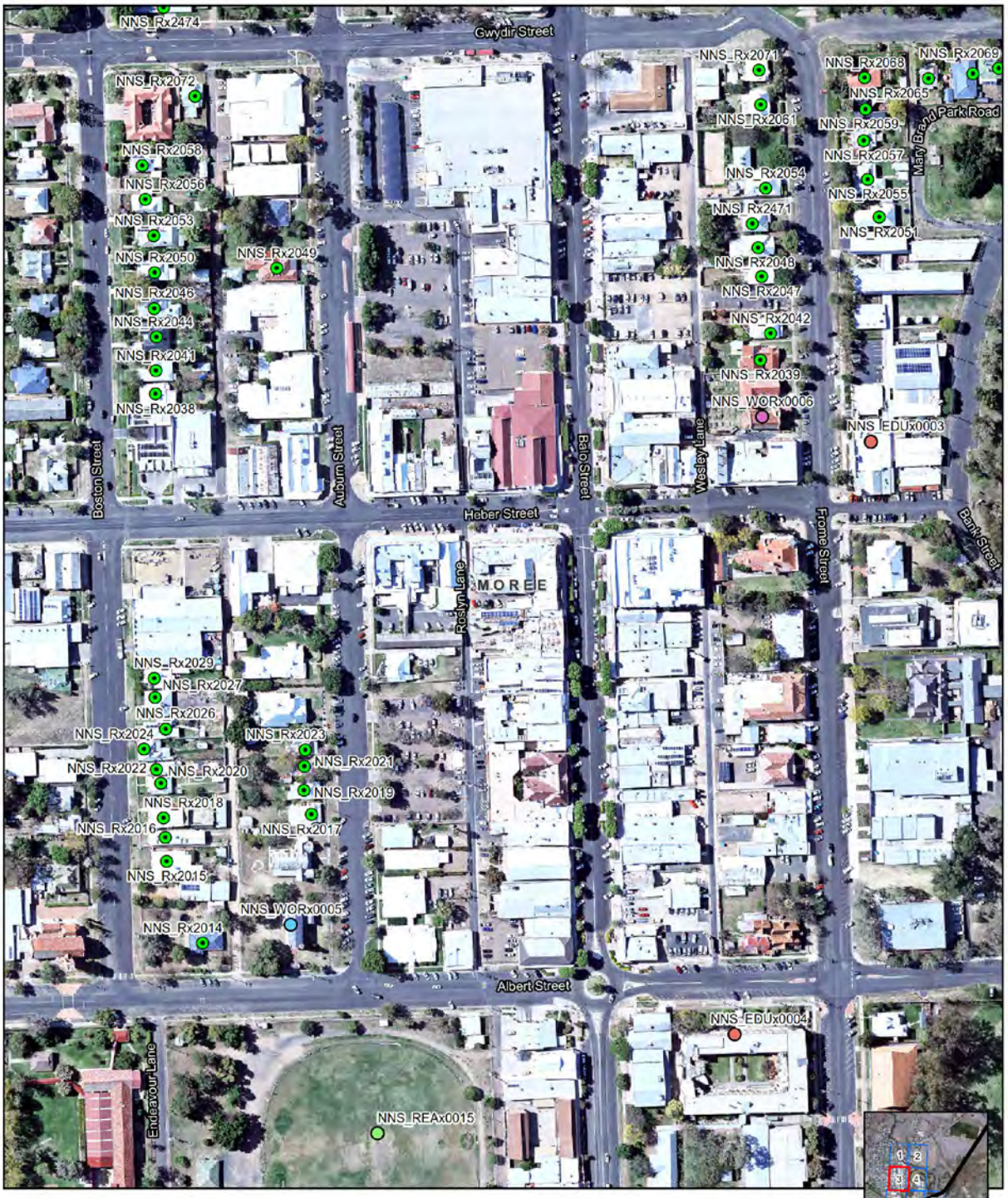
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LEGEND

- Residential receiver
- Active recreation
- Education
- Health
- Religous
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 3

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba





LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 4

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Aged care
- Health
- Passive recreation
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 5

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 6

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

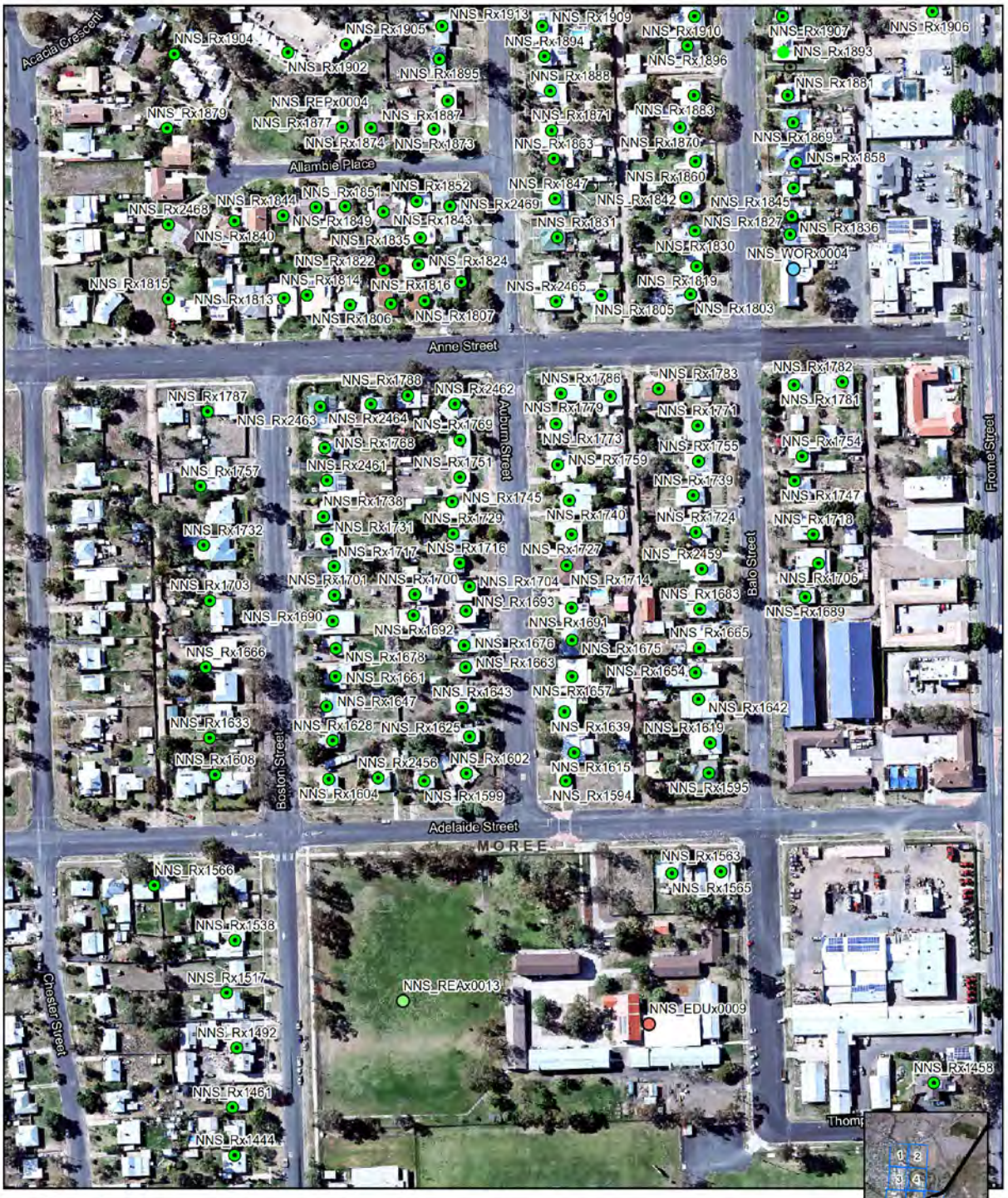
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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Health
- Passive recreation
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 8

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 9

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Passive recreation
- Religous
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Moree noise sensitive receivers

Figure C2- Sheet 10

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LEGEND

- Residential receiver
- Passive recreation
- Religous
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure C2- Sheet 11

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Moree noise sensitive receivers

Figure C2- Sheet 12

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LEGEND

- Residential receiver
- Active recreation
- Education
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

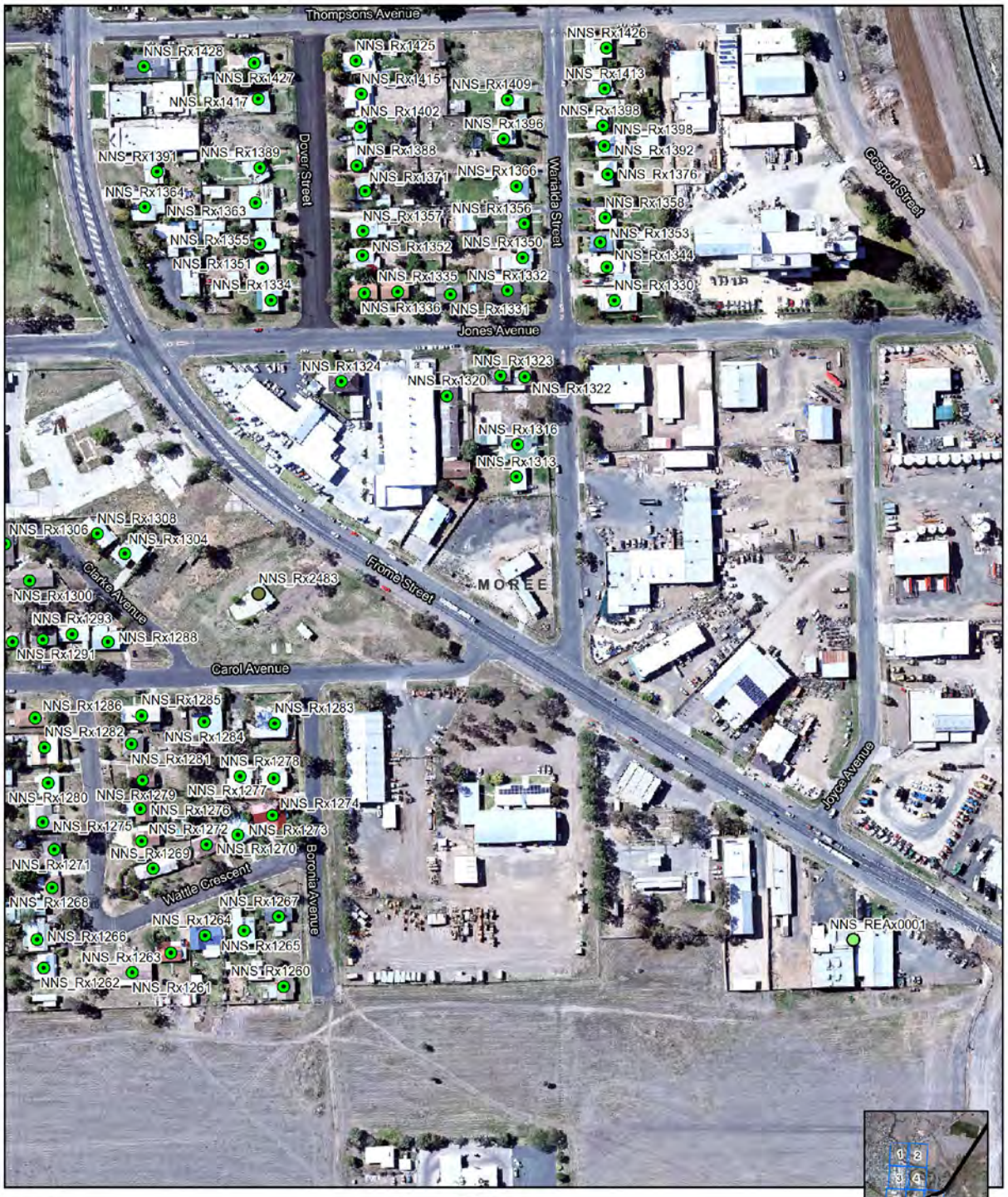
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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Passive recreation
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
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Date 02 Jun 2017

Figure C2- Sheet 14

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Data source: LPI: DTDB, 2012. ARTC: Imagery, 2015. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Moree noise sensitive receivers

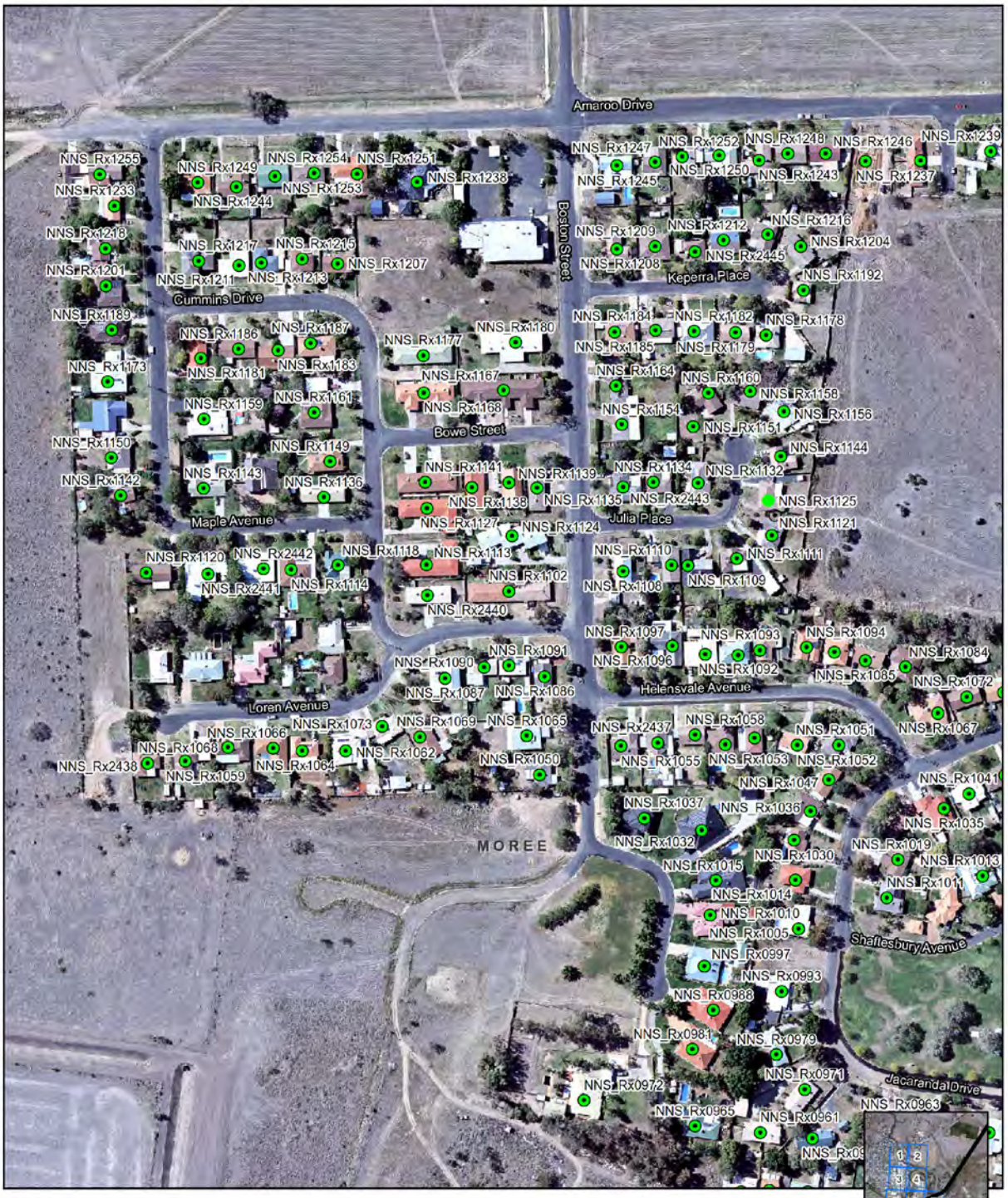
Figure C2- Sheet 15

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
Date 02 Jun 2017

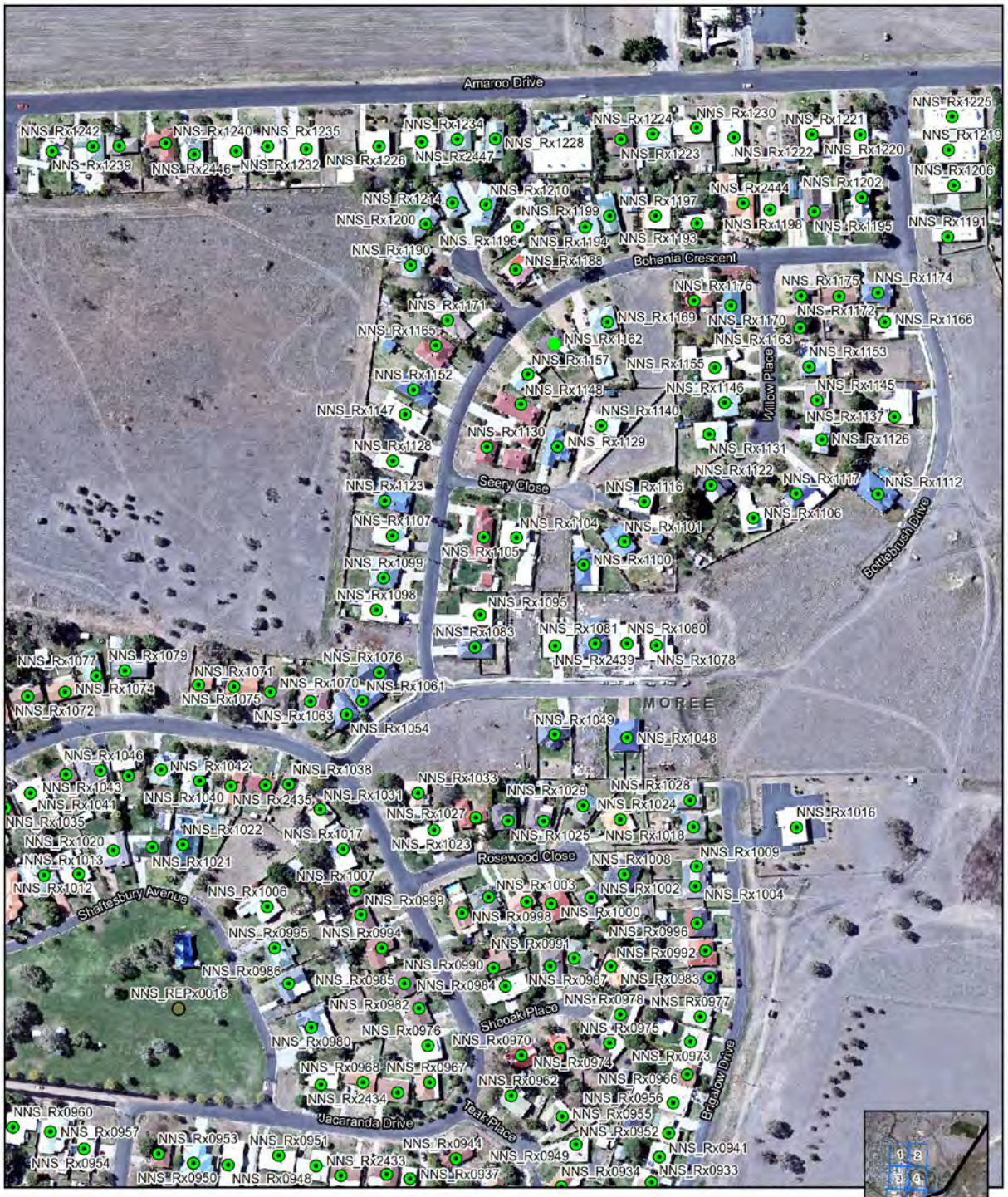
Figure C2- Sheet 16

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LEGEND

- Residential receiver
- Passive recreation
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Moree noise sensitive receivers

Figure C2- Sheet 17

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LEGEND

- Residential receiver
- Watercourse

Paper Size A4

0 10 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Moree noise sensitive receivers

Job Number 22-17916
Revision 0
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Figure C2- Sheet 18

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Appendix D – Operational rail noise, table of results

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_EDUx0001	775376.5	6735267	33	33	37	37	33	33	47	47	33	33	49	49	15.8	15.8	70	70
NNS_EDUx0002	775574.5	6735297	35	35	39	39	35	35	49	49	35	35	51	51	16	16	72	72
NNS_EDUx0003	775756.2	6737387	22	22	27	27	22	22	48	48	22	22	49	49	26.8	26.8	69	69
NNS_EDUx0004	775660.7	6737053	24	24	30	30	24	24	49	49	24	24	50	50	25.5	25.5	69	69
NNS_EDUx0005	779222.4	6740668	8	8	10	10	8	8	59	59	8	8	62	62	54.1	54.1	85	85
NNS_EDUx0006	830763.9	6795354	-	-	-	-	-	-	61	61	-	-	65	65	64.6	64.6	82	87
NNS_EDUx0007	822056.8	6773631	-	-	-	-	-	-	57	57	-	-	60	60	59.6	59.6	82	82
NNS_EDUx0008	769937.4	6686968	38	38	42	42	38	38	51	51	38	38	54	54	15.3	15.3	70	71
NNS_EDUx0009	775486.4	6735780	32	32	37	37	32	32	48	48	32	32	51	51	18.8	18.8	64	69
NNS_HOSx0001	775372.1	6736505	27	27	33	33	27	27	47	47	27	27	49	49	22.3	22.3	64	67
NNS_REAx0001	776110.1	6735168	44	44	48	48	44	44	57	57	44	44	60	60	15.6	15.6	80	80
NNS_REAx0002	775317.5	6735605	30	30	36	36	30	30	46	46	30	30	49	49	18.5	18.5	62	66
NNS_REAx0003	770402.4	6686754	34	34	37	37	34	34	45	45	34	34	48	48	14.4	14.4	66	66
NNS_REAx0004	831369.2	6795126	-	-	-	-	-	-	48	48	-	-	51	51	50.7	50.7	70	70
NNS_REAx0005	776375.5	6738005	19	19	23	23	19	19	48	48	19	19	50	50	31.3	31.3	70	70
NNS_REAx0006	776122.1	6736842	28	28	34	34	28	28	58	58	28	28	58	58	30.4	30.4	75	80
NNS_REAx0007	775348.5	6736899	24	24	30	30	24	24	46	46	24	24	48	48	23.3	23.3	63	65
NNS_REAx0008	776150.1	6736311	39	39	46	46	39	39	68	68	39	39	71	71	31.6	31.6	93	95
NNS_REAx0009	775563.7	6735635	34	34	38	38	34	34	49	49	34	34	52	52	17.8	17.8	67	70
NNS_REAx0010	775523.5	6735236	35	35	39	39	35	35	48	48	35	35	51	51	15.8	15.8	71	71
NNS_REAx0011	777275.4	6731747	34	34	39	39	34	34	48	48	34	34	51	51	17	17	61	69
NNS_REAx0012	776101.7	6737289	23	23	29	29	23	23	51	51	23	23	53	53	29.1	29.1	72	72
NNS_REAx0013	775346.5	6735800	30	30	36	36	30	30	47	47	30	30	49	49	19	19	63	67
NNS_REAx0014	775816.8	6736981	26	26	31	31	26	26	51	51	26	26	52	52	26.4	26.4	71	71
NNS_REAx0015	775453.7	6737007	24	24	29	29	24	24	47	47	24	24	48	48	24.2	24.2	68	68
NNS_REAx0016	776037.2	6736096	42	42	47	47	42	42	57	57	42	42	60	60	17.9	17.9	77	84
NNS_REAx0017	769929.4	6686886	38	38	42	42	38	38	51	51	38	38	54	54	15.7	15.7	66	72
NNS_REAx0018	785069.4	6744063	-	-	-	-	-	-	55	55	-	-	58	58	58.3	58.3	77	77
NNS_REAx0019	822003.7	6773763	-	-	-	-	-	-	59	59	-	-	62	62	61.6	61.6	86	86
NNS_REPx0001	775863.6	6737528	21	21	27	27	21	21	48	48	21	21	49	49	27.5	27.5	69	69
NNS_REPx0002	822064.8	6773866	-	-	-	-	-	-	58	58	-	-	61	61	61	61	79	81
NNS_REPx0003	821543.3	6773918	-	-	-	-	-	-	54	54	-	-	57	57	57.3	57.3	80	80
NNS_REPx0004	775297.2	6736308	28	28	33	33	28	28	47	47	28	28	49	49	21	21	67	67
NNS_REPx0005	776134	6736215	44	44	51	51	44	44	66	66	44	44	69	69	24.4	24.4	93	93
NNS_REPx0006	776905.3	6735665	34	34	39	39	34	34	50	50	34	34	53	53	18.3	18.3	67	70
NNS_REPx0007	775650.6	6736474	30	30	35	35	30	30	51	51	30	30	53	53	23	23	68	72
NNS_REPx0008	770277.3	6707461	40	40	43	43	40	40	51	51	40	40	53	53	13.1	13.1	75	75
NNS_REPx0009	775654	6736793	27	27	32	32	27	27	50	50	27	27	51	51	24.6	24.6	67	70
NNS_REPx0010	775846.1	6736582	30	30	36	36	30	30	54	54	30	30	56	56	25.4	25.4	75	76
NNS_REPx0011	831180.5	6794811	-	-	-	-	-	-	49	49	-	-	52	52	52.2	52.2	68	70
NNS_REPx0012	776417.6	6736305	36	36	41	41	36	36	57	57	36	36	58	58	22.8	22.8	77	77
NNS_REPx0013	776954.5	6735877	32	32	38	38	32	32	50	50	32	32	52	52	19.7	19.7	70	70
NNS_REPx0014	769446.8	6686954	53	53	57	57	53	53	66	66	53	53	69	69	15.9	15.9	91	96
NNS_REPx0015	769657.9	6686953	42	42	46	46	42	42	55	55	42	42	58	58	15.7	15.7	72	78

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_REPx0016	775550.7	6734454	32	32	37	37	32	32	46	46	32	32	49	49	17.1	17.1	62	66
NNS_Rx0001	769016.3	6640187	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0002	769368.6	6640213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0003	768925.2	6640219	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0004	768915.9	6640292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0005	768384.1	6640599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0006	768365.7	6640604	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0007	768346.9	6640615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0008	768462.7	6640625	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0009	768329.7	6640628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0010	768483.9	6640633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0011	768619.3	6640636	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0012	768508.9	6640639	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0013	768525	6640650	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0014	768548.1	6640657	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0015	768583.7	6640670	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0016	768272.2	6640673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0017	768671.7	6640674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0018	768564.9	6640685	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0019	768660.4	6640686	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0020	768232.6	6640700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0021	768548.8	6640701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0022	768625.9	6640708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0023	768264.7	6640710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0024	768692.1	6640713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0025	768534.4	6640714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0026	768615	6640722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0027	768283.5	6640722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0028	768706.5	6640726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0029	768515.2	6640727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0030	768301.1	6640729	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0031	768199	6640730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0032	768323	6640735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0033	768604.4	6640739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0034	768717.1	6640743	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0035	768493.7	6640744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0036	768174.3	6640744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0037	768337.5	6640746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0038	768213.5	6640748	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0039	768586.4	6640749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0040	768660.4	6640749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0041	768159.1	6640753	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0042	768728.1	6640755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0043	768351.6	6640756	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0044	768480.8	6640757	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0045	768576.6	6640760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0046	768652.5	6640762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0048	768234.6	6640763	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0049	768266.7	6640766	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0050	768739.8	6640771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0054	768635.7	6640777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0055	768281.6	6640778	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0056	768409.1	6640781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0057	768544.9	6640784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0058	768751.2	6640784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0059	768306.6	6640785	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0060	768427.5	6640790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0061	768693.2	6640791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0063	768325.8	6640792	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0064	768764.5	6640798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0065	768529.7	6640799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0067	768676.8	6640803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0069	768343.8	6640810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0070	768785.2	6640811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0071	768516.4	6640813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0072	768661.5	6640816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0073	768713.6	6640816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0074	768363.7	6640817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0075	768588	6640817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0076	768795	6640824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0078	768398.2	6640825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0079	768647.1	6640830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0080	768571.1	6640830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0081	768727.7	6640834	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0082	768489.8	6640835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0083	768815.3	6640837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0084	768631.8	6640841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0085	768560.2	6640842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0086	768832.6	6640842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0087	768472.1	6640848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0088	768698.8	6640849	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0089	768544.1	6640855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0090	768618.1	6640856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0091	768457.3	6640863	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0092	768761.7	6640866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0093	768680.7	6640868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0094	768602.5	6640868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0096	768526.9	6640869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0097	768781.1	6640880	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0098	768585.6	6640881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0099	768429.9	6640882	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0100	768513.6	6640883	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0101	768666.1	6640884	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0102	768796	6640887	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0104	768649.6	6640893	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0105	768495.2	6640894	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0106	768819.8	6640896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0107	768575.5	6640897	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0108	768720.1	6640902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0109	768636.3	6640903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0110	768559	6640908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0111	768480.8	6640908	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0112	768702.6	6640912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0113	768927.4	6640920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0114	768622.9	6640921	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0115	768548.5	6640922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0116	768691.2	6640926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0117	768603.9	6640927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0118	768534.8	6640940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0119	768675	6640941	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0120	768215.4	6640942	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0121	768591.8	6640951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0122	768206.1	6640959	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0123	768672.8	6640967	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0124	768263.3	6640969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0125	768199.3	6640972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0126	768607.1	6640974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0127	768313.6	6640985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0128	768258.2	6640985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0129	768694.1	6640988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0130	768192.6	6640989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0131	768625.8	6640989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0132	768702	6640999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0133	768346.7	6641003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0134	768304.3	6641004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0135	768184.9	6641006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0136	768639.1	6641006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0137	768252.2	6641009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0138	768717.2	6641013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0139	768365.3	6641014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0140	768650.2	6641018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0141	768172.7	6641021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0142	768243.8	6641023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0143	768877.5	6641025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0144	768298	6641026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0145	768404.6	6641031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0146	768348.3	6641033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0147	768662.6	6641037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0148	768165.9	6641037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0149	768427.5	6641039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0150	768233.6	6641042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0151	768289.1	6641044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0152	768776.7	6641045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0153	768675.5	6641047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0154	768161.7	6641053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0155	768798.7	6641053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0156	768404.2	6641056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0157	768690.4	6641059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0158	768224.7	6641059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0159	768278.1	6641064	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0160	768466.5	6641065	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0161	768393.2	6641072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0162	768715.8	6641072	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0163	768158.7	6641074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0164	768220.9	6641078	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0165	768273	6641080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0166	768149.4	6641081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0167	768456.7	6641085	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0168	768385.2	6641087	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0169	768204	6641095	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0170	768259.9	6641100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0171	768448.3	6641101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0172	768378.4	6641103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0173	768143.9	6641105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0174	768198.9	6641113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0175	768523.6	6641114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0176	768250.6	6641116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0177	768440.2	6641119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0178	768132.4	6641119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0179	768372.1	6641120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0180	768505.4	6641126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0181	768426.2	6641132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0183	768360.2	6641136	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0184	768244.2	6641137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0185	768125.2	6641140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0186	768494.8	6641144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0187	768536.3	6641147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0188	768176.5	6641147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0189	768416.9	6641153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0191	768114.2	6641154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0192	768236.6	6641157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0193	768492.3	6641161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0194	768552	6641166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0195	768346.7	6641169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0196	768226	6641169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0197	768170.1	6641172	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0199	768416.5	6641179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0200	768480.8	6641181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0201	768566.8	6641182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0202	768339	6641188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0203	768158.7	6641190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0204	768405.5	6641191	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0205	768577.4	6641199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0207	768330.6	6641201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0208	768199.3	6641209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0209	768399.6	6641212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0210	768214.6	6641215	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0211	768467.3	6641220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0212	768320.8	6641222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0213	768232.4	6641223	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0214	768501.2	6641225	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0215	768592.6	6641232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0216	768392.8	6641233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0217	768515.6	6641235	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0218	768253.5	6641237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0219	768537.6	6641242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0220	768285.7	6641247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0221	768553.2	6641249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0223	768157	6641255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0224	768066.4	6641257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0225	768310.7	6641260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0226	768571	6641262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0227	768323.4	6641264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0228	768593.5	6641267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0229	768148.1	6641268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0230	768433.4	6641269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0231	768454.2	6641269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0232	768059.6	6641275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0233	768339	6641279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0234	768356.8	6641281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0236	768473.2	6641282	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0237	768371.2	6641289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0238	768140.1	6641289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0239	768488.5	6641293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0240	768052	6641294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0241	768204.9	6641301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0242	768507.1	6641301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0243	768126.9	6641306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0244	768527.4	6641307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0245	768281.8	6641309	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0246	768412.3	6641313	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0247	768049.9	6641314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0248	768548.6	6641316	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0249	768194.5	6641317	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0250	768435.1	6641323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0251	768566.8	6641323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0252	768122.3	6641325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0253	768449.5	6641327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0254	768268.8	6641328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0255	768033.8	6641333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0256	768472	6641334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0257	768337	6641334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0258	768186.5	6641335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0259	768107	6641341	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0260	768486.8	6641344	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0261	768026.2	6641346	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0262	768263.4	6641348	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0263	768325.9	6641351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0265	768510.1	6641352	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0266	768366.9	6641355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0267	768019.8	6641355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0268	768524	6641359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0269	768380.5	6641360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0270	768109.2	6641366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0271	768543.9	6641369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0272	768318.9	6641369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0275	768014.8	6641370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0276	768400.2	6641371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0277	768417.7	6641380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0278	768099.4	6641382	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0279	768007.6	6641384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0280	768242.1	6641385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0281	768308.4	6641386	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0282	768433.5	6641387	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0283	768163	6641389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0284	768449.1	6641396	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0285	768237	6641400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0286	768470.7	6641403	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0287	768153.8	6641406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0288	768299.9	6641410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0289	768487.2	6641412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0290	768080	6641413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0291	768335.1	6641420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0293	768144.6	6641425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0294	768353.5	6641425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0295	768375.8	6641428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0296	767997.3	6641432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0297	768391.9	6641434	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0298	768214.5	6641437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0299	768281.1	6641441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0300	769819.1	6641445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0301	768408.1	6641448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0302	768143.5	6641449	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0303	767984.6	6641452	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0304	768425	6641455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0305	768214.5	6641457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0306	768277	6641460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0307	768437.7	6641461	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0308	768058.5	6641465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0309	768311.3	6641465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0310	767967.8	6641465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0311	768327.5	6641472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0312	768457.4	6641474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0314	768270	6641476	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0315	768345.6	6641478	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0316	768049.7	6641481	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0317	768355.1	6641485	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0318	768262.4	6641489	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0319	768641.7	6641490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0320	768119.9	6641491	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0321	768372.3	6641493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0322	768040.3	6641497	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0323	768390	6641497	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0324	767953.3	6641504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0325	768263.4	6641504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0326	768097.8	6641509	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0327	768293.2	6641510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0328	768403.1	6641511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0329	768418.9	6641516	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0330	768174.8	6641517	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0331	768305	6641521	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0332	768435.4	6641523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0333	767943.5	6641523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0334	768034.6	6641523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0335	768322.4	6641525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0336	768091.4	6641525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0337	768337	6641532	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0338	768025.3	6641536	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0339	768366.5	6641537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0340	768086.7	6641538	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0341	768347.8	6641538	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0342	767934.9	6641539	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0343	768171.1	6641540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0344	768456.4	6641543	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0345	768080	6641546	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0346	768385.9	6641548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0347	768231	6641549	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0348	768015	6641555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0349	768249.1	6641556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0350	768162.8	6641557	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0351	768397.7	6641557	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0352	767928.4	6641559	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0353	768075	6641564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0354	768263.9	6641569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0356	768412	6641572	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0357	768152	6641573	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0358	768288.5	6641575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0359	767983.9	6641575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0360	768442.7	6641576	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0361	768302.5	6641579	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0362	768076.6	6641583	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0363	768008	6641586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0364	768211.5	6641588	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0365	768323.7	6641589	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0366	768460.5	6641593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0367	768233.8	6641594	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0368	768151.5	6641595	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0369	768485.1	6641598	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0370	768065.5	6641602	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0371	768252.2	6641604	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0372	768364.9	6641610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0373	768142.6	6641613	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0374	768268.5	6641614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0375	768287.4	6641618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0376	768329.9	6641618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0377	768052.2	6641618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0378	768380.7	6641621	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0379	768197.8	6641627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0380	768396.7	6641628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0381	768417.2	6641631	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0382	768134.6	6641631	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0383	767894.3	6641633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0384	768428.9	6641637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0385	768188	6641643	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0386	768449.1	6641644	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0387	768120.1	6641644	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0388	768235.1	6641645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0389	767966	6641647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0390	767892.2	6641651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0391	768246.3	6641654	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0392	768465.4	6641654	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0393	768267.2	6641656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0394	768182.3	6641657	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0395	768490.2	6641664	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0396	767886.2	6641665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0397	767963.9	6641669	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0398	768282.5	6641671	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0399	768507.6	6641674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0401	768028.2	6641676	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0402	768302.2	6641679	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0403	768411	6641680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0405	767956.4	6641681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0406	767866	6641682	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0407	768206.1	6641690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0408	767948.1	6641693	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0409	768214.9	6641694	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0410	768227.6	6641698	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0411	767868.1	6641701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0413	768242.9	6641706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0414	768033.1	6641710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0415	767943.7	6641711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0416	768267.7	6641712	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0417	768487.4	6641715	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0418	768285.6	6641718	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0419	768008.2	6641725	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0420	767932.1	6641732	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0421	767855.4	6641735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0422	768001	6641739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0423	768189.5	6641748	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0424	767926.9	6641748	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0425	769384.8	6641753	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0426	767988.8	6641762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0427	767919.4	6641764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0428	769076.3	6641764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0429	767890.9	6641786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0430	768056.7	6641786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0431	768299.6	6641797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0432	768339	6641814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0433	768355.8	6641822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0434	767957.4	6641824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0435	768045.3	6641826	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0436	767982.3	6641837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0437	767852.8	6641844	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0438	767999.9	6641849	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0439	768336.6	6641852	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0440	768026.1	6641853	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0441	767881.4	6641854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0442	768091.9	6641855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0443	768397.3	6641857	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0444	767870.4	6641867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0445	768330.2	6641868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0446	768086.4	6641871	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0447	767930.1	6641875	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0448	768321.9	6641881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0449	768831.7	6641883	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0450	768076.9	6641889	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0451	767921.5	6641893	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0452	768313.9	6641898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0453	768114.2	6641899	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0454	768867.4	6641901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0455	767915.3	6641904	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0456	768131.2	6641909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0457	768308.2	6641911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0458	768151.5	6641916	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0459	767911.5	6641916	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0460	768169.1	6641923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0461	767904.1	6641927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0462	768301.4	6641931	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0463	768189.5	6641932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0464	767966.9	6641933	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0465	768204.5	6641934	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0466	767989.8	6641943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0467	768048.5	6641943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0468	767900.3	6641947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0469	768292.4	6641948	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0470	768232.5	6641950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0471	767972	6641957	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0472	768083	6641960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0473	768284.6	6641962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0474	767893.7	6641967	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0475	768275.5	6641980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0476	767972.2	6641981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0477	768033.5	6641983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0478	767887.5	6641984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0479	768159.7	6641985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0480	768176.8	6641997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0481	767963.3	6641998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0482	768197	6642000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0483	768021	6642002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0484	767879.9	6642003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0485	768217.9	6642010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0486	767951.8	6642014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0487	767865.3	6642020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0488	768010.5	6642023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0489	768256.2	6642024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0491	767943.4	6642034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0492	767721.8	6642037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0493	767738	6642041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0494	768252.3	6642042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0495	767756.8	6642051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0496	767937	6642054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0497	767702.5	6642058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0498	768241.4	6642061	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0499	768059.2	6642065	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0500	767769.2	6642066	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0501	767929.4	6642070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0502	767782.2	6642073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0503	769062.6	6642073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0504	768079.1	6642076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0505	767689	6642077	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0506	768233.5	6642079	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0507	768092.4	6642080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0508	767831.4	6642084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0509	768106.4	6642089	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0510	767847.3	6642091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0511	767978.9	6642093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0512	768223.5	6642096	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0513	768128.9	6642099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0514	767997.7	6642100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0515	767861.3	6642100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0516	767765.2	6642101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0517	767682.7	6642102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0518	768147.8	6642104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0519	768013.8	6642106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0520	768057.2	6642112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0521	768168.2	6642114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0522	768211.5	6642114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0523	767757.8	6642116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0524	767907.3	6642118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0525	768030.7	6642120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0526	767816	6642124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0527	768051.1	6642127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0528	768068.2	6642131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0529	768206.4	6642134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0530	767748.3	6642134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0531	767813.9	6642138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0532	767661	6642140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0533	768083.7	6642145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0534	767835.6	6642151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0535	767975.1	6642151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0536	768110.5	6642151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0537	768197	6642153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0538	767888.5	6642153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0539	767742.2	6642154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0540	767951.5	6642156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0541	768125.3	6642157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0542	767800.2	6642159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0543	767656.2	6642160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0544	767996.2	6642167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0545	768145.2	6642168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0546	767729.5	6642169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0547	767879.8	6642170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0548	768187	6642171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0549	767643.3	6642175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0550	767963.9	6642176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0551	767791.7	6642178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0552	768044.6	6642182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0553	768018.2	6642182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0554	768179.6	6642186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0555	767725	6642186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0556	768062.4	6642188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0557	767872.1	6642190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0558	767934.3	6642193	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0559	767636.1	6642194	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0560	768077.2	6642196	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0561	767785.3	6642199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0562	768087.2	6642202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0563	767713.9	6642207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0564	767864.2	6642207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0565	768098.9	6642210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0566	767971.3	6642215	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0567	767926.4	6642216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0568	768117.1	6642217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0570	767986.2	6642221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0571	768137.2	6642226	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0572	767709.7	6642227	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0573	767857.3	6642230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0574	767917.4	6642232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0575	767767.6	6642233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0576	768002.8	6642233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0577	768148.6	6642244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0578	768024.3	6642245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0579	767849.4	6642248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0581	767916.6	6642250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0582	768041.5	6642251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0583	768167.4	6642254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0584	768061.3	6642258	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0585	767781.6	6642259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0586	767655.9	6642264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0587	768071.1	6642266	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0588	767898.6	6642269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0590	768097.3	6642275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0591	767834	6642278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0592	767606.4	6642278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0593	767886.7	6642291	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0594	767587.7	6642297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0595	767681	6642298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0596	767728.6	6642301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0597	767674.6	6642305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0598	767758.2	6642311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0599	767892.2	6642312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0600	767580.7	6642313	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0601	767658.1	6642329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0602	767716.2	6642329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0603	767943	6642330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0604	767574	6642333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0605	767999.1	6642334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0606	767812.8	6642334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0607	767958.6	6642335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0608	769263.8	6642340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0609	767649.2	6642345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0610	767972.7	6642347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0611	767709.3	6642349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0612	767560.3	6642354	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0613	767805.8	6642355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0614	767643.2	6642358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0615	768014.6	6642358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0616	767857.4	6642358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0617	767875.5	6642363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0618	768027.3	6642363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0619	767701.3	6642367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0620	767791.5	6642367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0621	767890.1	6642371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0622	768049.6	6642373	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0623	767908.8	6642381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0624	767781.3	6642382	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0625	767641.3	6642385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0626	768062.9	6642385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0627	767698.8	6642388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0628	767936.4	6642389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0629	768075.6	6642391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0630	767953.6	6642398	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0631	767776.6	6642399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0632	767627.7	6642400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0633	768116.9	6642400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0634	768091.5	6642401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0635	767682.6	6642402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0636	767831.7	6642408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0637	767963.4	6642410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0638	767613.1	6642413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0639	767768	6642422	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0640	768002.2	6642423	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0641	767675.6	6642426	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0642	767829.4	6642427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0643	767609.9	6642430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0644	768019.6	6642431	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0645	767756.9	6642437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0646	768039.6	6642441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0647	767671.8	6642441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0648	767819.6	6642445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0649	767520.3	6642450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0650	768058.4	6642451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0651	767747.7	6642454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0652	767662.9	6642457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0653	767510.2	6642469	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0654	767811.1	6642477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0655	767745.8	6642478	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0656	767497.8	6642483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0657	767588.3	6642484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0658	767728.3	6642490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0659	767585.1	6642501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0660	767495.3	6642505	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0661	768498.7	6642512	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0662	767574.3	6642518	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0663	767628.9	6642523	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0664	767493.4	6642528	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0665	768489.7	6642533	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0666	767621	6642535	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0667	767565.4	6642539	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0668	767712.3	6642540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0669	767474.6	6642544	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0670	767619.1	6642546	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0671	768478.8	6642548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0672	767558.8	6642555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0673	767616.9	6642558	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0674	767472.1	6642562	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0675	768472.8	6642565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0676	767546.4	6642572	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0677	767692.4	6642574	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0678	767458.7	6642577	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0679	767608.9	6642582	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0680	768465.1	6642583	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0681	767446	6642589	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0682	767682.9	6642590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0683	767540	6642593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0684	767606.1	6642600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0685	768459.8	6642603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0686	767529.2	6642609	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0687	767441.9	6642615	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0688	767595.3	6642618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0689	767525.7	6642628	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0690	767583.2	6642632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0691	767491.8	6642635	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0692	767514.3	6642643	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0693	767578.4	6642656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0694	767565.7	6642673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0695	767401.5	6642693	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0696	767489.3	6642694	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0697	767506.8	6642702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0698	767522.4	6642711	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0699	767394.6	6642716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0700	767372.1	6642749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0701	767363.4	6642774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0702	767327.9	6642835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0703	767951.8	6642842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0704	767908.7	6642891	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0705	767799	6642901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0706	766851.3	6643307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0707	766831.1	6643325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0708	766772.3	6643364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0709	766751.2	6643385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0710	766690.7	6643437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0711	766665.8	6643451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0712	766639.8	6643472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0713	766622.7	6643488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0714	766610.5	6643502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0715	770162.7	6643919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0716	770606.7	6643969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx0717	770251.2	6645262	31	31	35	35	31	31	43	43	31	31	46	46	15.1	15.1	67	67
NNS_Rx0718	768944.8	6646456	48	48	52	52	48	48	60	60	48	48	63	63	14.8	14.8	86	86
NNS_Rx0719	769712.3	6647433	40	40	45	45	40	40	54	54	40	40	57	57	17.1	17.1	69	75
NNS_Rx0720	769938.3	6647903	44	44	47	47	44	44	55	55	44	44	58	58	14.2	14.2	79	79
NNS_Rx0721	771520.9	6649354	27	27	32	32	27	27	41	41	27	27	44	44	17	17	56	59
NNS_Rx0722	770143.1	6649968	42	42	46	46	42	42	55	55	42	42	58	58	15.9	15.9	75	77
NNS_Rx0723	769332	6650136	37	37	42	42	37	37	51	51	37	37	54	54	16.7	16.7	70	74
NNS_Rx0724	770485.5	6650230	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx0725	769966.1	6650941	42	42	46	46	42	42	56	56	42	42	59	59	17	17	71	79
NNS_Rx0726	769767.8	6651069	38	38	43	43	38	38	52	52	38	38	55	55	16.7	16.7	68	73
NNS_Rx0727	770552.4	6651254	41	41	47	47	41	41	56	56	41	41	59	59	17.6	17.6	71	80
NNS_Rx0728	772163.4	6654164	32	32	35	35	32	32	42	42	32	32	45	45	13.1	13.1	67	67
NNS_Rx0729	772166.2	6654202	32	32	35	35	32	32	42	42	32	32	45	45	13	13	67	67
NNS_Rx0730	772195.4	6654360	32	32	35	35	32	32	42	42	32	32	45	45	13.1	13.1	67	67
NNS_Rx0731	769694.1	6656429	32	32	34	34	32	32	42	42	32	32	45	45	13.6	13.6	65	65
NNS_Rx0732	769741.6	6656652	31	31	34	34	31	31	42	42	31	31	45	45	14.2	14.2	64	64

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0733	770429.6	6657780	33	33	37	37	33	33	45	45	33	33	48	48	15.4	15.4	63	64
NNS_Rx0734	770197.4	6657797	33	33	36	36	33	33	44	44	33	33	47	47	14	14	68	68
NNS_Rx0735	771851.3	6658349	42	42	44	44	42	42	53	53	42	42	56	56	14.2	14.2	77	77
NNS_Rx0736	771927.5	6658421	39	39	43	43	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx0737	770741.2	6662094	42	42	46	46	42	42	55	55	42	42	57	57	15.3	15.3	74	77
NNS_Rx0738	770690.4	6662096	43	43	47	47	43	43	56	56	43	43	59	59	15.6	15.6	75	79
NNS_Rx0739	770782.5	6663619	35	35	39	39	35	35	47	47	35	35	50	50	15.5	15.5	64	68
NNS_Rx0740	767751.3	6664564	29	29	31	31	29	29	39	39	29	29	42	42	12.7	12.7	65	65
NNS_Rx0741	769515.6	6665067	46	46	50	50	46	46	58	58	46	46	61	61	14.8	14.8	82	82
NNS_Rx0742	769869.8	6665132	46	46	49	49	46	46	58	58	46	46	61	61	14.3	14.3	82	82
NNS_Rx0743	769855.9	6665174	46	46	49	49	46	46	58	58	46	46	61	61	14.7	14.7	82	82
NNS_Rx0744	769723.1	6665184	49	49	53	53	49	49	63	63	49	49	65	65	15.9	15.9	83	89
NNS_Rx0745	769723.1	6665202	49	49	53	53	49	49	63	63	49	49	65	65	16	16	83	89
NNS_Rx0746	769863.5	6665224	46	46	49	49	46	46	58	58	46	46	60	60	14.6	14.6	81	81
NNS_Rx0747	769863	6665295	45	45	48	48	45	45	57	57	45	45	60	60	15	15	80	80
NNS_Rx0748	769745.2	6665311	45	45	49	49	45	45	58	58	45	45	61	61	15.8	15.8	79	82
NNS_Rx0749	769840.9	6665335	44	44	48	48	44	44	58	58	44	44	60	60	16	16	76	81
NNS_Rx0750	770725.7	6665675	34	34	37	37	34	34	45	45	34	34	48	48	14.2	14.2	68	68
NNS_Rx0751	770078.6	6665815	40	40	43	43	40	40	52	52	40	40	55	55	15	15	72	73
NNS_Rx0752	769665.8	6667616	42	42	47	47	42	42	55	55	42	42	58	58	15.8	15.8	76	79
NNS_Rx0753	767473.5	6668093	31	31	33	33	31	31	40	40	31	31	43	43	12	12	65	65
NNS_Rx0754	769515.5	6670040	42	42	45	45	42	42	54	54	42	42	57	57	14.1	14.1	78	78
NNS_Rx0755	770104.7	6670345	36	36	38	38	36	36	46	46	36	36	49	49	13.2	13.2	70	70
NNS_Rx0756	768529.5	6670369	41	41	44	44	41	41	52	52	41	41	55	55	13.6	13.6	75	75
NNS_Rx0757	768755.1	6670374	44	44	47	47	44	44	55	55	44	44	58	58	14.5	14.5	79	79
NNS_Rx0758	767335.7	6670466	30	30	33	33	30	30	41	41	30	30	43	43	13.6	13.6	62	62
NNS_Rx0759	767314.6	6670489	31	31	33	33	31	31	41	41	31	31	44	44	13	13	65	65
NNS_Rx0760	769413.7	6672210	40	40	43	43	40	40	52	52	40	40	55	55	14.3	14.3	72	72
NNS_Rx0761	767799.7	6674966	35	35	37	37	35	35	44	44	35	35	47	47	12.6	12.6	68	68
NNS_Rx0762	771110.1	6678554	26	26	30	30	26	26	39	39	26	26	42	42	15.6	15.6	55	57
NNS_Rx0763	770358.2	6678835	33	33	36	36	33	33	45	45	33	33	48	48	15.4	15.4	64	65
NNS_Rx0764	770551.6	6678869	31	31	35	35	31	31	43	43	31	31	46	46	15.1	15.1	64	64
NNS_Rx0765	770159.8	6680532	37	37	40	40	37	37	48	48	37	37	51	51	13.8	13.8	72	72
NNS_Rx0766	769297.9	6684556	52	52	54	54	52	52	63	63	52	52	66	66	13.4	13.4	85	88
NNS_Rx0767	769301.5	6684642	52	52	54	54	52	52	63	63	52	52	66	66	13.3	13.3	89	89
NNS_Rx0768	769723.9	6686577	42	42	45	45	42	42	55	55	42	42	57	57	15.8	15.8	70	77
NNS_Rx0769	769782.6	6686589	40	40	44	44	40	40	53	53	40	40	56	56	15.8	15.8	68	76
NNS_Rx0770	769701.2	6686622	42	42	46	46	42	42	55	55	42	42	58	58	15.9	15.9	71	78
NNS_Rx0771	769719.1	6686625	42	42	46	46	42	42	55	55	42	42	58	58	15.9	15.9	70	77
NNS_Rx0772	769672.1	6686627	43	43	47	47	43	43	56	56	43	43	59	59	15.9	15.9	72	79
NNS_Rx0773	769814.1	6686631	40	40	44	44	40	40	53	53	40	40	56	56	15.6	15.6	68	75
NNS_Rx0774	769778.4	6686634	41	41	44	44	41	41	54	54	41	41	56	56	15.7	15.7	68	76
NNS_Rx0775	769859.8	6686682	39	39	43	43	39	39	52	52	39	39	55	55	15.7	15.7	67	73
NNS_Rx0776	769778.6	6686693	40	40	44	44	40	40	54	54	40	40	56	56	15.8	15.8	69	75

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0777	769725.5	6686699	42	42	45	45	42	42	55	55	42	42	57	57	15.8	15.8	70	77
NNS_Rx0778	769515.6	6686737	49	49	52	52	49	49	62	62	49	49	65	65	16.1	16.1	81	87
NNS_Rx0779	769786.5	6686743	40	40	44	44	40	40	53	53	40	40	56	56	15.7	15.7	68	75
NNS_Rx0780	769941.2	6686751	37	37	41	41	37	37	51	51	37	37	53	53	15.9	15.9	65	71
NNS_Rx0781	769723.3	6686769	42	42	45	45	42	42	55	55	42	42	57	57	15.8	15.8	70	77
NNS_Rx0782	769857.7	6686782	39	39	43	43	39	39	52	52	39	39	55	55	15.4	15.4	68	73
NNS_Rx0783	769570.4	6686803	45	45	49	49	45	45	58	58	45	45	61	61	15.8	15.8	77	83
NNS_Rx0784	769647.1	6686809	43	43	47	47	43	43	56	56	43	43	59	59	15.9	15.9	73	80
NNS_Rx0785	769864.6	6686817	39	39	43	43	39	39	52	52	39	39	55	55	15.6	15.6	66	73
NNS_Rx0786	769499.8	6686819	49	49	53	53	49	49	62	62	49	49	65	65	16	16	83	89
NNS_Rx0787	768931.7	6686824	40	40	43	43	40	40	52	52	40	40	55	55	14.6	14.6	73	73
NNS_Rx0788	769782.6	6686841	40	40	44	44	40	40	53	53	40	40	56	56	16	16	68	75
NNS_Rx0789	769860.9	6686847	39	39	43	43	39	39	52	52	39	39	55	55	15.5	15.5	66	73
NNS_Rx0790	769572	6686850	44	44	48	48	44	44	58	58	44	44	60	60	16.3	16.3	76	81
NNS_Rx0792	770295.1	6686863	34	34	38	38	34	34	46	46	34	34	49	49	15.2	15.2	64	66
NNS_Rx0793	769803.7	6686912	40	40	44	44	40	40	53	53	40	40	56	56	15.7	15.7	68	74
NNS_Rx0794	769496.2	6686911	49	49	52	52	49	49	62	62	49	49	65	65	16	16	84	88
NNS_Rx0795	769571.9	6686924	44	44	47	47	44	44	57	57	44	44	59	59	15.9	15.9	76	81
NNS_Rx0796	769786.8	6686953	40	40	44	44	40	40	53	53	40	40	56	56	15.6	15.6	69	75
NNS_Rx0797	769499.6	6686959	48	48	52	52	48	48	61	61	48	48	64	64	15.9	15.9	83	88
NNS_Rx0798	769565.6	6686961	43	43	47	47	43	43	56	56	43	43	59	59	15.8	15.8	76	80
NNS_Rx0799	769860.8	6686977	39	39	43	43	39	39	52	52	39	39	55	55	15.4	15.4	70	73
NNS_Rx0800	769490.8	6687002	49	49	53	53	49	49	62	62	49	49	65	65	15.8	15.8	85	90
NNS_Rx0801	769653.5	6687006	42	42	46	46	42	42	55	55	42	42	58	58	15.7	15.7	73	77
NNS_Rx0802	769725.5	6687010	41	41	45	45	41	41	54	54	41	41	57	57	15.6	15.6	70	76
NNS_Rx0803	769854.6	6687021	40	40	43	43	40	40	52	52	40	40	55	55	15	15	71	73
NNS_Rx0804	769727.6	6687049	41	41	45	45	41	41	54	54	41	41	57	57	15.8	15.8	71	76
NNS_Rx0805	769584.3	6687074	40	40	44	44	40	40	53	53	40	40	56	56	15.6	15.6	76	79
NNS_Rx0806	769563.1	6687083	43	43	47	47	43	43	56	56	43	43	59	59	15.7	15.7	76	81
NNS_Rx0807	769844.7	6687093	39	39	43	43	39	39	52	52	39	39	55	55	15.6	15.6	69	73
NNS_Rx0808	769783.4	6687111	40	40	44	44	40	40	53	53	40	40	56	56	16.1	16.1	71	74
NNS_Rx0809	769714.1	6687113	41	41	45	45	41	41	54	54	41	41	57	57	15.6	15.6	74	76
NNS_Rx0810	769665.5	6687120	42	42	46	46	42	42	55	55	42	42	58	58	15.6	15.6	73	78
NNS_Rx0811	769639.8	6687129	42	42	46	46	42	42	55	55	42	42	58	58	15.4	15.4	73	78
NNS_Rx0812	769520.4	6687131	45	45	48	48	45	45	58	58	45	45	61	61	15.9	15.9	79	83
NNS_Rx0813	769583.9	6687170	43	43	47	47	43	43	56	56	43	43	59	59	15.5	15.5	77	79
NNS_Rx0814	769809.6	6687180	40	40	44	44	40	40	53	53	40	40	56	56	15.4	15.4	74	75
NNS_Rx0815	769727.6	6687186	41	41	45	45	41	41	54	54	41	41	57	57	15.6	15.6	74	77
NNS_Rx0816	769582.2	6687190	43	43	47	47	43	43	56	56	43	43	59	59	15.5	15.5	76	79
NNS_Rx0817	769511.1	6687198	48	48	51	51	48	48	60	60	48	48	63	63	15.6	15.6	82	88
NNS_Rx0818	769643.4	6687204	42	42	46	46	42	42	55	55	42	42	57	57	15.6	15.6	75	78
NNS_Rx0819	769510.3	6687224	50	50	53	53	50	50	61	61	50	50	64	64	14.7	14.7	85	88
NNS_Rx0820	769724	6687241	42	42	45	45	42	42	54	54	42	42	57	57	15.4	15.4	74	77
NNS_Rx0821	769648.4	6687245	43	43	46	46	43	43	55	55	43	43	58	58	14.8	14.8	77	77

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0822	769508	6687244	50	50	53	53	50	50	62	62	50	50	65	65	14.7	14.7	86	89
NNS_Rx0823	769508.8	6687265	50	50	53	53	50	50	62	62	50	50	65	65	14.4	14.4	87	89
NNS_Rx0824	769581.1	6687269	45	45	48	48	45	45	56	56	45	45	59	59	14.2	14.2	82	82
NNS_Rx0825	769721.2	6687288	42	42	46	46	42	42	55	55	42	42	57	57	15.5	15.5	75	78
NNS_Rx0826	769664.1	6687292	43	43	47	47	43	43	56	56	43	43	59	59	15.2	15.2	77	80
NNS_Rx0827	769498.7	6687293	52	52	55	55	52	52	63	63	52	52	66	66	14.2	14.2	90	90
NNS_Rx0828	770960.2	6687358	30	30	33	33	30	30	41	41	30	30	44	44	13.7	13.7	62	62
NNS_Rx0829	769641.1	6687362	44	44	48	48	44	44	56	56	44	44	59	59	14.9	14.9	79	80
NNS_Rx0830	769581.8	6687362	48	48	51	51	48	48	59	59	48	48	62	62	14.2	14.2	85	85
NNS_Rx0831	769643.2	6687394	45	45	48	48	45	45	56	56	45	45	59	59	13.8	13.8	83	83
NNS_Rx0832	769515.6	6687418	52	52	54	54	52	52	63	63	52	52	66	66	13.8	13.8	88	88
NNS_Rx0833	769582.2	6687420	46	46	49	49	46	46	57	57	46	46	60	60	13.9	13.9	81	83
NNS_Rx0834	769561.5	6687457	49	49	51	51	49	49	59	59	49	49	62	62	13.3	13.3	85	85
NNS_Rx0835	769505.7	6687458	52	52	55	55	52	52	64	64	52	52	66	66	13.9	13.9	87	89
NNS_Rx0836	769581	6687484	48	48	50	50	48	48	59	59	48	48	62	62	13.8	13.8	83	83
NNS_Rx0837	769510.2	6687556	52	52	54	54	52	52	63	63	52	52	66	66	13.7	13.7	87	88
NNS_Rx0838	769515.6	6687824	50	50	53	53	50	50	62	62	50	50	65	65	14.9	14.9	84	88
NNS_Rx0839	769886.6	6687850	41	41	44	44	41	41	52	52	41	41	55	55	14.1	14.1	76	76
NNS_Rx0840	768446.6	6688286	36	36	38	38	36	36	46	46	36	36	49	49	12.8	12.8	70	70
NNS_Rx0841	769252.9	6689283	45	45	49	49	45	45	58	58	45	45	61	61	15.3	15.3	78	83
NNS_Rx0842	769119.8	6690462	41	41	45	45	41	41	54	54	41	41	57	57	16.7	16.7	70	78
NNS_Rx0843	769613.7	6693047	43	43	48	48	43	43	57	57	43	43	60	60	17.8	17.8	74	83
NNS_Rx0844	768399.6	6695421	31	31	36	36	31	31	45	45	31	31	48	48	16.4	16.4	65	65
NNS_Rx0845	770685.5	6696155	30	30	35	35	30	30	44	44	30	30	47	47	16.3	16.3	59	63
NNS_Rx0846	770833.3	6696190	29	29	34	34	29	29	42	42	29	29	45	45	16.2	16.2	58	62
NNS_Rx0847	770473	6698685	34	34	38	38	34	34	46	46	34	34	49	49	15.4	15.4	65	66
NNS_Rx0848	770259.1	6706094	40	40	43	43	40	40	52	52	40	40	54	54	14.7	14.7	70	73
NNS_Rx0849	770509.9	6706164	46	46	48	48	46	46	57	57	46	46	59	59	13.6	13.6	82	82
NNS_Rx0850	770320.2	6706350	41	41	44	44	41	41	52	52	41	41	55	55	13.4	13.4	76	76
NNS_Rx0851	770478.6	6706457	43	43	47	47	43	43	55	55	43	43	57	57	13.7	13.7	77	77
NNS_Rx0852	769077.4	6706786	28	28	31	31	28	28	40	40	28	28	42	42	14.6	14.6	57	57
NNS_Rx0853	770549.8	6706815	45	45	48	48	45	45	56	56	45	45	58	58	13.5	13.5	80	80
NNS_Rx0854	770373.6	6706816	41	41	44	44	41	41	52	52	41	41	55	55	13.8	13.8	77	77
NNS_Rx0855	770081.1	6706846	38	38	41	41	38	38	49	49	38	38	51	51	13.1	13.1	72	72
NNS_Rx0856	770476.2	6706858	43	43	46	46	43	43	54	54	43	43	56	56	13.6	13.6	79	79
NNS_Rx0857	770182.7	6706861	39	39	41	41	39	39	50	50	39	39	52	52	13.5	13.5	71	71
NNS_Rx0858	770033.8	6706943	38	38	41	41	38	38	49	49	38	38	51	51	12.6	12.6	72	72
NNS_Rx0859	770779	6707134	52	52	55	55	52	52	63	63	52	52	66	66	13.9	13.9	89	89
NNS_Rx0860	770791	6707193	54	54	55	55	54	54	64	64	54	54	66	66	12.7	12.7	92	92
NNS_Rx0861	770712.6	6707213	48	48	50	50	48	48	59	59	48	48	61	61	13.1	13.1	86	86
NNS_Rx0862	770796	6707241	53	53	55	55	53	53	64	64	53	53	66	66	12.9	12.9	92	92
NNS_Rx0863	770799.1	6707269	53	53	55	55	53	53	64	64	53	53	66	66	13.6	13.6	91	91
NNS_Rx0864	770646.1	6707329	45	45	48	48	45	45	57	57	45	45	60	60	14.2	14.2	80	80
NNS_Rx0865	770509.6	6707335	43	43	45	45	43	43	54	54	43	43	57	57	13.9	13.9	78	78

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0866	770364.9	6707339	42	42	44	44	42	42	52	52	42	42	55	55	13	13	76	76
NNS_Rx0867	770794	6707372	51	51	54	54	51	51	63	63	51	51	66	66	14.3	14.3	85	88
NNS_Rx0868	770719.2	6707492	46	46	48	48	46	46	57	57	46	46	60	60	13.8	13.8	81	81
NNS_Rx0869	773300.5	6712366	31	31	33	33	31	31	41	41	31	31	44	44	12.6	12.6	65	65
NNS_Rx0870	769692.1	6713431	30	30	32	32	30	30	40	40	30	30	43	43	12.7	12.7	65	65
NNS_Rx0871	771075.3	6713993	37	37	40	40	37	37	49	49	37	37	52	52	15.1	15.1	69	69
NNS_Rx0872	772187.6	6714320	42	42	46	46	42	42	55	55	42	42	58	58	16.3	16.3	71	78
NNS_Rx0873	771021.2	6714688	36	36	39	39	36	36	47	47	36	36	50	50	14	14	71	71
NNS_Rx0874	770982.5	6714791	36	36	38	38	36	36	46	46	36	36	49	49	13.7	13.7	71	71
NNS_Rx0875	772505.2	6715270	39	39	43	43	39	39	52	52	39	39	55	55	15.9	15.9	71	74
NNS_Rx0876	772465.1	6718167	38	38	43	43	38	38	52	52	38	38	55	55	16.9	16.9	67	74
NNS_Rx0877	772091.4	6720101	32	32	35	35	32	32	42	42	32	32	45	45	13.1	13.1	66	66
NNS_Rx0878	772495.2	6720139	35	35	37	37	35	35	45	45	35	35	48	48	13	13	68	68
NNS_Rx0879	772404	6720236	34	34	36	36	34	34	44	44	34	34	47	47	12.8	12.8	68	68
NNS_Rx0880	772759.9	6724295	26	26	31	31	26	26	39	39	26	26	42	42	16.6	16.6	56	57
NNS_Rx0881	774070	6726975	32	32	36	36	32	32	45	45	32	32	48	48	16	16	63	65
NNS_Rx0882	773840.7	6727284	29	29	34	34	29	29	42	42	29	29	45	45	16.2	16.2	55	61
NNS_Rx0883	773661.9	6727383	29	29	33	33	29	29	41	41	29	29	44	44	14.9	14.9	63	63
NNS_Rx0884	773190.7	6727634	24	24	29	29	24	24	37	37	24	24	40	40	16.2	16.2	53	55
NNS_Rx0885	775930	6729006	47	47	49	49	47	47	58	58	47	47	61	61	14.4	14.4	83	83
NNS_Rx0886	774771.3	6729085	36	36	39	39	36	36	47	47	36	36	49	49	13.2	13.2	71	71
NNS_Rx0887	776307.9	6730373	51	51	54	54	51	51	63	63	51	51	65	65	13.7	13.7	87	87
NNS_Rx0888	776399.1	6730383	45	45	47	47	45	45	56	56	45	45	59	59	14.6	14.6	80	81
NNS_Rx0889	776373.8	6730395	44	44	47	47	44	44	56	56	44	44	58	58	14.3	14.3	80	80
NNS_Rx0890	776354.1	6730409	47	47	50	50	47	47	58	58	47	47	61	61	13.3	13.3	81	81
NNS_Rx0891	776340	6730414	49	49	51	51	49	49	59	59	49	49	62	62	13.3	13.3	84	84
NNS_Rx0892	776313.2	6730410	52	52	54	54	52	52	63	63	52	52	66	66	13.7	13.7	86	88
NNS_Rx0893	776407.4	6730455	45	45	47	47	45	45	56	56	45	45	59	59	14.5	14.5	77	81
NNS_Rx0894	776386.8	6730460	37	37	39	39	37	37	47	47	37	37	50	50	12.6	12.6	71	72
NNS_Rx0895	776368.7	6730467	45	45	47	47	45	45	56	56	45	45	59	59	13.1	13.1	83	83
NNS_Rx0896	776359.5	6730483	47	47	50	50	47	47	58	58	47	47	61	61	13.6	13.6	84	84
NNS_Rx0897	776327.8	6730479	52	52	55	55	52	52	63	63	52	52	66	66	13.8	13.8	87	89
NNS_Rx0898	776333.3	6730531	53	53	55	55	53	53	64	64	53	53	67	67	13.6	13.6	90	90
NNS_Rx0899	777263.9	6731578	35	35	39	39	35	35	48	48	35	35	51	51	16	16	68	69
NNS_Rx0900	774707.1	6732068	30	30	32	32	30	30	40	40	30	30	43	43	13.5	13.5	64	64
NNS_Rx0901	774748.9	6732132	30	30	33	33	30	30	41	41	30	30	43	43	13.3	13.3	64	64
NNS_Rx0902	775744.4	6734158	34	34	39	39	34	34	48	48	34	34	51	51	17.2	17.2	63	68
NNS_Rx0903	775643	6734242	33	33	38	38	33	33	47	47	33	33	50	50	17.2	17.2	62	67
NNS_Rx0904	775601.1	6734254	33	33	38	38	33	33	47	47	33	33	49	49	16.8	16.8	62	66
NNS_Rx0905	775651.4	6734257	33	33	38	38	33	33	47	47	33	33	50	50	17.3	17.3	62	67
NNS_Rx0906	775488.8	6734258	32	32	37	37	32	32	46	46	32	32	48	48	16.8	16.8	61	65
NNS_Rx0907	775624.8	6734258	33	33	38	38	33	33	47	47	33	33	50	50	16.9	16.9	62	66
NNS_Rx0908	775527.1	6734266	32	32	37	37	32	32	46	46	32	32	49	49	16.8	16.8	61	65
NNS_Rx0909	775590.9	6734269	33	33	37	37	33	33	47	47	33	33	49	49	16.8	16.8	62	66

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0910	775793.6	6734278	34	34	39	39	34	34	49	49	34	34	51	51	17.2	17.2	64	69
NNS_Rx0911	775762.4	6734291	35	35	40	40	35	35	49	49	35	35	51	51	16	16	71	71
NNS_Rx0912	775743.3	6734292	34	34	39	39	34	34	48	48	34	34	51	51	16.8	16.8	65	68
NNS_Rx0913	775730.6	6734292	34	34	39	39	34	34	48	48	34	34	51	51	16.9	16.9	63	68
NNS_Rx0914	775710.5	6734294	34	34	39	39	34	34	48	48	34	34	51	51	17	17	64	68
NNS_Rx0915	775691	6734301	34	34	39	39	34	34	48	48	34	34	50	50	16.9	16.9	64	67
NNS_Rx0917	775800.5	6734302	35	35	40	40	35	35	49	49	35	35	52	52	17.1	17.1	64	69
NNS_Rx0918	775646	6734307	33	33	38	38	33	33	47	47	33	33	50	50	16.8	16.8	64	67
NNS_Rx0919	775660.3	6734308	33	33	38	38	33	33	47	47	33	33	50	50	16.8	16.8	64	67
NNS_Rx0920	775622.7	6734314	34	34	38	38	34	34	47	47	34	34	50	50	16	16	70	70
NNS_Rx0922	775593.6	6734316	34	34	38	38	34	34	47	47	34	34	50	50	16.1	16.1	70	70
NNS_Rx0923	775573.5	6734320	32	32	37	37	32	32	46	46	32	32	49	49	17.2	17.2	62	66
NNS_Rx0924	775555.5	6734323	32	32	37	37	32	32	46	46	32	32	49	49	17.2	17.2	62	66
NNS_Rx0925	775809.5	6734328	35	35	40	40	35	35	49	49	35	35	52	52	16.9	16.9	64	69
NNS_Rx0926	775539.1	6734328	32	32	37	37	32	32	46	46	32	32	49	49	17.3	17.3	62	66
NNS_Rx0928	775487.7	6734336	32	32	37	37	32	32	46	46	32	32	49	49	16.8	16.8	61	65
NNS_Rx0929	775736.9	6734336	35	35	39	39	35	35	48	48	35	35	51	51	15.9	15.9	71	71
NNS_Rx0930	775475	6734337	32	32	37	37	32	32	46	46	32	32	48	48	16.8	16.8	61	65
NNS_Rx0931	775455.7	6734340	31	31	36	36	31	31	46	46	31	31	48	48	16.8	16.8	61	65
NNS_Rx0932	775727.4	6734341	35	35	39	39	35	35	48	48	35	35	51	51	15.9	15.9	71	71
NNS_Rx0933	775815.8	6734341	35	35	40	40	35	35	49	49	35	35	52	52	16.9	16.9	64	69
NNS_Rx0934	775764.2	6734341	36	36	40	40	36	36	49	49	36	36	51	51	15.9	15.9	72	72
NNS_Rx0935	775435.7	6734346	33	33	37	37	33	33	46	46	33	33	48	48	15.7	15.7	69	69
NNS_Rx0937	775677.8	6734350	33	33	38	38	33	33	48	48	33	33	50	50	17.2	17.2	63	67
NNS_Rx0938	775664.5	6734353	33	33	38	38	33	33	47	47	33	33	50	50	17.1	17.1	63	67
NNS_Rx0939	775398.6	6734354	33	33	37	37	33	33	45	45	33	33	48	48	14.8	14.8	69	69
NNS_Rx0940	775638.5	6734354	33	33	38	38	33	33	47	47	33	33	50	50	17.2	17.2	63	67
NNS_Rx0941	775821.1	6734355	35	35	40	40	35	35	49	49	35	35	52	52	17	17	65	69
NNS_Rx0942	775383.1	6734356	33	33	37	37	33	33	45	45	33	33	48	48	14.8	14.8	69	69
NNS_Rx0943	775368.3	6734359	33	33	37	37	33	33	45	45	33	33	48	48	14.8	14.8	69	69
NNS_Rx0944	775704.5	6734360	33	33	39	39	33	33	48	48	33	33	51	51	17.1	17.1	64	68
NNS_Rx0946	775346.1	6734361	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0947	775330.1	6734361	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	68	68
NNS_Rx0948	775574.3	6734364	32	32	37	37	32	32	47	47	32	32	49	49	17.2	17.2	62	66
NNS_Rx0949	775773.7	6734365	36	36	40	40	36	36	49	49	36	36	52	52	15.9	15.9	72	72
NNS_Rx0950	775554.6	6734365	32	32	37	37	32	32	46	46	32	32	49	49	17.1	17.1	62	66
NNS_Rx0951	775603.5	6734367	32	32	38	38	32	32	47	47	32	32	50	50	17.2	17.2	63	66
NNS_Rx0952	775827	6734369	36	36	40	40	36	36	49	49	36	36	52	52	15.9	15.9	72	72
NNS_Rx0953	775534.9	6734372	32	32	37	37	32	32	46	46	32	32	49	49	17.2	17.2	62	66
NNS_Rx0954	775492.3	6734377	32	32	37	37	32	32	46	46	32	32	49	49	16.8	16.8	62	65
NNS_Rx0955	775766.7	6734381	34	34	39	39	34	34	49	49	34	34	51	51	17.1	17.1	65	69
NNS_Rx0956	775830.5	6734386	36	36	41	41	36	36	49	49	36	36	52	52	15.9	15.9	72	72
NNS_Rx0957	775473.5	6734388	33	33	37	37	33	33	46	46	33	33	49	49	15.7	15.7	69	69
NNS_Rx0958	775412.7	6734389	32	32	36	36	32	32	45	45	32	32	48	48	15.7	15.7	69	69

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx0959	775372.2	6734390	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0960	775452.5	6734391	33	33	37	37	33	33	46	46	33	33	48	48	15.7	15.7	69	69
NNS_Rx0961	775342.8	6734395	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0962	775738.2	6734395	34	34	39	39	34	34	48	48	34	34	51	51	16.9	16.9	66	68
NNS_Rx0963	775434.4	6734397	33	33	37	37	33	33	46	46	33	33	48	48	15.7	15.7	69	69
NNS_Rx0964	775673.4	6734400	36	36	39	39	36	36	48	48	36	36	51	51	15.1	15.1	71	71
NNS_Rx0965	775305.8	6734400	33	33	36	36	33	33	45	45	33	33	47	47	14.6	14.6	68	68
NNS_Rx0966	775839.5	6734402	37	37	41	41	37	37	50	50	37	37	52	52	15.8	15.8	73	73
NNS_Rx0967	775691.8	6734405	36	36	39	39	36	36	48	48	36	36	51	51	15.1	15.1	71	71
NNS_Rx0968	775653.7	6734407	35	35	39	39	35	35	48	48	35	35	51	51	15.1	15.1	71	71
NNS_Rx0970	775745.1	6734418	34	34	39	39	34	34	48	48	34	34	51	51	17.1	17.1	65	68
NNS_Rx0971	775369.4	6734418	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0972	775243	6734418	32	32	36	36	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx0973	775842.3	6734420	37	37	41	41	37	37	50	50	37	37	52	52	15.9	15.9	73	73
NNS_Rx0974	775767.4	6734421	35	35	39	39	35	35	49	49	35	35	51	51	16.8	16.8	66	69
NNS_Rx0975	775795.9	6734422	36	36	40	40	36	36	49	49	36	36	52	52	15.8	15.8	72	72
NNS_Rx0976	775691.8	6734426	36	36	39	39	36	36	48	48	36	36	51	51	15.1	15.1	71	71
NNS_Rx0977	775848.6	6734434	37	37	41	41	37	37	50	50	37	37	53	53	15.9	15.9	73	73
NNS_Rx0978	775802.9	6734438	36	36	40	40	36	36	49	49	36	36	52	52	15.9	15.9	73	73
NNS_Rx0979	775354.2	6734439	33	33	37	37	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx0980	775625.8	6734440	33	33	38	38	33	33	47	47	33	33	50	50	17.1	17.1	63	67
NNS_Rx0981	775306.5	6734444	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0982	775688	6734447	34	34	39	39	34	34	48	48	34	34	51	51	17	17	64	68
NNS_Rx0983	775854.9	6734457	37	37	41	41	37	37	50	50	37	37	53	53	15.8	15.8	73	73
NNS_Rx0984	775738.2	6734458	35	35	39	39	35	35	48	48	35	35	51	51	16.4	16.4	67	68
NNS_Rx0985	775680.4	6734462	33	33	38	38	33	33	48	48	33	33	50	50	17	17	64	68
NNS_Rx0986	775614	6734465	33	33	38	38	33	33	47	47	33	33	50	50	17.1	17.1	63	67
NNS_Rx0987	775799.1	6734466	36	36	40	40	36	36	49	49	36	36	52	52	15.6	15.6	73	73
NNS_Rx0988	775319.5	6734466	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx0989	775764.2	6734468	37	37	40	40	37	37	49	49	37	37	52	52	15.1	15.1	72	72
NNS_Rx0990	775731.8	6734468	36	36	40	40	36	36	49	49	36	36	51	51	15.1	15.1	72	72
NNS_Rx0991	775778.2	6734471	37	37	40	40	37	37	49	49	37	37	52	52	15.1	15.1	72	72
NNS_Rx0992	775853.6	6734472	37	37	41	41	37	37	50	50	37	37	53	53	15.8	15.8	73	73
NNS_Rx0993	775359.3	6734475	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx0994	775668.3	6734483	33	33	38	38	33	33	48	48	33	33	50	50	17	17	64	67
NNS_Rx0995	775607.3	6734486	34	34	38	38	34	34	47	47	34	34	50	50	16	16	70	70
NNS_Rx0996	775849.5	6734488	37	37	41	41	37	37	50	50	37	37	53	53	15.8	15.8	73	73
NNS_Rx0997	775315.7	6734491	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx0998	775715.3	6734501	36	36	40	40	36	36	49	49	36	36	51	51	14.9	14.9	72	72
NNS_Rx0999	775657.5	6734503	33	33	38	38	33	33	48	48	33	33	50	50	17	17	64	67
NNS_Rx1000	775766.7	6734503	37	37	40	40	37	37	49	49	37	37	52	52	15	15	72	72
NNS_Rx1001	775752.8	6734505	37	37	40	40	37	37	49	49	37	37	52	52	15.1	15.1	72	72
NNS_Rx1002	775789.6	6734506	37	37	41	41	37	37	49	49	37	37	52	52	15.1	15.1	73	73
NNS_Rx1003	775731.2	6734509	36	36	40	40	36	36	49	49	36	36	51	51	15	15	72	72

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1004	775849.5	6734509	37	37	41	41	37	37	50	50	37	37	53	53	15.5	15.5	73	73
NNS_Rx1005	775370.7	6734510	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1006	775604.2	6734510	34	34	38	38	34	34	47	47	34	34	50	50	16	16	70	70
NNS_Rx1007	775655	6734517	35	35	39	39	35	35	48	48	35	35	50	50	15.9	15.9	71	71
NNS_Rx1008	775809.3	6734518	37	37	41	41	37	37	50	50	37	37	52	52	15	15	73	73
NNS_Rx1009	775850.9	6734520	37	37	41	41	37	37	50	50	37	37	53	53	15.6	15.6	73	73
NNS_Rx1010	775320.5	6734520	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1011	775421.9	6734525	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	69	69
NNS_Rx1012	775497.5	6734534	34	34	38	38	34	34	47	47	34	34	49	49	14.8	14.8	70	70
NNS_Rx1013	775477.5	6734535	34	34	38	38	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1014	775370.3	6734538	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1015	775324.9	6734540	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1016	775909.3	6734540	38	38	42	42	38	38	51	51	38	38	53	53	15.7	15.7	74	74
NNS_Rx1017	775649.3	6734541	35	35	39	39	35	35	48	48	35	35	50	50	15.9	15.9	71	71
NNS_Rx1018	775850.4	6734543	38	38	41	41	38	38	50	50	38	38	53	53	15.1	15.1	74	74
NNS_Rx1019	775429.5	6734546	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1020	775517.8	6734547	35	35	38	38	35	35	47	47	35	35	49	49	14.9	14.9	70	70
NNS_Rx1021	775540.4	6734547	35	35	38	38	35	35	47	47	35	35	50	50	14.9	14.9	70	70
NNS_Rx1022	775557.8	6734548	35	35	38	38	35	35	47	47	35	35	50	50	14.9	14.9	71	71
NNS_Rx1023	775702	6734549	34	34	39	39	34	34	48	48	34	34	51	51	17	17	65	68
NNS_Rx1024	775808.6	6734550	37	37	41	41	37	37	50	50	37	37	52	52	15.1	15.1	73	73
NNS_Rx1025	775764.8	6734551	37	37	40	40	37	37	49	49	37	37	52	52	15	15	73	73
NNS_Rx1026	775744.5	6734552	35	35	39	39	35	35	49	49	35	35	51	51	16.8	16.8	66	69
NNS_Rx1027	775726.1	6734555	34	34	39	39	34	34	48	48	34	34	51	51	17	17	65	68
NNS_Rx1028	775849.1	6734558	38	38	41	41	38	38	50	50	38	38	53	53	15.1	15.1	74	74
NNS_Rx1029	775787.7	6734558	37	37	41	41	37	37	49	49	37	37	52	52	15.1	15.1	73	73
NNS_Rx1030	775370.7	6734561	34	34	37	37	34	34	45	45	34	34	48	48	14.6	14.6	69	69
NNS_Rx1031	775637.2	6734564	36	36	39	39	36	36	48	48	36	36	51	51	15	15	71	71
NNS_Rx1032	775318.3	6734569	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1033	775693.7	6734571	35	35	39	39	35	35	48	48	35	35	51	51	15.9	15.9	71	71
NNS_Rx1034	774665	6734573	27	27	31	31	27	27	40	40	27	27	43	43	16.1	16.1	58	58
NNS_Rx1035	775457.5	6734574	34	34	38	38	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1036	775380.9	6734577	34	34	37	37	34	34	46	46	34	34	48	48	14.6	14.6	69	69
NNS_Rx1037	775285.9	6734578	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1038	775620	6734579	35	35	39	39	35	35	48	48	35	35	50	50	15	15	71	71
NNS_Rx1040	775587	6734580	35	35	39	39	35	35	47	47	35	35	50	50	14.9	14.9	71	71
NNS_Rx1041	775472.1	6734582	34	34	38	38	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1042	775569.2	6734584	35	35	38	38	35	35	47	47	35	35	50	50	15	15	71	71
NNS_Rx1043	775528.6	6734589	35	35	38	38	35	35	47	47	35	35	50	50	14.9	14.9	70	70
NNS_Rx1044	775547.7	6734592	35	35	38	38	35	35	47	47	35	35	50	50	14.9	14.9	71	71
NNS_Rx1046	775512.7	6734593	35	35	38	38	35	35	47	47	35	35	49	49	14.8	14.8	70	70
NNS_Rx1047	775392.3	6734594	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	69	69
NNS_Rx1048	775815	6734596	38	38	41	41	38	38	50	50	38	38	53	53	15	15	73	73
NNS_Rx1049	775773.7	6734600	37	37	41	41	37	37	49	49	37	37	52	52	15	15	73	73

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1050	775227.2	6734606	33	33	36	36	33	33	44	44	33	33	47	47	14.6	14.6	68	68
NNS_Rx1051	775399.1	6734614	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	69	69
NNS_Rx1052	775375.4	6734615	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	69	69
NNS_Rx1053	775334.3	6734617	33	33	37	37	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1054	775655.2	6734617	36	36	39	39	36	36	48	48	36	36	51	51	15	15	72	72
NNS_Rx1055	775274.6	6734619	33	33	36	36	33	33	45	45	33	33	47	47	14.6	14.6	69	69
NNS_Rx1056	775351.2	6734620	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1058	775317.4	6734624	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1059	775025.3	6734624	31	31	34	34	31	31	43	43	31	31	46	46	14.4	14.4	67	67
NNS_Rx1061	775664.7	6734625	36	36	39	39	36	36	48	48	36	36	51	51	14.9	14.9	72	72
NNS_Rx1062	775117.1	6734625	30	30	34	34	30	30	43	43	30	30	46	46	16	16	63	63
NNS_Rx1063	775634.8	6734626	36	36	39	39	36	36	48	48	36	36	51	51	14.9	14.9	72	72
NNS_Rx1064	775092.3	6734626	29	29	34	34	29	29	43	43	29	29	46	46	16.6	16.6	60	61
NNS_Rx1065	775221.2	6734628	33	33	36	36	33	33	44	44	33	33	47	47	14.5	14.5	68	68
NNS_Rx1066	775075.8	6734628	29	29	34	34	29	29	43	43	29	29	46	46	16.6	16.6	59	61
NNS_Rx1067	775456.7	6734629	34	34	38	38	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1068	775050.1	6734630	29	29	33	33	29	29	43	43	29	29	45	45	16.5	16.5	59	61
NNS_Rx1069	775159.9	6734631	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx1070	775612.3	6734632	35	35	39	39	35	35	48	48	35	35	50	50	15	15	71	71
NNS_Rx1071	775591.7	6734636	35	35	39	39	35	35	48	48	35	35	50	50	14.9	14.9	71	71
NNS_Rx1072	775473.5	6734637	34	34	38	38	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1073	775138.7	6734638	32	32	35	35	32	32	44	44	32	32	46	46	14.5	14.5	68	68
NNS_Rx1074	775494.8	6734638	35	35	38	38	35	35	47	47	35	35	49	49	14.7	14.7	70	70
NNS_Rx1075	775571.3	6734639	35	35	39	39	35	35	47	47	35	35	50	50	14.9	14.9	71	71
NNS_Rx1076	775675.2	6734640	36	36	40	40	36	36	48	48	36	36	51	51	14.9	14.9	72	72
NNS_Rx1077	775513.2	6734647	35	35	38	38	35	35	47	47	35	35	50	50	14.8	14.8	70	70
NNS_Rx1078	775834.4	6734648	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1079	775529.7	6734649	35	35	38	38	35	35	47	47	35	35	50	50	14.8	14.8	71	71
NNS_Rx1080	775817.6	6734649	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1081	775799.5	6734650	38	38	41	41	38	38	50	50	38	38	52	52	14.9	14.9	73	73
NNS_Rx1083	775730.6	6734652	37	37	40	40	37	37	49	49	37	37	52	52	15	15	73	73
NNS_Rx1084	775439.4	6734656	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1085	775416.8	6734661	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1086	775233	6734661	29	29	35	35	29	29	44	44	29	29	47	47	17.3	17.3	60	63
NNS_Rx1087	775176.1	6734663	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx1088	775399.4	6734667	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	70	70
NNS_Rx1089	775344.1	6734668	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1090	775198.7	6734668	32	32	35	35	32	32	44	44	32	32	47	47	14.7	14.7	68	68
NNS_Rx1091	775213	6734668	29	29	34	34	29	29	44	44	29	29	47	47	17.3	17.3	60	63
NNS_Rx1092	775325.4	6734669	33	33	37	37	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1093	775356.8	6734670	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	69	69
NNS_Rx1094	775383.5	6734670	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	70	70
NNS_Rx1095	775734.7	6734670	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1096	775307	6734675	31	31	36	36	31	31	45	45	31	31	47	47	16.2	16.2	64	64

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1097	775277.8	6734676	30	30	35	35	30	30	44	44	30	30	47	47	17.2	17.2	61	63
NNS_Rx1098	775675.5	6734676	36	36	40	40	36	36	48	48	36	36	51	51	14.9	14.9	72	72
NNS_Rx1099	775680.2	6734694	36	36	40	40	36	36	49	49	36	36	51	51	14.9	14.9	72	72
NNS_Rx1100	775795	6734696	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	73	73
NNS_Rx1101	775819.1	6734708	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1102	775215.2	6734711	29	29	34	34	29	29	44	44	29	29	47	47	17.3	17.3	60	63
NNS_Rx1104	775757.5	6734713	37	37	41	41	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1105	775738.8	6734715	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1106	775893.6	6734718	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1107	775686.6	6734718	36	36	40	40	36	36	49	49	36	36	51	51	14.9	14.9	72	72
NNS_Rx1108	775280.9	6734719	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1109	775318.1	6734720	33	33	37	37	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx1110	775308.9	6734721	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1111	775346.3	6734723	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	69	69
NNS_Rx1112	775965.6	6734728	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx1113	775168.8	6734728	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx1114	775091.4	6734730	28	28	33	33	28	28	43	43	28	28	46	46	17.4	17.4	59	61
NNS_Rx1116	775831.8	6734730	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1117	775918.8	6734730	39	39	43	43	39	39	51	51	39	39	54	54	14.9	14.9	75	75
NNS_Rx1118	775118.3	6734731	28	28	34	34	28	28	43	43	28	28	46	46	17.4	17.4	60	62
NNS_Rx1120	775008.5	6734732	28	28	33	33	28	28	42	42	28	28	45	45	17.4	17.4	59	60
NNS_Rx1121	775367	6734735	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	70	70
NNS_Rx1122	775870.4	6734738	39	39	42	42	39	39	51	51	39	39	54	54	14.9	14.9	74	74
NNS_Rx1123	775683.4	6734738	36	36	40	40	36	36	49	49	36	36	51	51	14.9	14.9	72	72
NNS_Rx1124	775218.7	6734742	29	29	34	34	29	29	44	44	29	29	47	47	17.2	17.2	61	63
NNS_Rx1125	775366	6734755	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	70	70
NNS_Rx1126	775934.9	6734760	40	40	43	43	40	40	52	52	40	40	54	54	14.8	14.8	75	75
NNS_Rx1127	775170.7	6734761	32	32	35	35	32	32	44	44	32	32	47	47	14.6	14.6	68	68
NNS_Rx1128	775689.1	6734761	37	37	40	40	37	37	49	49	37	37	51	51	14.9	14.9	72	72
NNS_Rx1129	775783.6	6734764	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	73	73
NNS_Rx1130	775743.3	6734766	37	37	41	41	37	37	49	49	37	37	52	52	14.8	14.8	73	73
NNS_Rx1131	775870.9	6734767	39	39	42	42	39	39	51	51	39	39	54	54	14.9	14.9	74	74
NNS_Rx1132	775326.4	6734767	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1134	775300.9	6734769	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1135	775234.2	6734769	33	33	36	36	33	33	45	45	33	33	47	47	14.6	14.6	69	69
NNS_Rx1136	775112.3	6734770	28	28	34	34	28	28	43	43	28	28	46	46	17.4	17.4	60	62
NNS_Rx1137	775977.3	6734771	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx1138	775197.1	6734771	32	32	36	36	32	32	44	44	32	32	47	47	14.6	14.6	68	68
NNS_Rx1139	775218.4	6734773	33	33	36	36	33	33	45	45	33	33	47	47	14.6	14.6	69	69
NNS_Rx1140	775809.3	6734775	38	38	41	41	38	38	50	50	38	38	53	53	14.8	14.8	74	74
NNS_Rx1141	775170.4	6734776	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx1142	774996.1	6734777	28	28	33	33	28	28	42	42	28	28	45	45	17.4	17.4	59	60
NNS_Rx1143	775043.7	6734779	28	28	33	33	28	28	43	43	28	28	45	45	17.5	17.5	59	61
NNS_Rx1144	775374.3	6734780	34	34	37	37	34	34	46	46	34	34	49	49	14.7	14.7	70	70

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1145	775933.3	6734783	40	40	43	43	40	40	52	52	40	40	54	54	14.8	14.8	75	75
NNS_Rx1146	775880.7	6734784	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1147	775697.7	6734787	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1148	775764.2	6734789	38	38	41	41	38	38	50	50	38	38	52	52	14.8	14.8	73	73
NNS_Rx1149	775116.8	6734790	32	32	35	35	32	32	44	44	32	32	46	46	14.5	14.5	68	68
NNS_Rx1150	774992	6734799	27	27	33	33	27	27	42	42	27	27	45	45	17.5	17.5	59	60
NNS_Rx1151	775325.4	6734800	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1152	775703.1	6734801	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1153	775929.9	6734802	40	40	43	43	40	40	52	52	40	40	54	54	14.7	14.7	75	75
NNS_Rx1154	775284.6	6734803	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1155	775875.9	6734805	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1156	775377.5	6734805	34	34	37	37	34	34	46	46	34	34	49	49	14.8	14.8	70	70
NNS_Rx1157	775769	6734806	38	38	41	41	38	38	50	50	38	38	52	52	14.8	14.8	73	73
NNS_Rx1158	775358.7	6734818	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	70	70
NNS_Rx1159	775046	6734818	28	28	33	33	28	28	43	43	28	28	45	45	17.4	17.4	59	61
NNS_Rx1160	775334.9	6734818	34	34	37	37	34	34	46	46	34	34	48	48	14.7	14.7	70	70
NNS_Rx1161	775109.1	6734819	32	32	35	35	32	32	44	44	32	32	46	46	14.5	14.5	68	68
NNS_Rx1162	775784.8	6734823	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1163	775925.9	6734825	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	75	75
NNS_Rx1164	775282.4	6734825	33	33	36	36	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1165	775717.1	6734826	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1166	775974.6	6734826	40	40	44	44	40	40	52	52	40	40	55	55	14.7	14.7	76	76
NNS_Rx1167	775218	6734826	33	33	36	36	33	33	45	45	33	33	47	47	14.7	14.7	69	69
NNS_Rx1168	775172.3	6734827	32	32	35	35	32	32	44	44	32	32	47	47	14.6	14.6	68	68
NNS_Rx1169	775816	6734834	38	38	42	42	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1170	775887	6734840	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1171	775724.4	6734840	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1172	775949.2	6734842	40	40	43	43	40	40	52	52	40	40	55	55	14.7	14.7	76	76
NNS_Rx1173	774992	6734842	28	28	33	33	28	28	42	42	28	28	45	45	17.4	17.4	59	61
NNS_Rx1174	775971.7	6734843	40	40	44	44	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx1175	775927.2	6734843	40	40	43	43	40	40	52	52	40	40	55	55	14.7	14.7	76	76
NNS_Rx1176	775866.1	6734844	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1177	775173.3	6734848	32	32	35	35	32	32	44	44	32	32	47	47	14.6	14.6	68	68
NNS_Rx1178	775369.7	6734850	31	31	36	36	31	31	45	45	31	31	48	48	17.2	17.2	63	65
NNS_Rx1179	775352.2	6734852	31	31	36	36	31	31	45	45	31	31	48	48	17.2	17.2	62	64
NNS_Rx1180	775226.3	6734853	33	33	36	36	33	33	45	45	33	33	47	47	14.7	14.7	69	69
NNS_Rx1181	775046	6734853	28	28	33	33	28	28	43	43	28	28	45	45	17.5	17.5	59	61
NNS_Rx1182	775328.7	6734854	33	33	37	37	33	33	46	46	33	33	48	48	14.9	14.9	70	70
NNS_Rx1183	775090.4	6734855	29	29	34	34	29	29	43	43	29	29	46	46	17.2	17.2	60	62
NNS_Rx1184	775306.5	6734856	33	33	37	37	33	33	45	45	33	33	48	48	14.7	14.7	69	69
NNS_Rx1185	775283.3	6734856	30	30	35	35	30	30	45	45	30	30	47	47	17.3	17.3	61	64
NNS_Rx1186	775067.9	6734857	28	28	33	33	28	28	43	43	28	28	46	46	17.4	17.4	59	61
NNS_Rx1187	775109.1	6734859	29	29	34	34	29	29	43	43	29	29	46	46	17.4	17.4	60	62
NNS_Rx1188	775765.1	6734867	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1189	774995.8	6734872	28	28	33	33	28	28	42	42	28	28	45	45	17.5	17.5	59	61
NNS_Rx1190	775705	6734872	37	37	40	40	37	37	49	49	37	37	52	52	15	15	73	73
NNS_Rx1191	776013	6734873	41	41	44	44	41	41	53	53	41	41	56	56	14.7	14.7	77	77
NNS_Rx1192	775392.3	6734874	31	31	36	36	31	31	46	46	31	31	48	48	17.1	17.1	63	65
NNS_Rx1193	775870.1	6734888	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1194	775806.1	6734889	38	38	42	42	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1195	775937.6	6734891	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx1196	775767.7	6734891	38	38	41	41	38	38	50	50	38	38	53	53	14.9	14.9	74	74
NNS_Rx1197	775846.6	6734893	39	39	42	42	39	39	51	51	39	39	54	54	14.8	14.8	75	75
NNS_Rx1198	775912.2	6734893	40	40	43	43	40	40	52	52	40	40	55	55	14.8	14.8	76	76
NNS_Rx1199	775820.4	6734894	38	38	42	42	38	38	51	51	38	38	53	53	14.9	14.9	74	74
NNS_Rx1200	775714.8	6734895	37	37	40	40	37	37	49	49	37	37	52	52	14.9	14.9	73	73
NNS_Rx1201	774993.9	6734897	28	28	33	33	28	28	42	42	28	28	45	45	17.5	17.5	59	61
NNS_Rx1202	775965.1	6734898	41	41	44	44	41	41	53	53	41	41	55	55	14.8	14.8	77	77
NNS_Rx1204	775391.9	6734899	31	31	36	36	31	31	46	46	31	31	48	48	17.3	17.3	62	65
NNS_Rx1206	776018	6734902	41	41	45	45	41	41	53	53	41	41	56	56	14.7	14.7	77	77
NNS_Rx1207	775126.9	6734903	30	30	34	34	30	30	43	43	30	30	46	46	16.3	16.3	60	62
NNS_Rx1208	775286.8	6734903	30	30	35	35	30	30	45	45	30	30	47	47	17.4	17.4	61	64
NNS_Rx1209	775308.7	6734904	30	30	35	35	30	30	45	45	30	30	48	48	17.4	17.4	61	64
NNS_Rx1210	775750	6734905	38	38	41	41	38	38	50	50	38	38	53	53	15	15	74	74
NNS_Rx1211	775070.7	6734905	28	28	33	33	28	28	43	43	28	28	46	46	17.5	17.5	59	61
NNS_Rx1212	775348.1	6734905	31	31	36	36	31	31	45	45	31	31	48	48	17.4	17.4	62	64
NNS_Rx1213	775083.4	6734906	28	28	33	33	28	28	43	43	28	28	46	46	17.5	17.5	60	62
NNS_Rx1214	775730.7	6734907	37	37	41	41	37	37	50	50	37	37	52	52	15	15	73	73
NNS_Rx1215	775106.9	6734907	28	28	34	34	28	28	43	43	28	28	46	46	17.5	17.5	60	62
NNS_Rx1216	775373.5	6734907	31	31	36	36	31	31	46	46	31	31	48	48	17.3	17.3	62	65
NNS_Rx1217	775047.5	6734909	28	28	33	33	28	28	43	43	28	28	45	45	17.5	17.5	59	61
NNS_Rx1218	774994.8	6734919	28	28	33	33	28	28	42	42	28	28	45	45	17.5	17.5	59	61
NNS_Rx1219	776016.2	6734922	41	41	45	45	41	41	53	53	41	41	56	56	14.8	14.8	78	78
NNS_Rx1220	775966.1	6734934	41	41	44	44	41	41	53	53	41	41	56	56	14.5	14.5	77	77
NNS_Rx1221	775938.4	6734935	41	41	44	44	41	41	52	52	41	41	55	55	14.5	14.5	76	76
NNS_Rx1222	775893.6	6734936	40	40	43	43	40	40	52	52	40	40	55	55	14.6	14.6	76	76
NNS_Rx1223	775829.1	6734938	39	39	42	42	39	39	51	51	39	39	54	54	14.6	14.6	75	75
NNS_Rx1224	775847.3	6734940	39	39	42	42	39	39	51	51	39	39	54	54	14.6	14.6	75	75
NNS_Rx1225	776019.1	6734941	42	42	45	45	42	42	54	54	42	42	56	56	14.8	14.8	78	78
NNS_Rx1226	775690.4	6734941	37	37	41	41	37	37	49	49	37	37	52	52	14.7	14.7	73	73
NNS_Rx1227	775648.9	6734942	37	37	40	40	37	37	49	49	37	37	52	52	14.7	14.7	73	73
NNS_Rx1228	775757.1	6734942	38	38	41	41	38	38	50	50	38	38	53	53	14.6	14.6	74	74
NNS_Rx1230	775872.7	6734942	40	40	43	43	40	40	52	52	40	40	54	54	14.6	14.6	75	75
NNS_Rx1232	775608.7	6734943	37	37	40	40	37	37	49	49	37	37	51	51	14.7	14.7	72	72
NNS_Rx1233	775001.2	6734943	29	29	33	33	29	29	43	43	29	29	45	45	16.3	16.3	59	61
NNS_Rx1234	775735.4	6734943	38	38	41	41	38	38	50	50	38	38	53	53	14.7	14.7	74	74
NNS_Rx1235	775626.9	6734944	37	37	40	40	37	37	49	49	37	37	51	51	14.7	14.7	72	72
NNS_Rx1236	775463	6734945	32	32	37	37	32	32	46	46	32	32	49	49	17.3	17.3	63	66

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1237	775431.7	6734946	32	32	37	37	32	32	46	46	32	32	49	49	17.3	17.3	63	66
NNS_Rx1238	775174.9	6734948	33	33	36	36	33	33	45	45	33	33	47	47	14.6	14.6	69	69
NNS_Rx1239	775503.4	6734948	33	33	37	37	33	33	47	47	33	33	50	50	17.1	17.1	64	66
NNS_Rx1240	775568.7	6734949	36	36	39	39	36	36	48	48	36	36	51	51	14.7	14.7	72	72
NNS_Rx1242	775526.9	6734950	36	36	39	39	36	36	48	48	36	36	50	50	14.7	14.7	71	71
NNS_Rx1243	775370.7	6734950	31	31	36	36	31	31	46	46	31	31	48	48	17.2	17.2	63	65
NNS_Rx1244	775071.4	6734950	28	28	33	33	28	28	43	43	28	28	46	46	17.5	17.5	60	62
NNS_Rx1245	775289.4	6734951	30	30	35	35	30	30	45	45	30	30	48	48	17.4	17.4	62	64
NNS_Rx1246	775409.1	6734951	33	33	37	37	33	33	46	46	33	33	49	49	15.9	15.9	70	70
NNS_Rx1247	775311.3	6734952	30	30	35	35	30	30	45	45	30	30	48	48	17.4	17.4	62	64
NNS_Rx1248	775387.5	6734953	33	33	37	37	33	33	46	46	33	33	49	49	15.9	15.9	70	70
NNS_Rx1249	775049.4	6734954	28	28	33	33	28	28	43	43	28	28	46	46	17.5	17.5	60	61
NNS_Rx1250	775348.1	6734954	31	31	36	36	31	31	45	45	31	31	48	48	17.4	17.4	62	65
NNS_Rx1251	775140.9	6734954	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx1252	775326.8	6734954	30	30	36	36	30	30	45	45	30	30	48	48	17.4	17.4	62	64
NNS_Rx1253	775093.9	6734955	30	30	34	34	30	30	43	43	30	30	46	46	16.3	16.3	60	62
NNS_Rx1254	775116.1	6734955	30	30	34	34	30	30	43	43	30	30	46	46	16.3	16.3	61	62
NNS_Rx1255	774993.6	6734961	30	30	34	34	30	30	43	43	30	30	46	46	15.3	15.3	67	67
NNS_Rx1256	776879	6735080	40	40	43	43	40	40	52	52	40	40	55	55	14.5	14.5	77	77
NNS_Rx1257	776534.2	6735107	50	50	52	52	50	50	61	61	50	50	64	64	14	14	88	88
NNS_Rx1258	777641.6	6735116	32	32	35	35	32	32	45	45	32	32	47	47	15.4	15.4	69	69
NNS_Rx1259	776534.7	6735130	49	49	52	52	49	49	60	60	49	49	63	63	13.9	13.9	88	88
NNS_Rx1260	775782.6	6735159	38	38	42	42	38	38	51	51	38	38	54	54	15.7	15.7	74	74
NNS_Rx1261	775696.7	6735171	37	37	41	41	37	37	50	50	37	37	53	53	15.7	15.7	73	73
NNS_Rx1262	775646.1	6735176	36	36	40	40	36	36	49	49	36	36	52	52	15.7	15.7	73	73
NNS_Rx1263	775719.4	6735181	37	37	41	41	37	37	50	50	37	37	53	53	15.7	15.7	74	74
NNS_Rx1264	775739.2	6735190	38	38	41	41	38	38	51	51	38	38	53	53	15.7	15.7	74	74
NNS_Rx1265	775761.8	6735191	38	38	42	42	38	38	51	51	38	38	54	54	15.7	15.7	74	74
NNS_Rx1266	775643	6735193	36	36	40	40	36	36	49	49	36	36	52	52	15.8	15.8	73	73
NNS_Rx1267	775781.9	6735199	38	38	42	42	38	38	51	51	38	38	54	54	15.8	15.8	74	74
NNS_Rx1268	775653.3	6735222	36	36	40	40	36	36	50	50	36	36	52	52	15.8	15.8	73	73
NNS_Rx1269	775711.7	6735230	37	37	41	41	37	37	50	50	37	37	53	53	15.8	15.8	73	73
NNS_Rx1270	775742.7	6735242	38	38	41	41	38	38	51	51	38	38	53	53	15.9	15.9	74	74
NNS_Rx1271	775655.7	6735244	36	36	40	40	36	36	50	50	36	36	52	52	15.9	15.9	73	73
NNS_Rx1272	775705.8	6735246	37	37	41	41	37	37	50	50	37	37	53	53	15.9	15.9	73	73
NNS_Rx1273	775761.1	6735247	38	38	42	42	38	38	51	51	38	38	54	54	15.9	15.9	74	74
NNS_Rx1274	775781.4	6735257	38	38	42	42	38	38	51	51	38	38	54	54	15.9	15.9	74	74
NNS_Rx1275	775649.8	6735260	36	36	40	40	36	36	50	50	36	36	52	52	15.9	15.9	73	73
NNS_Rx1276	775706.1	6735264	37	37	41	41	37	37	50	50	37	37	53	53	16	16	73	73
NNS_Rx1277	775783.3	6735278	38	38	42	42	38	38	51	51	38	38	54	54	16	16	74	74
NNS_Rx1278	775763.9	6735280	38	38	42	42	38	38	51	51	38	38	54	54	16	16	74	74
NNS_Rx1279	775708.2	6735281	37	37	41	41	37	37	50	50	37	37	53	53	15.9	15.9	73	73
NNS_Rx1280	775654	6735282	36	36	40	40	36	36	50	50	36	36	52	52	15.9	15.9	73	73
NNS_Rx1281	775702.8	6735302	37	37	41	41	37	37	50	50	37	37	53	53	16	16	73	73

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1282	775653.1	6735302	36	36	40	40	36	36	50	50	36	36	52	52	16.1	16.1	72	72
NNS_Rx1283	775785.4	6735309	38	38	42	42	38	38	52	52	38	38	54	54	16.1	16.1	74	74
NNS_Rx1284	775745	6735312	38	38	42	42	38	38	51	51	38	38	54	54	16.1	16.1	73	73
NNS_Rx1285	775709.6	6735318	37	37	41	41	37	37	50	50	37	37	53	53	16	16	73	73
NNS_Rx1286	775648.7	6735319	36	36	40	40	36	36	50	50	36	36	52	52	16	16	72	72
NNS_Rx1287	776843.8	6735340	38	38	42	42	38	38	52	52	38	38	54	54	16.6	16.6	73	73
NNS_Rx1288	775692.4	6735360	36	36	41	41	36	36	50	50	36	36	53	53	16.9	16.9	68	71
NNS_Rx1289	775554.6	6735363	35	35	39	39	35	35	49	49	35	35	51	51	16.1	16.1	71	71
NNS_Rx1290	775637.8	6735363	36	36	40	40	36	36	50	50	36	36	52	52	16.2	16.2	72	72
NNS_Rx1291	775655.2	6735364	36	36	40	40	36	36	50	50	36	36	52	52	16.9	16.9	68	70
NNS_Rx1292	775575.5	6735364	35	35	39	39	35	35	49	49	35	35	52	52	16.1	16.1	72	72
NNS_Rx1293	775672.1	6735366	36	36	40	40	36	36	50	50	36	36	53	53	16.9	16.9	68	71
NNS_Rx1294	775487.9	6735367	32	32	38	38	32	32	48	48	32	32	50	50	17.8	17.8	63	68
NNS_Rx1295	775533.1	6735370	35	35	39	39	35	35	48	48	35	35	51	51	16.1	16.1	71	71
NNS_Rx1297	775465.4	6735372	32	32	37	37	32	32	47	47	32	32	50	50	17.8	17.8	63	67
NNS_Rx1298	775311.9	6735389	33	33	36	36	33	33	46	46	33	33	49	49	16	16	69	69
NNS_Rx1299	775536.3	6735394	33	33	38	38	33	33	48	48	33	33	51	51	17.5	17.5	65	68
NNS_Rx1300	775649.4	6735398	35	35	40	40	35	35	50	50	35	35	52	52	17	17	67	71
NNS_Rx1301	775487.6	6735398	32	32	38	38	32	32	48	48	32	32	50	50	17.8	17.8	63	68
NNS_Rx1302	776847	6735408	38	38	42	42	38	38	51	51	38	38	54	54	16.4	16.4	69	73
NNS_Rx1303	775299	6735409	33	33	36	36	33	33	46	46	33	33	49	49	16.1	16.1	69	69
NNS_Rx1304	775704.7	6735410	37	37	41	41	37	37	51	51	37	37	53	53	16.4	16.4	73	73
NNS_Rx1305	775533.7	6735418	34	34	38	38	34	34	48	48	34	34	51	51	17.1	17.1	66	69
NNS_Rx1306	775636.5	6735420	35	35	40	40	35	35	50	50	35	35	52	52	17.1	17.1	67	70
NNS_Rx1307	775487.1	6735420	33	33	38	38	33	33	48	48	33	33	50	50	16.9	16.9	66	68
NNS_Rx1308	775689.4	6735423	37	37	41	41	37	37	50	50	37	37	53	53	16.4	16.4	72	72
NNS_Rx1309	775303.2	6735426	33	33	36	36	33	33	46	46	33	33	49	49	16.1	16.1	69	69
NNS_Rx1310	775537.1	6735434	34	34	38	38	34	34	48	48	34	34	51	51	17.3	17.3	63	69
NNS_Rx1311	775484.7	6735435	33	33	38	38	33	33	48	48	33	33	50	50	16.9	16.9	66	68
NNS_Rx1312	776839.3	6735439	38	38	42	42	38	38	51	51	38	38	54	54	16.5	16.5	69	73
NNS_Rx1313	775931	6735443	40	40	45	45	40	40	54	54	40	40	57	57	17.2	17.2	72	77
NNS_Rx1314	775237.3	6735459	32	32	36	36	32	32	46	46	32	32	48	48	16.2	16.2	69	69
NNS_Rx1315	775485	6735459	32	32	38	38	32	32	48	48	32	32	50	50	18	18	62	68
NNS_Rx1316	775932.6	6735461	40	40	45	45	40	40	55	55	40	40	57	57	17.3	17.3	72	78
NNS_Rx1317	775536.6	6735476	35	35	39	39	35	35	49	49	35	35	51	51	16.4	16.4	71	71
NNS_Rx1318	776844.1	6735478	37	37	41	41	37	37	51	51	37	37	54	54	16.7	16.7	68	72
NNS_Rx1319	775484.4	6735480	32	32	38	38	32	32	48	48	32	32	50	50	18.1	18.1	62	68
NNS_Rx1320	775893.4	6735491	39	39	44	44	39	39	54	54	39	39	57	57	17.4	17.4	71	77
NNS_Rx1321	775239.4	6735495	31	31	35	35	31	31	45	45	31	31	48	48	17.5	17.5	60	65
NNS_Rx1322	775938.7	6735500	40	40	45	45	40	40	55	55	40	40	58	58	17.3	17.3	71	78
NNS_Rx1323	775924.7	6735501	40	40	45	45	40	40	55	55	40	40	57	57	17.3	17.3	71	78
NNS_Rx1324	775833.6	6735502	38	38	43	43	38	38	53	53	38	38	56	56	17.1	17.1	71	75
NNS_Rx1325	775535.8	6735503	34	34	38	38	34	34	49	49	34	34	51	51	17.5	17.5	63	69
NNS_Rx1326	775557.5	6735506	34	34	39	39	34	34	49	49	34	34	51	51	17.5	17.5	63	69

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1327	775468.6	6735508	32	32	37	37	32	32	48	48	32	32	50	50	18	18	63	68
NNS_Rx1328	775492.4	6735509	34	34	38	38	34	34	48	48	34	34	51	51	16.5	16.5	70	70
NNS_Rx1329	775237.3	6735525	30	30	35	35	30	30	45	45	30	30	48	48	18.3	18.3	61	65
NNS_Rx1330	775992.1	6735541	41	41	46	46	41	41	56	56	41	41	59	59	17.8	17.8	71	80
NNS_Rx1331	775898.6	6735549	39	39	44	44	39	39	54	54	39	39	57	57	17.5	17.5	71	77
NNS_Rx1332	775931.4	6735549	40	40	45	45	40	40	55	55	40	40	58	58	17.7	17.7	70	78
NNS_Rx1333	776842.5	6735551	36	36	41	41	36	36	51	51	36	36	54	54	17.7	17.7	67	72
NNS_Rx1334	775795.9	6735551	37	37	42	42	37	37	52	52	37	37	55	55	17.5	17.5	70	74
NNS_Rx1335	775868.4	6735552	39	39	44	44	39	39	54	54	39	39	56	56	17.5	17.5	71	76
NNS_Rx1336	775849.4	6735552	38	38	43	43	38	38	53	53	38	38	56	56	17.5	17.5	71	76
NNS_Rx1337	777001.5	6735554	35	35	39	39	35	35	49	49	35	35	52	52	17.2	17.2	67	69
NNS_Rx1338	776981.2	6735554	35	35	39	39	35	35	50	50	35	35	52	52	17.2	17.2	67	69
NNS_Rx1340	777020.8	6735555	35	35	39	39	35	35	49	49	35	35	52	52	17.1	17.1	67	69
NNS_Rx1341	776880.4	6735557	35	35	40	40	35	35	51	51	35	35	53	53	17.8	17.8	67	71
NNS_Rx1342	776962.9	6735558	35	35	39	39	35	35	50	50	35	35	52	52	17.2	17.2	67	69
NNS_Rx1343	776910.8	6735558	36	36	40	40	36	36	50	50	36	36	53	53	17.2	17.2	66	70
NNS_Rx1344	775988.9	6735560	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	71	79
NNS_Rx1345	776919.2	6735561	36	36	40	40	36	36	50	50	36	36	53	53	17.2	17.2	66	70
NNS_Rx1346	777541.2	6735561	31	31	34	34	31	31	46	46	31	31	48	48	16.4	16.4	69	69
NNS_Rx1347	777565.3	6735565	31	31	34	34	31	31	45	45	31	31	48	48	16.4	16.4	69	69
NNS_Rx1348	775235.1	6735567	30	30	35	35	30	30	46	46	30	30	48	48	17.6	17.6	61	65
NNS_Rx1349	777516.5	6735567	32	32	35	35	32	32	46	46	32	32	48	48	16.3	16.3	69	69
NNS_Rx1350	775940.9	6735568	40	40	45	45	40	40	55	55	40	40	58	58	17.8	17.8	70	79
NNS_Rx1351	775791.7	6735570	37	37	42	42	37	37	52	52	37	37	55	55	17.5	17.5	70	74
NNS_Rx1352	775849.4	6735574	39	39	43	43	39	39	53	53	39	39	56	56	17.4	17.4	70	76
NNS_Rx1353	775985.9	6735575	41	41	46	46	41	41	56	56	41	41	59	59	17.9	17.9	71	80
NNS_Rx1354	777493.6	6735579	32	32	35	35	32	32	46	46	32	32	48	48	16.4	16.4	69	69
NNS_Rx1355	775790.9	6735584	37	37	42	42	37	37	52	52	37	37	55	55	17.6	17.6	70	74
NNS_Rx1356	775943	6735587	40	40	45	45	40	40	55	55	40	40	58	58	17.8	17.8	71	79
NNS_Rx1357	775850.4	6735588	38	38	43	43	38	38	53	53	38	38	56	56	17.6	17.6	70	76
NNS_Rx1358	775989.2	6735588	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	72	81
NNS_Rx1359	775237.3	6735590	30	30	35	35	30	30	46	46	30	30	48	48	17.7	17.7	61	65
NNS_Rx1361	776551.9	6735592	41	41	46	46	41	41	55	55	41	41	58	58	17.5	17.5	72	78
NNS_Rx1362	776996.5	6735604	34	34	39	39	34	34	49	49	34	34	52	52	17.4	17.4	68	69
NNS_Rx1363	775789.8	6735607	37	37	42	42	37	37	52	52	37	37	55	55	17.6	17.6	70	74
NNS_Rx1364	775726.3	6735608	36	36	41	41	36	36	51	51	36	36	54	54	18.1	18.1	65	73
NNS_Rx1365	776382.6	6735607	44	44	49	49	44	44	59	59	44	44	62	62	17.3	17.3	76	85
NNS_Rx1366	775939.6	6735609	40	40	45	45	40	40	55	55	40	40	58	58	17.9	17.9	71	79
NNS_Rx1367	776963.4	6735609	35	35	39	39	35	35	50	50	35	35	52	52	17.4	17.4	68	69
NNS_Rx1368	776552.6	6735609	41	41	46	46	41	41	55	55	41	41	58	58	17.5	17.5	71	78
NNS_Rx1369	777570.8	6735610	31	31	34	34	31	31	45	45	31	31	48	48	16.6	16.6	68	68
NNS_Rx1370	776499.4	6735610	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	71	80
NNS_Rx1371	775852.8	6735611	39	39	43	43	39	39	53	53	39	39	56	56	17.6	17.6	70	76
NNS_Rx1372	776458.5	6735611	39	39	44	44	39	39	54	54	39	39	56	56	17.3	17.3	69	79

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1373	776521	6735612	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	71	79
NNS_Rx1374	776482.7	6735612	41	41	47	47	41	41	56	56	41	41	59	59	17.7	17.7	71	80
NNS_Rx1376	775992	6735613	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	72	81
NNS_Rx1377	776845.7	6735613	35	35	40	40	35	35	51	51	35	35	53	53	18	18	66	71
NNS_Rx1378	776900.5	6735613	35	35	40	40	35	35	50	50	35	35	53	53	18	18	66	70
NNS_Rx1379	776917.9	6735614	34	34	39	39	34	34	50	50	34	34	53	53	18.1	18.1	66	70
NNS_Rx1380	776440.3	6735613	41	41	46	46	41	41	55	55	41	41	58	58	17.4	17.4	72	81
NNS_Rx1381	776611.1	6735615	39	39	44	44	39	39	54	54	39	39	57	57	17.7	17.7	68	76
NNS_Rx1382	776417.3	6735618	40	40	44	44	40	40	54	54	40	40	57	57	16.5	16.5	76	79
NNS_Rx1383	775241.5	6735616	30	30	35	35	30	30	46	46	30	30	48	48	17.8	17.8	61	65
NNS_Rx1384	776880.6	6735616	35	35	40	40	35	35	50	50	35	35	53	53	18.1	18.1	66	70
NNS_Rx1385	777545.5	6735618	31	31	34	34	31	31	46	46	31	31	48	48	16.6	16.6	69	69
NNS_Rx1386	777520.8	6735618	31	31	34	34	31	31	46	46	31	31	48	48	16.5	16.5	69	69
NNS_Rx1387	776357	6735622	45	45	50	50	45	45	60	60	45	45	63	63	18.1	18.1	77	86
NNS_Rx1388	775848.8	6735625	38	38	43	43	38	38	53	53	38	38	56	56	18	18	68	76
NNS_Rx1389	775793.3	6735627	38	38	42	42	38	38	52	52	38	38	55	55	17.5	17.5	70	75
NNS_Rx1390	777492.4	6735628	32	32	35	35	32	32	46	46	32	32	48	48	16.6	16.6	69	69
NNS_Rx1391	775734.5	6735628	36	36	41	41	36	36	51	51	36	36	54	54	18.1	18.1	65	73
NNS_Rx1392	775990.9	6735629	41	41	46	46	41	41	56	56	41	41	58	58	17.9	17.9	71	80
NNS_Rx1393	776918.7	6735635	34	34	39	39	34	34	50	50	34	34	53	53	18.2	18.2	66	70
NNS_Rx1394	776613.9	6735636	39	39	44	44	39	39	54	54	39	39	57	57	17.8	17.8	68	76
NNS_Rx1395	776968.5	6735636	35	35	39	39	35	35	50	50	35	35	52	52	17.5	17.5	68	69
NNS_Rx1396	775933.5	6735636	40	40	45	45	40	40	55	55	40	40	58	58	17.8	17.8	70	79
NNS_Rx1397	775239.4	6735639	30	30	35	35	30	30	46	46	30	30	48	48	17.8	17.8	61	65
NNS_Rx1398	775990.8	6735641	40	40	45	45	40	40	55	55	40	40	58	58	18	18	70	79
NNS_Rx1400	776846	6735641	35	35	40	40	35	35	51	51	35	35	53	53	18.1	18.1	66	71
NNS_Rx1401	776556.1	6735645	40	40	45	45	40	40	55	55	40	40	58	58	17.7	17.7	69	77
NNS_Rx1402	775852	6735648	38	38	43	43	38	38	53	53	38	38	56	56	18	18	68	76
NNS_Rx1403	776521	6735653	41	41	46	46	41	41	56	56	41	41	58	58	17.8	17.8	70	78
NNS_Rx1404	776615	6735655	39	39	44	44	39	39	54	54	39	39	57	57	17.9	17.9	68	76
NNS_Rx1405	776970	6735657	34	34	39	39	34	34	50	50	34	34	52	52	17.7	17.7	68	69
NNS_Rx1406	776501.5	6735657	41	41	46	46	41	41	56	56	41	41	59	59	17.8	17.8	71	79
NNS_Rx1407	776482	6735658	41	41	46	46	41	41	56	56	41	41	59	59	17.7	17.7	71	80
NNS_Rx1409	775936.9	6735659	40	40	45	45	40	40	55	55	40	40	58	58	17.9	17.9	71	79
NNS_Rx1410	777521.4	6735659	28	28	33	33	28	28	45	45	28	28	48	48	19.5	19.5	67	67
NNS_Rx1411	776434.8	6735659	40	40	46	46	40	40	56	56	40	40	58	58	17.9	17.9	71	81
NNS_Rx1412	776403.7	6735660	40	40	45	45	40	40	55	55	40	40	58	58	18	18	71	81
NNS_Rx1413	775992.9	6735662	40	40	45	45	40	40	55	55	40	40	58	58	18.1	18.1	70	78
NNS_Rx1414	776555.8	6735664	40	40	45	45	40	40	55	55	40	40	58	58	17.9	17.9	69	77
NNS_Rx1415	775853.3	6735666	38	38	43	43	38	38	53	53	38	38	56	56	18.1	18.1	68	76
NNS_Rx1416	775241.5	6735666	30	30	35	35	30	30	46	46	30	30	48	48	17.8	17.8	61	65
NNS_Rx1417	775794.5	6735666	37	37	42	42	37	37	52	52	37	37	55	55	17.7	17.7	70	75
NNS_Rx1418	777498.6	6735667	28	28	33	33	28	28	46	46	28	28	48	48	19.3	19.3	67	67
NNS_Rx1419	776387.5	6735668	37	37	42	42	37	37	52	52	37	37	55	55	17.4	17.4	71	77

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1420	776367.3	6735668	44	44	49	49	44	44	59	59	44	44	62	62	17.4	17.4	76	84
NNS_Rx1421	776849.9	6735673	35	35	40	40	35	35	51	51	35	35	53	53	18.2	18.2	67	71
NNS_Rx1422	776614.3	6735675	39	39	44	44	39	39	54	54	39	39	57	57	18	18	68	76
NNS_Rx1423	777014.5	6735678	34	34	38	38	34	34	49	49	34	34	52	52	17.8	17.8	68	68
NNS_Rx1424	776965.5	6735679	34	34	39	39	34	34	50	50	34	34	52	52	18.5	18.5	68	69
NNS_Rx1425	775851.3	6735685	38	38	43	43	38	38	53	53	38	38	56	56	18	18	68	76
NNS_Rx1426	775995	6735685	40	40	45	45	40	40	55	55	40	40	58	58	18.2	18.2	70	80
NNS_Rx1427	775793.2	6735687	37	37	42	42	37	37	52	52	37	37	55	55	18.1	18.1	67	75
NNS_Rx1428	775730	6735688	36	36	41	41	36	36	51	51	36	36	54	54	18.3	18.3	66	73
NNS_Rx1429	776543.4	6735689	40	40	45	45	40	40	55	55	40	40	58	58	17.9	17.9	69	77
NNS_Rx1430	776617.8	6735691	38	38	43	43	38	38	54	54	38	38	56	56	18	18	68	75
NNS_Rx1431	775239.4	6735694	30	30	35	35	30	30	46	46	30	30	48	48	18	18	61	65
NNS_Rx1432	776964.2	6735694	33	33	38	38	33	33	50	50	33	33	52	52	18.6	18.6	68	69
NNS_Rx1433	776847.8	6735701	35	35	40	40	35	35	51	51	35	35	53	53	18.4	18.4	65	71
NNS_Rx1434	777538.7	6735707	31	31	34	34	31	31	46	46	31	31	48	48	17	17	68	68
NNS_Rx1436	776615.4	6735708	38	38	43	43	38	38	54	54	38	38	56	56	18.1	18.1	68	75
NNS_Rx1437	776543.4	6735712	40	40	45	45	40	40	55	55	40	40	58	58	18	18	69	77
NNS_Rx1438	777018.7	6735712	34	34	38	38	34	34	49	49	34	34	52	52	18	18	69	69
NNS_Rx1439	776907.3	6735714	34	34	39	39	34	34	50	50	34	34	53	53	18.5	18.5	67	70
NNS_Rx1440	776923.2	6735714	34	34	39	39	34	34	50	50	34	34	52	52	18.5	18.5	67	69
NNS_Rx1441	776863.4	6735715	35	35	40	40	35	35	51	51	35	35	53	53	18.5	18.5	65	70
NNS_Rx1442	776880.9	6735715	34	34	39	39	34	34	50	50	34	34	53	53	18.5	18.5	67	70
NNS_Rx1443	776966.9	6735717	33	33	38	38	33	33	50	50	33	33	52	52	18.7	18.7	68	69
NNS_Rx1444	775245.7	6735717	30	30	35	35	30	30	46	46	30	30	48	48	18	18	62	65
NNS_Rx1445	776094.8	6735719	47	47	51	51	47	47	61	61	47	47	64	64	17.3	17.3	81	88
NNS_Rx1446	775988.8	6735721	40	40	46	46	40	40	56	56	40	40	59	59	18.1	18.1	71	80
NNS_Rx1447	775943.3	6735724	40	40	45	45	40	40	55	55	40	40	58	58	18	18	71	80
NNS_Rx1448	777544.3	6735728	29	29	33	33	29	29	46	46	29	29	48	48	18.6	18.6	67	67
NNS_Rx1449	775781.2	6735729	37	37	42	42	37	37	52	52	37	37	55	55	18.3	18.3	67	74
NNS_Rx1450	776555.1	6735729	39	39	44	44	39	39	55	55	39	39	57	57	18.1	18.1	69	76
NNS_Rx1451	776614.6	6735730	38	38	43	43	38	38	54	54	38	38	56	56	18.1	18.1	68	75
NNS_Rx1452	777081.2	6735730	33	33	37	37	33	33	48	48	33	33	51	51	17.8	17.8	63	67
NNS_Rx1453	775867.1	6735731	38	38	44	44	38	38	54	54	38	38	57	57	18.1	18.1	69	77
NNS_Rx1454	775844.5	6735732	38	38	43	43	38	38	53	53	38	38	56	56	18.2	18.2	68	76
NNS_Rx1455	775802.6	6735733	37	37	42	42	37	37	53	53	37	37	55	55	18.3	18.3	67	75
NNS_Rx1456	775740.8	6735734	36	36	41	41	36	36	52	52	36	36	54	54	18.5	18.5	66	73
NNS_Rx1457	775758.5	6735735	36	36	41	41	36	36	52	52	36	36	55	55	18.4	18.4	66	74
NNS_Rx1458	775647.2	6735738	34	34	40	40	34	34	50	50	34	34	53	53	18.6	18.6	68	71
NNS_Rx1459	775994.7	6735738	40	40	45	45	40	40	55	55	40	40	58	58	18.2	18.2	71	78
NNS_Rx1460	775942.3	6735740	40	40	45	45	40	40	55	55	40	40	58	58	17.9	17.9	71	80
NNS_Rx1461	775245.7	6735745	30	30	35	35	30	30	46	46	30	30	48	48	18	18	62	65
NNS_Rx1462	777584.9	6735746	29	29	33	33	29	29	45	45	29	29	48	48	18.8	18.8	67	67
NNS_Rx1463	776617.8	6735746	38	38	43	43	38	38	54	54	38	38	56	56	18.2	18.2	69	75
NNS_Rx1464	776558.3	6735750	39	39	44	44	39	39	54	54	39	39	57	57	18.1	18.1	69	76

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1465	777082.2	6735752	33	33	37	37	33	33	49	49	33	33	51	51	18.1	18.1	64	67
NNS_Rx1466	775991.5	6735754	40	40	45	45	40	40	55	55	40	40	58	58	18.4	18.4	70	79
NNS_Rx1467	777543.3	6735755	29	29	33	33	29	29	46	46	29	29	48	48	18.7	18.7	68	68
NNS_Rx1468	776980.9	6735758	33	33	38	38	33	33	50	50	33	33	52	52	19	19	70	70
NNS_Rx1469	776943.4	6735759	33	33	38	38	33	33	50	50	33	33	52	52	18.8	18.8	67	69
NNS_Rx1470	775723.2	6735759	36	36	41	41	36	36	51	51	36	36	54	54	18.5	18.5	66	73
NNS_Rx1471	777020.9	6735760	32	32	37	37	32	32	49	49	32	32	51	51	19	19	69	69
NNS_Rx1472	776999.7	6735760	33	33	38	38	33	33	49	49	33	33	52	52	19	19	70	70
NNS_Rx1473	775926.4	6735760	40	40	45	45	40	40	55	55	40	40	58	58	18.1	18.1	71	79
NNS_Rx1474	776963.2	6735761	33	33	38	38	33	33	50	50	33	33	52	52	19	19	70	70
NNS_Rx1475	776846.9	6735762	34	34	40	40	34	34	51	51	34	34	53	53	18.7	18.7	65	70
NNS_Rx1476	777040.4	6735763	32	32	37	37	32	32	49	49	32	32	51	51	19.1	19.1	69	69
NNS_Rx1477	776888	6735763	34	34	39	39	34	34	50	50	34	34	53	53	18.8	18.8	67	70
NNS_Rx1478	776432.7	6735764	41	41	47	47	41	41	57	57	41	41	59	59	18	18	72	80
NNS_Rx1479	775847.7	6735765	38	38	43	43	38	38	54	54	38	38	56	56	18.3	18.3	68	76
NNS_Rx1480	776863	6735765	34	34	39	39	34	34	51	51	34	34	53	53	18.7	18.7	67	70
NNS_Rx1481	776618.9	6735765	38	38	43	43	38	38	53	53	38	38	56	56	18.3	18.3	69	74
NNS_Rx1482	776408.2	6735769	42	42	47	47	42	42	57	57	42	42	60	60	18.3	18.3	72	81
NNS_Rx1483	775944.6	6735770	40	40	45	45	40	40	56	56	40	40	58	58	18	18	71	79
NNS_Rx1484	775801.5	6735771	37	37	42	42	37	37	53	53	37	37	55	55	18.5	18.5	67	75
NNS_Rx1485	776559.7	6735772	39	39	44	44	39	39	54	54	39	39	57	57	18.2	18.2	68	76
NNS_Rx1486	777593.8	6735772	29	29	33	33	29	29	45	45	29	29	47	47	18.7	18.7	67	67
NNS_Rx1487	776539.8	6735772	39	39	44	44	39	39	55	55	39	39	57	57	18.2	18.2	69	76
NNS_Rx1488	777083.6	6735772	33	33	37	37	33	33	49	49	33	33	51	51	18.3	18.3	69	69
NNS_Rx1489	776521.7	6735772	39	39	45	45	39	39	55	55	39	39	58	58	18.1	18.1	69	77
NNS_Rx1490	775725.7	6735776	36	36	41	41	36	36	52	52	36	36	54	54	18.6	18.6	67	73
NNS_Rx1491	776929.7	6735778	33	33	38	38	33	33	50	50	33	33	52	52	18.9	18.9	67	69
NNS_Rx1492	775250	6735779	29	29	35	35	29	29	46	46	29	29	48	48	19	19	62	65
NNS_Rx1493	776084.4	6735780	46	46	51	51	46	46	61	61	46	46	63	63	17.4	17.4	80	87
NNS_Rx1494	775991.7	6735782	40	40	45	45	40	40	55	55	40	40	58	58	18.5	18.5	70	80
NNS_Rx1495	777546.6	6735782	29	29	33	33	29	29	46	46	29	29	48	48	18.9	18.9	68	68
NNS_Rx1496	777503.6	6735783	29	29	33	33	29	29	46	46	29	29	48	48	18.9	18.9	68	68
NNS_Rx1497	775851	6735784	38	38	43	43	38	38	54	54	38	38	56	56	18.2	18.2	69	76
NNS_Rx1498	776617.8	6735787	38	38	43	43	38	38	53	53	38	38	56	56	18.4	18.4	69	74
NNS_Rx1499	777593	6735788	29	29	33	33	29	29	45	45	29	29	47	47	18.8	18.8	67	67
NNS_Rx1500	775942.8	6735790	40	40	45	45	40	40	56	56	40	40	58	58	18.1	18.1	71	79
NNS_Rx1501	776559.3	6735791	39	39	44	44	39	39	54	54	39	39	57	57	18.3	18.3	68	76
NNS_Rx1502	775942	6735794	40	40	45	45	40	40	56	56	40	40	58	58	18.1	18.1	71	79
NNS_Rx1503	777082.2	6735794	33	33	37	37	33	33	49	49	33	33	51	51	18.4	18.4	69	69
NNS_Rx1504	775996	6735796	40	40	45	45	40	40	56	56	40	40	58	58	18.6	18.6	71	80
NNS_Rx1505	776852	6735797	34	34	39	39	34	34	51	51	34	34	53	53	18.9	18.9	68	70
NNS_Rx1506	777507.5	6735798	29	29	33	33	29	29	46	46	29	29	48	48	18.9	18.9	68	68
NNS_Rx1507	777547.1	6735799	29	29	33	33	29	29	46	46	29	29	48	48	19	19	68	68
NNS_Rx1508	776081.6	6735798	46	46	50	50	46	46	60	60	46	46	63	63	17.7	17.7	80	87

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1509	776619.6	6735802	37	37	43	43	37	37	53	53	37	37	56	56	18.5	18.5	69	74
NNS_Rx1510	775849.8	6735804	38	38	43	43	38	38	54	54	38	38	56	56	18.4	18.4	69	76
NNS_Rx1511	776911.6	6735804	33	33	39	39	33	33	50	50	33	33	52	52	19	19	67	69
NNS_Rx1512	776971.9	6735804	33	33	38	38	33	33	50	50	33	33	52	52	19.2	19.2	70	70
NNS_Rx1513	776933.3	6735805	33	33	38	38	33	33	50	50	33	33	52	52	19.2	19.2	72	72
NNS_Rx1514	776991.2	6735805	32	32	38	38	32	32	49	49	32	32	52	52	19.3	19.3	70	70
NNS_Rx1515	776952.8	6735806	33	33	38	38	33	33	50	50	33	33	52	52	19.2	19.2	70	70
NNS_Rx1516	777007.4	6735810	32	32	37	37	32	32	49	49	32	32	52	52	19.4	19.4	70	70
NNS_Rx1517	775245.7	6735810	29	29	34	34	29	29	46	46	29	29	48	48	19	19	62	65
NNS_Rx1518	775944.1	6735810	40	40	45	45	40	40	56	56	40	40	58	58	18.2	18.2	71	79
NNS_Rx1519	775996.5	6735811	41	41	46	46	41	41	56	56	41	41	59	59	18.2	18.2	72	81
NNS_Rx1520	777084.6	6735813	32	32	37	37	32	32	49	49	32	32	51	51	18.5	18.5	69	69
NNS_Rx1521	776853.3	6735815	34	34	39	39	34	34	51	51	34	34	53	53	19	19	68	70
NNS_Rx1522	777549.9	6735815	29	29	33	33	29	29	46	46	29	29	48	48	19.1	19.1	68	68
NNS_Rx1523	776901.8	6735817	33	33	39	39	33	33	50	50	33	33	53	53	19.1	19.1	68	69
NNS_Rx1524	777505.2	6735819	29	29	33	33	29	29	46	46	29	29	48	48	19	19	68	68
NNS_Rx1525	776618.9	6735819	38	38	43	43	38	38	53	53	38	38	56	56	18.4	18.4	69	74
NNS_Rx1526	776260.8	6735823	47	47	52	52	47	47	62	62	47	47	65	65	17.4	17.4	83	91
NNS_Rx1527	775894.2	6735821	39	39	44	44	39	39	55	55	39	39	57	57	18.4	18.4	70	78
NNS_Rx1528	777040.8	6735823	32	32	37	37	32	32	49	49	32	32	51	51	19.3	19.3	69	69
NNS_Rx1529	775944.6	6735823	40	40	45	45	40	40	56	56	40	40	58	58	18.2	18.2	71	79
NNS_Rx1530	775855.5	6735826	38	38	43	43	38	38	54	54	38	38	57	57	18.5	18.5	69	76
NNS_Rx1531	776850.3	6735830	34	34	39	39	34	34	51	51	34	34	53	53	19	19	68	70
NNS_Rx1532	777025.3	6735831	32	32	37	37	32	32	49	49	32	32	51	51	19.4	19.4	69	69
NNS_Rx1533	776891.5	6735832	33	33	39	39	33	33	50	50	33	33	53	53	19.1	19.1	68	69
NNS_Rx1534	775803.2	6735834	37	37	42	42	37	37	53	53	37	37	56	56	18.5	18.5	68	75
NNS_Rx1535	775945.7	6735835	40	40	45	45	40	40	56	56	40	40	59	59	18.2	18.2	71	79
NNS_Rx1536	777083.6	6735835	31	31	36	36	31	31	49	49	31	31	51	51	19.5	19.5	69	69
NNS_Rx1537	776526.7	6735839	39	39	44	44	39	39	55	55	39	39	57	57	18.4	18.4	69	76
NNS_Rx1538	775252.1	6735840	29	29	34	34	29	29	46	46	29	29	48	48	19.1	19.1	62	66
NNS_Rx1539	776540.5	6735840	39	39	44	44	39	39	54	54	39	39	57	57	18.4	18.4	69	76
NNS_Rx1540	776564.6	6735840	38	38	43	43	38	38	54	54	38	38	57	57	18.5	18.5	68	75
NNS_Rx1542	776421	6735841	41	41	46	46	41	41	57	57	41	41	59	59	17.9	17.9	73	80
NNS_Rx1543	776500.8	6735842	39	39	44	44	39	39	55	55	39	39	58	58	18.4	18.4	70	77
NNS_Rx1544	776308.4	6735842	43	43	48	48	43	43	58	58	43	43	60	60	17.9	17.9	76	83
NNS_Rx1545	776437.3	6735843	41	41	46	46	41	41	56	56	41	41	59	59	18.1	18.1	71	79
NNS_Rx1546	776482.7	6735844	40	40	45	45	40	40	55	55	40	40	58	58	18.3	18.3	70	78
NNS_Rx1547	776460.7	6735844	40	40	45	45	40	40	56	56	40	40	58	58	18.3	18.3	71	78
NNS_Rx1548	776263.5	6735845	44	44	49	49	44	44	59	59	44	44	62	62	17.6	17.6	80	87
NNS_Rx1549	776889.9	6735846	33	33	39	39	33	33	50	50	33	33	53	53	19.2	19.2	71	71
NNS_Rx1550	776987	6735847	32	32	37	37	32	32	50	50	32	32	52	52	19.5	19.5	70	70
NNS_Rx1551	776854.5	6735851	34	34	39	39	34	34	51	51	34	34	53	53	19.1	19.1	68	70
NNS_Rx1552	776243.7	6735851	50	50	54	54	50	50	64	64	50	50	67	67	17.2	17.2	86	93
NNS_Rx1553	775741	6735855	36	36	41	41	36	36	52	52	36	36	54	54	18.8	18.8	68	73

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1554	777029.8	6735857	32	32	37	37	32	32	49	49	32	32	51	51	19.6	19.6	69	69
NNS_Rx1555	775809.3	6735857	37	37	42	42	37	37	53	53	37	37	56	56	18.6	18.6	68	75
NNS_Rx1556	775897.6	6735859	39	39	44	44	39	39	55	55	39	39	57	57	18.4	18.4	70	77
NNS_Rx1557	775880.7	6735859	39	39	44	44	39	39	54	54	39	39	57	57	18.5	18.5	70	77
NNS_Rx1558	775844.7	6735860	38	38	43	43	38	38	54	54	38	38	56	56	18.6	18.6	69	76
NNS_Rx1559	775780.6	6735860	37	37	42	42	37	37	53	53	37	37	55	55	18.7	18.7	71	74
NNS_Rx1560	775763.8	6735862	36	36	41	41	36	36	52	52	36	36	55	55	18.8	18.8	68	74
NNS_Rx1561	775946.2	6735863	40	40	45	45	40	40	56	56	40	40	59	59	18.3	18.3	72	79
NNS_Rx1562	776890.1	6735865	33	33	38	38	33	33	50	50	33	33	53	53	19.4	19.4	71	71
NNS_Rx1563	775531.6	6735865	32	32	38	38	32	32	49	49	32	32	51	51	19.1	19.1	65	69
NNS_Rx1564	776852.8	6735866	34	34	39	39	34	34	51	51	34	34	53	53	19.2	19.2	68	70
NNS_Rx1565	775503.7	6735866	32	32	37	37	32	32	49	49	32	32	51	51	19.2	19.2	65	69
NNS_Rx1566	775207.6	6735874	30	30	34	34	30	30	45	45	30	30	48	48	18.3	18.3	62	65
NNS_Rx1567	776850.7	6735885	34	34	39	39	34	34	51	51	34	34	53	53	19.4	19.4	71	71
NNS_Rx1568	776892.5	6735886	33	33	38	38	33	33	50	50	33	33	53	53	19.5	19.5	71	71
NNS_Rx1569	777034.1	6735891	32	32	37	37	32	32	49	49	32	32	51	51	19.8	19.8	70	70
NNS_Rx1570	776560.5	6735894	38	38	43	43	38	38	54	54	38	38	57	57	18.7	18.7	69	75
NNS_Rx1571	776619.3	6735894	37	37	42	42	37	37	53	53	37	37	56	56	18.8	18.8	68	74
NNS_Rx1572	778029.7	6735897	28	28	30	30	28	28	44	44	28	28	46	46	18.1	18.1	66	66
NNS_Rx1573	777080.4	6735897	31	31	36	36	31	31	49	49	31	31	51	51	20	20	70	70
NNS_Rx1574	776347.3	6735898	41	41	47	47	41	41	57	57	41	41	59	59	18.4	18.4	73	81
NNS_Rx1575	776408.7	6735899	40	40	45	45	40	40	56	56	40	40	59	59	18.5	18.5	71	79
NNS_Rx1576	776466.5	6735900	40	40	45	45	40	40	56	56	40	40	58	58	18.5	18.5	71	78
NNS_Rx1577	777056.1	6735901	31	31	36	36	31	31	49	49	31	31	51	51	19.9	19.9	70	70
NNS_Rx1578	776266.7	6735902	47	47	52	52	47	47	62	62	47	47	65	65	17.5	17.5	83	90
NNS_Rx1579	776900.7	6735904	33	33	38	38	33	33	50	50	33	33	53	53	19.7	19.7	71	71
NNS_Rx1580	776877.8	6735905	33	33	38	38	33	33	51	51	33	33	53	53	19.5	19.5	71	71
NNS_Rx1581	776530.2	6735906	38	38	43	43	38	38	55	55	38	38	57	57	18.7	18.7	70	76
NNS_Rx1582	776012	6735906	40	40	45	45	40	40	55	55	40	40	57	57	17.6	17.6	71	80
NNS_Rx1583	775944.2	6735907	39	39	44	44	39	39	55	55	39	39	58	58	18.8	18.8	71	78
NNS_Rx1584	776509.5	6735908	39	39	44	44	39	39	55	55	39	39	57	57	18.7	18.7	70	77
NNS_Rx1585	775858.8	6735908	38	38	43	43	38	38	54	54	38	38	57	57	18.8	18.8	73	76
NNS_Rx1586	776848.2	6735908	34	34	39	39	34	34	51	51	34	34	53	53	19.5	19.5	71	71
NNS_Rx1587	777032.1	6735909	31	31	37	37	31	31	49	49	31	31	51	51	19.9	19.9	70	70
NNS_Rx1588	777298.3	6735911	29	29	34	34	29	29	47	47	29	29	49	49	20.1	20.1	61	64
NNS_Rx1589	775803.6	6735915	37	37	42	42	37	37	53	53	37	37	56	56	19	19	69	75
NNS_Rx1590	776410.1	6735918	40	40	45	45	40	40	56	56	40	40	59	59	18.6	18.6	72	78
NNS_Rx1591	776269	6735919	47	47	52	52	47	47	61	61	47	47	64	64	17.3	17.3	82	90
NNS_Rx1592	776344.8	6735920	40	40	45	45	40	40	55	55	40	40	58	58	17.7	17.7	72	80
NNS_Rx1593	777083.3	6735921	31	31	36	36	31	31	49	49	31	31	51	51	20.2	20.2	70	70
NNS_Rx1594	775445.8	6735921	31	31	36	36	31	31	48	48	31	31	50	50	19.4	19.4	64	68
NNS_Rx1595	775527.9	6735922	32	32	37	37	32	32	49	49	32	32	51	51	19.3	19.3	65	69
NNS_Rx1596	776014.3	6735921	38	38	43	43	38	38	53	53	38	38	56	56	17.7	17.7	71	78
NNS_Rx1597	777019.2	6735922	32	32	37	37	32	32	49	49	32	32	51	51	19.9	19.9	70	70

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1598	777057.8	6735925	31	31	36	36	31	31	49	49	31	31	51	51	20.1	20.1	70	70
NNS_Rx1599	775365.1	6735925	30	30	35	35	30	30	47	47	30	30	50	50	19.4	19.4	64	67
NNS_Rx1600	776998.5	6735927	32	32	37	37	32	32	50	50	32	32	52	52	20	20	70	70
NNS_Rx1601	776622.7	6735928	37	37	42	42	37	37	53	53	37	37	56	56	19	19	69	74
NNS_Rx1602	775389.4	6735929	30	30	36	36	30	30	47	47	30	30	50	50	19.4	19.4	64	67
NNS_Rx1604	775310.5	6735929	30	30	35	35	30	30	47	47	30	30	49	49	18.8	18.8	63	66
NNS_Rx1605	777223.8	6735930	29	29	34	34	29	29	48	48	29	29	50	50	20.6	20.6	70	70
NNS_Rx1606	775860.7	6735931	38	38	43	43	38	38	54	54	38	38	57	57	18.9	18.9	73	77
NNS_Rx1607	776984.3	6735931	32	32	37	37	32	32	50	50	32	32	52	52	19.9	19.9	70	70
NNS_Rx1608	775245.7	6735935	30	30	34	34	30	30	46	46	30	30	48	48	18.7	18.7	62	66
NNS_Rx1609	776960.2	6735935	32	32	37	37	32	32	50	50	32	32	52	52	20	20	70	70
NNS_Rx1610	776261.9	6735936	48	48	53	53	48	48	63	63	48	48	66	66	17.6	17.6	84	91
NNS_Rx1611	775801.3	6735936	37	37	42	42	37	37	53	53	37	37	56	56	19.1	19.1	69	75
NNS_Rx1612	777187.3	6735936	30	30	35	35	30	30	48	48	30	30	50	50	20.6	20.6	70	70
NNS_Rx1613	776335.4	6735936	39	39	45	45	39	39	55	55	39	39	57	57	18	18	73	79
NNS_Rx1614	776560.8	6735937	38	38	43	43	38	38	54	54	38	38	56	56	18.9	18.9	70	75
NNS_Rx1615	775451.5	6735937	31	31	36	36	31	31	48	48	31	31	51	51	19.5	19.5	65	68
NNS_Rx1616	776007.6	6735937	36	36	41	41	36	36	52	52	36	36	55	55	18.7	18.7	73	77
NNS_Rx1617	776513.7	6735938	39	39	44	44	39	39	55	55	39	39	57	57	18.8	18.8	71	77
NNS_Rx1618	776086.7	6735938	45	45	51	51	45	45	61	61	45	45	64	64	18.1	18.1	80	87
NNS_Rx1619	775529.4	6735939	32	32	37	37	32	32	49	49	32	32	51	51	19.4	19.4	66	69
NNS_Rx1620	776445.2	6735940	40	40	45	45	40	40	56	56	40	40	59	59	18.8	18.8	72	79
NNS_Rx1621	776942	6735945	32	32	37	37	32	32	50	50	32	32	52	52	20	20	70	70
NNS_Rx1622	776884.5	6735945	33	33	38	38	33	33	51	51	33	33	53	53	19.9	19.9	71	71
NNS_Rx1623	776853.6	6735946	33	33	38	38	33	33	51	51	33	33	53	53	19.8	19.8	72	72
NNS_Rx1624	775800.2	6735949	36	36	42	42	36	36	53	53	36	36	56	56	19.2	19.2	70	75
NNS_Rx1625	775392.2	6735949	30	30	36	36	30	30	47	47	30	30	50	50	19.5	19.5	64	67
NNS_Rx1626	776900.7	6735950	33	33	38	38	33	33	50	50	33	33	53	53	19.9	19.9	65	69
NNS_Rx1627	775863.5	6735951	38	38	43	43	38	38	54	54	38	38	57	57	19	19	72	77
NNS_Rx1628	775313.9	6735951	30	30	35	35	30	30	47	47	30	30	49	49	18.8	18.8	63	66
NNS_Rx1629	776622.4	6735952	36	36	41	41	36	36	53	53	36	36	56	56	19.2	19.2	72	74
NNS_Rx1630	776266.2	6735953	47	47	52	52	47	47	62	62	47	47	65	65	17.5	17.5	83	90
NNS_Rx1631	776010.2	6735953	36	36	41	41	36	36	54	54	36	36	56	56	20.4	20.4	76	76
NNS_Rx1632	777074.2	6735954	31	31	36	36	31	31	49	49	31	31	51	51	20.5	20.5	70	70
NNS_Rx1633	775243.6	6735956	30	30	34	34	30	30	46	46	30	30	48	48	18.8	18.8	63	65
NNS_Rx1634	776345.3	6735956	37	37	43	43	37	37	54	54	37	37	57	57	19.7	19.7	76	79
NNS_Rx1635	776086.6	6735956	46	46	51	51	46	46	61	61	46	46	64	64	18.1	18.1	80	88
NNS_Rx1636	776560.5	6735957	37	37	43	43	37	37	54	54	37	37	57	57	19.1	19.1	70	76
NNS_Rx1637	776508.2	6735959	38	38	44	44	38	38	55	55	38	38	57	57	19	19	71	77
NNS_Rx1638	776850	6735960	33	33	38	38	33	33	51	51	33	33	53	53	19.9	19.9	72	72
NNS_Rx1639	775447.1	6735961	31	31	36	36	31	31	48	48	31	31	50	50	19.5	19.5	65	68
NNS_Rx1640	775803.2	6735962	36	36	42	42	36	36	53	53	36	36	56	56	19.2	19.2	70	75
NNS_Rx1641	776625.1	6735963	36	36	41	41	36	36	53	53	36	36	56	56	19.3	19.3	72	74
NNS_Rx1642	775524.1	6735964	32	32	37	37	32	32	49	49	32	32	51	51	19.5	19.5	66	69

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1643	775388.8	6735966	30	30	36	36	30	30	47	47	30	30	50	50	19.5	19.5	64	67
NNS_Rx1644	777017	6735967	31	31	36	36	31	31	50	50	31	31	52	52	20.3	20.3	70	70
NNS_Rx1645	776007.4	6735969	38	38	43	43	38	38	55	55	38	38	58	58	20.2	20.2	76	80
NNS_Rx1646	775865.4	6735970	38	38	43	43	38	38	54	54	38	38	57	57	19.2	19.2	71	77
NNS_Rx1647	775311.4	6735971	30	30	35	35	30	30	47	47	30	30	49	49	18.6	18.6	66	66
NNS_Rx1648	776263.3	6735969	48	48	53	53	48	48	62	62	48	48	65	65	17.5	17.5	83	91
NNS_Rx1649	776082.3	6735975	45	45	51	51	45	45	61	61	45	45	64	64	18.2	18.2	81	87
NNS_Rx1650	776556	6735976	37	37	43	43	37	37	54	54	37	37	57	57	19.2	19.2	70	76
NNS_Rx1651	776409.4	6735977	39	39	44	44	39	39	56	56	39	39	58	58	19.3	19.3	73	78
NNS_Rx1652	776986.6	6735978	32	32	37	37	32	32	50	50	32	32	52	52	20.3	20.3	71	71
NNS_Rx1653	776504	6735978	38	38	44	44	38	38	55	55	38	38	58	58	19.1	19.1	71	77
NNS_Rx1654	775523.2	6735979	32	32	37	37	32	32	49	49	32	32	51	51	19.6	19.6	66	69
NNS_Rx1655	775802.4	6735979	36	36	42	42	36	36	53	53	36	36	56	56	19.3	19.3	70	75
NNS_Rx1656	776341.3	6735979	38	38	43	43	38	38	55	55	38	38	58	58	19.5	19.5	77	79
NNS_Rx1657	775452.4	6735981	31	31	36	36	31	31	48	48	31	31	51	51	19.6	19.6	65	68
NNS_Rx1658	776008.6	6735984	37	37	42	42	37	37	55	55	37	37	57	57	20.3	20.3	74	80
NNS_Rx1659	776621.7	6735987	36	36	41	41	36	36	53	53	36	36	56	56	19.5	19.5	72	74
NNS_Rx1661	775317.3	6735988	30	30	35	35	30	30	47	47	30	30	49	49	18.6	18.6	66	66
NNS_Rx1662	775860	6735989	38	38	43	43	38	38	54	54	38	38	57	57	19.3	19.3	71	77
NNS_Rx1663	775391.9	6735989	30	30	36	36	30	30	48	48	30	30	50	50	19.7	19.7	64	67
NNS_Rx1664	776083	6735991	46	46	51	51	46	46	61	61	46	46	64	64	18.2	18.2	81	87
NNS_Rx1665	775526	6735993	32	32	37	37	32	32	49	49	32	32	51	51	19.7	19.7	66	69
NNS_Rx1666	775243.6	6735997	29	29	34	34	29	29	46	46	29	29	48	48	18.9	18.9	63	65
NNS_Rx1667	776923.8	6735997	32	32	37	37	32	32	50	50	32	32	52	52	20.4	20.4	69	69
NNS_Rx1668	776564.2	6735998	37	37	42	42	37	37	54	54	37	37	57	57	19.5	19.5	73	75
NNS_Rx1669	776006.1	6735999	38	38	44	44	38	38	56	56	38	38	58	58	20.2	20.2	74	80
NNS_Rx1670	776411.5	6735998	39	39	44	44	39	39	56	56	39	39	59	59	19.3	19.3	73	78
NNS_Rx1671	776341.3	6735999	39	39	45	45	39	39	56	56	39	39	59	59	19.4	19.4	77	81
NNS_Rx1672	776887.7	6735999	33	33	38	38	33	33	51	51	33	33	53	53	20.2	20.2	66	69
NNS_Rx1673	776906.8	6736000	32	32	37	37	32	32	51	51	32	32	53	53	20.3	20.3	65	69
NNS_Rx1674	775799	6736001	36	36	42	42	36	36	53	53	36	36	56	56	19.5	19.5	70	75
NNS_Rx1675	775453.6	6736001	31	31	36	36	31	31	48	48	31	31	51	51	19.7	19.7	65	68
NNS_Rx1676	775391.9	6736002	30	30	36	36	30	30	48	48	30	30	50	50	19.7	19.7	64	67
NNS_Rx1677	775859.7	6736002	37	37	43	43	37	37	54	54	37	37	57	57	19.4	19.4	71	77
NNS_Rx1678	775318.3	6736003	30	30	35	35	30	30	47	47	30	30	49	49	18.7	18.7	66	66
NNS_Rx1679	776257.8	6736005	48	48	53	53	48	48	63	63	48	48	66	66	17.7	17.7	84	92
NNS_Rx1680	776621.7	6736005	36	36	41	41	36	36	53	53	36	36	56	56	19.6	19.6	72	74
NNS_Rx1681	775861	6736013	37	37	43	43	37	37	54	54	37	37	57	57	19.5	19.5	71	77
NNS_Rx1682	775942.9	6736014	38	38	43	43	38	38	55	55	38	38	58	58	20.1	20.1	75	78
NNS_Rx1683	775527.6	6736015	32	32	37	37	32	32	49	49	32	32	51	51	19.7	19.7	66	69
NNS_Rx1684	776007.7	6736016	40	40	46	46	40	40	57	57	40	40	60	60	19.5	19.5	75	80
NNS_Rx1685	776085.3	6736015	46	46	51	51	46	46	61	61	46	46	64	64	18.3	18.3	82	88
NNS_Rx1686	776343.7	6736020	40	40	45	45	40	40	57	57	40	40	59	59	19.3	19.3	77	81
NNS_Rx1687	776409.1	6736018	39	39	44	44	39	39	56	56	39	39	58	58	19.7	19.7	74	77

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1688	776563.5	6736018	37	37	42	42	37	37	54	54	37	37	56	56	19.5	19.5	74	75
NNS_Rx1689	775588.1	6736019	33	33	38	38	33	33	50	50	33	33	52	52	19.8	19.8	67	71
NNS_Rx1690	775317.3	6736019	30	30	35	35	30	30	47	47	30	30	49	49	18.7	18.7	66	66
NNS_Rx1691	775454.3	6736020	31	31	36	36	31	31	48	48	31	31	51	51	19.8	19.8	65	68
NNS_Rx1692	775363.8	6736020	31	31	35	35	31	31	47	47	31	31	50	50	18.8	18.8	66	67
NNS_Rx1693	775393.8	6736021	31	31	36	36	31	31	48	48	31	31	50	50	19.2	19.2	64	67
NNS_Rx1694	776622	6736022	36	36	41	41	36	36	53	53	36	36	56	56	19.8	19.8	72	74
NNS_Rx1695	775805.5	6736030	36	36	42	42	36	36	53	53	36	36	56	56	19.7	19.7	71	76
NNS_Rx1696	775943.9	6736030	38	38	44	44	38	38	55	55	38	38	58	58	20.4	20.4	75	79
NNS_Rx1698	776010.1	6736031	40	40	46	46	40	40	57	57	40	40	60	60	19.6	19.6	75	81
NNS_Rx1699	776087.3	6736032	46	46	51	51	46	46	61	61	46	46	64	64	18.5	18.5	82	88
NNS_Rx1700	775365.1	6736032	31	31	35	35	31	31	47	47	31	31	50	50	18.9	18.9	66	67
NNS_Rx1701	775319.2	6736034	30	30	35	35	30	30	47	47	30	30	49	49	18.8	18.8	66	66
NNS_Rx1702	776564.9	6736034	37	37	42	42	37	37	54	54	37	37	56	56	19.7	19.7	74	75
NNS_Rx1703	775247.8	6736035	30	30	34	34	30	30	46	46	30	30	48	48	18.7	18.7	66	66
NNS_Rx1704	775396.6	6736035	30	30	35	35	30	30	48	48	30	30	50	50	19.8	19.8	64	68
NNS_Rx1705	776262.9	6736038	48	48	53	53	48	48	63	63	48	48	65	65	17.9	17.9	84	91
NNS_Rx1706	775596.5	6736038	33	33	38	38	33	33	50	50	33	33	52	52	19.9	19.9	67	71
NNS_Rx1708	776415.3	6736039	39	39	44	44	39	39	56	56	39	39	59	59	19.8	19.8	74	79
NNS_Rx1709	776343.4	6736039	40	40	45	45	40	40	57	57	40	40	60	60	19.5	19.5	78	81
NNS_Rx1710	776621	6736040	36	36	41	41	36	36	53	53	36	36	56	56	19.9	19.9	70	74
NNS_Rx1711	775942.6	6736042	39	39	44	44	39	39	56	56	39	39	58	58	19.9	19.9	74	79
NNS_Rx1712	775805.1	6736043	36	36	41	41	36	36	53	53	36	36	56	56	19.8	19.8	71	76
NNS_Rx1713	775863.8	6736043	37	37	43	43	37	37	54	54	37	37	57	57	19.7	19.7	72	77
NNS_Rx1714	775452.7	6736044	31	31	36	36	31	31	48	48	31	31	51	51	19.9	19.9	65	68
NNS_Rx1715	776261.4	6736047	48	48	53	53	48	48	63	63	48	48	66	66	18	18	84	91
NNS_Rx1716	775391.6	6736049	31	31	36	36	31	31	48	48	31	31	50	50	19	19	66	67
NNS_Rx1717	775319.8	6736051	30	30	35	35	30	30	47	47	30	30	49	49	18.9	18.9	66	66
NNS_Rx1718	775594.3	6736055	32	32	38	38	32	32	50	50	32	32	52	52	20	20	67	71
NNS_Rx1719	775869.9	6736056	37	37	43	43	37	37	55	55	37	37	57	57	19.9	19.9	72	78
NNS_Rx1720	776627.5	6736057	35	35	41	41	35	35	53	53	35	35	56	56	20.2	20.2	70	74
NNS_Rx1721	776262	6736057	47	47	53	53	47	47	63	63	47	47	66	66	18.1	18.1	84	91
NNS_Rx1722	776412.2	6736058	39	39	44	44	39	39	56	56	39	39	59	59	20.1	20.1	75	78
NNS_Rx1723	775806.2	6736058	36	36	41	41	36	36	53	53	36	36	56	56	20	20	71	76
NNS_Rx1724	775527.6	6736059	31	31	37	37	31	31	49	49	31	31	51	51	20	20	66	70
NNS_Rx1725	776340.6	6736059	40	40	46	46	40	40	57	57	40	40	60	60	19.7	19.7	79	81
NNS_Rx1726	776564.6	6736061	37	37	42	42	37	37	54	54	37	37	56	56	19.9	19.9	74	75
NNS_Rx1727	775456.5	6736062	31	31	36	36	31	31	48	48	31	31	51	51	20	20	65	68
NNS_Rx1728	775945.5	6736063	39	39	44	44	39	39	56	56	39	39	58	58	19.4	19.4	74	80
NNS_Rx1729	775388.8	6736066	31	31	36	36	31	31	48	48	31	31	50	50	19.1	19.1	66	67
NNS_Rx1730	777714.7	6736066	27	27	31	31	27	27	46	46	27	27	48	48	20.8	20.8	69	69
NNS_Rx1731	775316.7	6736066	30	30	35	35	30	30	47	47	30	30	49	49	18.9	18.9	66	66
NNS_Rx1732	775245.7	6736066	30	30	34	34	30	30	46	46	30	30	48	48	18.8	18.8	65	65
NNS_Rx1733	776263.5	6736068	47	47	52	52	47	47	63	63	47	47	65	65	18.2	18.2	83	91

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1734	775863.8	6736070	37	37	43	43	37	37	55	55	37	37	57	57	20	20	72	77
NNS_Rx1735	775800.7	6736072	36	36	41	41	36	36	53	53	36	36	56	56	20.1	20.1	71	76
NNS_Rx1736	776564.2	6736078	36	36	41	41	36	36	54	54	36	36	56	56	20.1	20.1	72	75
NNS_Rx1738	775315.1	6736079	30	30	35	35	30	30	47	47	30	30	49	49	19	19	66	66
NNS_Rx1739	775527	6736080	31	31	37	37	31	31	49	49	31	31	51	51	20.1	20.1	66	70
NNS_Rx1740	775456.1	6736081	30	30	36	36	30	30	48	48	30	30	51	51	20.1	20.1	65	68
NNS_Rx1741	776266.6	6736082	47	47	52	52	47	47	62	62	47	47	65	65	18.4	18.4	83	90
NNS_Rx1742	775866.4	6736083	37	37	43	43	37	37	55	55	37	37	57	57	20.2	20.2	73	78
NNS_Rx1743	776345.1	6736083	40	40	45	45	40	40	56	56	40	40	59	59	19.2	19.2	80	81
NNS_Rx1744	775810.4	6736084	36	36	41	41	36	36	54	54	36	36	56	56	20.2	20.2	71	76
NNS_Rx1745	775389.1	6736084	31	31	35	35	31	31	48	48	31	31	50	50	19.2	19.2	66	67
NNS_Rx1746	777676.6	6736084	27	27	31	31	27	27	46	46	27	27	48	48	20.9	20.9	69	69
NNS_Rx1747	775585.3	6736086	32	32	38	38	32	32	50	50	32	32	52	52	20.2	20.2	67	71
NNS_Rx1748	776621.7	6736089	35	35	40	40	35	35	54	54	35	35	56	56	20.5	20.5	70	74
NNS_Rx1749	776640.3	6736091	35	35	40	40	35	35	53	53	35	35	56	56	20.6	20.6	70	73
NNS_Rx1750	775867	6736096	37	37	42	42	37	37	55	55	37	37	57	57	20.3	20.3	73	78
NNS_Rx1751	775394.1	6736098	31	31	35	35	31	31	48	48	31	31	50	50	19.2	19.2	66	67
NNS_Rx1752	775806	6736098	36	36	41	41	36	36	53	53	36	36	56	56	20.3	20.3	71	76
NNS_Rx1753	776411.5	6736099	39	39	44	44	39	39	57	57	39	39	59	59	20.5	20.5	78	79
NNS_Rx1754	775590.3	6736099	32	32	38	38	32	32	50	50	32	32	52	52	20.3	20.3	67	71
NNS_Rx1755	775531	6736100	31	31	37	37	31	31	49	49	31	31	52	52	20.3	20.3	66	70
NNS_Rx1757	775245.7	6736100	29	29	34	34	29	29	46	46	29	29	48	48	19	19	65	65
NNS_Rx1758	776570.4	6736101	36	36	41	41	36	36	54	54	36	36	56	56	20.4	20.4	72	75
NNS_Rx1759	775450.5	6736102	30	30	36	36	30	30	48	48	30	30	50	50	20.1	20.1	65	68
NNS_Rx1760	775808.9	6736112	36	36	41	41	36	36	54	54	36	36	56	56	20.4	20.4	71	76
NNS_Rx1761	775799.4	6736113	35	35	41	41	35	35	53	53	35	35	56	56	20.4	20.4	71	76
NNS_Rx1762	775786.7	6736113	35	35	41	41	35	35	53	53	35	35	56	56	20.5	20.5	71	75
NNS_Rx1763	776454.8	6736115	38	38	43	43	38	38	56	56	38	38	59	59	20.3	20.3	77	79
NNS_Rx1764	776479.3	6736117	38	38	43	43	38	38	56	56	38	38	58	58	20.3	20.3	74	78
NNS_Rx1765	776522.3	6736117	37	37	42	42	37	37	55	55	37	37	57	57	20.4	20.4	73	76
NNS_Rx1766	776319.6	6736118	39	39	44	44	39	39	57	57	39	39	60	60	20.7	20.7	81	81
NNS_Rx1767	776413.9	6736118	39	39	44	44	39	39	57	57	39	39	59	59	20.6	20.6	79	80
NNS_Rx1768	775318	6736119	30	30	35	35	30	30	47	47	30	30	49	49	19.2	19.2	65	66
NNS_Rx1769	775395.3	6736119	31	31	35	35	31	31	48	48	31	31	50	50	19.3	19.3	66	67
NNS_Rx1770	776350.4	6736119	36	36	41	41	36	36	52	52	36	36	55	55	18.5	18.5	73	78
NNS_Rx1771	775531.6	6736120	31	31	37	37	31	31	49	49	31	31	52	52	20.4	20.4	66	70
NNS_Rx1772	776337.7	6736122	38	38	43	43	38	38	57	57	38	38	59	59	21.1	21.1	75	80
NNS_Rx1773	775450.8	6736125	30	30	36	36	30	30	48	48	30	30	50	50	20.3	20.3	65	68
NNS_Rx1774	776263.4	6736128	46	46	52	52	46	46	63	63	46	46	65	65	19	19	83	90
NNS_Rx1775	775877.8	6736127	37	37	42	42	37	37	55	55	37	37	57	57	20.6	20.6	73	78
NNS_Rx1776	775889.9	6736128	37	37	42	42	37	37	55	55	37	37	58	58	20.6	20.6	74	78
NNS_Rx1777	775860.7	6736128	36	36	42	42	36	36	55	55	36	36	57	57	20.6	20.6	73	77
NNS_Rx1778	775751.1	6736131	34	34	40	40	34	34	53	53	34	34	55	55	20.5	20.5	70	74
NNS_Rx1779	775482.7	6736140	30	30	36	36	30	30	49	49	30	30	51	51	20.4	20.4	66	69

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1781	775587.8	6736141	32	32	37	37	32	32	50	50	32	32	52	52	20.6	20.6	67	71
NNS_Rx1782	775615.5	6736141	32	32	38	38	32	32	50	50	32	32	53	53	20.5	20.5	68	71
NNS_Rx1783	775510.4	6736142	31	31	36	36	31	31	49	49	31	31	51	51	20.5	20.5	66	69
NNS_Rx1786	775454.6	6736143	30	30	36	36	30	30	48	48	30	30	51	51	20.4	20.4	65	68
NNS_Rx1787	775252.1	6736143	29	29	34	34	29	29	46	46	29	29	48	48	19.1	19.1	65	66
NNS_Rx1788	775366.9	6736146	30	30	35	35	30	30	47	47	30	30	50	50	19.4	19.4	66	67
NNS_Rx1789	776506.2	6736170	37	37	42	42	37	37	56	56	37	37	58	58	21.2	21.2	76	77
NNS_Rx1790	776338.7	6736172	40	40	45	45	40	40	58	58	40	40	60	60	20.6	20.6	83	83
NNS_Rx1791	776476.5	6736171	37	37	42	42	37	37	56	56	37	37	58	58	21.2	21.2	77	78
NNS_Rx1792	776415.1	6736172	38	38	44	44	38	38	57	57	38	38	59	59	21.1	21.1	76	79
NNS_Rx1793	776265.9	6736174	45	45	50	50	45	45	63	63	45	45	66	66	21	21	89	89
NNS_Rx1794	775866.4	6736182	36	36	42	42	36	36	55	55	36	36	57	57	21.2	21.2	73	78
NNS_Rx1795	775802	6736183	35	35	40	40	35	35	54	54	35	35	56	56	21.1	21.1	72	76
NNS_Rx1796	775941.8	6736184	35	35	41	41	35	35	54	54	35	35	56	56	20.6	20.6	74	78
NNS_Rx1797	776345.3	6736189	38	38	44	44	38	38	57	57	38	38	60	60	21.1	21.1	82	82
NNS_Rx1798	775776.4	6736190	34	34	40	40	34	34	53	53	34	34	55	55	21.1	21.1	71	75
NNS_Rx1799	775894.4	6736191	36	36	42	42	36	36	56	56	36	36	58	58	21.4	21.4	74	79
NNS_Rx1800	776490.5	6736192	37	37	42	42	37	37	56	56	37	37	58	58	21.5	21.5	75	77
NNS_Rx1801	776264.7	6736193	43	43	49	49	43	43	63	63	43	43	66	66	22.5	22.5	91	91
NNS_Rx1802	776414.1	6736193	37	37	42	42	37	37	57	57	37	37	59	59	21.8	21.8	79	79
NNS_Rx1803	775531.4	6736195	31	31	36	36	31	31	49	49	31	31	52	52	20.8	20.8	69	70
NNS_Rx1805	775480.4	6736198	30	30	36	36	30	30	49	49	30	30	51	51	20.7	20.7	69	69
NNS_Rx1806	775360.1	6736199	30	30	35	35	30	30	47	47	30	30	50	50	19.7	19.7	67	67
NNS_Rx1807	775379.4	6736199	30	30	35	35	30	30	48	48	30	30	50	50	19.7	19.7	68	68
NNS_Rx1809	775944.7	6736202	35	35	40	40	35	35	54	54	35	35	56	56	20.8	20.8	75	76
NNS_Rx1810	775862.9	6736203	36	36	41	41	36	36	55	55	36	36	57	57	21.5	21.5	73	78
NNS_Rx1811	775724.2	6736203	33	33	39	39	33	33	52	52	33	33	54	54	21.2	21.2	70	74
NNS_Rx1812	775811.5	6736205	35	35	40	40	35	35	54	54	35	35	56	56	21.4	21.4	72	76
NNS_Rx1813	775299	6736205	29	29	34	34	29	29	47	47	29	29	49	49	19.5	19.5	67	67
NNS_Rx1814	775312.3	6736206	29	29	34	34	29	29	47	47	29	29	49	49	19.5	19.5	67	67
NNS_Rx1815	775233	6736208	29	29	33	33	29	29	46	46	29	29	48	48	19.3	19.3	66	66
NNS_Rx1816	775400.6	6736209	29	29	35	35	29	29	48	48	29	29	50	50	20.7	20.7	68	68
NNS_Rx1817	776413.1	6736209	37	37	43	43	37	37	57	57	37	37	59	59	21.9	21.9	77	78
NNS_Rx1819	775535.9	6736211	31	31	36	36	31	31	49	49	31	31	52	52	20.9	20.9	70	70
NNS_Rx1820	776275	6736216	38	38	44	44	38	38	62	62	38	38	65	65	26.4	26.4	91	91
NNS_Rx1821	775942.6	6736217	35	35	40	40	35	35	54	54	35	35	56	56	21.5	21.5	75	76
NNS_Rx1822	775356.9	6736218	29	29	34	34	29	29	47	47	29	29	49	49	20.6	20.6	67	67
NNS_Rx1823	775869	6736219	36	36	41	41	36	36	55	55	36	36	57	57	21.6	21.6	75	78
NNS_Rx1824	775376.9	6736220	29	29	34	34	29	29	48	48	29	29	50	50	20.8	20.8	68	68
NNS_Rx1825	776009.4	6736222	28	28	34	34	28	28	50	50	28	28	52	52	24.7	24.7	78	78
NNS_Rx1826	775811.4	6736224	34	34	40	40	34	34	54	54	34	34	56	56	21.6	21.6	74	76
NNS_Rx1827	775590	6736227	31	31	37	37	31	31	50	50	31	31	52	52	21.2	21.2	70	71
NNS_Rx1828	776415.5	6736228	37	37	43	43	37	37	57	57	37	37	59	59	21.5	21.5	77	78
NNS_Rx1829	775950	6736230	35	35	40	40	35	35	54	54	35	35	57	57	22	22	77	77

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1830	775535.9	6736231	31	31	36	36	31	31	49	49	31	31	52	52	21	21	70	70
NNS_Rx1831	775457	6736232	30	30	35	35	30	30	48	48	30	30	51	51	20.9	20.9	69	69
NNS_Rx1832	775867.7	6736233	35	35	41	41	35	35	55	55	35	35	57	57	21.9	21.9	76	78
NNS_Rx1833	776343.3	6736235	38	38	43	43	38	38	57	57	38	38	60	60	21.5	21.5	83	83
NNS_Rx1834	776267.2	6736235	40	40	46	46	40	40	64	64	40	40	67	67	26.4	26.4	93	93
NNS_Rx1835	775378.8	6736236	29	29	34	34	29	29	48	48	29	29	50	50	20.9	20.9	68	68
NNS_Rx1836	775591.6	6736237	31	31	37	37	31	31	50	50	31	31	52	52	21.2	21.2	71	71
NNS_Rx1837	775801.4	6736244	34	34	40	40	34	34	54	54	34	34	56	56	21.8	21.8	75	76
NNS_Rx1838	775870.6	6736245	35	35	41	41	35	35	55	55	35	35	57	57	22	22	76	78
NNS_Rx1839	775949.7	6736246	35	35	41	41	35	35	55	55	35	35	58	58	22.7	22.7	78	78
NNS_Rx1840	775273.2	6736251	29	29	34	34	29	29	46	46	29	29	48	48	19.5	19.5	65	66
NNS_Rx1842	775531.8	6736251	30	30	36	36	30	30	49	49	30	30	51	51	21.1	21.1	67	70
NNS_Rx1843	775358.5	6736252	29	29	34	34	29	29	47	47	29	29	49	49	20.8	20.8	64	67
NNS_Rx1844	775300.9	6736252	29	29	34	34	29	29	47	47	29	29	49	49	19.6	19.6	65	66
NNS_Rx1845	775593.5	6736253	31	31	37	37	31	31	50	50	31	31	52	52	21.2	21.2	68	71
NNS_Rx1847	775457	6736254	30	30	35	35	30	30	48	48	30	30	50	50	20.9	20.9	66	69
NNS_Rx1848	776269.4	6736255	39	39	45	45	39	39	65	65	39	39	67	67	27.9	27.9	93	93
NNS_Rx1849	775336.6	6736256	29	29	34	34	29	29	47	47	29	29	49	49	19.8	19.8	65	67
NNS_Rx1850	776455.4	6736256	36	36	41	41	36	36	57	57	36	36	59	59	22.6	22.6	78	79
NNS_Rx1851	775319.9	6736256	29	29	34	34	29	29	47	47	29	29	49	49	19.8	19.8	66	66
NNS_Rx1852	775377.8	6736257	29	29	34	34	29	29	47	47	29	29	50	50	20.9	20.9	65	67
NNS_Rx1853	776345.2	6736255	37	37	42	42	37	37	57	57	37	37	59	59	21.9	21.9	82	82
NNS_Rx1854	775945.7	6736259	36	36	42	42	36	36	56	56	36	36	58	58	22.5	22.5	77	78
NNS_Rx1855	776415.5	6736261	37	37	42	42	37	37	57	57	37	37	59	59	22.1	22.1	79	79
NNS_Rx1856	775809.6	6736265	34	34	40	40	34	34	54	54	34	34	56	56	22.1	22.1	74	76
NNS_Rx1857	775866.7	6736265	35	35	41	41	35	35	55	55	35	35	57	57	22.3	22.3	76	78
NNS_Rx1858	775595.7	6736268	31	31	36	36	31	31	50	50	31	31	52	52	21.4	21.4	70	71
NNS_Rx1859	775940.4	6736270	36	36	41	41	36	36	56	56	36	36	58	58	22.2	22.2	78	78
NNS_Rx1860	775538.1	6736271	30	30	36	36	30	30	49	49	30	30	52	52	21.3	21.3	69	70
NNS_Rx1861	776347.6	6736273	37	37	42	42	37	37	56	56	37	37	59	59	21.7	21.7	83	83
NNS_Rx1862	776266.9	6736274	38	38	44	44	38	38	65	65	38	38	68	68	29.2	29.2	93	93
NNS_Rx1863	775457.3	6736277	29	29	35	35	29	29	48	48	29	29	50	50	21.1	21.1	68	69
NNS_Rx1864	776416.5	6736281	36	36	42	42	36	36	57	57	36	36	59	59	22.6	22.6	76	78
NNS_Rx1865	775947.9	6736286	35	35	41	41	35	35	55	55	35	35	58	58	22.4	22.4	79	79
NNS_Rx1866	775866.3	6736287	35	35	40	40	35	35	55	55	35	35	57	57	22.8	22.8	80	80
NNS_Rx1867	775812.6	6736288	34	34	39	39	34	34	54	54	34	34	56	56	22.3	22.3	75	76
NNS_Rx1868	775779.8	6736290	33	33	39	39	33	33	53	53	33	33	55	55	22.2	22.2	74	75
NNS_Rx1869	775595.1	6736291	31	31	36	36	31	31	50	50	31	31	52	52	21.6	21.6	71	71
NNS_Rx1870	775530.2	6736291	30	30	35	35	30	30	49	49	30	30	51	51	21.4	21.4	70	70
NNS_Rx1871	775457	6736293	29	29	35	35	29	29	48	48	29	29	51	51	21.3	21.3	69	69
NNS_Rx1872	776346.9	6736296	36	36	41	41	36	36	55	55	36	36	57	57	21.1	21.1	78	79
NNS_Rx1873	775389.9	6736297	29	29	34	34	29	29	48	48	29	29	50	50	21.4	21.4	68	68
NNS_Rx1874	775353.7	6736300	28	28	34	34	28	28	47	47	28	28	49	49	21.1	21.1	67	67
NNS_Rx1875	775950.2	6736301	36	36	41	41	36	36	55	55	36	36	57	57	21.9	21.9	78	79

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1876	776267.5	6736299	37	37	42	42	37	37	65	65	37	37	68	68	30.5	30.5	92	92
NNS_Rx1877	775337.3	6736301	28	28	33	33	28	28	47	47	28	28	49	49	21	21	67	67
NNS_Rx1878	775864.3	6736303	34	34	40	40	34	34	55	55	34	34	57	57	22.7	22.7	76	78
NNS_Rx1879	775237.3	6736306	28	28	33	33	28	28	46	46	28	28	49	49	20.2	20.2	70	70
NNS_Rx1880	775809.6	6736306	33	33	39	39	33	33	54	54	33	33	56	56	22.6	22.6	75	76
NNS_Rx1881	775592.9	6736306	31	31	36	36	31	31	50	50	31	31	52	52	21.7	21.7	71	71
NNS_Rx1882	775728.3	6736308	32	32	38	38	32	32	53	53	32	32	55	55	22.4	22.4	77	77
NNS_Rx1883	775539.4	6736309	30	30	35	35	30	30	50	50	30	30	52	52	21.5	21.5	70	70
NNS_Rx1884	776346.1	6736315	31	31	36	36	31	31	56	56	31	31	59	59	28.2	28.2	85	85
NNS_Rx1885	775952.1	6736312	36	36	42	42	36	36	56	56	36	36	58	58	22	22	76	78
NNS_Rx1886	776269	6736313	36	36	42	42	36	36	65	65	36	36	67	67	31	31	91	91
NNS_Rx1887	775398.4	6736313	29	29	34	34	29	29	48	48	29	29	50	50	21.2	21.2	68	68
NNS_Rx1888	775457.3	6736316	29	29	35	35	29	29	49	49	29	29	51	51	21.7	21.7	69	69
NNS_Rx1889	775808.9	6736327	33	33	39	39	33	33	54	54	33	33	56	56	22.7	22.7	75	76
NNS_Rx1890	775947.3	6736327	35	35	41	41	35	35	55	55	35	35	57	57	22	22	75	77
NNS_Rx1891	775886	6736329	34	34	40	40	34	34	56	56	34	34	58	58	23.3	23.3	76	78
NNS_Rx1892	776351.8	6736330	27	27	31	31	27	27	55	55	27	27	58	58	31.2	31.2	82	82
NNS_Rx1893	775591.6	6736331	30	30	36	36	30	30	50	50	30	30	52	52	21.8	21.8	71	71
NNS_Rx1894	775455.1	6736336	29	29	34	34	29	29	49	49	29	29	51	51	21.9	21.9	73	73
NNS_Rx1895	775394.9	6736337	28	28	34	34	28	28	48	48	28	28	50	50	21.3	21.3	65	67
NNS_Rx1896	775537.1	6736338	30	30	35	35	30	30	50	50	30	30	52	52	22	22	70	70
NNS_Rx1897	776268.8	6736339	36	36	41	41	36	36	65	65	36	36	68	68	32	32	89	92
NNS_Rx1898	775808.3	6736342	33	33	39	39	33	33	54	54	33	33	56	56	22.9	22.9	74	76
NNS_Rx1899	775893.5	6736343	34	34	40	40	34	34	56	56	34	34	58	58	23.5	23.5	74	78
NNS_Rx1900	775947.6	6736344	35	35	40	40	35	35	55	55	35	35	57	57	22.2	22.2	74	78
NNS_Rx1901	775864.7	6736345	34	34	40	40	34	34	55	55	34	34	57	57	23.3	23.3	73	78
NNS_Rx1902	775308.5	6736345	28	28	33	33	28	28	47	47	28	28	49	49	21.6	21.6	71	71
NNS_Rx1903	776354.1	6736346	31	31	37	37	31	31	56	56	31	31	58	58	26.6	26.6	80	80
NNS_Rx1904	775243.6	6736348	28	28	33	33	28	28	46	46	28	28	48	48	20.2	20.2	71	71
NNS_Rx1905	775342	6736348	28	28	33	33	28	28	47	47	28	28	50	50	21.7	21.7	72	72
NNS_Rx1906	775678.1	6736350	31	31	37	37	31	31	52	52	31	31	54	54	22.5	22.5	72	73
NNS_Rx1907	775592.3	6736351	30	30	36	36	30	30	50	50	30	30	52	52	22	22	70	71
NNS_Rx1908	776269.4	6736351	35	35	40	40	35	35	65	65	35	35	67	67	32.3	32.3	88	91
NNS_Rx1909	775454.8	6736353	29	29	34	34	29	29	49	49	29	29	51	51	22	22	73	73
NNS_Rx1910	775541.9	6736354	30	30	35	35	30	30	50	50	30	30	52	52	22.1	22.1	70	70
NNS_Rx1911	775890.9	6736354	34	34	40	40	34	34	56	56	34	34	58	58	23.7	23.7	74	78
NNS_Rx1912	775868.3	6736356	34	34	39	39	34	34	55	55	34	34	57	57	23.4	23.4	73	78
NNS_Rx1913	775397.5	6736356	28	28	34	34	28	28	48	48	28	28	50	50	21.5	21.5	68	68
NNS_Rx1914	776327.4	6736356	36	36	41	41	36	36	57	57	36	36	59	59	23.8	23.8	79	81
NNS_Rx1915	776352.6	6736360	35	35	40	40	35	35	57	57	35	35	58	58	23.6	23.6	77	79
NNS_Rx1916	775946.8	6736364	34	34	40	40	34	34	55	55	34	34	57	57	23.1	23.1	74	79
NNS_Rx1917	775879.5	6736369	34	34	39	39	34	34	56	56	34	34	58	58	23.9	23.9	73	78
NNS_Rx1918	776269.3	6736370	35	35	40	40	35	35	65	65	35	35	67	67	32.8	32.8	87	92
NNS_Rx1919	775597.6	6736370	30	30	36	36	30	30	50	50	30	30	52	52	22.2	22.2	70	71

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1920	776353.4	6736370	32	32	36	36	32	32	57	57	32	32	59	59	27.1	27.1	77	79
NNS_Rx1921	775540.9	6736372	30	30	35	35	30	30	50	50	30	30	52	52	22	22	70	70
NNS_Rx1922	775400	6736373	28	28	34	34	28	28	48	48	28	28	50	50	21.6	21.6	68	68
NNS_Rx1923	775455.7	6736377	29	29	34	34	29	29	48	48	29	29	50	50	21.8	21.8	68	68
NNS_Rx1924	775862.1	6736392	33	33	39	39	33	33	55	55	33	33	57	57	23.9	23.9	73	77
NNS_Rx1925	776268.3	6736397	34	34	39	39	34	34	65	65	34	34	67	67	33.2	33.2	86	92
NNS_Rx1926	776306.6	6736399	33	33	38	38	33	33	54	54	33	33	55	55	22.7	22.7	76	78
NNS_Rx1927	775958.1	6736399	34	34	40	40	34	34	57	57	34	34	58	58	24.2	24.2	75	79
NNS_Rx1928	776295.4	6736406	30	30	36	36	30	30	60	60	30	30	62	62	31.3	31.3	80	85
NNS_Rx1929	775899.6	6736400	33	33	39	39	33	33	56	56	33	33	58	58	24.3	24.3	74	79
NNS_Rx1930	775942.5	6736401	34	34	40	40	34	34	57	57	34	34	59	59	24.6	24.6	74	80
NNS_Rx1931	775932.5	6736402	34	34	40	40	34	34	57	57	34	34	59	59	24.7	24.7	74	80
NNS_Rx1932	775916.3	6736403	34	34	39	39	34	34	56	56	34	34	58	58	24.5	24.5	74	79
NNS_Rx1933	775337	6736403	27	27	33	33	27	27	47	47	27	27	49	49	21.5	21.5	67	67
NNS_Rx1934	775230.9	6736405	27	27	32	32	27	27	46	46	27	27	48	48	21.4	21.4	66	66
NNS_Rx1935	775869.9	6736407	33	33	39	39	33	33	55	55	33	33	57	57	24.1	24.1	73	78
NNS_Rx1936	775539.4	6736407	29	29	35	35	29	29	49	49	29	29	51	51	22.1	22.1	67	70
NNS_Rx1937	775891.8	6736408	33	33	39	39	33	33	56	56	33	33	58	58	24.3	24.3	73	78
NNS_Rx1938	775597.3	6736409	30	30	35	35	30	30	50	50	30	30	52	52	22.3	22.3	67	71
NNS_Rx1939	775522.6	6736409	29	29	35	35	29	29	49	49	29	29	51	51	22.1	22.1	66	70
NNS_Rx1940	775462.4	6736410	28	28	34	34	28	28	48	48	28	28	50	50	21.9	21.9	68	68
NNS_Rx1941	775509	6736412	29	29	34	34	29	29	49	49	29	29	51	51	22	22	66	69
NNS_Rx1942	775482.3	6736413	29	29	34	34	29	29	49	49	29	29	51	51	21.9	21.9	66	69
NNS_Rx1943	776919.8	6736429	30	30	34	34	30	30	54	54	30	30	55	55	25	25	69	73
NNS_Rx1944	775228.8	6736437	26	26	32	32	26	26	46	46	26	26	48	48	21.5	21.5	66	66
NNS_Rx1945	776445.3	6736438	33	33	38	38	33	33	57	57	33	33	59	59	26.1	26.1	76	80
NNS_Rx1946	776411.6	6736462	33	33	38	38	33	33	58	58	33	33	60	60	27.1	27.1	78	81
NNS_Rx1947	777031.1	6736464	28	28	33	33	28	28	53	53	28	28	55	55	26.8	26.8	76	76
NNS_Rx1948	777568.7	6736464	26	26	30	30	26	26	49	49	26	26	51	51	24.6	24.6	72	72
NNS_Rx1949	777274.1	6736470	26	26	31	31	26	26	51	51	26	26	53	53	26.6	26.6	74	74
NNS_Rx1950	777123	6736473	27	27	32	32	27	27	53	53	27	27	54	54	26.9	26.9	75	75
NNS_Rx1951	776413.5	6736482	32	32	37	37	32	32	58	58	32	32	59	59	27.6	27.6	78	81
NNS_Rx1952	777863	6736501	24	24	28	28	24	24	47	47	24	24	48	48	23.7	23.7	70	70
NNS_Rx1953	776330.4	6736504	32	32	37	37	32	32	58	58	32	32	59	59	27.4	27.4	83	83
NNS_Rx1954	776097	6736503	23	23	26	26	23	23	62	62	23	23	63	63	40.7	40.7	87	87
NNS_Rx1955	776273.2	6736510	25	25	29	29	25	25	65	65	25	25	66	66	41.7	41.7	93	93
NNS_Rx1956	776412	6736502	32	32	37	37	32	32	59	59	32	32	60	60	28	28	78	82
NNS_Rx1957	776223	6736511	32	32	37	37	32	32	74	74	32	32	74	74	42.5	42.5	98	102
NNS_Rx1958	776275	6736523	27	27	32	32	27	27	65	65	27	27	67	67	39.3	39.3	94	94
NNS_Rx1959	776225.4	6736523	22	22	25	25	22	22	74	74	22	22	75	75	53	53	101	102
NNS_Rx1960	776329.8	6736529	31	31	36	36	31	31	59	59	31	31	60	60	28.9	28.9	86	86
NNS_Rx1961	776411.7	6736525	31	31	37	37	31	31	59	59	31	31	60	60	28.5	28.5	79	82
NNS_Rx1962	776097.3	6736528	30	30	37	37	30	30	62	62	30	30	64	64	33.3	33.3	88	88
NNS_Rx1963	776863.5	6736536	28	28	34	34	28	28	56	56	28	28	57	57	28.3	28.3	71	76

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx1964	776020.1	6736539	32	32	38	38	32	32	58	58	32	32	59	59	26.4	26.4	81	81
NNS_Rx1965	776338.4	6736545	23	23	26	26	23	23	58	58	23	23	59	59	35.7	35.7	84	84
NNS_Rx1966	776412.1	6736545	31	31	36	36	31	31	59	59	31	31	60	60	28.8	28.8	81	83
NNS_Rx1967	776275.9	6736546	31	31	35	35	31	31	67	67	31	31	68	68	36.8	36.8	95	95
NNS_Rx1968	776306.8	6736555	28	28	32	32	28	28	62	62	28	28	63	63	35.1	35.1	91	91
NNS_Rx1969	776096	6736547	32	32	38	38	32	32	62	62	32	32	63	63	31.9	31.9	88	88
NNS_Rx1970	776354.7	6736560	22	22	24	24	22	22	58	58	22	22	59	59	37.6	37.6	87	87
NNS_Rx1971	776415.2	6736565	30	30	35	35	30	30	59	59	30	30	60	60	29.8	29.8	80	83
NNS_Rx1972	776279.5	6736568	28	28	32	32	28	28	67	67	28	28	68	68	40	40	94	94
NNS_Rx1973	776099	6736568	32	32	38	38	32	32	62	62	32	32	63	63	31.4	31.4	88	88
NNS_Rx1974	776067.2	6736573	29	29	34	34	29	29	52	52	29	29	54	54	24.5	24.5	82	82
NNS_Rx1975	776352.7	6736575	24	24	27	27	24	24	60	60	24	24	61	61	36.9	36.9	84	85
NNS_Rx1976	776007.1	6736580	31	31	37	37	31	31	58	58	31	31	59	59	27.9	27.9	80	81
NNS_Rx1977	776412.7	6736586	30	30	36	36	30	30	59	59	30	30	60	60	29.6	29.6	80	84
NNS_Rx1978	776354.8	6736589	25	25	29	29	25	25	60	60	25	25	60	60	35.8	35.8	82	85
NNS_Rx1979	776274.7	6736590	31	31	35	35	31	31	69	69	31	31	70	70	39	39	94	97
NNS_Rx1980	776098.7	6736592	32	32	37	37	32	32	62	62	32	32	63	63	31.3	31.3	88	88
NNS_Rx1981	776011.8	6736594	31	31	37	37	31	31	58	58	31	31	59	59	27.7	27.7	81	81
NNS_Rx1982	776355.7	6736603	30	30	34	34	30	30	60	60	30	30	61	61	31	31	86	86
NNS_Rx1983	776276.8	6736604	29	29	34	34	29	29	70	70	29	29	70	70	40.8	40.8	92	97
NNS_Rx1984	776413.4	6736611	30	30	35	35	30	30	60	60	30	30	61	61	30.7	30.7	78	85
NNS_Rx1985	776083.9	6736620	22	22	26	26	22	22	60	60	22	22	61	61	38.4	38.4	86	86
NNS_Rx1986	776413.6	6736625	30	30	35	35	30	30	60	60	30	30	61	61	31.5	31.5	80	86
NNS_Rx1987	776361	6736623	22	22	25	25	22	22	59	59	22	22	60	60	37.6	37.6	83	83
NNS_Rx1988	776039.5	6736622	31	31	37	37	31	31	55	55	31	31	57	57	26.1	26.1	84	84
NNS_Rx1989	776275.9	6736628	30	30	34	34	30	30	73	73	30	30	73	73	43.8	43.8	92	101
NNS_Rx1990	776414.8	6736636	29	29	34	34	29	29	61	61	29	29	61	61	32	32	78	87
NNS_Rx1991	776087.3	6736633	24	24	28	28	24	24	61	61	24	24	61	61	37.6	37.6	86	86
NNS_Rx1992	776008.1	6736642	30	30	36	36	30	30	58	58	30	30	59	59	28.4	28.4	80	81
NNS_Rx1993	776362.1	6736648	29	29	33	33	29	29	61	61	29	29	61	61	32.6	32.6	79	87
NNS_Rx1994	776417.4	6736653	29	29	34	34	29	29	61	61	29	29	62	62	33.1	33.1	78	87
NNS_Rx1995	776105.1	6736651	31	31	36	36	31	31	61	61	31	31	62	62	31.1	31.1	86	86
NNS_Rx1996	776016.1	6736657	30	30	36	36	30	30	58	58	30	30	59	59	28.5	28.5	77	81
NNS_Rx1997	776420.3	6736672	18	18	20	20	18	18	64	64	18	18	65	65	47.2	47.2	81	89
NNS_Rx1998	776343.3	6736678	17	17	19	19	17	17	69	69	17	17	69	69	52.6	52.6	88	96
NNS_Rx1999	776370.8	6736675	18	18	20	20	18	18	66	66	18	18	67	67	49	49	84	91
NNS_Rx2000	776102.7	6736671	30	30	36	36	30	30	60	60	30	30	61	61	31.1	31.1	85	85
NNS_Rx2001	776190.2	6736667	30	30	36	36	30	30	65	65	30	30	66	66	35.2	35.2	89	91
NNS_Rx2002	776172.5	6736655	31	31	36	36	31	31	64	64	31	31	65	65	34.3	34.3	89	89
NNS_Rx2003	776009.8	6736676	30	30	36	36	30	30	57	57	30	30	58	58	28.5	28.5	79	80
NNS_Rx2004	776010.4	6736729	29	29	35	35	29	29	57	57	29	29	58	58	28.5	28.5	76	79
NNS_Rx2005	776865.3	6736746	27	27	32	32	27	27	61	61	27	27	61	61	34.3	34.3	80	83
NNS_Rx2006	778071.9	6736749	23	23	26	26	23	23	47	47	23	23	49	49	25.8	25.8	69	69
NNS_Rx2007	777979.8	6736753	23	23	26	26	23	23	47	47	23	23	49	49	26	26	70	70

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2008	777814.5	6736785	24	24	26	26	24	24	49	49	24	24	51	51	27	27	71	71
NNS_Rx2009	777554.3	6736796	23	23	28	28	23	23	51	51	23	23	53	53	30.1	30.1	74	74
NNS_Rx2010	777504.4	6736796	23	23	28	28	23	23	52	52	23	23	53	53	30.4	30.4	74	74
NNS_Rx2011	777975.4	6736899	23	23	26	26	23	23	48	48	23	23	50	50	27.2	27.2	70	70
NNS_Rx2012	776675.5	6737051	24	24	28	28	24	24	62	62	24	24	62	62	38.3	38.3	79	83
NNS_Rx2013	778194.3	6737063	19	19	24	24	19	19	47	47	19	19	48	48	29.1	29.1	64	65
NNS_Rx2014	775359.4	6737121	23	23	28	28	23	23	45	45	23	23	47	47	23.9	23.9	62	64
NNS_Rx2015	775341.3	6737169	23	23	28	28	23	23	45	45	23	23	47	47	24.4	24.4	67	67
NNS_Rx2016	775341.3	6737182	22	22	28	28	22	22	45	45	22	22	47	47	24.4	24.4	67	67
NNS_Rx2017	775425.5	6737191	23	23	28	28	23	23	46	46	23	23	47	47	24.6	24.6	67	67
NNS_Rx2018	775340.9	6737194	22	22	28	28	22	22	45	45	22	22	47	47	24.5	24.5	67	67
NNS_Rx2019	775421.8	6737205	23	23	28	28	23	23	46	46	23	23	47	47	24.4	24.4	62	64
NNS_Rx2020	775340.3	6737213	22	22	27	27	22	22	45	45	22	22	46	46	24.2	24.2	62	63
NNS_Rx2021	775422.8	6737219	22	22	28	28	22	22	45	45	22	22	47	47	24.5	24.5	62	64
NNS_Rx2022	775338.2	6737221	22	22	27	27	22	22	45	45	22	22	46	46	24.3	24.3	62	63
NNS_Rx2023	775423.8	6737228	22	22	28	28	22	22	45	45	22	22	47	47	24.4	24.4	62	64
NNS_Rx2024	775331.7	6737233	22	22	27	27	22	22	45	45	22	22	46	46	24.1	24.1	61	63
NNS_Rx2025	776231.6	6737243	24	24	29	29	24	24	53	53	24	24	54	54	30.5	30.5	74	74
NNS_Rx2026	775344.7	6737244	22	22	27	27	22	22	45	45	22	22	46	46	24.2	24.2	61	63
NNS_Rx2027	775339.6	6737262	22	22	27	27	22	22	45	45	22	22	46	46	24.2	24.2	61	63
NNS_Rx2028	776227.1	6737264	24	24	29	29	24	24	53	53	24	24	54	54	30.2	30.2	72	72
NNS_Rx2029	775339.6	6737273	22	22	27	27	22	22	45	45	22	22	46	46	24.2	24.2	61	62
NNS_Rx2030	776228.1	6737278	23	23	28	28	23	23	53	53	23	23	54	54	30.2	30.2	72	72
NNS_Rx2031	776228.8	6737300	23	23	28	28	23	23	52	52	23	23	53	53	30.1	30.1	72	72
NNS_Rx2032	778258.6	6737314	21	21	23	23	21	21	48	48	21	21	50	50	29	29	69	69
NNS_Rx2033	776166.8	6737314	23	23	29	29	23	23	52	52	23	23	53	53	29.3	29.3	65	70
NNS_Rx2034	776220.6	6737315	23	23	29	29	23	23	52	52	23	23	53	53	29.9	29.9	72	72
NNS_Rx2035	776204.2	6737315	23	23	29	29	23	23	52	52	23	23	53	53	29.6	29.6	66	71
NNS_Rx2036	776182.2	6737318	23	23	29	29	23	23	52	52	23	23	53	53	29.4	29.4	65	70
NNS_Rx2037	778399.9	6737397	20	20	23	23	20	20	47	47	20	20	49	49	28.9	28.9	68	68
NNS_Rx2038	775348.9	6737436	21	21	26	26	21	21	44	44	21	21	45	45	24.4	24.4	60	61
NNS_Rx2039	775695.2	6737437	22	22	27	27	22	22	47	47	22	22	48	48	26.6	26.6	69	69
NNS_Rx2040	778580.5	6737447	17	17	21	21	17	17	45	45	17	17	48	48	30.2	30.2	65	65
NNS_Rx2041	775349.7	6737449	21	21	26	26	21	21	44	44	21	21	45	45	24.4	24.4	60	61
NNS_Rx2042	775701.8	6737452	22	22	27	27	22	22	47	47	22	22	48	48	26.7	26.7	69	69
NNS_Rx2043	776929.9	6737468	21	21	26	26	21	21	60	60	21	21	61	61	40.2	40.2	81	81
NNS_Rx2044	775351	6737468	21	21	26	26	21	21	44	44	21	21	45	45	24.4	24.4	60	61
NNS_Rx2045	776810.6	6737484	21	21	26	26	21	21	57	57	21	21	59	59	37.5	37.5	79	79
NNS_Rx2046	775350.5	6737485	21	21	26	26	21	21	44	44	21	21	45	45	24.4	24.4	60	61
NNS_Rx2047	775698.4	6737485	21	21	27	27	21	21	46	46	21	21	48	48	26.4	26.4	68	68
NNS_Rx2048	775697.3	6737502	21	21	27	27	21	21	46	46	21	21	47	47	26.1	26.1	62	64
NNS_Rx2049	775421.6	6737504	21	21	26	26	21	21	44	44	21	21	45	45	24.7	24.7	60	62
NNS_Rx2050	775351.8	6737505	21	21	26	26	21	21	43	43	21	21	45	45	24.4	24.4	60	61
NNS_Rx2051	775767.4	6737515	21	21	27	27	21	21	47	47	21	21	48	48	26.5	26.5	62	65

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2053	775352.3	6737526	20	20	25	25	20	20	43	43	20	20	45	45	24.4	24.4	60	61
NNS_Rx2054	775703.4	6737535	21	21	26	26	21	21	46	46	21	21	47	47	26.1	26.1	61	64
NNS_Rx2055	775761.9	6737537	21	21	26	26	21	21	46	46	21	21	48	48	26.4	26.4	62	64
NNS_Rx2056	775348.6	6737547	20	20	25	25	20	20	44	44	20	20	45	45	24.8	24.8	66	66
NNS_Rx2057	775760.8	6737559	21	21	26	26	21	21	46	46	21	21	48	48	26.5	26.5	62	64
NNS_Rx2058	775347.8	6737567	20	20	25	25	20	20	44	44	20	20	45	45	25	25	66	66
NNS_Rx2059	775762.7	6737577	21	21	26	26	21	21	46	46	21	21	47	47	26.5	26.5	61	64
NNS_Rx2060	775983.3	6737582	21	21	26	26	21	21	48	48	21	21	50	50	28.5	28.5	70	70
NNS_Rx2061	775702.9	6737583	21	21	26	26	21	21	46	46	21	21	47	47	26.2	26.2	61	63
NNS_Rx2062	775950	6737590	21	21	26	26	21	21	48	48	21	21	49	49	28.3	28.3	69	69
NNS_Rx2063	775919.3	6737591	21	21	26	26	21	21	47	47	21	21	49	49	27.6	27.6	68	68
NNS_Rx2065	775799.7	6737593	21	21	26	26	21	21	46	46	21	21	48	48	26.7	26.7	61	64
NNS_Rx2066	775873.3	6737595	21	21	26	26	21	21	47	47	21	21	48	48	27.3	27.3	62	65
NNS_Rx2068	775763.2	6737595	21	21	26	26	21	21	46	46	21	21	47	47	26.5	26.5	61	64
NNS_Rx2069	775839.9	6737597	21	21	26	26	21	21	47	47	21	21	49	49	27.6	27.6	69	69
NNS_Rx2070	775892.3	6737598	21	21	26	26	21	21	47	47	21	21	48	48	27.3	27.3	62	65
NNS_Rx2071	775702.9	6737603	21	21	26	26	21	21	46	46	21	21	47	47	26.1	26.1	61	63
NNS_Rx2072	775380.1	6737604	20	20	25	25	20	20	44	44	20	20	45	45	25.2	25.2	66	66
NNS_Rx2073	775887.5	6737656	21	21	26	26	21	21	47	47	21	21	49	49	27.9	27.9	69	69
NNS_Rx2075	775504.9	6737659	20	20	25	25	20	20	44	44	20	20	45	45	25.4	25.4	60	61
NNS_Rx2076	775476	6737659	20	20	25	25	20	20	44	44	20	20	45	45	25.3	25.3	60	61
NNS_Rx2077	775406.2	6737661	20	20	25	25	20	20	43	43	20	20	45	45	25.2	25.2	66	66
NNS_Rx2078	775825	6737661	21	21	26	26	21	21	46	46	21	21	47	47	26.9	26.9	61	64
NNS_Rx2079	775867.8	6737663	21	21	26	26	21	21	47	47	21	21	48	48	27.7	27.7	69	69
NNS_Rx2080	775432.5	6737663	20	20	25	25	20	20	44	44	20	20	45	45	25.3	25.3	66	66
NNS_Rx2081	775747.8	6737669	20	20	25	25	20	20	46	46	20	20	47	47	26.7	26.7	61	63
NNS_Rx2082	775353.2	6737672	20	20	25	25	20	20	43	43	20	20	45	45	25.3	25.3	67	67
NNS_Rx2083	775772.9	6737685	20	20	25	25	20	20	46	46	20	20	47	47	26.6	26.6	61	63
NNS_Rx2084	775432.5	6737686	20	20	25	25	20	20	44	44	20	20	45	45	25.3	25.3	66	66
NNS_Rx2085	775481.7	6737687	20	20	25	25	20	20	44	44	20	20	45	45	25.4	25.4	59	61
NNS_Rx2086	775354.4	6737690	20	20	24	24	20	20	43	43	20	20	45	45	25.3	25.3	67	67
NNS_Rx2087	775483.3	6737701	20	20	25	25	20	20	44	44	20	20	45	45	25.4	25.4	59	61
NNS_Rx2088	775829.7	6737702	20	20	25	25	20	20	46	46	20	20	47	47	26.9	26.9	61	64
NNS_Rx2089	775434.1	6737703	20	20	25	25	20	20	43	43	20	20	45	45	25.4	25.4	66	66
NNS_Rx2090	775801.5	6737707	20	20	25	25	20	20	46	46	20	20	47	47	26.8	26.8	60	63
NNS_Rx2092	775482.4	6737718	20	20	25	25	20	20	44	44	20	20	45	45	25.6	25.6	66	66
NNS_Rx2093	775433.2	6737719	20	20	24	24	20	20	43	43	20	20	45	45	25.4	25.4	66	66
NNS_Rx2094	775542.1	6737720	20	20	25	25	20	20	44	44	20	20	46	46	25.9	25.9	67	67
NNS_Rx2095	777138.5	6737718	19	19	24	24	19	19	59	59	19	19	61	61	41.4	41.4	76	79
NNS_Rx2096	775977.7	6737727	20	20	25	25	20	20	47	47	20	20	49	49	28.3	28.3	69	69
NNS_Rx2097	775482.4	6737737	20	20	24	24	20	20	44	44	20	20	45	45	25.6	25.6	66	66
NNS_Rx2098	775434.4	6737738	19	19	24	24	19	19	43	43	19	19	45	45	25.4	25.4	66	66
NNS_Rx2099	775350.9	6737739	19	19	24	24	19	19	43	43	19	19	45	45	25.4	25.4	67	67
NNS_Rx2100	775482.4	6737754	19	19	24	24	19	19	44	44	19	19	45	45	25.7	25.7	66	66

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2101	775971.7	6737759	20	20	25	25	20	20	47	47	20	20	49	49	28.5	28.5	69	69
NNS_Rx2102	775440.5	6737762	19	19	24	24	19	19	43	43	19	19	44	44	25.1	25.1	59	60
NNS_Rx2103	775427.8	6737762	19	19	24	24	19	19	43	43	19	19	44	44	25	25	59	60
NNS_Rx2104	775409	6737766	19	19	24	24	19	19	43	43	19	19	45	45	25.4	25.4	66	66
NNS_Rx2105	775384.6	6737768	19	19	24	24	19	19	43	43	19	19	45	45	25.3	25.3	66	66
NNS_Rx2108	779132	6737769	18	18	20	20	18	18	43	43	18	18	45	45	27.7	27.7	65	65
NNS_Rx2109	775482.7	6737770	19	19	24	24	19	19	43	43	19	19	45	45	25.6	25.6	66	66
NNS_Rx2110	775980.2	6737783	20	20	25	25	20	20	47	47	20	20	49	49	28.7	28.7	69	69
NNS_Rx2111	775969.5	6737804	20	20	25	25	20	20	47	47	20	20	49	49	28.7	28.7	69	69
NNS_Rx2112	775495.4	6737810	19	19	24	24	19	19	43	43	19	19	45	45	25.5	25.5	59	60
NNS_Rx2113	775542.2	6737812	19	19	24	24	19	19	43	43	19	19	45	45	25.6	25.6	59	61
NNS_Rx2114	775351	6737813	19	19	24	24	19	19	42	42	19	19	44	44	24.9	24.9	58	59
NNS_Rx2115	775420.1	6737813	19	19	24	24	19	19	43	43	19	19	44	44	25	25	59	60
NNS_Rx2117	775387.7	6737814	19	19	24	24	19	19	42	42	19	19	44	44	24.8	24.8	58	59
NNS_Rx2118	775468.3	6737814	19	19	24	24	19	19	43	43	19	19	45	45	25.5	25.5	59	60
NNS_Rx2119	775363.7	6737817	19	19	24	24	19	19	42	42	19	19	44	44	24.8	24.8	58	59
NNS_Rx2120	775432.5	6737818	19	19	24	24	19	19	43	43	19	19	44	44	25.1	25.1	59	60
NNS_Rx2121	775449.3	6737818	19	19	24	24	19	19	43	43	19	19	44	44	25.2	25.2	59	60
NNS_Rx2122	775968.2	6737824	20	20	25	25	20	20	46	46	20	20	48	48	27.9	27.9	61	64
NNS_Rx2123	775515.5	6737834	19	19	24	24	19	19	43	43	19	19	45	45	25.4	25.4	59	60
NNS_Rx2124	778912.9	6737839	18	18	20	20	18	18	45	45	18	18	47	47	29.3	29.3	66	66
NNS_Rx2125	775973.9	6737844	20	20	25	25	20	20	46	46	20	20	48	48	28.1	28.1	69	69
NNS_Rx2126	775463.4	6737856	19	19	24	24	19	19	43	43	19	19	44	44	25.4	25.4	60	60
NNS_Rx2127	775514	6737858	19	19	24	24	19	19	43	43	19	19	45	45	25.5	25.5	59	60
NNS_Rx2129	775975.8	6737865	20	20	24	24	20	20	46	46	20	20	48	48	28.5	28.5	69	69
NNS_Rx2130	775356.1	6737872	19	19	23	23	19	19	42	42	19	19	43	43	24.8	24.8	58	59
NNS_Rx2131	775520.4	6737882	19	19	24	24	19	19	43	43	19	19	45	45	25.8	25.8	60	60
NNS_Rx2132	775720.5	6737884	19	19	24	24	19	19	45	45	19	19	46	46	27.2	27.2	67	67
NNS_Rx2133	775974.2	6737887	19	19	24	24	19	19	46	46	19	19	48	48	28.4	28.4	69	69
NNS_Rx2134	775464.5	6737888	19	19	24	24	19	19	43	43	19	19	44	44	25.5	25.5	60	60
NNS_Rx2135	775354.2	6737891	19	19	23	23	19	19	42	42	19	19	43	43	24.8	24.8	58	59
NNS_Rx2136	775750.7	6737894	19	19	24	24	19	19	44	44	19	19	46	46	26.7	26.7	60	61
NNS_Rx2137	775518.9	6737898	19	19	24	24	19	19	43	43	19	19	45	45	25.9	25.9	60	60
NNS_Rx2138	779114.3	6737899	17	17	19	19	17	17	44	44	17	17	46	46	29	29	66	66
NNS_Rx2139	775775.1	6737901	19	19	24	24	19	19	44	44	19	19	46	46	26.7	26.7	60	62
NNS_Rx2140	775355.9	6737903	19	19	23	23	19	19	42	42	19	19	44	44	25	25	58	59
NNS_Rx2141	775801.8	6737906	19	19	24	24	19	19	45	45	19	19	46	46	26.9	26.9	60	62
NNS_Rx2142	775850.7	6737907	19	19	24	24	19	19	46	46	19	19	47	47	28.2	28.2	68	68
NNS_Rx2143	775443.3	6737910	19	19	23	23	19	19	42	42	19	19	44	44	25.3	25.3	60	60
NNS_Rx2144	777253.9	6737902	18	18	23	23	18	18	60	60	18	18	61	61	43	43	74	80
NNS_Rx2145	775519.7	6737912	19	19	23	23	19	19	43	43	19	19	44	44	25.7	25.7	60	60
NNS_Rx2146	775479.3	6737914	19	19	23	23	19	19	43	43	19	19	44	44	25.8	25.8	60	60
NNS_Rx2147	775424.1	6737917	19	19	23	23	19	19	42	42	19	19	44	44	25.3	25.3	60	60
NNS_Rx2148	775399.7	6737918	19	19	23	23	19	19	42	42	19	19	44	44	25.1	25.1	60	60

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
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NNS_Rx2149	775465.1	6737924	19	19	23	23	19	19	43	43	19	19	44	44	25.6	25.6	60	60
NNS_Rx2150	775981.8	6737926	19	19	24	24	19	19	46	46	19	19	48	48	28.6	28.6	68	68
NNS_Rx2151	775963.1	6737928	19	19	24	24	19	19	46	46	19	19	48	48	28.4	28.4	68	68
NNS_Rx2152	775357.2	6737929	18	18	23	23	18	18	42	42	18	18	43	43	24.8	24.8	58	58
NNS_Rx2153	775889.8	6737930	19	19	24	24	19	19	45	45	19	19	47	47	28	28	68	68
NNS_Rx2154	775939.6	6737930	19	19	24	24	19	19	46	46	19	19	47	47	28.2	28.2	68	68
NNS_Rx2156	775518.1	6737930	19	19	23	23	19	19	43	43	19	19	44	44	25.7	25.7	60	60
NNS_Rx2157	775385.5	6737930	18	18	23	23	18	18	42	42	18	18	43	43	25	25	60	60
NNS_Rx2158	775859.9	6737932	19	19	24	24	19	19	45	45	19	19	47	47	28	28	68	68
NNS_Rx2159	775517.8	6737966	18	18	23	23	18	18	43	43	18	18	44	44	25.7	25.7	60	60
NNS_Rx2160	775350	6737969	18	18	23	23	18	18	42	42	18	18	43	43	24.9	24.9	59	59
NNS_Rx2161	775407.6	6737969	18	18	23	23	18	18	42	42	18	18	44	44	25.3	25.3	59	59
NNS_Rx2162	775710.1	6737971	19	19	23	23	19	19	44	44	19	19	45	45	26.5	26.5	60	61
NNS_Rx2163	775481	6737973	18	18	23	23	18	18	42	42	18	18	44	44	25.5	25.5	60	60
NNS_Rx2164	775392.3	6737974	18	18	23	23	18	18	42	42	18	18	44	44	25.3	25.3	59	59
NNS_Rx2165	775447.6	6737976	18	18	23	23	18	18	42	42	18	18	44	44	25.2	25.2	58	59
NNS_Rx2166	775462.4	6737976	18	18	23	23	18	18	42	42	18	18	44	44	25.3	25.3	58	59
NNS_Rx2167	775726.9	6737986	19	19	23	23	19	19	44	44	19	19	45	45	26.7	26.7	61	61
NNS_Rx2168	775504.1	6737987	18	18	23	23	18	18	42	42	18	18	44	44	25.6	25.6	58	59
NNS_Rx2169	778785.8	6737988	18	18	20	20	18	18	46	46	18	18	48	48	30.3	30.3	65	65
NNS_Rx2170	775353.8	6737997	18	18	23	23	18	18	42	42	18	18	43	43	25.2	25.2	57	58
NNS_Rx2171	775743.7	6738002	19	19	23	23	19	19	44	44	19	19	45	45	26.8	26.8	61	61
NNS_Rx2172	775484.2	6738005	18	18	23	23	18	18	42	42	18	18	44	44	25.4	25.4	58	59
NNS_Rx2173	775357.6	6738013	18	18	23	23	18	18	42	42	18	18	43	43	25.3	25.3	57	58
NNS_Rx2174	775757.7	6738014	19	19	23	23	19	19	44	44	19	19	45	45	26.9	26.9	61	61
NNS_Rx2175	775478.3	6738024	18	18	23	23	18	18	42	42	18	18	44	44	25.4	25.4	59	59
NNS_Rx2176	775772.3	6738024	19	19	23	23	19	19	44	44	19	19	46	46	27.1	27.1	67	67
NNS_Rx2177	775358.9	6738030	18	18	22	22	18	18	42	42	18	18	43	43	25.4	25.4	57	58
NNS_Rx2178	775786.9	6738038	18	18	23	23	18	18	44	44	18	18	46	46	27.6	27.6	67	67
NNS_Rx2179	779185.1	6738046	17	17	19	19	17	17	43	43	17	17	45	45	28.4	28.4	58	61
NNS_Rx2180	775469.6	6738047	18	18	23	23	18	18	42	42	18	18	43	43	25.3	25.3	57	58
NNS_Rx2181	775361.8	6738047	18	18	22	22	18	18	42	42	18	18	43	43	25.5	25.5	57	58
NNS_Rx2182	775810.1	6738056	18	18	23	23	18	18	44	44	18	18	46	46	27.6	27.6	67	67
NNS_Rx2183	775362.5	6738072	18	18	22	22	18	18	42	42	18	18	43	43	25.7	25.7	65	65
NNS_Rx2184	779172.9	6738075	17	17	19	19	17	17	44	44	17	17	47	47	29.7	29.7	67	67
NNS_Rx2185	775830.7	6738076	18	18	23	23	18	18	44	44	18	18	46	46	27.8	27.8	67	67
NNS_Rx2186	775473	6738080	18	18	22	22	18	18	42	42	18	18	44	44	26	26	65	65
NNS_Rx2187	778778.8	6738089	18	18	20	20	18	18	46	46	18	18	49	49	31.5	31.5	68	68
NNS_Rx2188	775358.9	6738089	18	18	22	22	18	18	42	42	18	18	43	43	25.7	25.7	65	65
NNS_Rx2189	778823.7	6738090	17	17	19	19	17	17	46	46	17	17	49	49	31.3	31.3	68	68
NNS_Rx2190	775844.7	6738095	18	18	23	23	18	18	44	44	18	18	46	46	27.8	27.8	67	67
NNS_Rx2191	775466.2	6738095	18	18	22	22	18	18	42	42	18	18	44	44	26.2	26.2	65	65
NNS_Rx2192	775858.6	6738105	18	18	23	23	18	18	44	44	18	18	46	46	27.9	27.9	67	67
NNS_Rx2193	775435.3	6738109	18	18	22	22	18	18	42	42	18	18	44	44	26.1	26.1	65	65

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2194	775368.6	6738112	18	18	22	22	18	18	42	42	18	18	43	43	25.7	25.7	65	65
NNS_Rx2195	775427	6738128	18	18	22	22	18	18	42	42	18	18	44	44	26	26	65	65
NNS_Rx2196	775430.4	6738151	18	18	22	22	18	18	42	42	18	18	44	44	25.7	25.7	65	65
NNS_Rx2197	775365.2	6738156	18	18	22	22	18	18	41	41	18	18	43	43	25.6	25.6	65	65
NNS_Rx2198	775355.1	6738170	18	18	22	22	18	18	41	41	18	18	43	43	25.7	25.7	65	65
NNS_Rx2199	775424.7	6738172	18	18	22	22	18	18	42	42	18	18	43	43	25.7	25.7	65	65
NNS_Rx2200	775365	6738184	18	18	22	22	18	18	41	41	18	18	43	43	25.5	25.5	65	65
NNS_Rx2201	775421.5	6738199	18	18	22	22	18	18	42	42	18	18	44	44	25.9	25.9	65	65
NNS_Rx2202	775366.9	6738202	18	18	22	22	18	18	41	41	18	18	43	43	25.6	25.6	65	65
NNS_Rx2203	776082.4	6738209	18	18	22	22	18	18	45	45	18	18	47	47	29.1	29.1	68	68
NNS_Rx2204	775363.3	6738216	18	18	22	22	18	18	41	41	18	18	43	43	25.4	25.4	65	65
NNS_Rx2205	775409.7	6738225	18	18	22	22	18	18	41	41	18	18	43	43	25.7	25.7	65	65
NNS_Rx2206	775362.7	6738233	17	17	22	22	17	17	41	41	17	17	43	43	25.4	25.4	65	65
NNS_Rx2207	775398.5	6738245	17	17	22	22	17	17	41	41	17	17	43	43	25.5	25.5	65	65
NNS_Rx2208	775360.4	6738247	17	17	21	21	17	17	41	41	17	17	43	43	25.4	25.4	65	65
NNS_Rx2209	779040.2	6738253	17	17	18	18	17	17	45	45	17	17	48	48	31.3	31.3	68	68
NNS_Rx2210	775984.4	6738271	18	18	22	22	18	18	44	44	18	18	46	46	28.6	28.6	67	67
NNS_Rx2211	775984.2	6738318	17	17	22	22	17	17	44	44	17	17	46	46	28.6	28.6	67	67
NNS_Rx2212	775986.4	6738345	17	17	22	22	17	17	44	44	17	17	46	46	28.5	28.5	67	67
NNS_Rx2213	775985.1	6738364	17	17	21	21	17	17	44	44	17	17	46	46	28.6	28.6	67	67
NNS_Rx2214	779187.2	6738373	16	16	18	18	16	16	45	45	16	16	48	48	31.4	31.4	68	68
NNS_Rx2215	775989.5	6738384	17	17	21	21	17	17	43	43	17	17	45	45	27.9	27.9	58	60
NNS_Rx2216	775939.3	6738430	17	17	21	21	17	17	43	43	17	17	45	45	27.9	27.9	59	59
NNS_Rx2217	775864.6	6738432	17	17	21	21	17	17	43	43	17	17	45	45	28.3	28.3	66	66
NNS_Rx2218	775972.9	6738474	17	17	21	21	17	17	43	43	17	17	44	44	27.8	27.8	58	60
NNS_Rx2219	776295.7	6738477	17	17	21	21	17	17	45	45	17	17	47	47	30	30	63	63
NNS_Rx2220	776385.9	6738522	16	16	20	20	16	16	46	46	16	16	48	48	31.1	31.1	67	67
NNS_Rx2221	775984.1	6738540	16	16	21	21	16	16	43	43	16	16	45	45	28.7	28.7	66	66
NNS_Rx2222	775968.8	6738563	16	16	20	20	16	16	43	43	16	16	45	45	28.2	28.2	62	62
NNS_Rx2223	776133	6738572	16	16	20	20	16	16	43	43	16	16	45	45	28.6	28.6	58	60
NNS_Rx2224	776891.8	6738600	16	16	20	20	16	16	48	48	16	16	50	50	34.1	34.1	59	67
NNS_Rx2225	775993	6738732	16	16	20	20	16	16	42	42	16	16	43	43	27.8	27.8	56	58
NNS_Rx2226	776792.3	6738755	15	15	19	19	15	15	46	46	15	15	49	49	33.2	33.2	65	65
NNS_Rx2227	776523.7	6738757	15	15	19	19	15	15	45	45	15	15	47	47	31.5	31.5	64	64
NNS_Rx2228	776083.7	6738868	15	15	19	19	15	15	41	41	15	15	43	43	28.2	28.2	56	58
NNS_Rx2229	775955.9	6738875	16	16	19	19	16	16	42	42	16	16	44	44	28	28	64	64
NNS_Rx2230	776077.9	6738902	15	15	19	19	15	15	42	42	15	15	44	44	29.3	29.3	65	65
NNS_Rx2231	776066	6738956	15	15	18	18	15	15	41	41	15	15	43	43	28.2	28.2	56	58
NNS_Rx2232	777193.4	6739014	14	14	17	17	14	14	48	48	14	14	50	50	36	36	68	68
NNS_Rx2233	777642.4	6739117	13	13	17	17	13	13	51	51	13	13	54	54	40.4	40.4	72	72
NNS_Rx2234	777333.1	6739162	14	14	17	17	14	14	48	48	14	14	51	51	37.1	37.1	69	69
NNS_Rx2235	777119.9	6739169	14	14	17	17	14	14	46	46	14	14	49	49	34.9	34.9	66	66
NNS_Rx2236	777392.9	6739195	13	13	17	17	13	13	48	48	13	13	51	51	37.5	37.5	70	70
NNS_Rx2237	777956.6	6739202	16	16	16	16	16	16	54	54	16	16	58	58	41.6	41.6	76	76

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2238	779396.2	6739293	11	11	13	13	11	11	48	48	11	11	51	51	39.8	39.8	72	72
NNS_Rx2239	777524.3	6739337	13	13	16	16	13	13	48	48	13	13	51	51	38.4	38.4	71	71
NNS_Rx2240	776177.7	6739362	13	13	17	17	13	13	41	41	13	13	44	44	30.1	30.1	63	63
NNS_Rx2241	778113	6739367	12	12	15	15	12	12	55	55	12	12	58	58	46	46	74	77
NNS_Rx2242	777010.1	6739437	13	13	16	16	13	13	44	44	13	13	47	47	34.2	34.2	67	67
NNS_Rx2243	778274.7	6739500	7	7	14	14	7	7	55	55	7	7	59	59	51.3	51.3	81	81
NNS_Rx2244	777757.9	6739570	12	12	15	15	12	12	49	49	12	12	52	52	39.8	39.8	73	73
NNS_Rx2245	777867.8	6739621	15	15	17	17	15	15	50	50	15	15	53	53	37.9	37.9	75	75
NNS_Rx2246	779151.2	6739875	10	10	12	12	10	10	54	54	10	10	58	58	47.4	47.4	76	76
NNS_Rx2247	776441.5	6739890	12	12	15	15	12	12	39	39	12	12	41	41	29.5	29.5	60	60
NNS_Rx2248	776800.8	6739911	12	12	14	14	12	12	42	42	12	12	45	45	32.7	32.7	66	66
NNS_Rx2249	776685.1	6739958	12	12	14	14	12	12	41	41	12	12	43	43	31.7	31.7	65	65
NNS_Rx2250	776596.6	6740000	12	12	14	14	12	12	41	41	12	12	43	43	31.8	31.8	65	65
NNS_Rx2251	779278.9	6740688	8	8	10	10	8	8	60	60	8	8	63	63	55.1	55.1	87	87
NNS_Rx2252	779069.1	6742077	6	6	7	7	6	6	43	43	6	6	46	46	40	40	67	67
NNS_Rx2253	778693.6	6742190	6	6	7	7	6	6	40	40	6	6	43	43	37	37	64	64
NNS_Rx2254	778589.4	6742322	10	10	11	11	10	10	39	39	10	10	43	43	32.3	32.3	65	65
NNS_Rx2255	785689.7	6742327	-	-	-	-	-	-	42	42	-	-	45	45	44.8	44.8	65	65
NNS_Rx2256	782346.8	6742363	3	3	4	4	3	3	56	56	3	3	59	59	55.5	55.5	81	81
NNS_Rx2257	778375.3	6742373	6	6	7	7	6	6	39	39	6	6	42	42	36.4	36.4	64	64
NNS_Rx2258	782428.8	6742408	3	3	4	4	3	3	56	56	3	3	59	59	55.8	55.8	80	80
NNS_Rx2259	785496.8	6742505	-	-	-	-	-	-	43	43	-	-	45	45	45.3	45.3	65	65
NNS_Rx2260	786976.2	6742591	-	-	-	-	-	-	42	42	-	-	46	46	45.5	45.5	67	67
NNS_Rx2261	783876.2	6743079	-	-	-	-	-	-	57	57	-	-	58	58	57.7	57.7	78	78
NNS_Rx2262	783121.3	6744940	-	-	-	-	-	-	45	45	-	-	48	48	48.4	48.4	71	70
NNS_Rx2263	783267.6	6745079	-	-	-	-	-	-	46	46	-	-	49	49	48.6	48.6	70	70
NNS_Rx2264	783376.8	6745138	-	-	-	-	-	-	46	46	-	-	49	49	48.8	48.8	71	71
NNS_Rx2265	806847.1	6745886	-	-	-	-	-	-	39	39	-	-	42	42	42.2	42.2	57	57
NNS_Rx2266	805727.8	6747216	-	-	-	-	-	-	57	57	-	-	60	60	59.8	59.8	81	81
NNS_Rx2267	805767.1	6747404	-	-	-	-	-	-	65	65	-	-	69	69	68.5	68.5	87	92
NNS_Rx2268	808843.3	6747426	-	-	-	-	-	-	47	47	-	-	50	50	50	50	65	67
NNS_Rx2269	806194.4	6748926	-	-	-	-	-	-	43	43	-	-	46	46	45.7	45.7	68	68
NNS_Rx2270	810881.1	6749026	-	-	-	-	-	-	58	58	-	-	61	61	61.2	61.2	84	84
NNS_Rx2271	806214.9	6749044	-	-	-	-	-	-	42	42	-	-	45	45	44.7	44.7	60	61
NNS_Rx2272	810892	6749090	-	-	-	-	-	-	57	57	-	-	60	60	59.8	59.8	82	82
NNS_Rx2273	809947.1	6749574	-	-	-	-	-	-	47	47	-	-	49	49	49.4	49.4	70	70
NNS_Rx2274	810182.6	6750444	-	-	-	-	-	-	42	42	-	-	45	45	44.8	44.8	65	65
NNS_Rx2275	811476.5	6750790	-	-	-	-	-	-	50	50	-	-	53	53	52.6	52.6	68	70
NNS_Rx2276	817316.3	6756382	-	-	-	-	-	-	41	41	-	-	44	44	44.1	44.1	65	65
NNS_Rx2277	817281.7	6756388	-	-	-	-	-	-	41	41	-	-	44	44	44.2	44.2	66	66
NNS_Rx2278	817242.1	6756398	-	-	-	-	-	-	42	42	-	-	45	45	44.5	44.5	66	66
NNS_Rx2279	817265.7	6756501	-	-	-	-	-	-	41	41	-	-	44	44	43.6	43.6	66	66
NNS_Rx2280	817283.6	6756606	-	-	-	-	-	-	40	40	-	-	43	43	43.1	43.1	58	58
NNS_Rx2281	817305.2	6757144	-	-	-	-	-	-	44	44	-	-	47	47	46.7	46.7	67	67

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2282	817189.8	6757290	-	-	-	-	-	-	45	45	-	-	48	48	47.9	47.9	69	69
NNS_Rx2283	817140	6757343	-	-	-	-	-	-	45	45	-	-	48	48	48.4	48.4	69	69
NNS_Rx2284	817267.1	6757363	-	-	-	-	-	-	45	45	-	-	48	48	47.6	47.6	68	68
NNS_Rx2285	817197.7	6757379	-	-	-	-	-	-	45	45	-	-	48	48	48.1	48.1	69	69
NNS_Rx2286	814930.3	6757564	-	-	-	-	-	-	48	48	-	-	51	51	50.6	50.6	72	72
NNS_Rx2287	816237.5	6758238	-	-	-	-	-	-	65	65	-	-	68	68	67.9	67.9	92	92
NNS_Rx2288	815921.3	6760086	-	-	-	-	-	-	45	45	-	-	48	48	48.4	48.4	70	70
NNS_Rx2289	815697.7	6760159	-	-	-	-	-	-	43	43	-	-	46	46	46	46	65	65
NNS_Rx2290	815636.8	6760170	-	-	-	-	-	-	42	42	-	-	45	45	45	45	59	61
NNS_Rx2291	815580.1	6760181	-	-	-	-	-	-	42	42	-	-	45	45	44.6	44.6	59	60
NNS_Rx2292	816493	6762332	-	-	-	-	-	-	44	44	-	-	47	47	47.3	47.3	62	64
NNS_Rx2293	819916.6	6764654	-	-	-	-	-	-	40	40	-	-	43	43	42.8	42.8	61	61
NNS_Rx2294	819308.7	6765247	-	-	-	-	-	-	47	47	-	-	50	50	49.9	49.9	71	71
NNS_Rx2295	820923.6	6767907	-	-	-	-	-	-	42	42	-	-	45	45	44.8	44.8	59	61
NNS_Rx2296	820881.3	6768179	-	-	-	-	-	-	44	44	-	-	47	47	46.8	46.8	68	68
NNS_Rx2297	820156	6768814	-	-	-	-	-	-	55	55	-	-	58	58	57.8	57.8	80	80
NNS_Rx2298	820097.8	6768936	-	-	-	-	-	-	57	57	-	-	61	61	60.5	60.5	82	82
NNS_Rx2299	820348.7	6769982	-	-	-	-	-	-	63	63	-	-	67	67	66.5	66.5	86	90
NNS_Rx2300	821595.8	6772924	-	-	-	-	-	-	62	62	-	-	65	65	64.7	64.7	82	87
NNS_Rx2301	821460	6773248	-	-	-	-	-	-	58	58	-	-	61	61	60.7	60.7	79	80
NNS_Rx2302	821559.2	6773293	-	-	-	-	-	-	61	61	-	-	64	64	63.9	63.9	82	86
NNS_Rx2303	821405.8	6773299	-	-	-	-	-	-	55	55	-	-	59	59	58.5	58.5	75	77
NNS_Rx2304	821484.1	6773308	-	-	-	-	-	-	58	58	-	-	61	61	60.8	60.8	81	81
NNS_Rx2305	821492.5	6773327	-	-	-	-	-	-	58	58	-	-	61	61	60.7	60.7	81	81
NNS_Rx2306	821570.1	6773346	-	-	-	-	-	-	61	61	-	-	64	64	64.3	64.3	84	86
NNS_Rx2307	821434.7	6773385	-	-	-	-	-	-	56	56	-	-	59	59	58.7	58.7	76	77
NNS_Rx2308	821523.5	6773406	-	-	-	-	-	-	58	58	-	-	61	61	60.6	60.6	80	80
NNS_Rx2309	821449.8	6773415	-	-	-	-	-	-	56	56	-	-	59	59	58.6	58.6	75	77
NNS_Rx2310	821458	6773440	-	-	-	-	-	-	56	56	-	-	59	59	58.8	58.8	78	78
NNS_Rx2311	821640.6	6773452	-	-	-	-	-	-	64	64	-	-	67	67	66.9	66.9	91	91
NNS_Rx2312	821477.6	6773497	-	-	-	-	-	-	56	56	-	-	59	59	59	59	76	77
NNS_Rx2313	821568.9	6773500	-	-	-	-	-	-	57	57	-	-	60	60	59.8	59.8	80	80
NNS_Rx2314	822047.4	6773531	-	-	-	-	-	-	56	56	-	-	59	59	58.9	58.9	81	81
NNS_Rx2315	821578.6	6773539	-	-	-	-	-	-	53	53	-	-	56	56	56.2	56.2	82	82
NNS_Rx2316	821508.1	6773546	-	-	-	-	-	-	56	56	-	-	59	59	59.1	59.1	83	83
NNS_Rx2317	821521.5	6773581	-	-	-	-	-	-	56	56	-	-	59	59	59.3	59.3	83	83
NNS_Rx2318	821630.3	6773616	-	-	-	-	-	-	57	57	-	-	60	60	59.8	59.8	82	82
NNS_Rx2319	822056.8	6773631	-	-	-	-	-	-	57	57	-	-	60	60	59.6	59.6	82	82
NNS_Rx2320	822002.1	6773892	-	-	-	-	-	-	61	61	-	-	65	65	64.6	64.6	84	86
NNS_Rx2321	823806.5	6774968	-	-	-	-	-	-	40	40	-	-	42	42	42.4	42.4	56	57
NNS_Rx2322	823584.8	6775026	-	-	-	-	-	-	42	42	-	-	44	44	44.1	44.1	58	60
NNS_Rx2323	824181.6	6776289	-	-	-	-	-	-	37	37	-	-	40	40	40.3	40.3	56	56
NNS_Rx2324	821991.8	6776886	-	-	-	-	-	-	59	59	-	-	62	62	61.9	61.9	77	82
NNS_Rx2325	820635.8	6779564	-	-	-	-	-	-	42	42	-	-	45	45	44.7	44.7	60	61

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2326	822996.9	6779751	-	-	-	-	-	-	48	48	-	-	50	50	50	50	60	67
NNS_Rx2327	824720.3	6782098	-	-	-	-	-	-	41	41	-	-	44	44	43.6	43.6	58	59
NNS_Rx2328	822331.4	6782168	-	-	-	-	-	-	48	48	-	-	51	51	50.7	50.7	73	73
NNS_Rx2329	822508.9	6782461	-	-	-	-	-	-	47	47	-	-	50	50	50.2	50.2	67	68
NNS_Rx2330	822735.9	6783015	-	-	-	-	-	-	47	47	-	-	50	50	49.9	49.9	64	67
NNS_Rx2331	825461.2	6783676	-	-	-	-	-	-	43	43	-	-	46	46	45.6	45.6	64	64
NNS_Rx2332	823225.5	6785436	-	-	-	-	-	-	42	42	-	-	45	45	44.5	44.5	59	59
NNS_Rx2333	822991.4	6785628	-	-	-	-	-	-	41	41	-	-	44	44	43.5	43.5	65	65
NNS_Rx2334	825441.9	6788534	-	-	-	-	-	-	52	52	-	-	56	56	55.6	55.6	77	77
NNS_Rx2335	827464.2	6789634	-	-	-	-	-	-	42	42	-	-	45	45	44.7	44.7	61	61
NNS_Rx2336	827243.3	6790537	-	-	-	-	-	-	49	49	-	-	53	53	52.6	52.6	69	71
NNS_Rx2337	831494.4	6792689	-	-	-	-	-	-	37	37	-	-	40	40	40.2	40.2	64	64
NNS_Rx2338	828242	6792780	-	-	-	-	-	-	54	54	-	-	57	57	57.1	57.1	78	78
NNS_Rx2339	828320.2	6792879	-	-	-	-	-	-	54	54	-	-	57	57	56.9	56.9	79	79
NNS_Rx2340	830874.3	6794733	-	-	-	-	-	-	55	55	-	-	58	58	57.6	57.6	79	79
NNS_Rx2341	830880.6	6794768	-	-	-	-	-	-	55	55	-	-	58	58	57.6	57.6	78	78
NNS_Rx2342	830647.3	6794779	-	-	-	-	-	-	63	63	-	-	66	66	66.1	66.1	88	88
NNS_Rx2343	830802.8	6794787	-	-	-	-	-	-	56	56	-	-	59	59	59.2	59.2	77	78
NNS_Rx2344	830728.5	6794793	-	-	-	-	-	-	58	58	-	-	61	61	60.5	60.5	82	82
NNS_Rx2345	830811.7	6794817	-	-	-	-	-	-	57	57	-	-	60	60	59.5	59.5	82	82
NNS_Rx2346	830661	6794852	-	-	-	-	-	-	63	63	-	-	66	66	66.2	66.2	91	91
NNS_Rx2347	830705.3	6794865	-	-	-	-	-	-	59	59	-	-	62	62	61.9	61.9	88	88
NNS_Rx2348	830751	6794895	-	-	-	-	-	-	57	57	-	-	60	60	60.2	60.2	83	83
NNS_Rx2349	830894	6794908	-	-	-	-	-	-	55	55	-	-	58	58	57.6	57.6	77	77
NNS_Rx2350	830673	6794913	-	-	-	-	-	-	63	63	-	-	66	66	65.6	65.6	91	91
NNS_Rx2351	830829.8	6794939	-	-	-	-	-	-	56	56	-	-	59	59	59.4	59.4	79	79
NNS_Rx2352	830673.7	6794961	-	-	-	-	-	-	63	63	-	-	66	66	66.1	66.1	89	89
NNS_Rx2353	830919.8	6794967	-	-	-	-	-	-	54	54	-	-	57	57	57.4	57.4	73	76
NNS_Rx2354	830927.7	6794989	-	-	-	-	-	-	54	54	-	-	57	57	57.4	57.4	75	76
NNS_Rx2355	830745.1	6795005	-	-	-	-	-	-	58	58	-	-	62	62	61.5	61.5	79	82
NNS_Rx2356	830687.7	6795036	-	-	-	-	-	-	63	63	-	-	66	66	65.9	65.9	85	88
NNS_Rx2357	830785.5	6795034	-	-	-	-	-	-	56	56	-	-	59	59	58.7	58.7	77	79
NNS_Rx2358	830704.2	6795051	-	-	-	-	-	-	59	59	-	-	63	63	62.5	62.5	80	85
NNS_Rx2359	830693.7	6795077	-	-	-	-	-	-	63	63	-	-	66	66	65.9	65.9	84	89
NNS_Rx2360	830926.8	6795093	-	-	-	-	-	-	54	54	-	-	58	58	57.6	57.6	74	76
NNS_Rx2361	830704.4	6795098	-	-	-	-	-	-	62	62	-	-	65	65	64.8	64.8	83	88
NNS_Rx2362	829783.2	6795099	-	-	-	-	-	-	48	48	-	-	51	51	50.7	50.7	72	72
NNS_Rx2363	830858.2	6795107	-	-	-	-	-	-	56	56	-	-	59	59	59.4	59.4	75	78
NNS_Rx2364	830937.8	6795129	-	-	-	-	-	-	54	54	-	-	58	58	57.5	57.5	71	76
NNS_Rx2365	830866.8	6795143	-	-	-	-	-	-	56	56	-	-	59	59	59.4	59.4	79	79
NNS_Rx2366	830875.7	6795184	-	-	-	-	-	-	56	56	-	-	59	59	59	59	74	78
NNS_Rx2367	830804.9	6795204	-	-	-	-	-	-	58	58	-	-	61	61	60.8	60.8	75	81
NNS_Rx2368	830895.2	6795292	-	-	-	-	-	-	56	56	-	-	59	59	58.9	58.9	71	78
NNS_Rx2369	830741	6795303	-	-	-	-	-	-	62	62	-	-	66	66	65.6	65.6	83	88

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
NNS_Rx2370	830900.3	6795314	-	-	-	-	-	-	56	56	-	-	59	59	59.2	59.2	71	78
NNS_Rx2371	830907.6	6795345	-	-	-	-	-	-	56	56	-	-	59	59	59.1	59.1	72	78
NNS_Rx2372	830990.8	6795346	-	-	-	-	-	-	54	54	-	-	57	57	57.1	57.1	70	76
NNS_Rx2373	830851.8	6795389	-	-	-	-	-	-	54	54	-	-	58	58	57.6	57.6	71	77
NNS_Rx2374	832373.1	6795400	-	-	-	-	-	-	39	39	-	-	42	42	41.9	41.9	64	64
NNS_Rx2375	830854.3	6795407	-	-	-	-	-	-	56	56	-	-	59	59	58.7	58.7	72	78
NNS_Rx2376	830856.6	6795427	-	-	-	-	-	-	56	56	-	-	59	59	58.9	58.9	73	79
NNS_Rx2377	830847.1	6795448	-	-	-	-	-	-	58	58	-	-	61	61	61.1	61.1	76	81
NNS_Rx2378	779021.4	6735728	19	19	24	24	19	19	39	39	19	19	41	41	21.6	21.6	62	62
NNS_Rx2379	779351	6736904	19	19	21	21	19	19	40	40	19	19	43	43	23.8	23.8	63	63
NNS_Rx2380	779605.6	6738326	16	16	17	17	16	16	41	41	16	16	44	44	28.3	28.3	59	59
NNS_Rx2381	779225.8	6739806	10	10	12	12	10	10	53	53	10	10	56	56	45.5	45.5	75	75
NNS_Rx2400	768373.9	6640762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2401	768391.1	6640771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2402	768142.2	6640771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2403	768560.2	6640771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2404	768620.1	6640791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2405	768449.4	6640799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2406	768603.6	6640803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2407	768501.5	6640824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2408	768441.6	6640868	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2409	768735.7	6640887	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2410	768187.5	6641132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2411	768350.9	6641153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2412	768107	6641172	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2413	768472	6641199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2414	768380.5	6641249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2415	768212.6	6641281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2416	768177.6	6641351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2417	768172.6	6641369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2418	768248.8	6641369	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2419	768227.5	6641420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2420	768202.7	6641474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2421	767947.1	6641569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2422	768178.1	6641674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2423	768052	6641680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2424	768017	6641701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2425	768093.9	6642024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2426	767774.2	6642217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2427	767759.2	6642248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2428	767812.6	6642269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NNS_Rx2429	775679.3	6734301	33	33	38	38	33	33	48	48	33	33	50	50	16.9	16.9	64	67
NNS_Rx2430	775611.1	6734314	34	34	38	38	34	34	47	47	34	34	50	50	16	16	70	70
NNS_Rx2431	775524.3	6734328	32	32	37	37	32	32	46	46	32	32	49	49	17	17	62	65

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
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NNS_Rx2433	775624.5	6734360	33	33	38	38	33	33	47	47	33	33	50	50	17.2	17.2	63	67
NNS_Rx2434	775629.6	6734407	33	33	38	38	33	33	47	47	33	33	50	50	17.1	17.1	63	67
NNS_Rx2435	775606.7	6734579	35	35	39	39	35	35	48	48	35	35	50	50	14.9	14.9	71	71
NNS_Rx2436	775493	6734592	35	35	38	38	35	35	47	47	35	35	49	49	14.7	14.7	70	70
NNS_Rx2437	775295.8	6734620	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx2438	775003.7	6734624	31	31	34	34	31	31	43	43	31	31	45	45	14.3	14.3	67	67
NNS_Rx2439	775776.6	6734650	37	37	41	41	37	37	49	49	37	37	52	52	15	15	73	73
NNS_Rx2440	775168.5	6734711	32	32	35	35	32	32	44	44	32	32	47	47	14.5	14.5	68	68
NNS_Rx2441	775043.7	6734730	28	28	33	33	28	28	43	43	28	28	45	45	17.2	17.2	60	61
NNS_Rx2442	775075.5	6734731	28	28	33	33	28	28	43	43	28	28	46	46	17.4	17.4	59	61
NNS_Rx2443	775283.4	6734767	33	33	36	36	33	33	45	45	33	33	48	48	14.6	14.6	69	69
NNS_Rx2444	775897.1	6734898	40	40	43	43	40	40	52	52	40	40	54	54	14.8	14.8	76	76
NNS_Rx2445	775331.6	6734899	30	30	36	36	30	30	45	45	30	30	48	48	17.4	17.4	62	64
NNS_Rx2446	775584.9	6734942	36	36	39	39	36	36	48	48	36	36	51	51	14.6	14.6	72	72
NNS_Rx2447	775715.1	6734942	38	38	41	41	38	38	50	50	38	38	52	52	14.6	14.6	73	73
NNS_Rx2448	775542	6734949	36	36	39	39	36	36	48	48	36	36	51	51	14.6	14.6	72	72
NNS_Rx2449	775313.3	6735370	33	33	36	36	33	33	46	46	33	33	49	49	16	16	69	69
NNS_Rx2450	769878.3	6647748	40	40	45	45	40	40	54	54	40	40	57	57	16.4	16.4	75	76
NNS_Rx2451	776865.8	6735554	36	36	41	41	36	36	51	51	36	36	53	53	17.8	17.8	67	71
NNS_Rx2452	776403.6	6735612	42	42	46	46	42	42	56	56	42	42	58	58	16.8	16.8	76	80
NNS_Rx2453	776466.8	6735658	41	41	46	46	41	41	56	56	41	41	59	59	17.9	17.9	71	80
NNS_Rx2454	777491.8	6735707	30	30	34	34	30	30	46	46	30	30	48	48	18.4	18.4	67	67
NNS_Rx2455	776335.5	6735841	40	40	45	45	40	40	56	56	40	40	58	58	18.3	18.3	72	80
NNS_Rx2456	775338.5	6735929	31	31	35	35	31	31	47	47	31	31	49	49	18.7	18.7	63	67
NNS_Rx2457	776266.7	6735987	47	47	52	52	47	47	61	61	47	47	64	64	17.4	17.4	83	90
NNS_Rx2458	775861.9	6736030	37	37	43	43	37	37	54	54	37	37	57	57	19.6	19.6	72	77
NNS_Rx2459	775529.8	6736038	32	32	37	37	32	32	49	49	32	32	52	52	19.9	19.9	66	70
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NNS_Rx2461	775318.3	6736100	30	30	35	35	30	30	47	47	30	30	49	49	19.1	19.1	66	66
NNS_Rx2462	775393.4	6736140	30	30	35	35	30	30	48	48	30	30	50	50	19.4	19.4	66	67
NNS_Rx2463	775316.7	6736142	30	30	34	34	30	30	47	47	30	30	49	49	19.3	19.3	65	66
NNS_Rx2464	775345.7	6736142	30	30	35	35	30	30	47	47	30	30	49	49	19.3	19.3	65	67
NNS_Rx2465	775454.5	6736195	30	30	35	35	30	30	48	48	30	30	51	51	20.7	20.7	68	68
NNS_Rx2466	775336.6	6736199	29	29	34	34	29	29	47	47	29	29	49	49	20.4	20.4	67	67
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NNS_Rx2468	775235.1	6736251	29	29	33	33	29	29	46	46	29	29	48	48	19.4	19.4	65	65
NNS_Rx2469	775396.5	6736253	29	29	34	34	29	29	48	48	29	29	50	50	20.9	20.9	65	68
NNS_Rx2471	775694.7	6737515	21	21	26	26	21	21	46	46	21	21	47	47	26.1	26.1	62	64
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NNS_Rx2473	775825.1	6737595	21	21	26	26	21	21	47	47	21	21	48	48	27.5	27.5	68	68
NNS_Rx2474	775364.6	6737656	20	20	25	25	20	20	43	43	20	20	45	45	25	25	66	66
NNS_Rx2475	775354.7	6737707	19	19	24	24	19	19	43	43	19	19	45	45	25.3	25.3	67	67
NNS_Rx2476	775350.6	6737768	19	19	24	24	19	19	43	43	19	19	44	44	25.3	25.3	65	65

Receiver ID	Receiver Location		L_{Aeq}- No Build 2020		L_{Aeq}- Build 2020		L_{Aeq}- No Build 2025		L_{Aeq}- Build 2025		L_{Aeq}- No Build 2040		L_{Aeq}- Build 2040		2040 L_{Aeq} Increase		L_{Amax} No Build	L_{Amax} Design
	Easting	Northing	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day			
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NNS_Rx2478	775405.4	6737813	19	19	24	24	19	19	42	42	19	19	44	44	24.9	24.9	58	60
NNS_Rx2479	775355.1	6737858	19	19	23	23	19	19	42	42	19	19	44	44	24.8	24.8	58	59
NNS_Rx2480	775917.7	6737930	19	19	24	24	19	19	46	46	19	19	47	47	28.1	28.1	68	68
NNS_Rx2481	769654.6	6687484	46	46	49	49	46	46	57	57	46	46	60	60	14.1	14.1	81	81
NNS_Rx2482	776541.2	6736435	32	32	37	37	32	32	57	57	32	32	59	59	26.4	26.4	73	77
NNS_Rx2483	775780.2	6735383	37	37	42	42	37	37	52	52	37	37	54	54	16.9	16.9	69	73
NNS_Rx2484	776276.6	6734825	46	46	49	49	46	46	58	58	46	46	60	60	14.8	14.8	83	83
NNS_Rx2485	775220.5	6736602	25	25	31	31	25	25	46	46	25	25	48	48	22.4	22.4	65	65
NNS_WORx0001	776842.8	6735619	35	35	41	41	35	35	51	51	35	35	53	53	18	18	66	71
NNS_WORx0002	830725.2	6794752	-	-	-	-	-	-	58	58	-	-	62	62	61.5	61.5	84	84
NNS_WORx0003	776323.4	6735725	45	45	50	50	45	45	59	59	45	45	62	62	17.3	17.3	78	86
NNS_WORx0004	775591	6736207	31	31	37	37	31	31	50	50	31	31	52	52	21	21	70	71
NNS_WORx0005	775410.5	6737128	23	23	28	28	23	23	46	46	23	23	47	47	24.1	24.1	63	64
NNS_WORx0006	775694.8	6737405	22	22	27	27	22	22	47	47	22	22	49	49	26.6	26.6	69	69
NNS_WORx0007	769513	6686849	47	47	51	51	47	47	61	61	47	47	63	63	16	16	82	87
NNS_WORx0008	769860.8	6686930	39	39	43	43	39	39	52	52	39	39	55	55	15.4	15.4	67	73

Appendix E – Operational rail noise contours, LAeq



LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

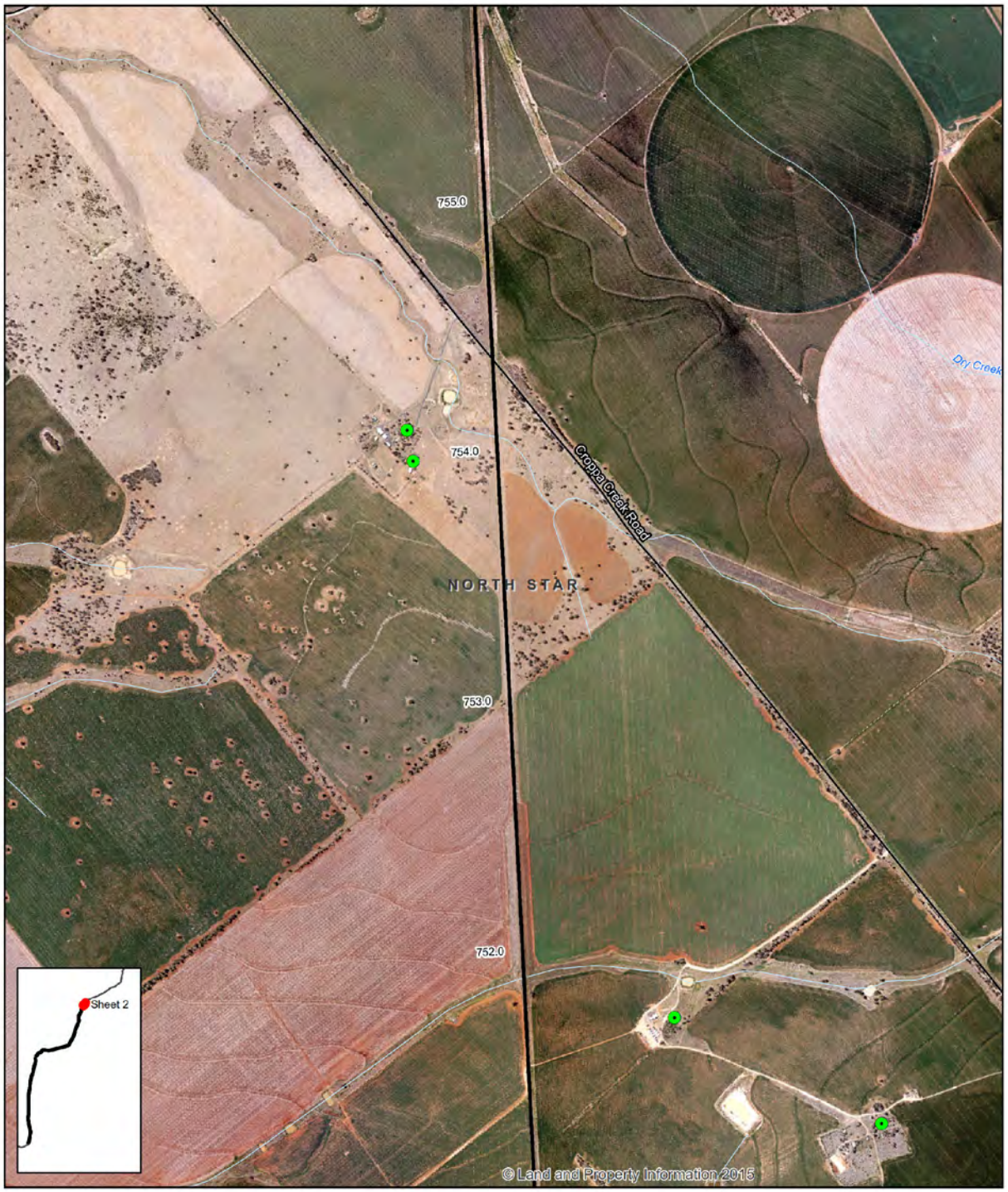
Figure E1- Sheet 1

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

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Operational rail noise contours, LAeq 2020 build

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Figure E1- Sheet 2

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LEGEND

Residential receiver

The proposal

Watercourse

Paper Size A4

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Metres

Map Projection: Transverse Mercator
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Operational rail noise contours, LAeq 2020 build

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Figure E1- Sheet 3

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LEGEND

- Residential receiver
- The proposal
- Watercourse

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

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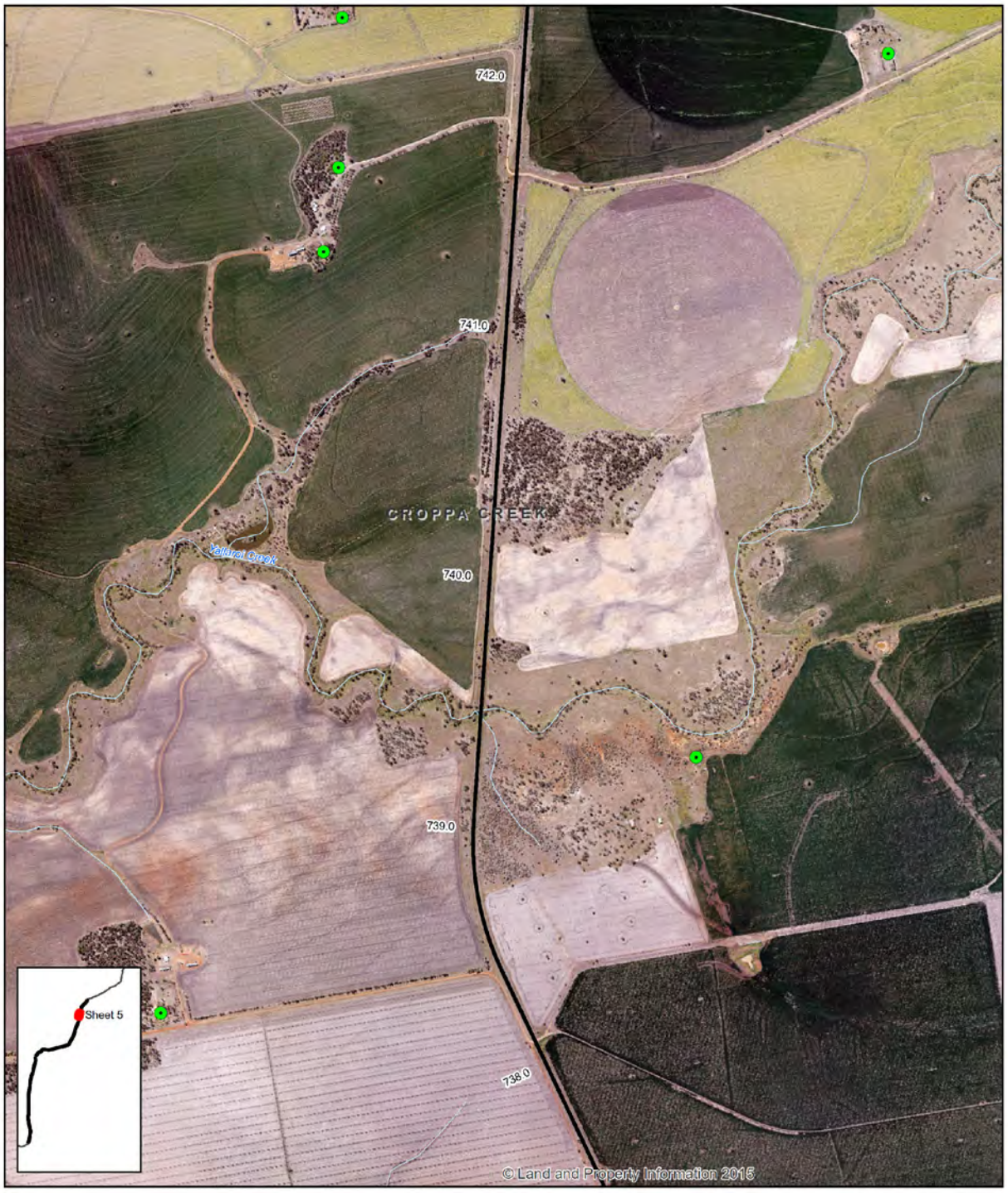
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LEGEND

Residential receiver

The proposal

Watercourse

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Metres

Map Projection: Transverse Mercator
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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

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Figure E1- Sheet 5

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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse
- Road

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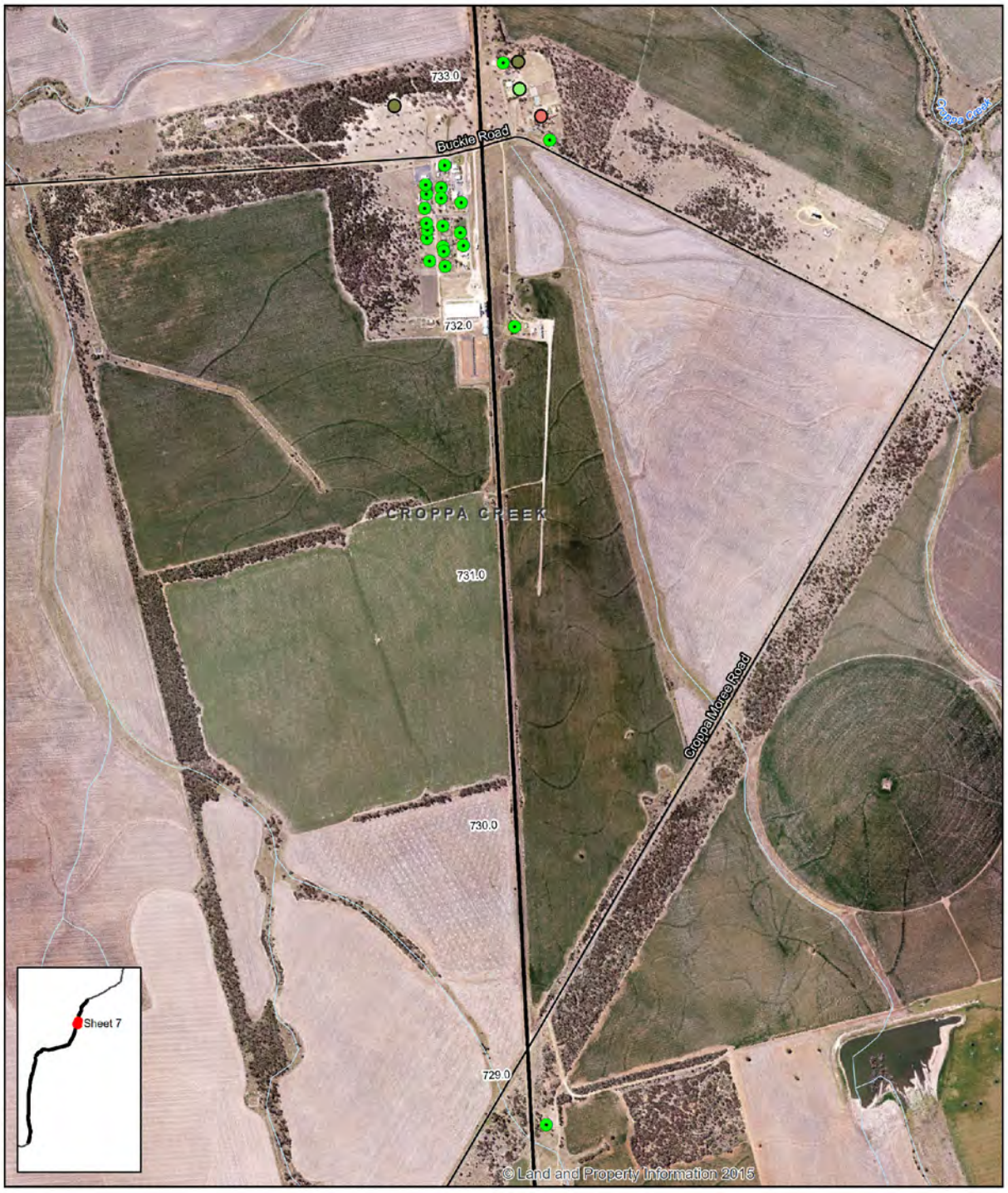
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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- The proposal
- Watercourse
- Road

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Metres

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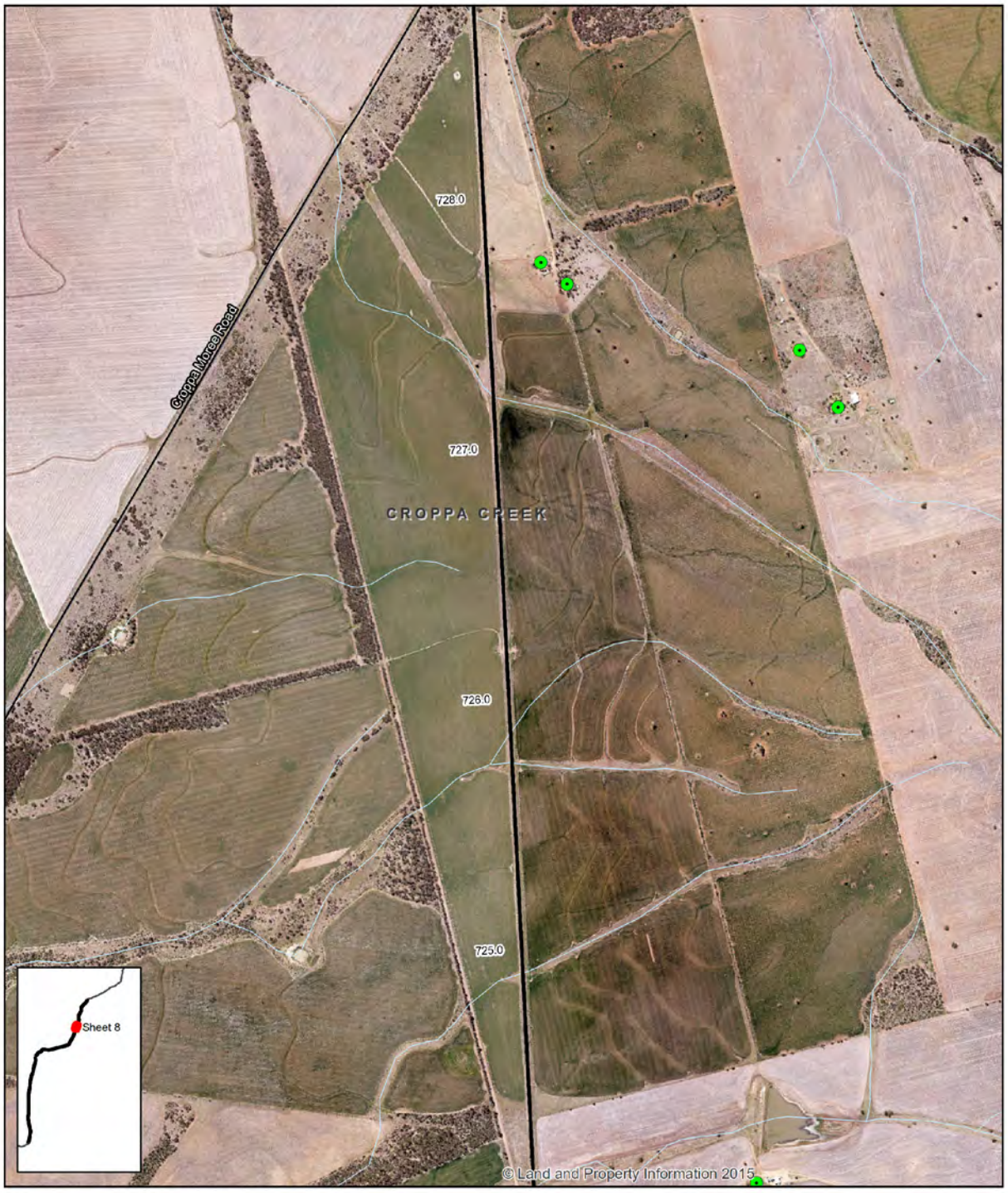
Figure E1- Sheet 7

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LEGEND

- Residential receiver
- The proposal
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- Road

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Figure E1- Sheet 8

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

Residential receiver

The proposal

Watercourse

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

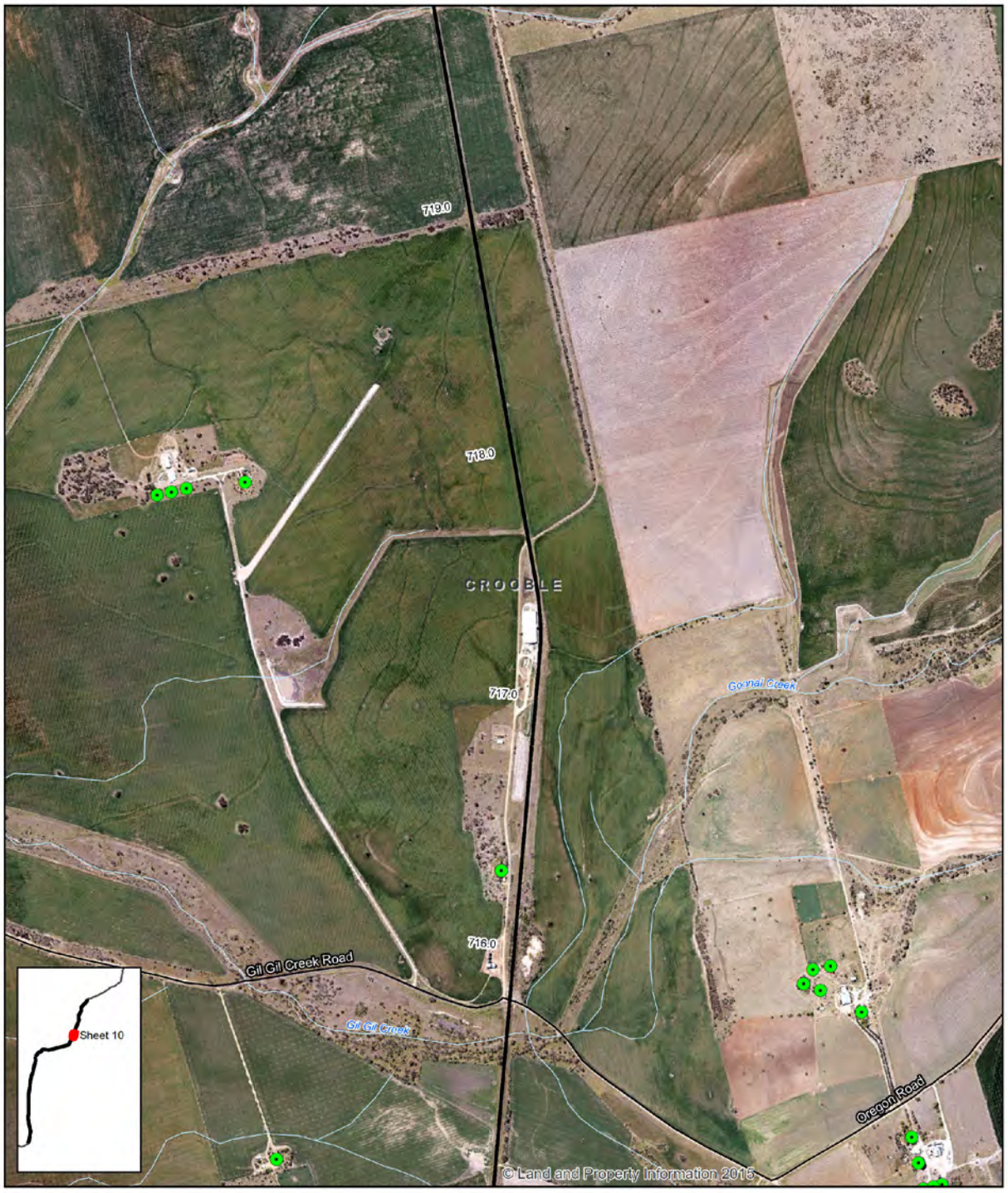
Figure E1- Sheet 9

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 10

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 11

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 12

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 13

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LEGEND

Residential receiver

The proposal

Watercourse

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 14

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LEGEND

The proposal

Watercourse

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 15

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LEGEND

The proposal

Watercourse

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 16

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LEGEND

- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 17

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 18

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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 19

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

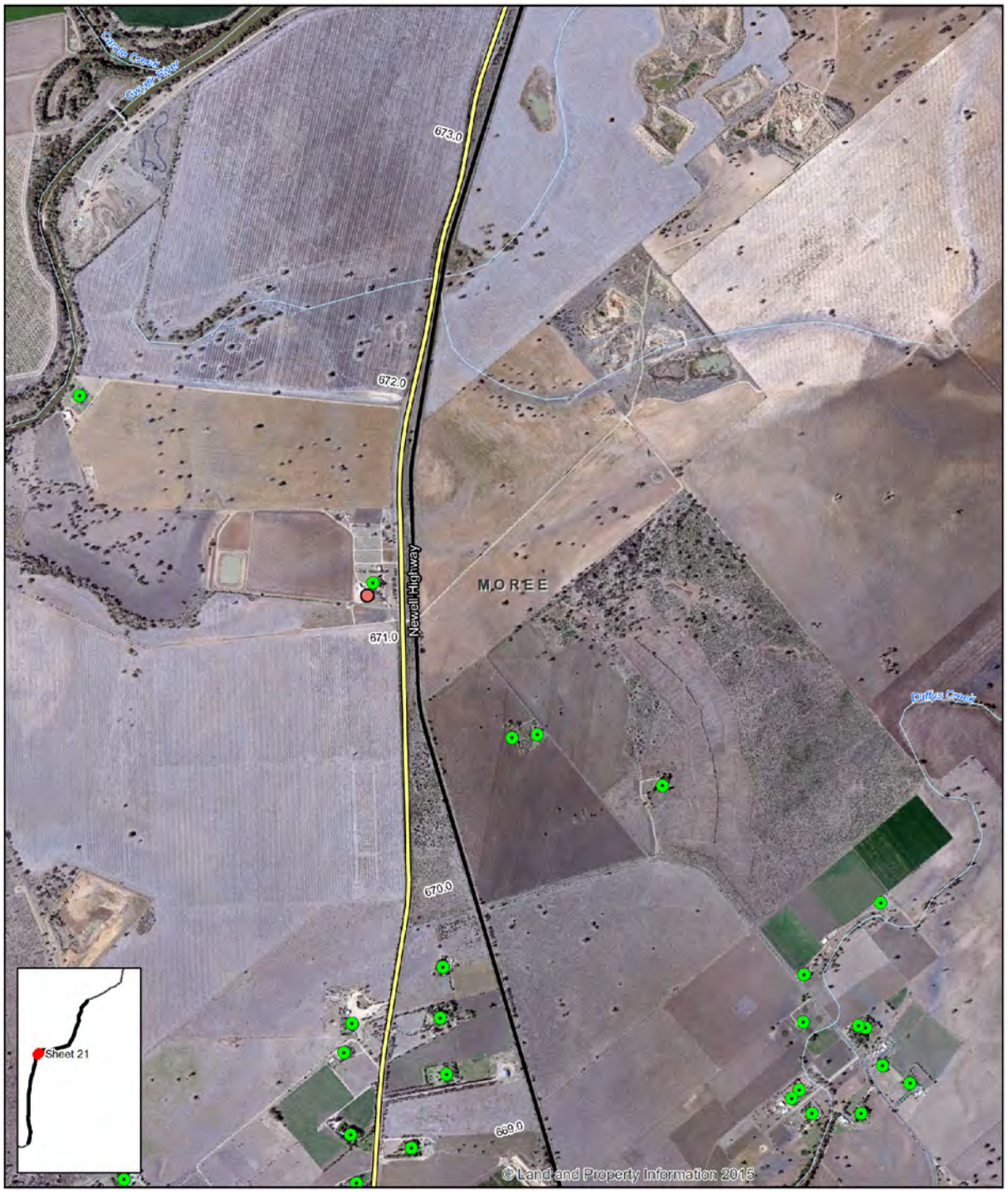
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse
- Highway
- Road

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

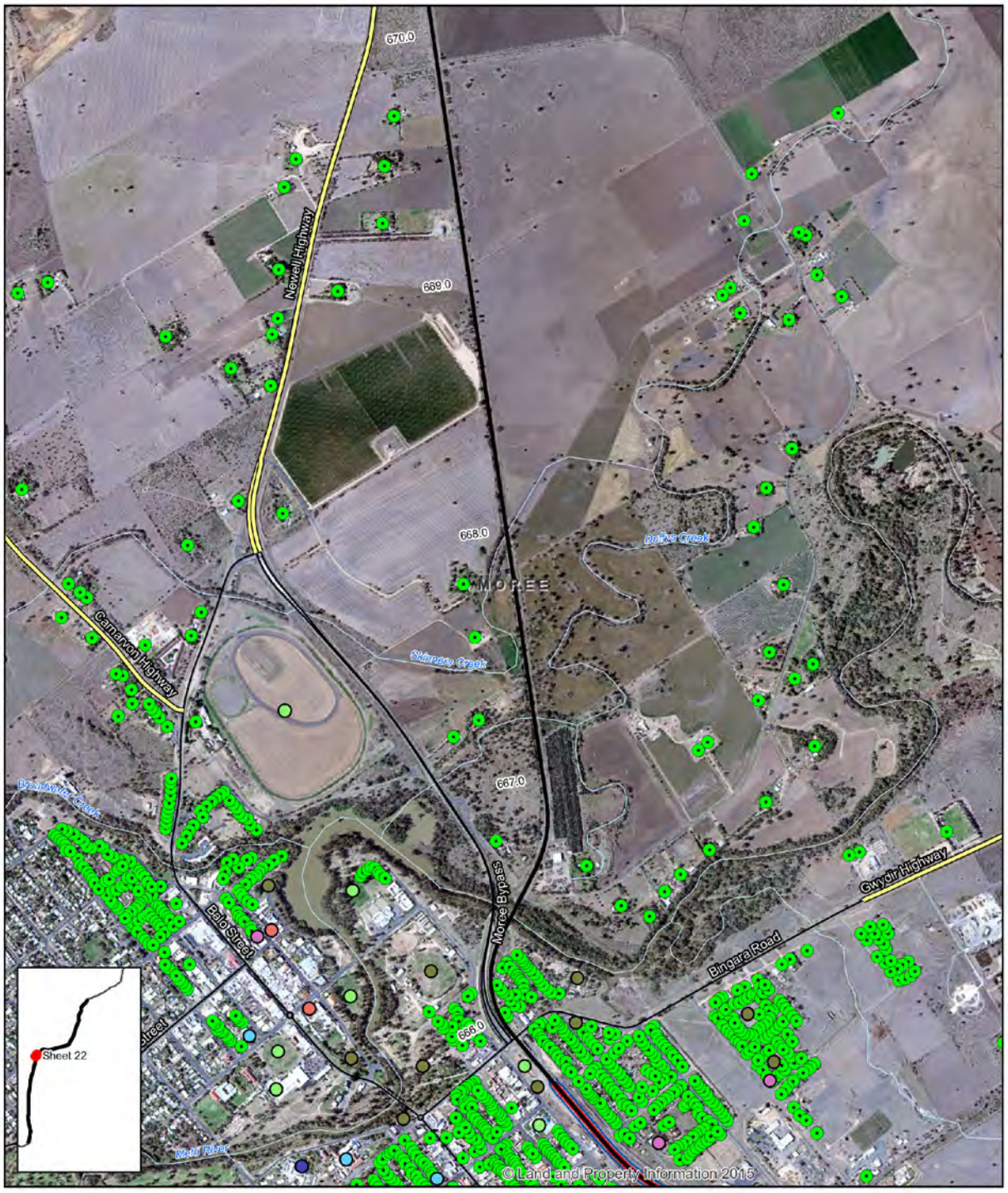
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LEGEND

- Residential receiver
- Active recreation
- Aged care
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

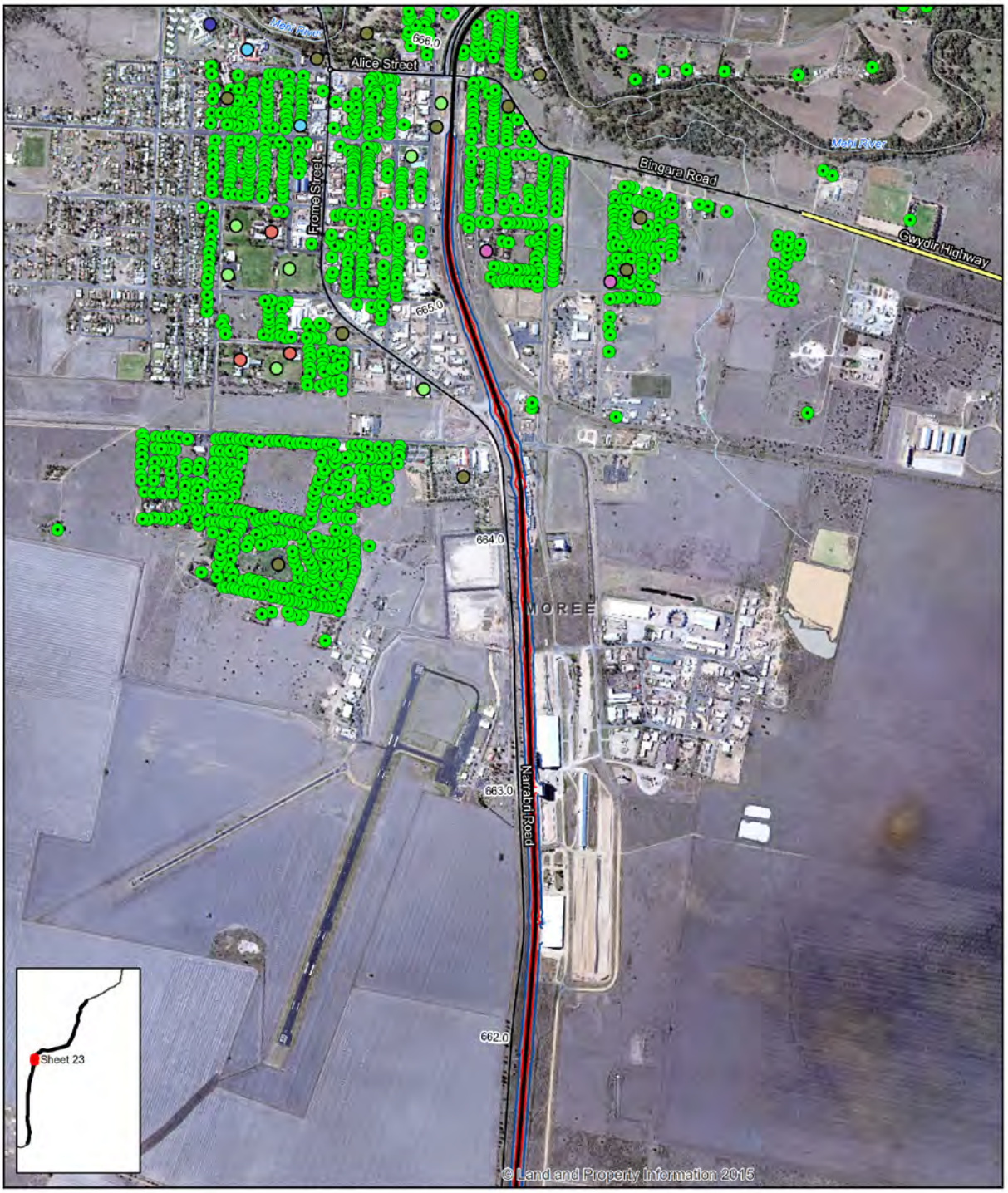
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LEGEND

- Residential receiver
- Active recreation
- Aged care
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

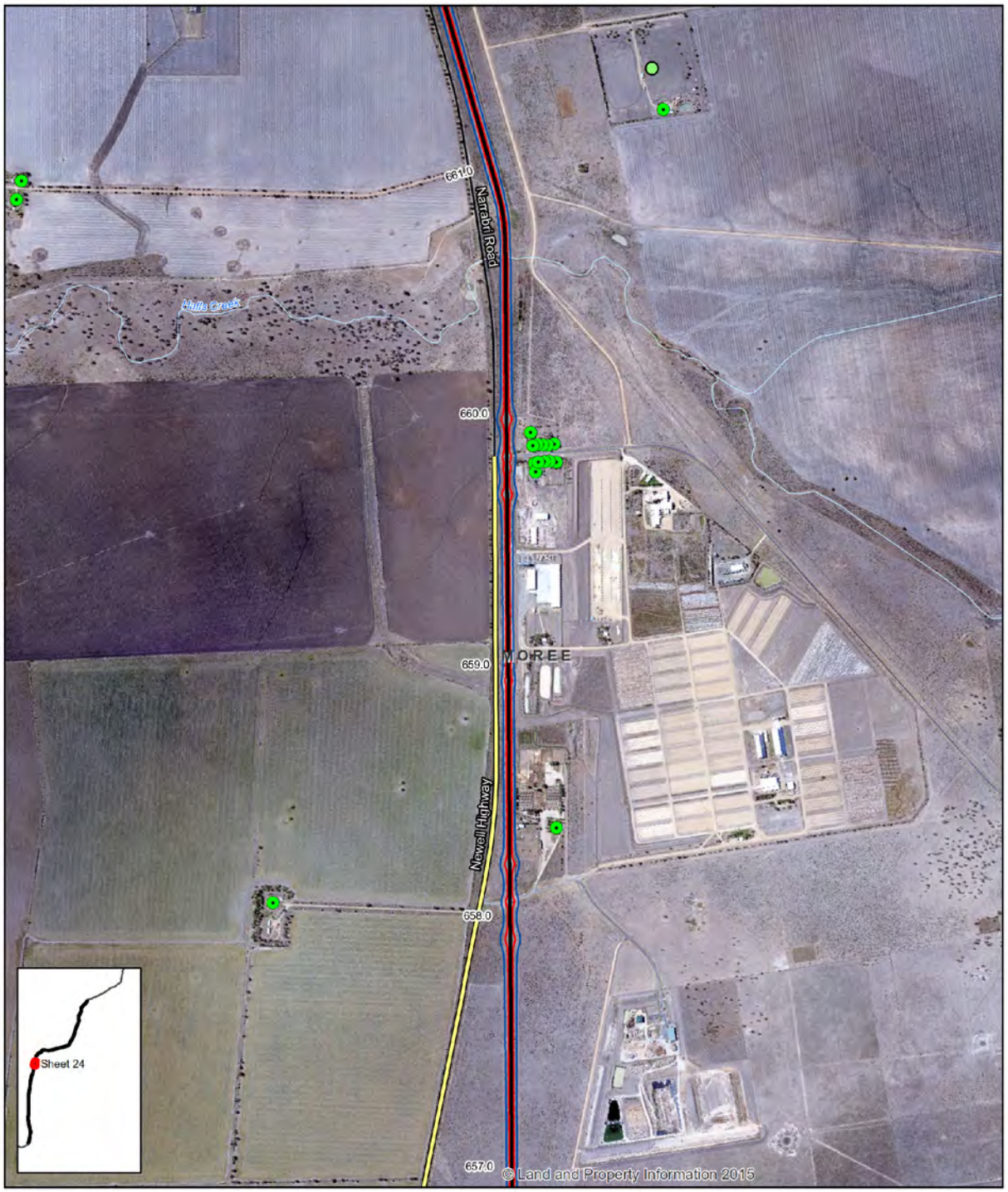
Figure E1- Sheet 23

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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 24

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 25

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 26

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

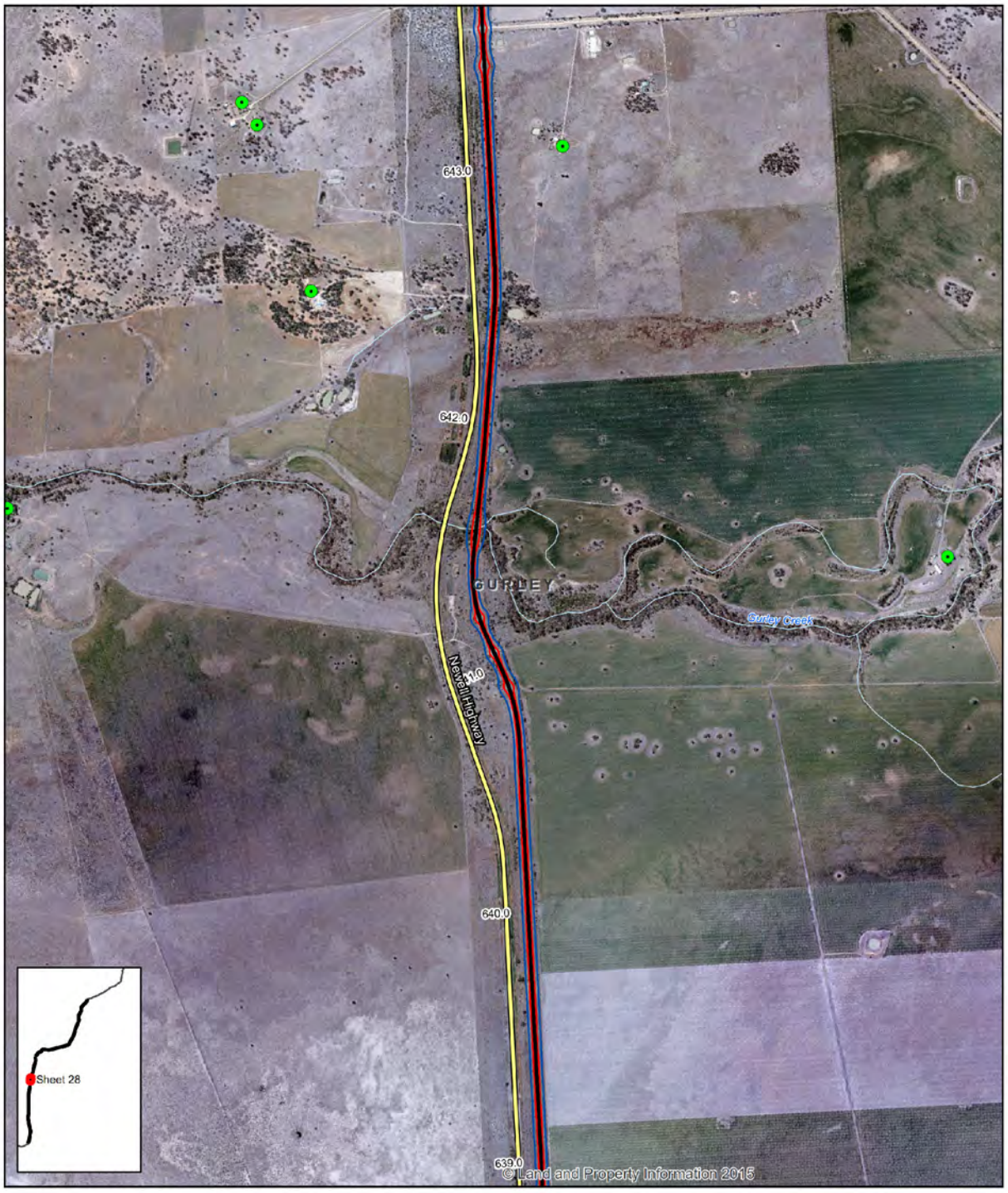
Figure E1- Sheet 27

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 28

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 29

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 30

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

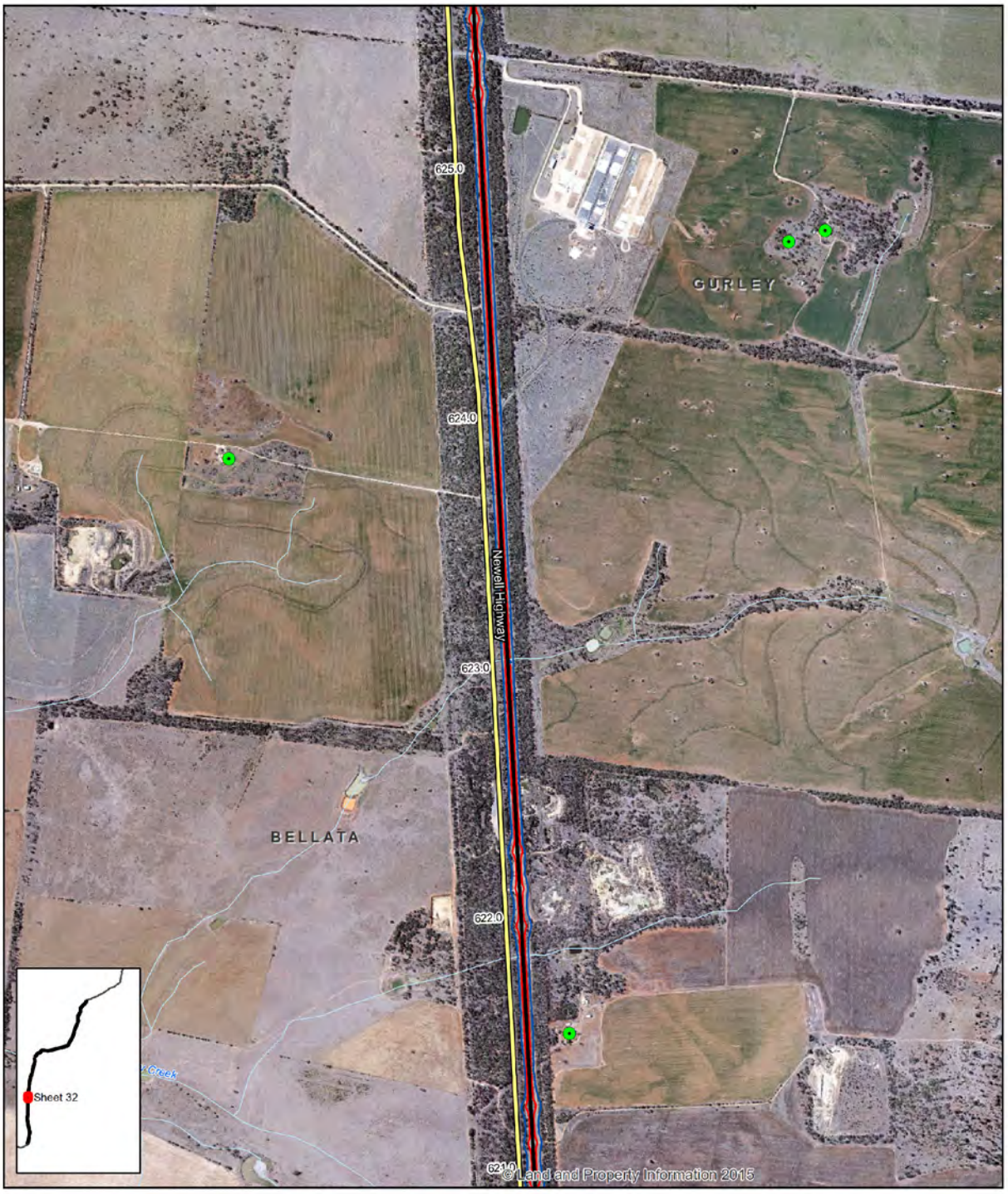
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

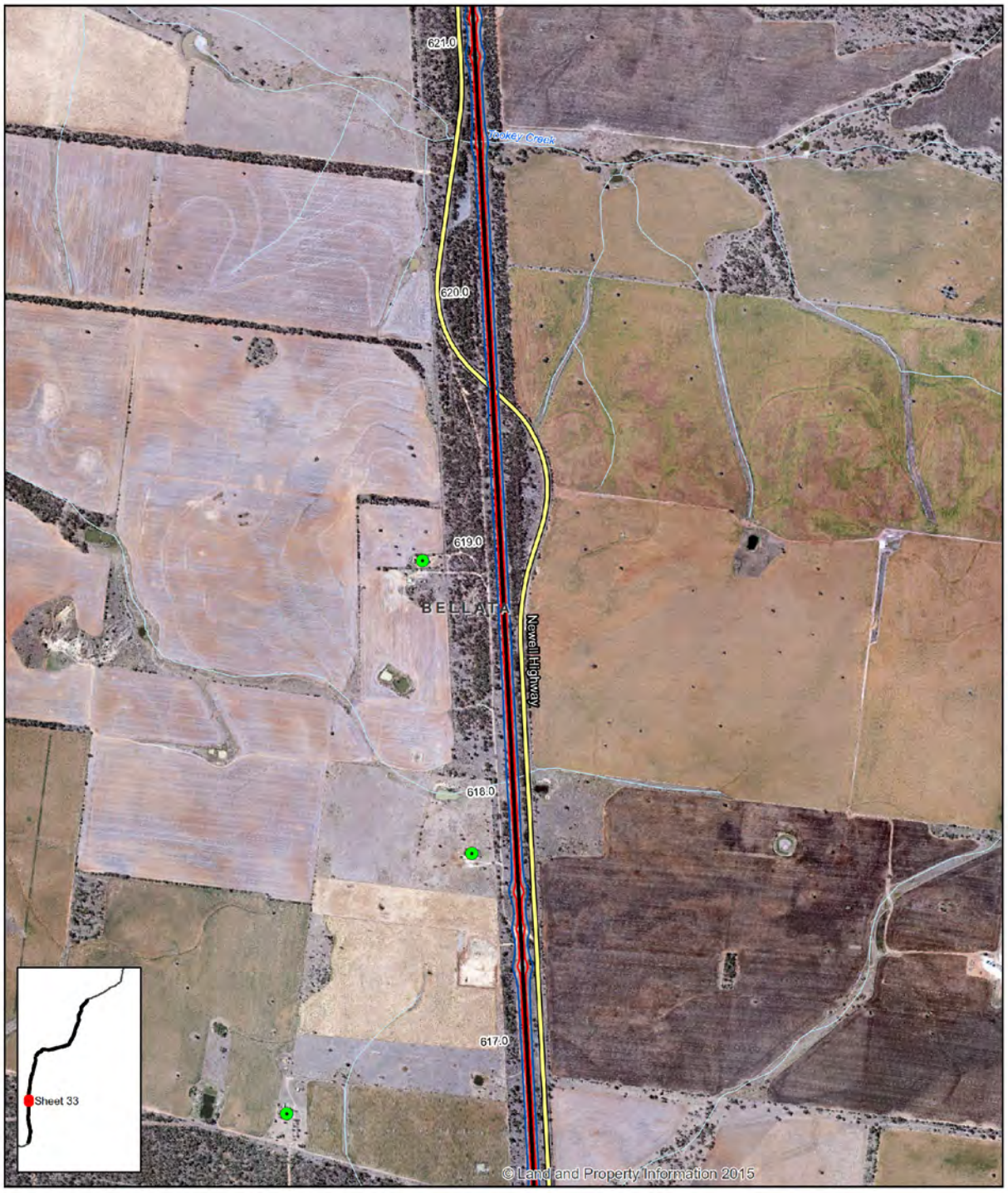
Figure E1- Sheet 32

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

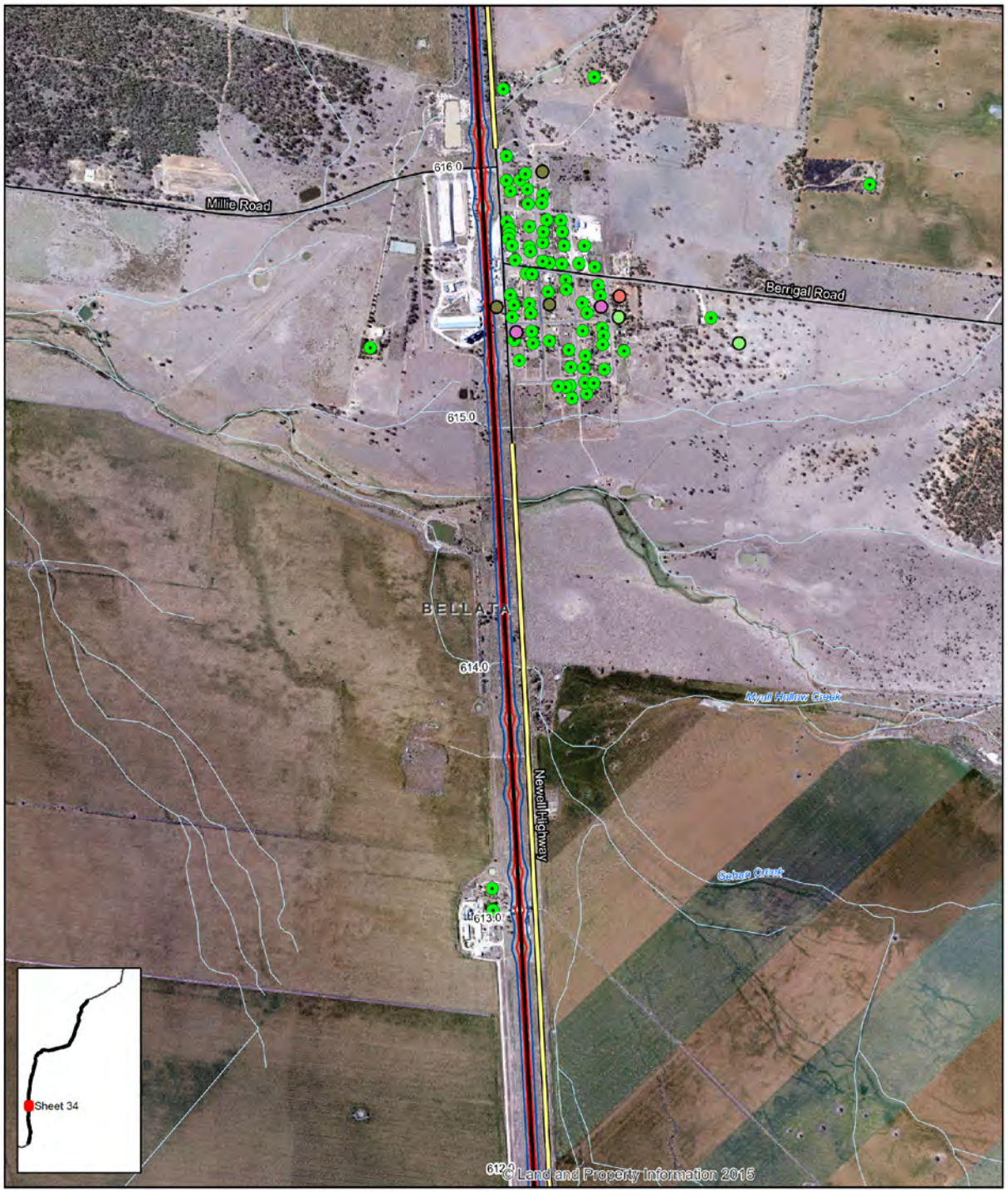
Figure E1- Sheet 33

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 34

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

Figure E1- Sheet 35

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

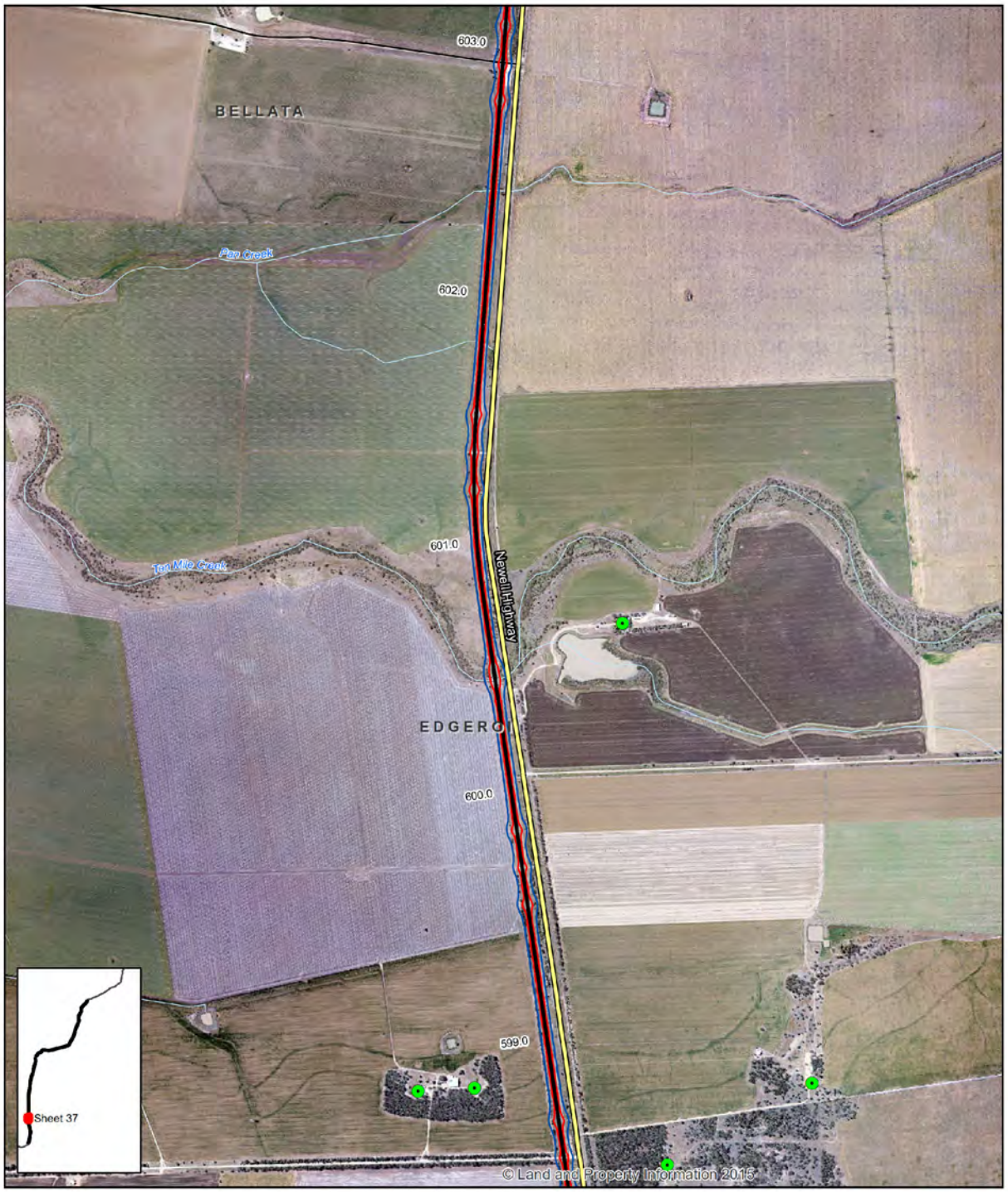
Figure E1- Sheet 36

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

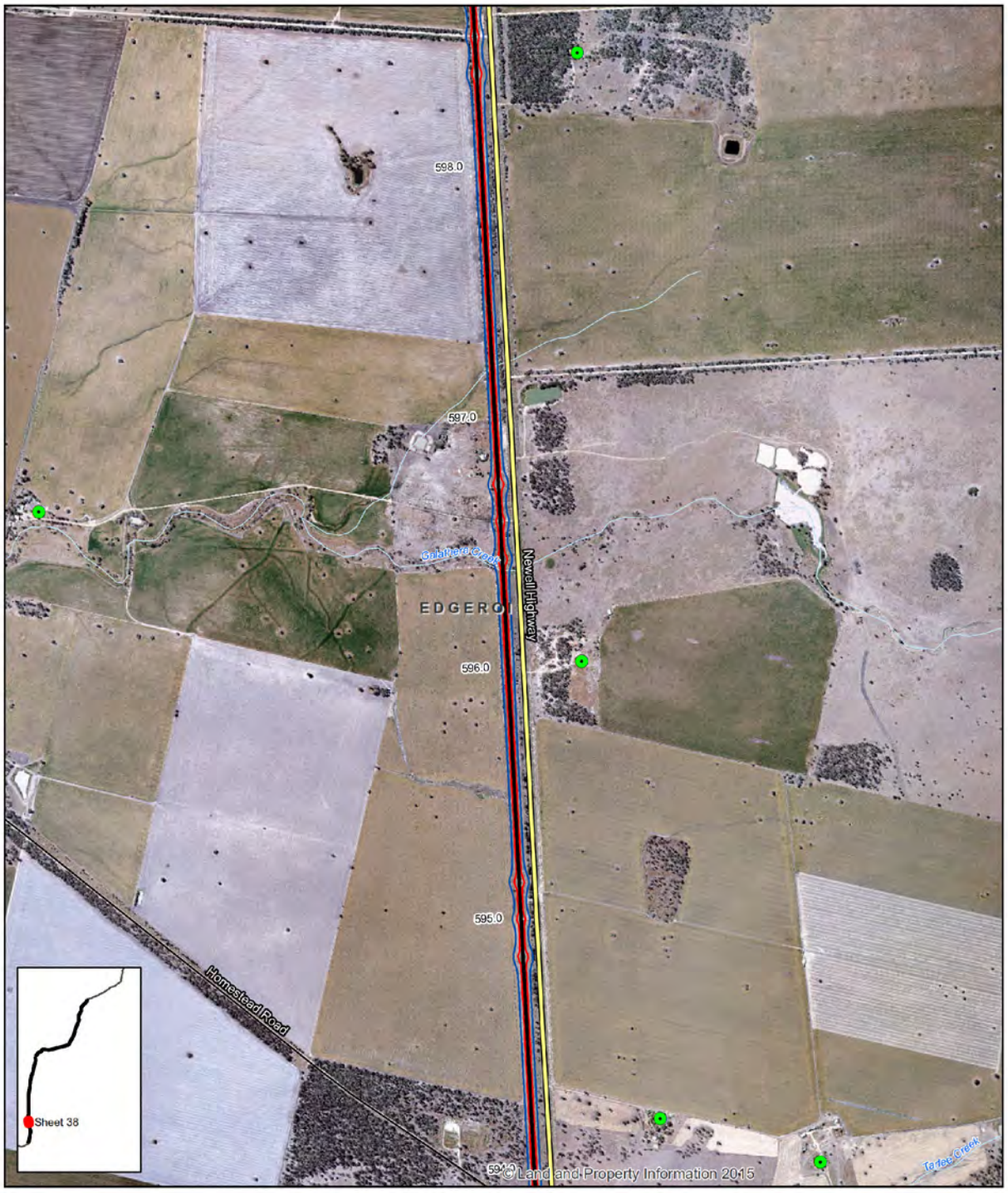
Figure E1- Sheet 37

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

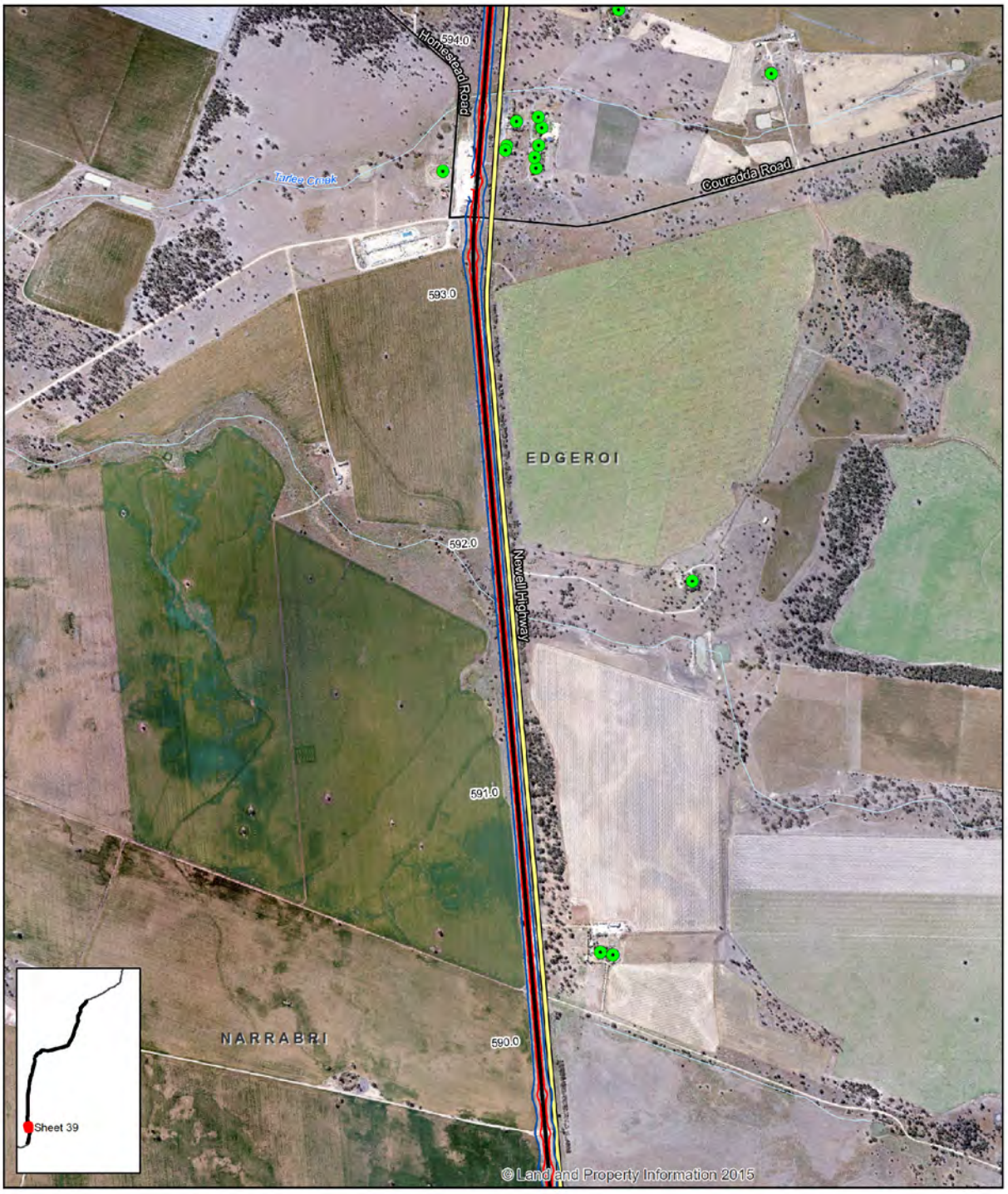
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

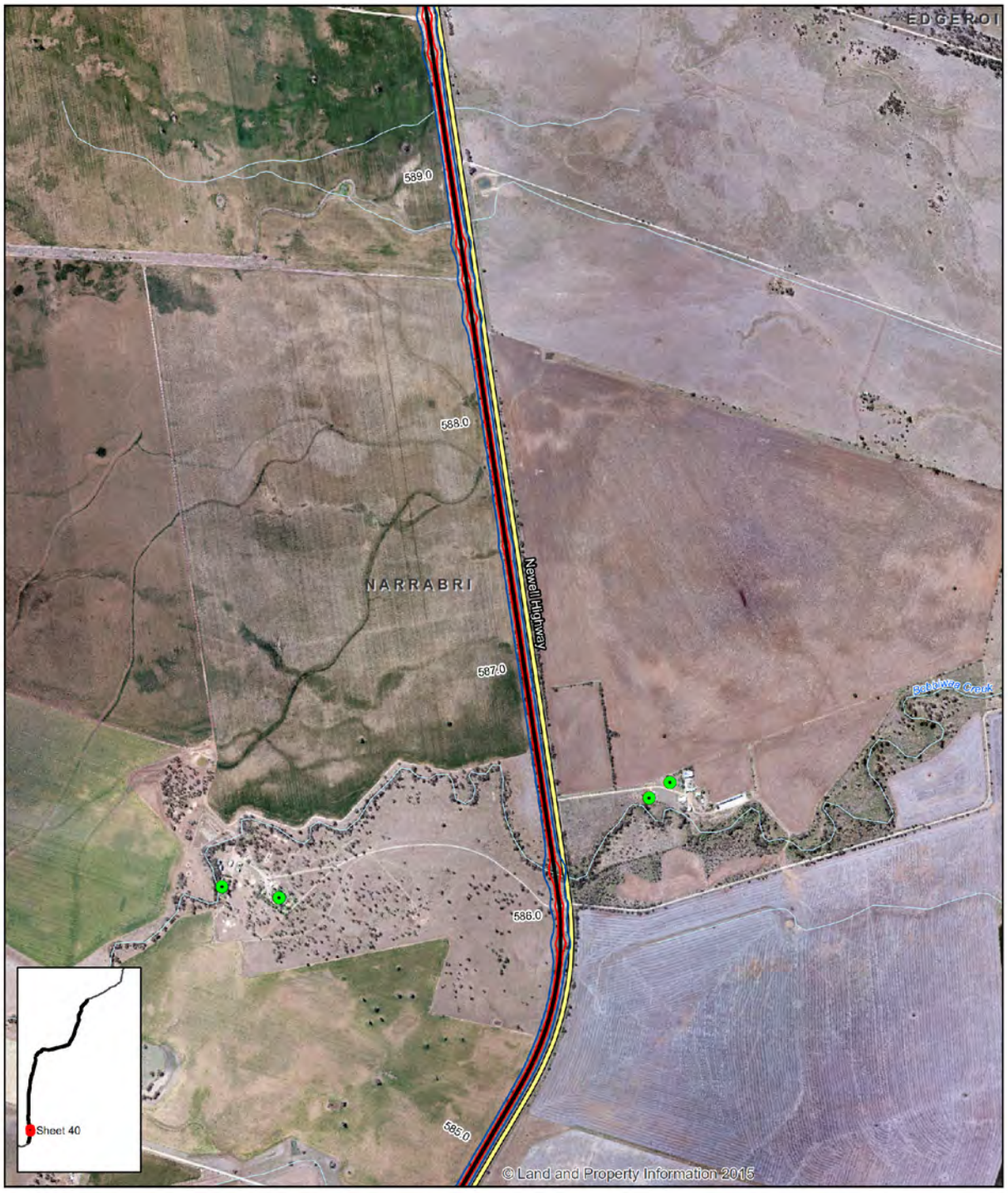
Figure E1- Sheet 39

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

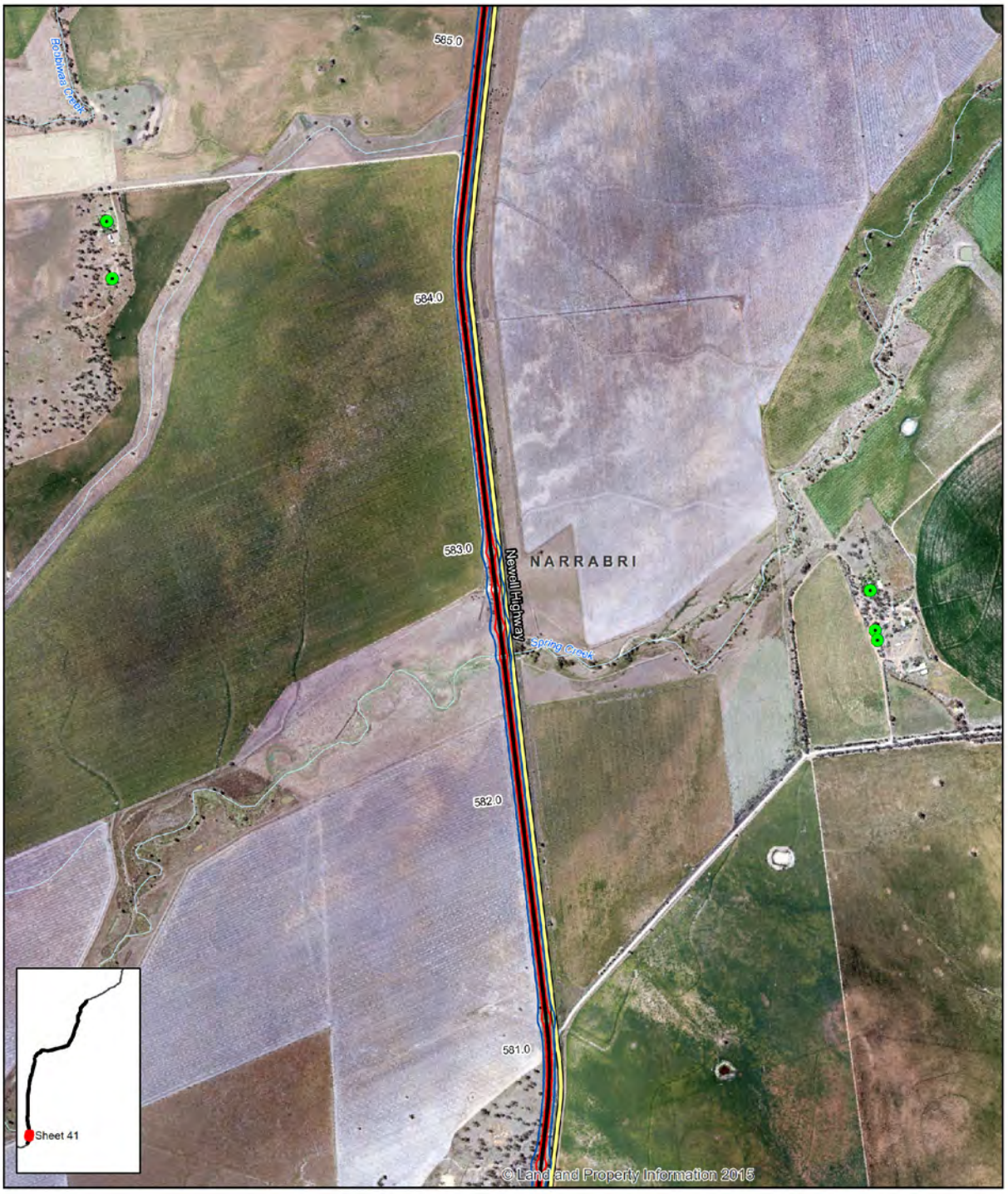
Figure E1- Sheet 40

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2020 build

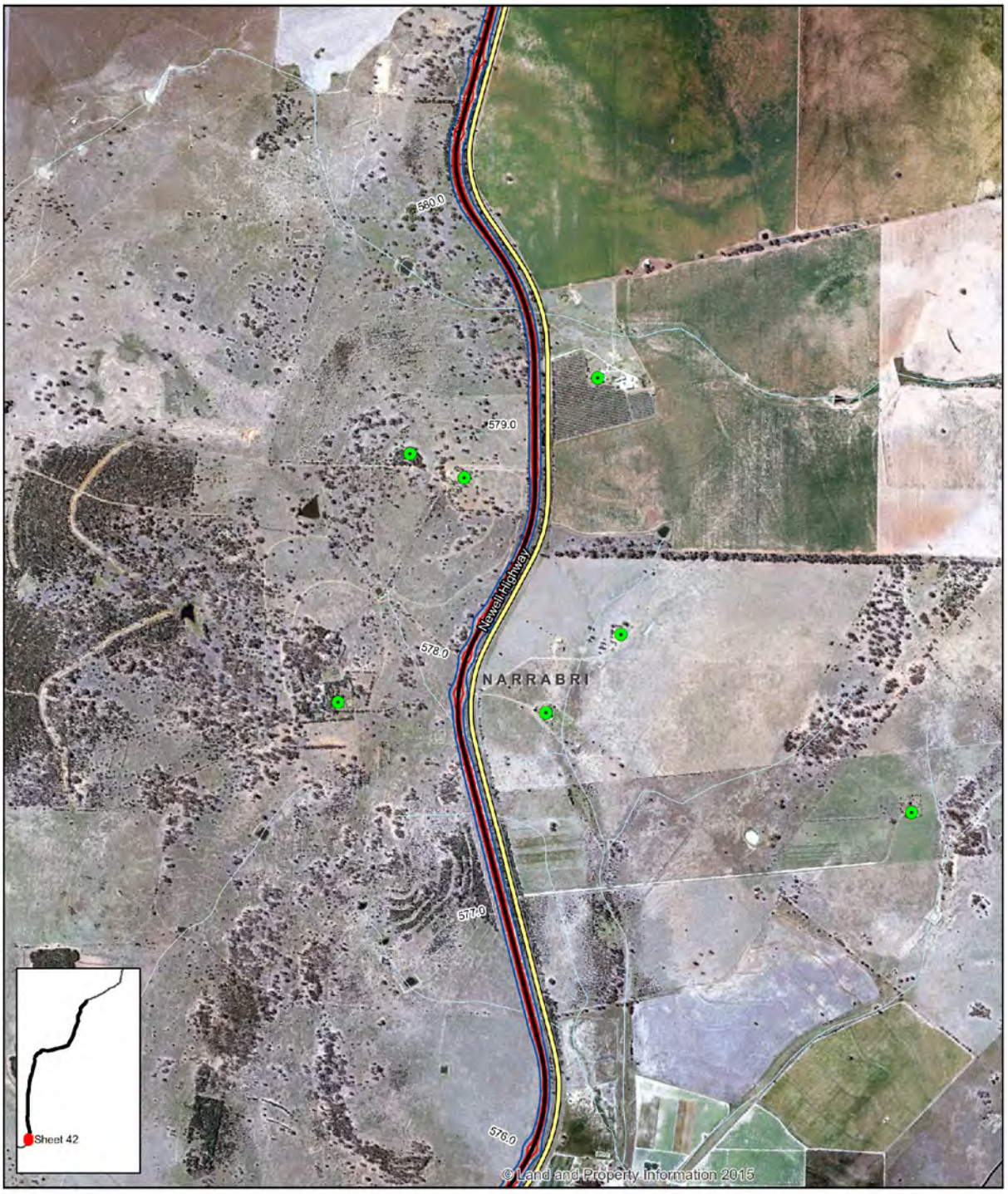
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E1- Sheet 42

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2020 Build 60dB(A) LAeq 9-hour
- 2020 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2020 build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

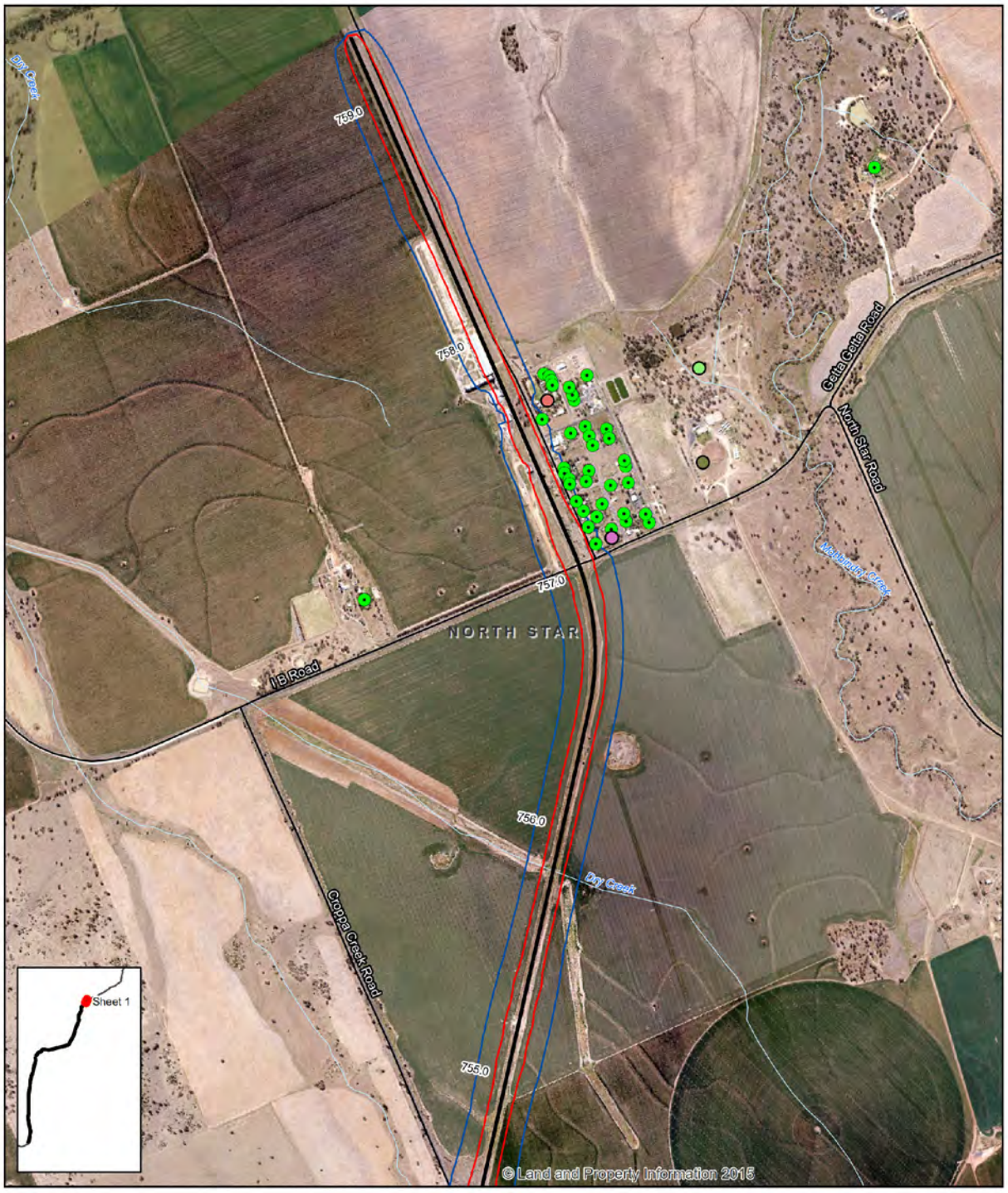
Figure E1- Sheet 43

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

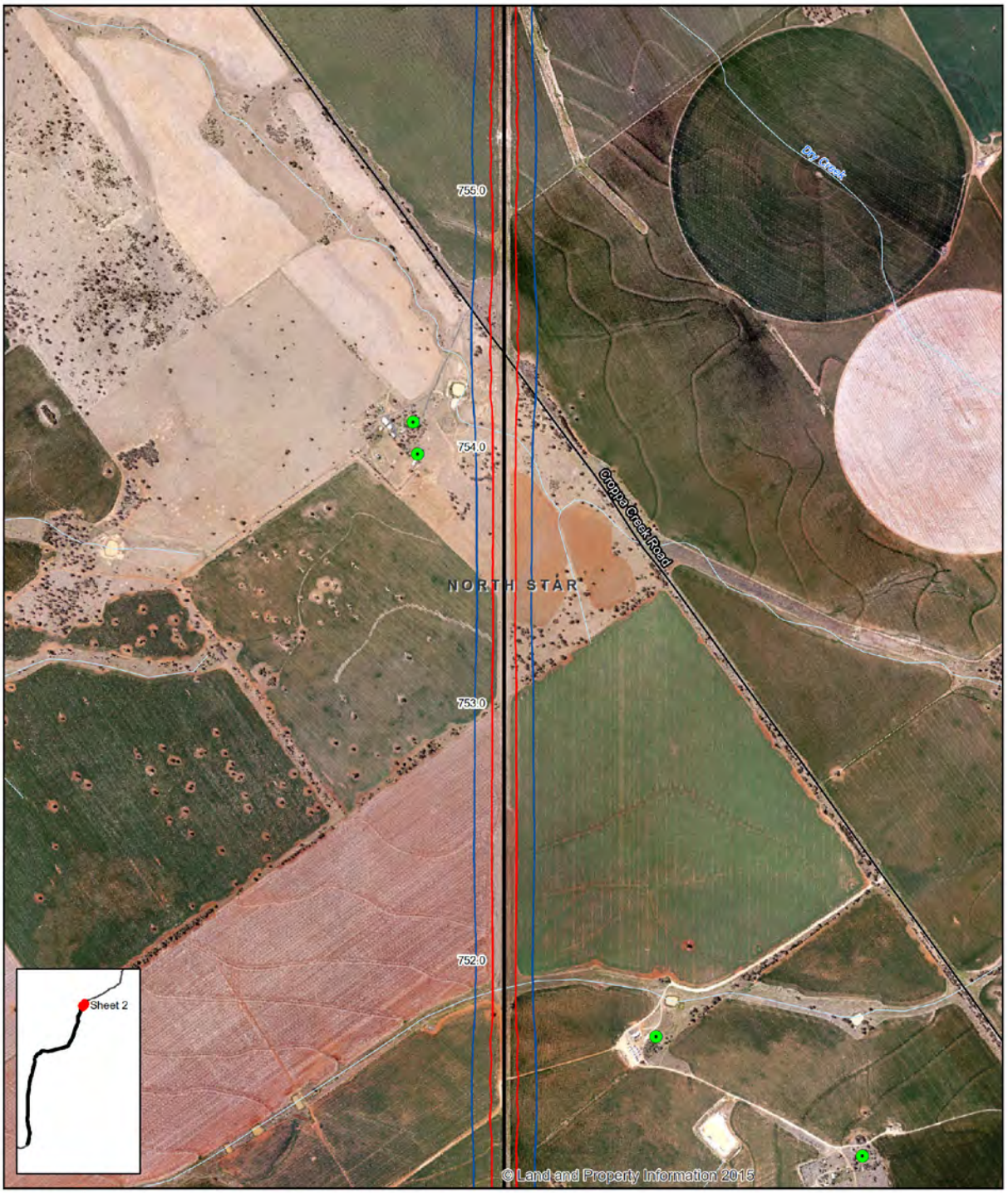
Figure E2- Sheet 1

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

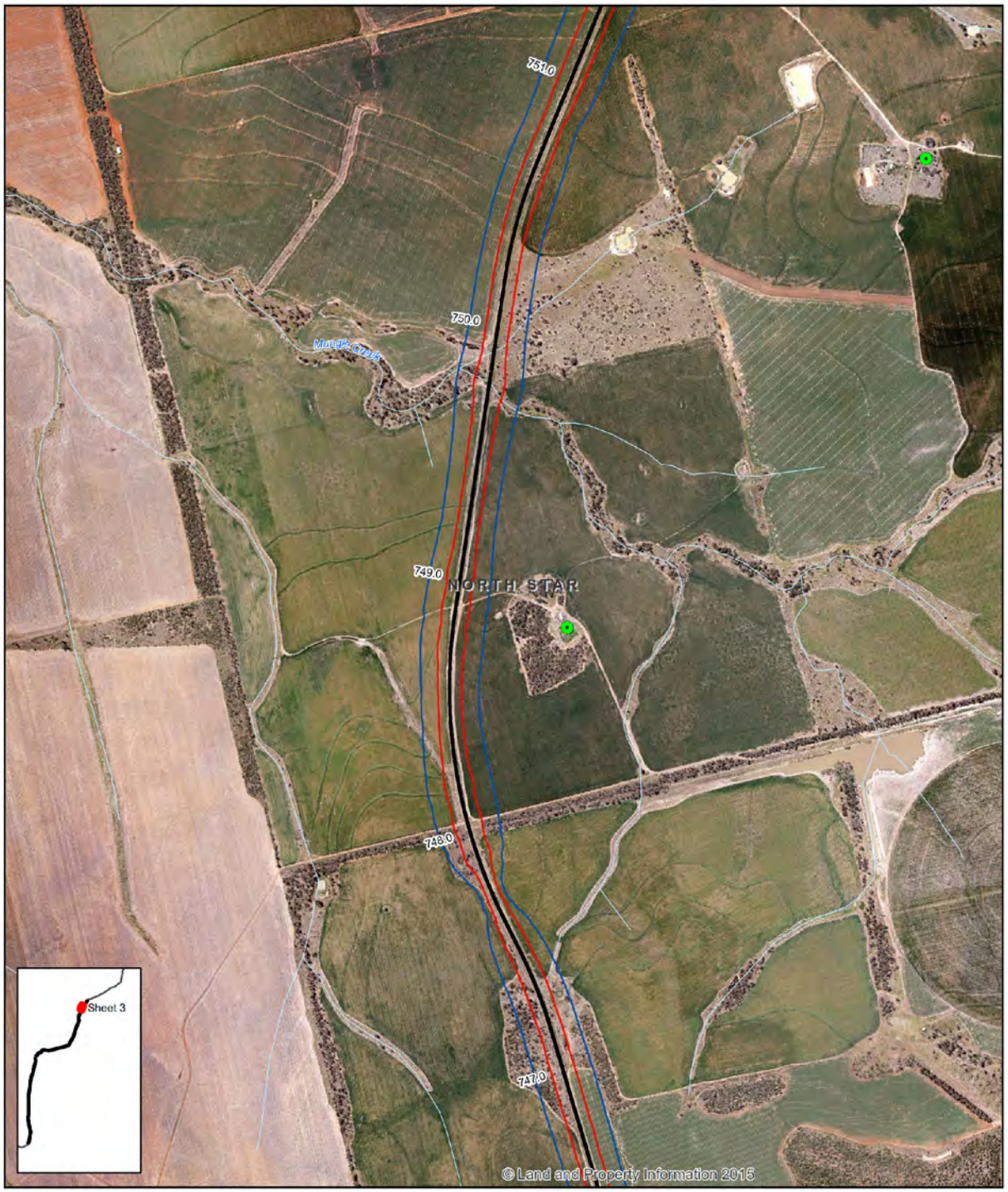
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

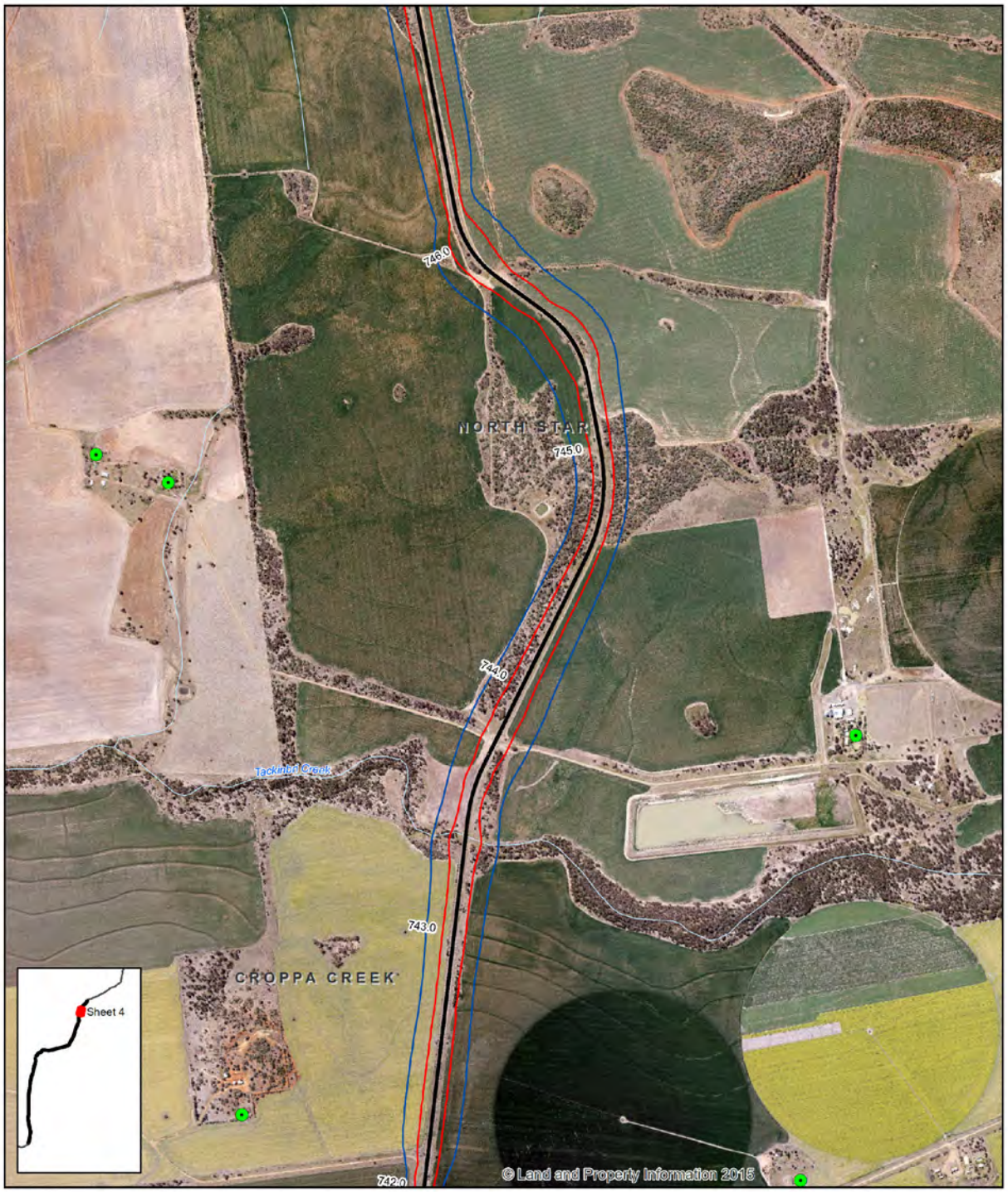
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

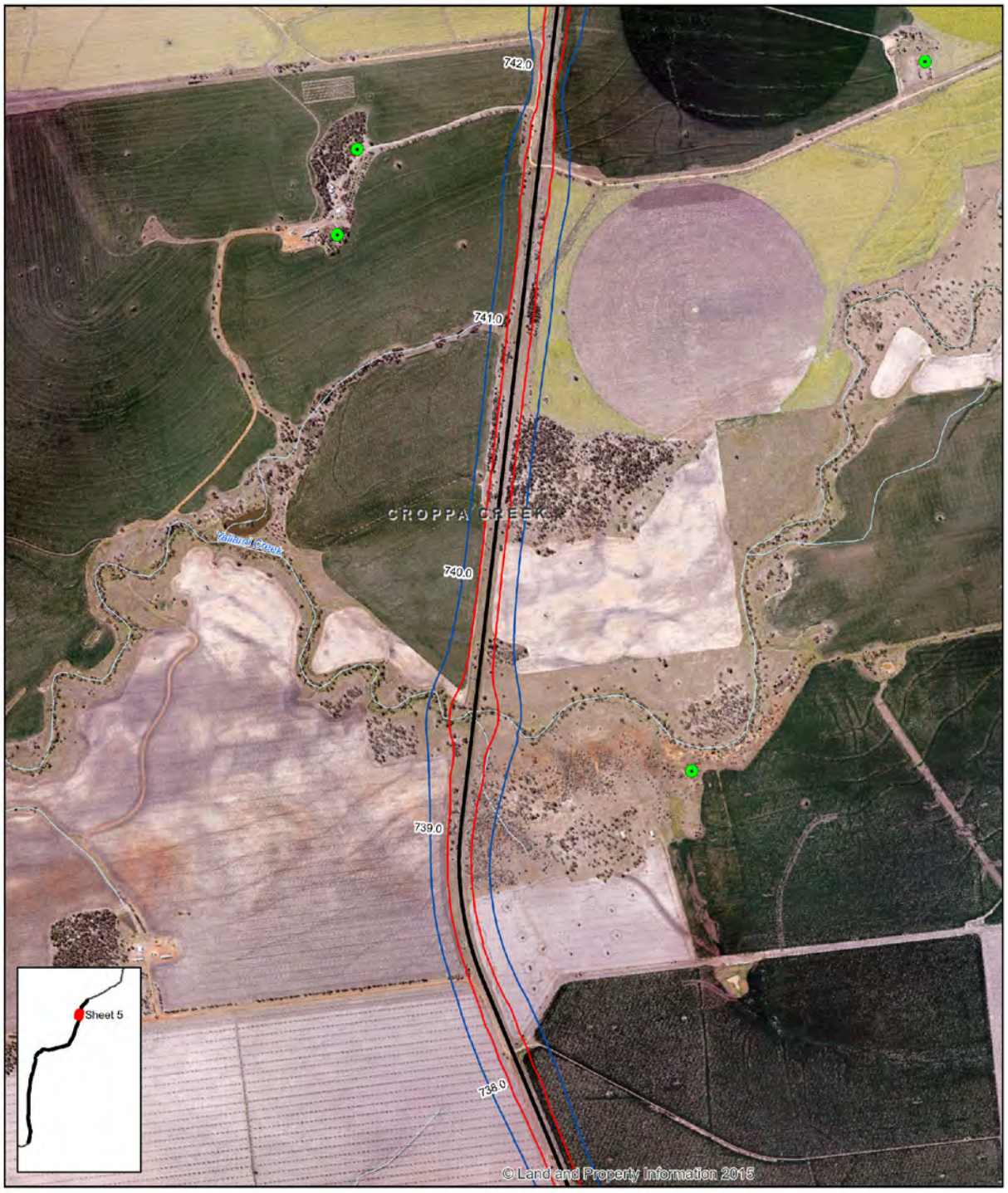
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

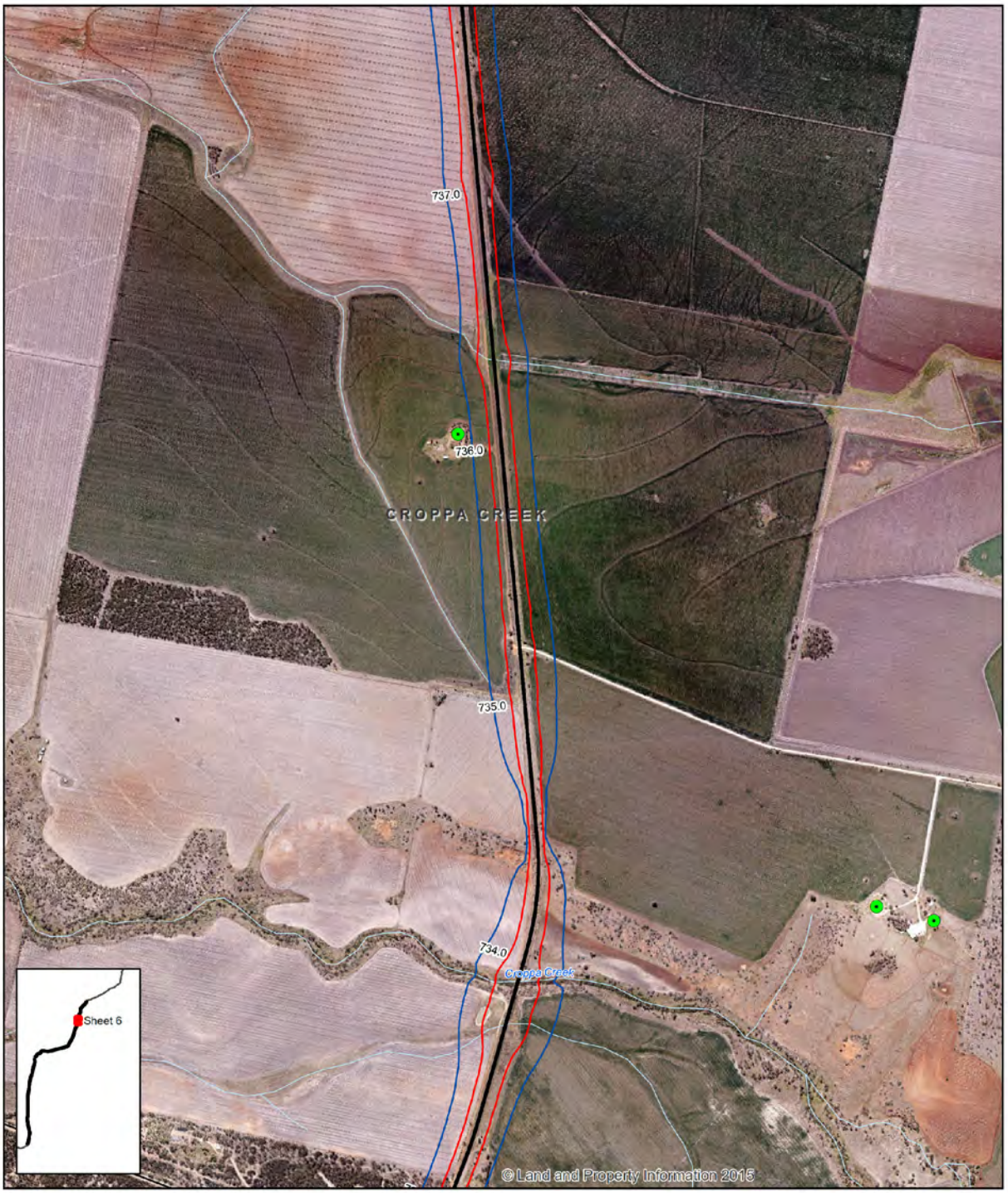
Figure E2- Sheet 5

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 6

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

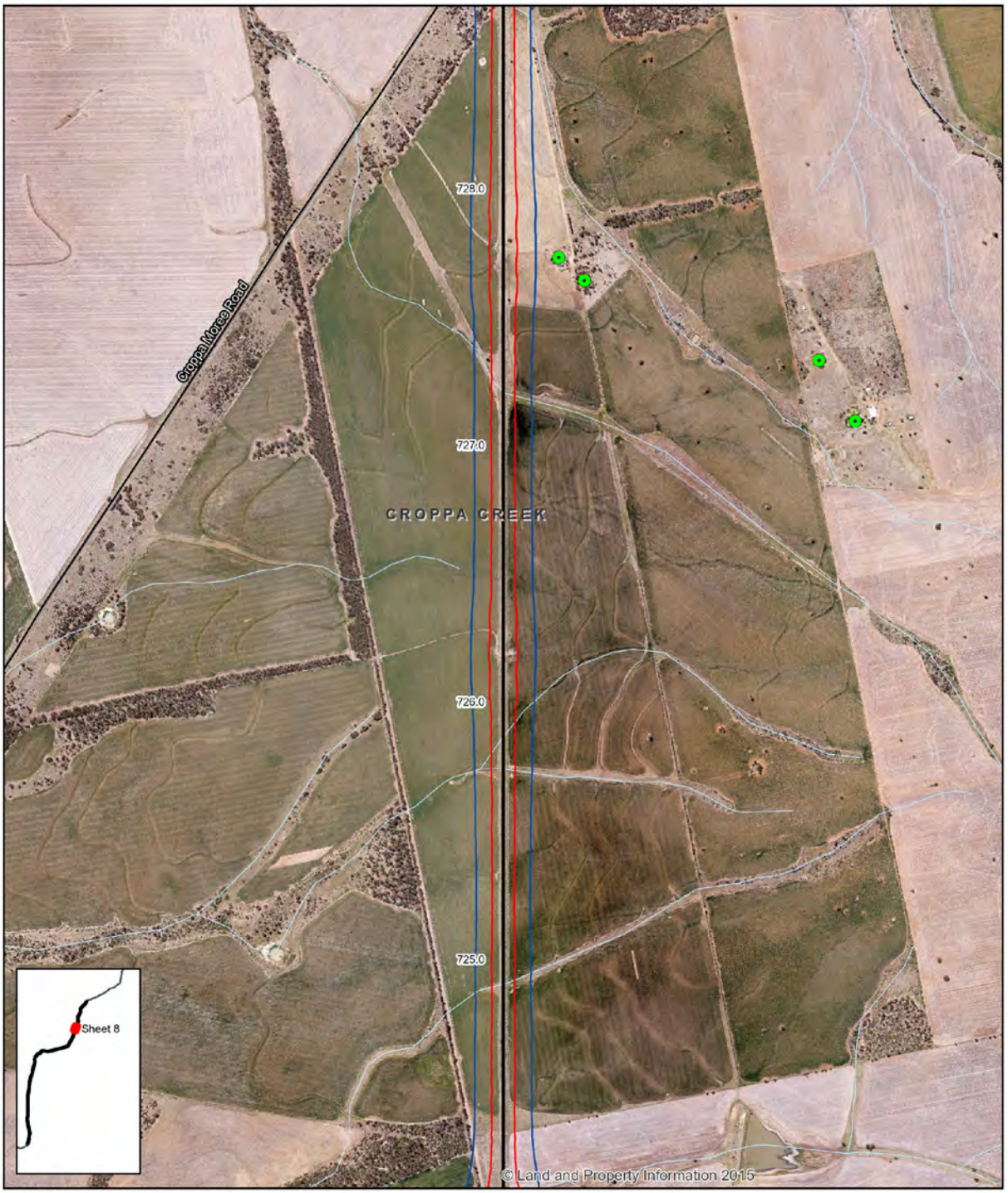
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

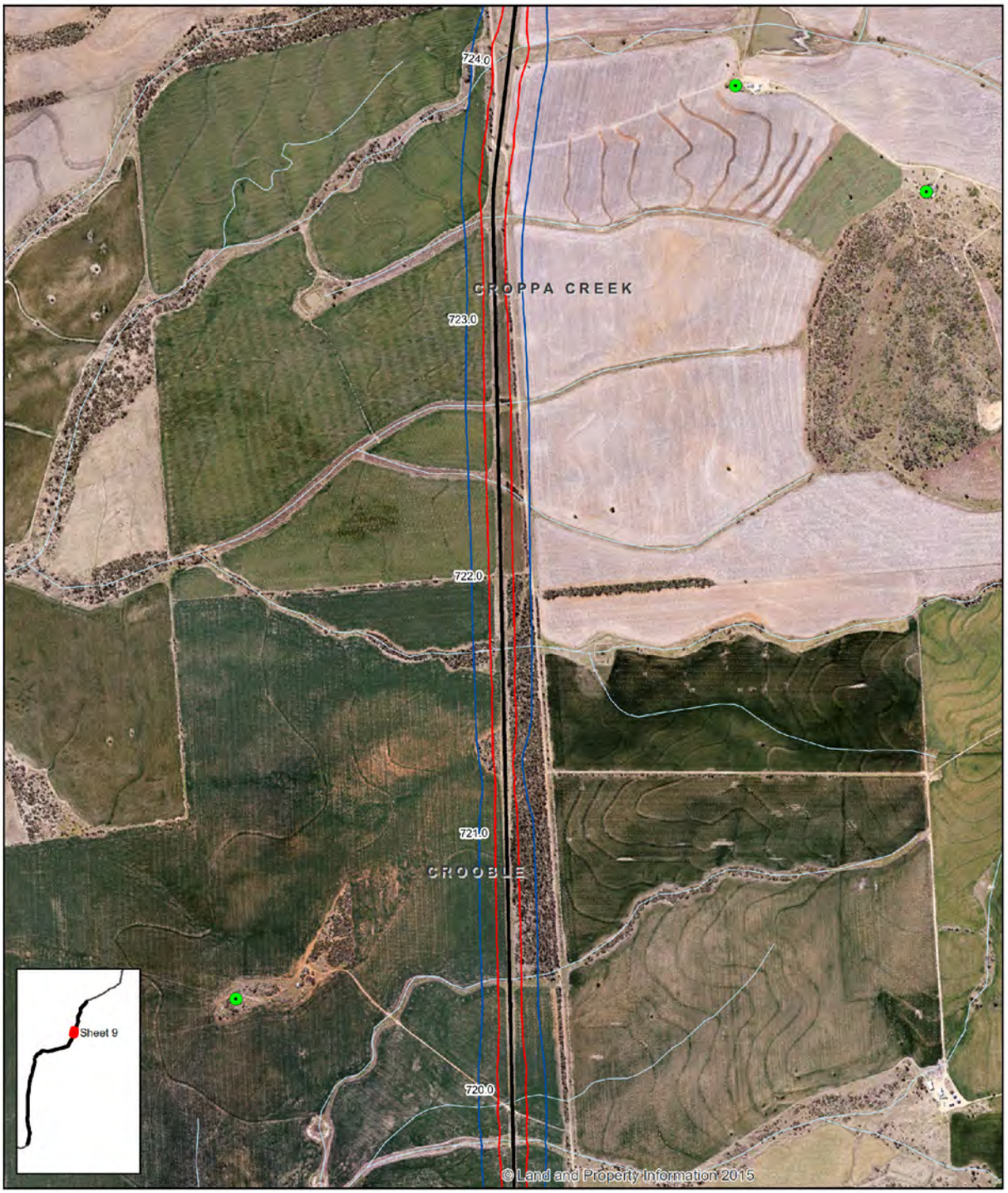
Figure E2- Sheet 8

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

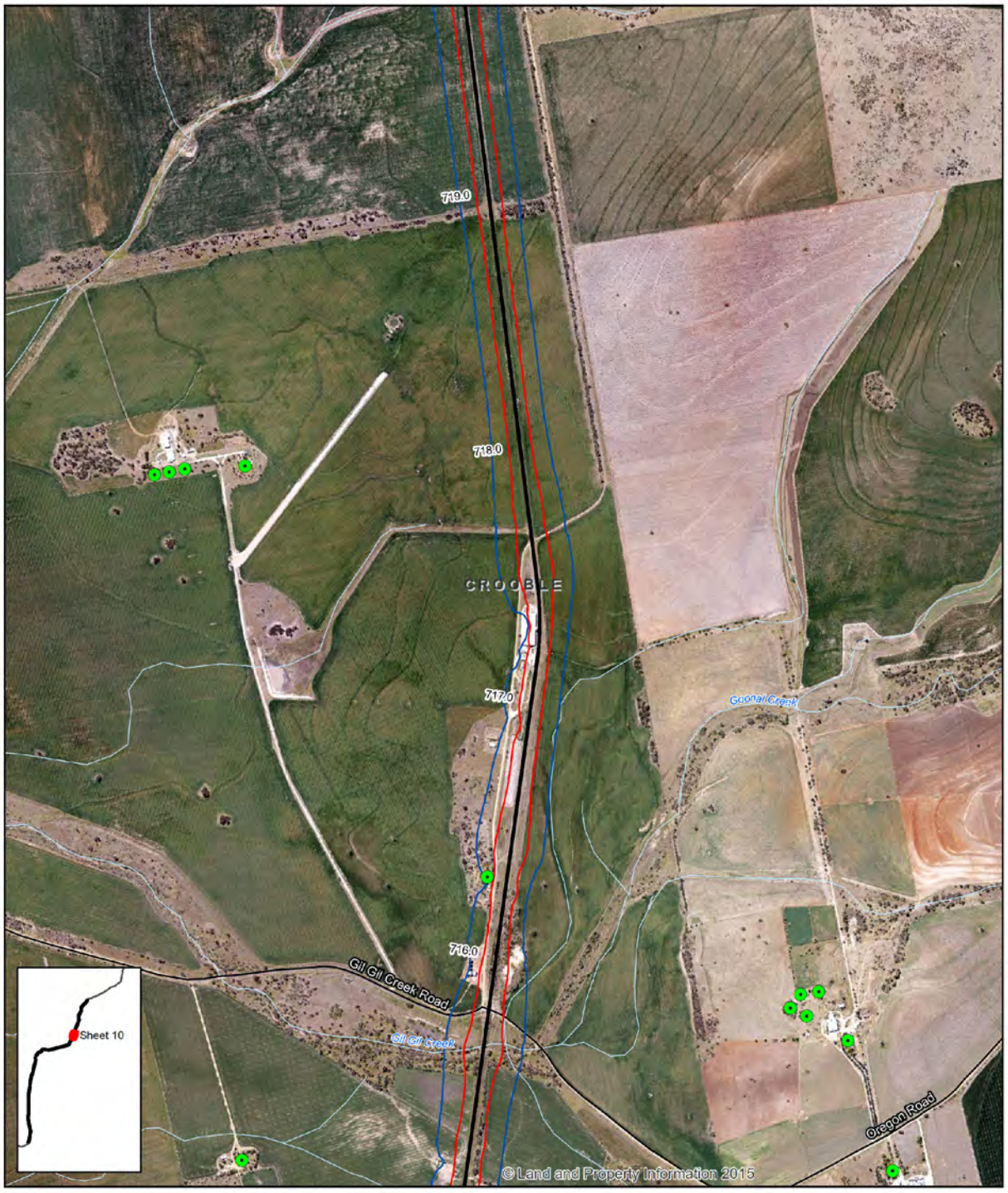
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

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Figure E2- Sheet 10

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

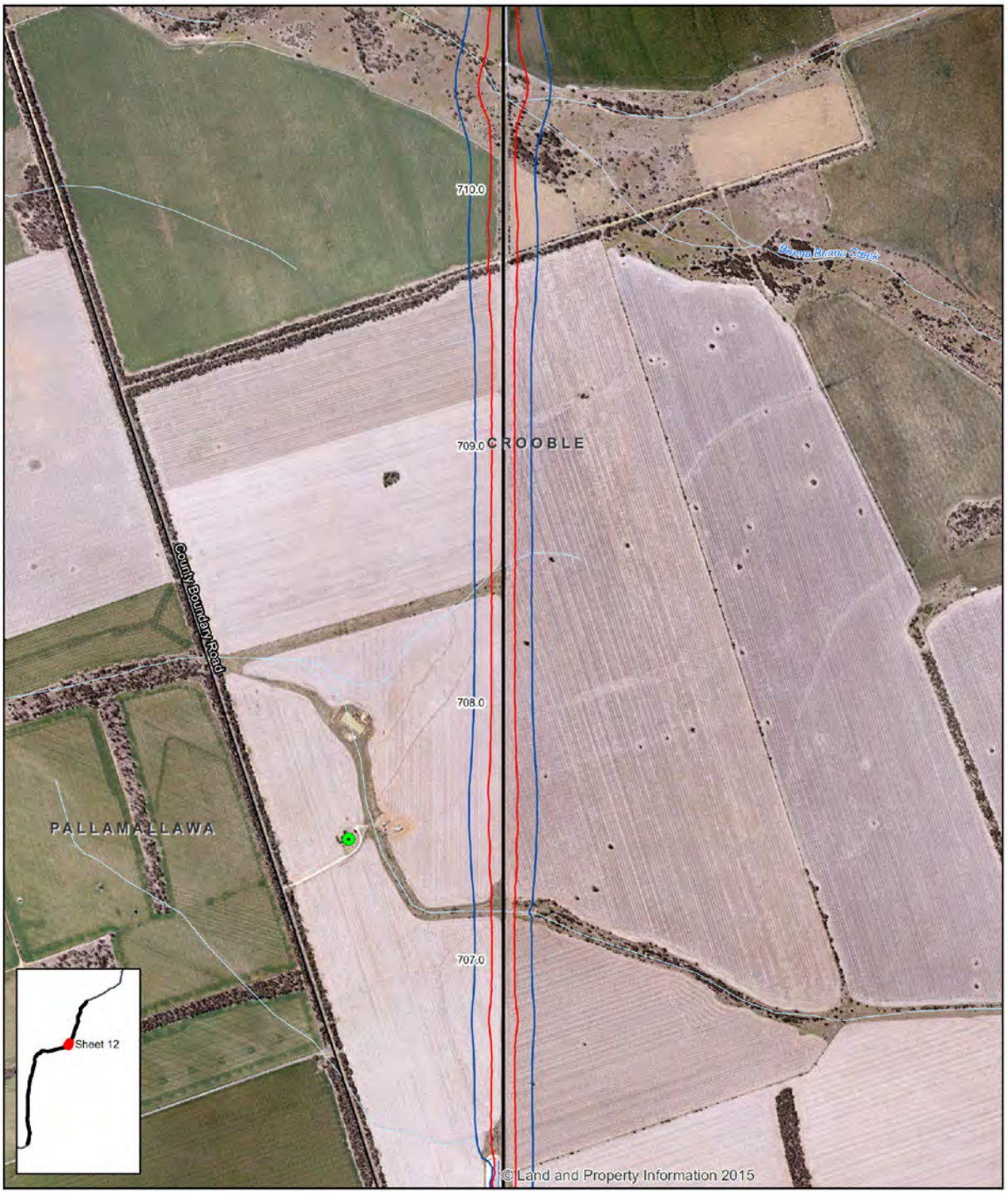
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

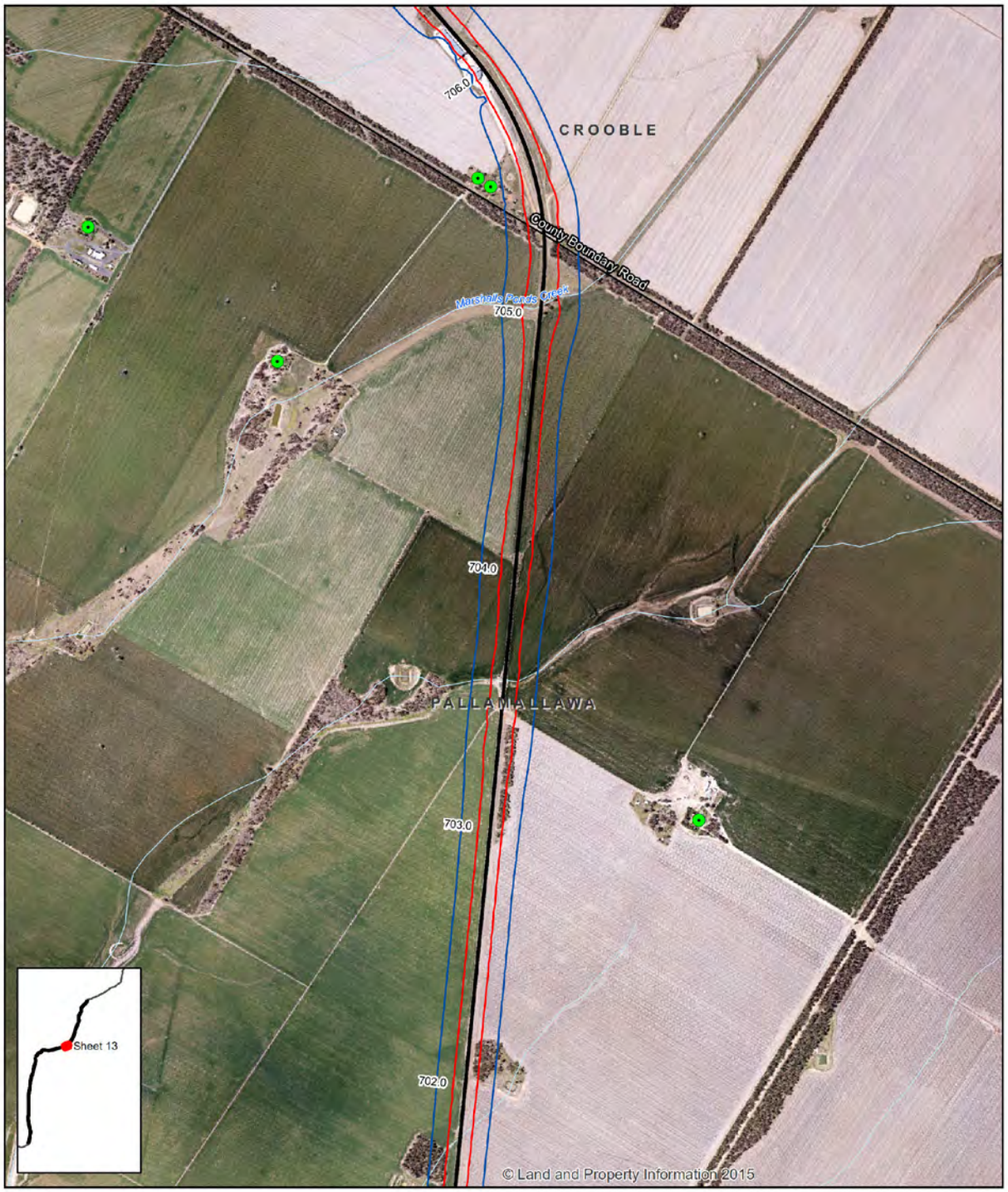
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 13

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
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Figure E2- Sheet 14

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LEGEND

- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 15

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LEGEND

- The proposal
- Watercourse
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 16

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LEGEND

- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
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Figure E2- Sheet 17

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

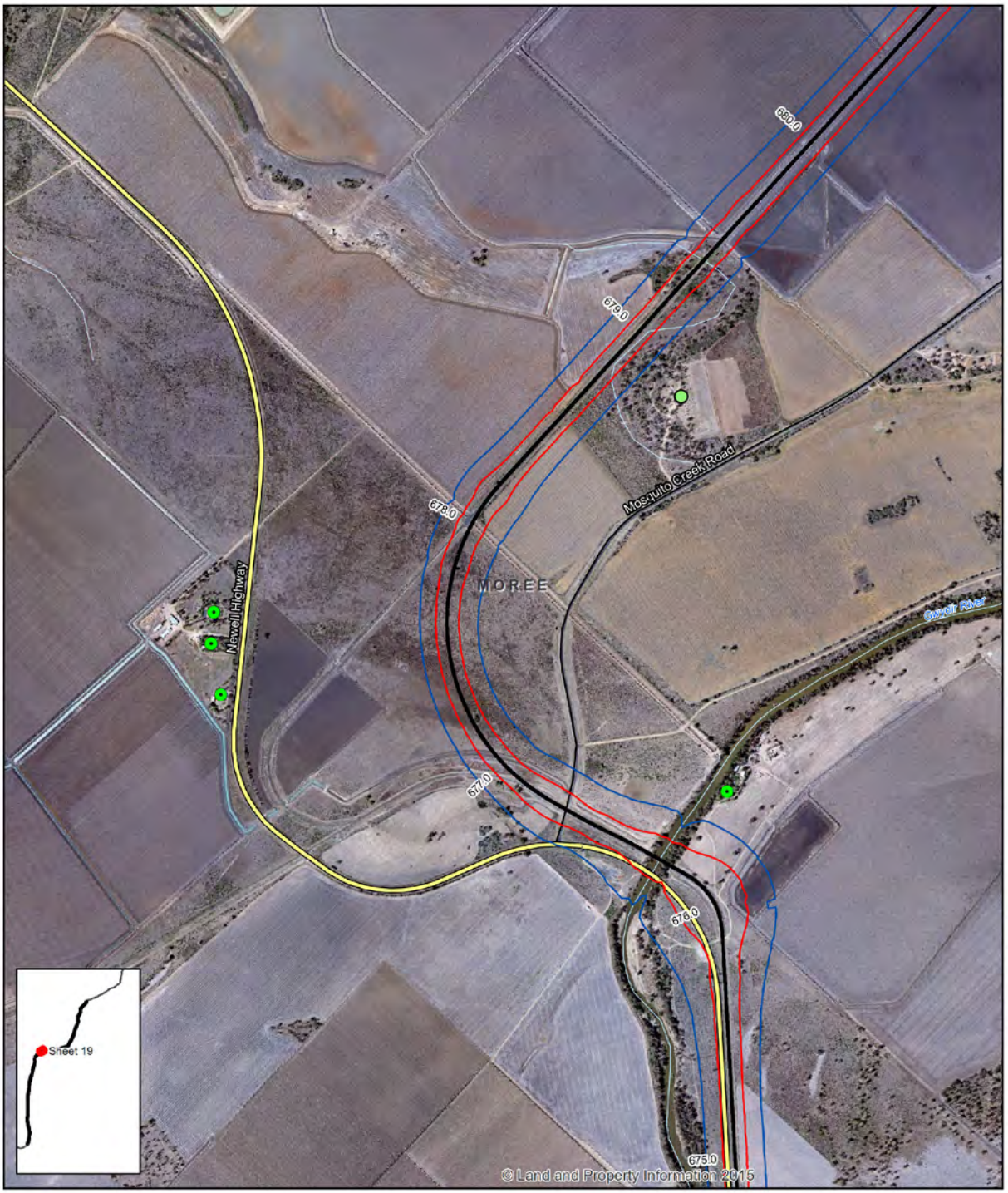
Figure E2- Sheet 18

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

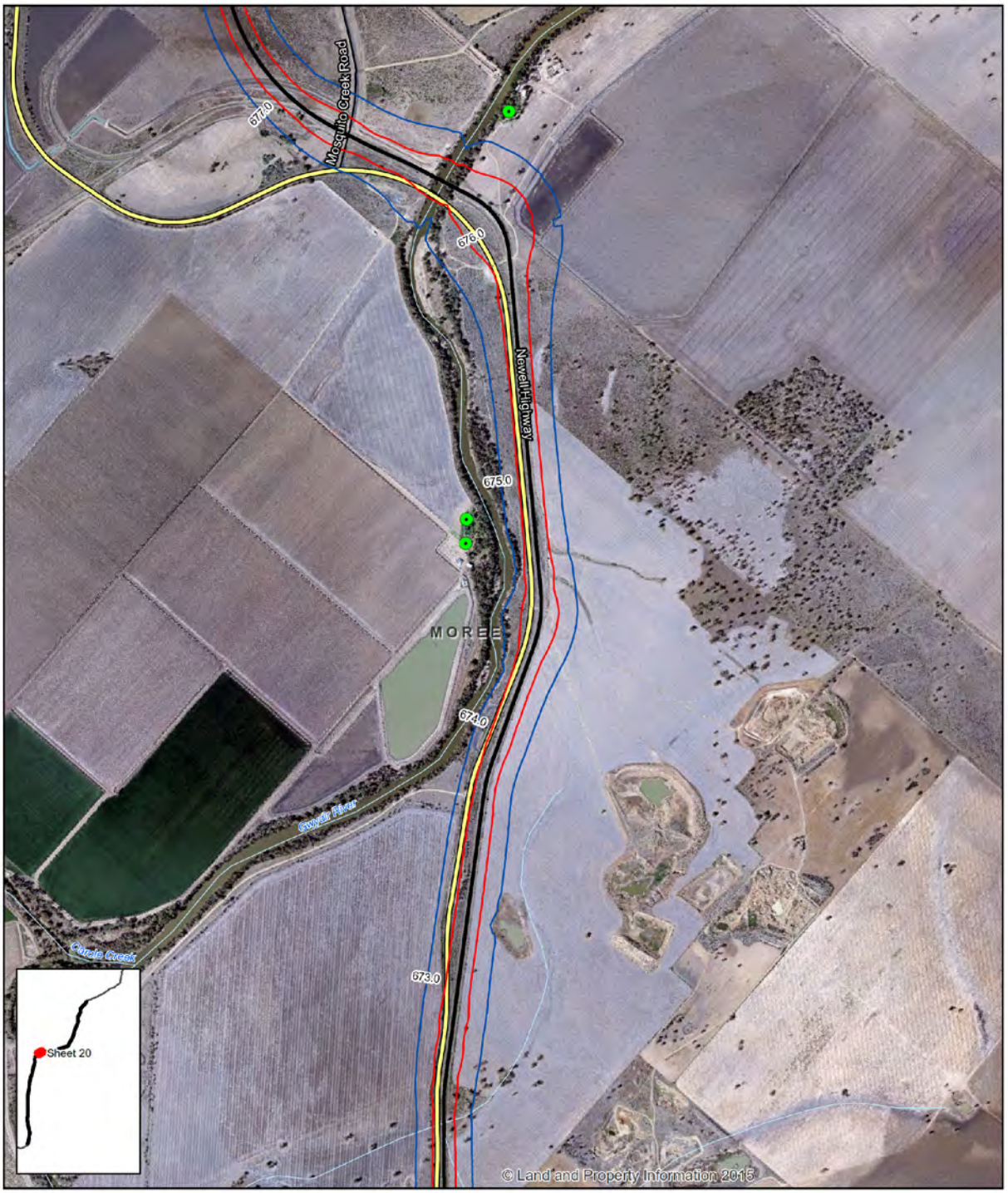
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

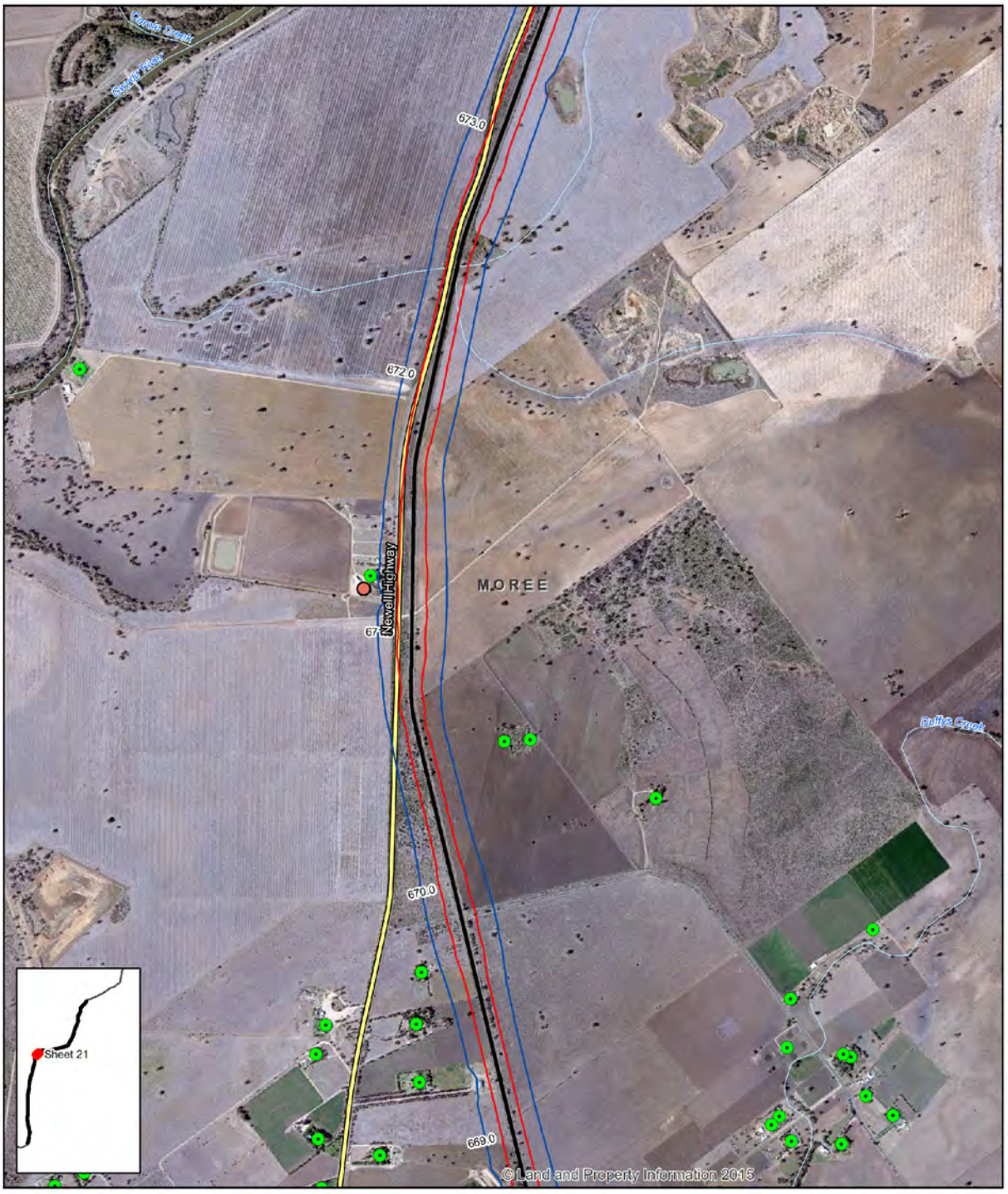
Figure E2- Sheet 20

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

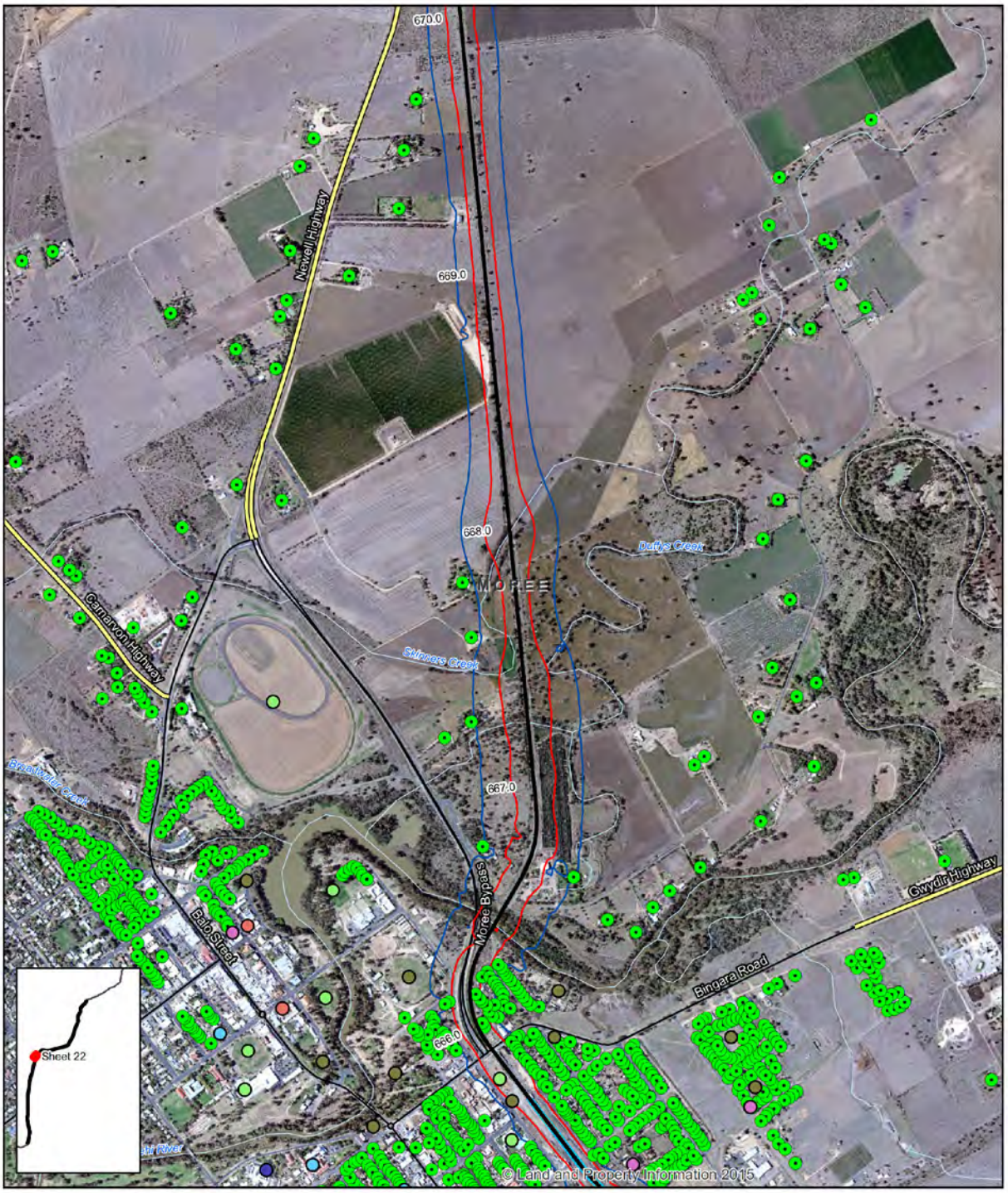
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Aged care
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

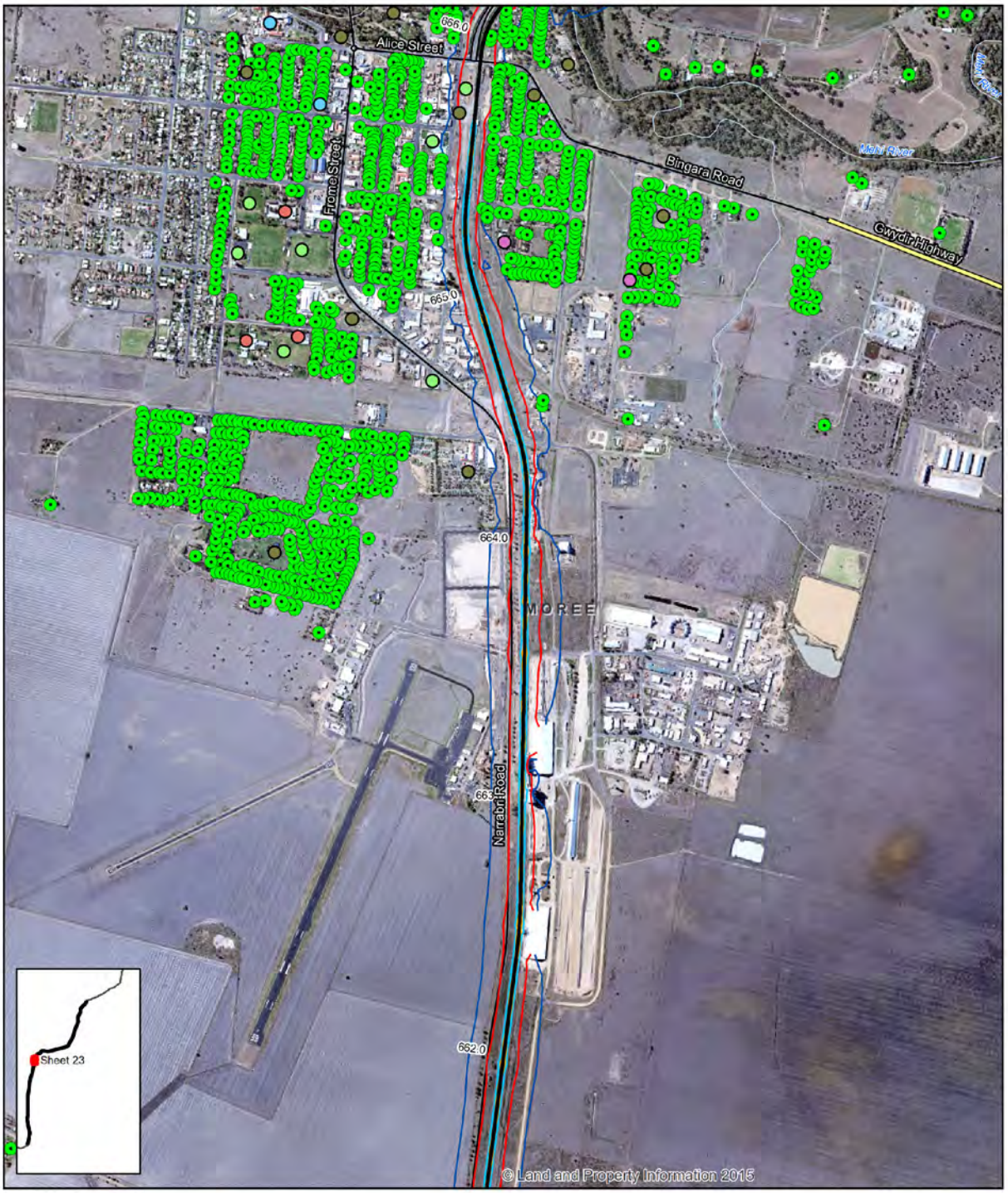
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

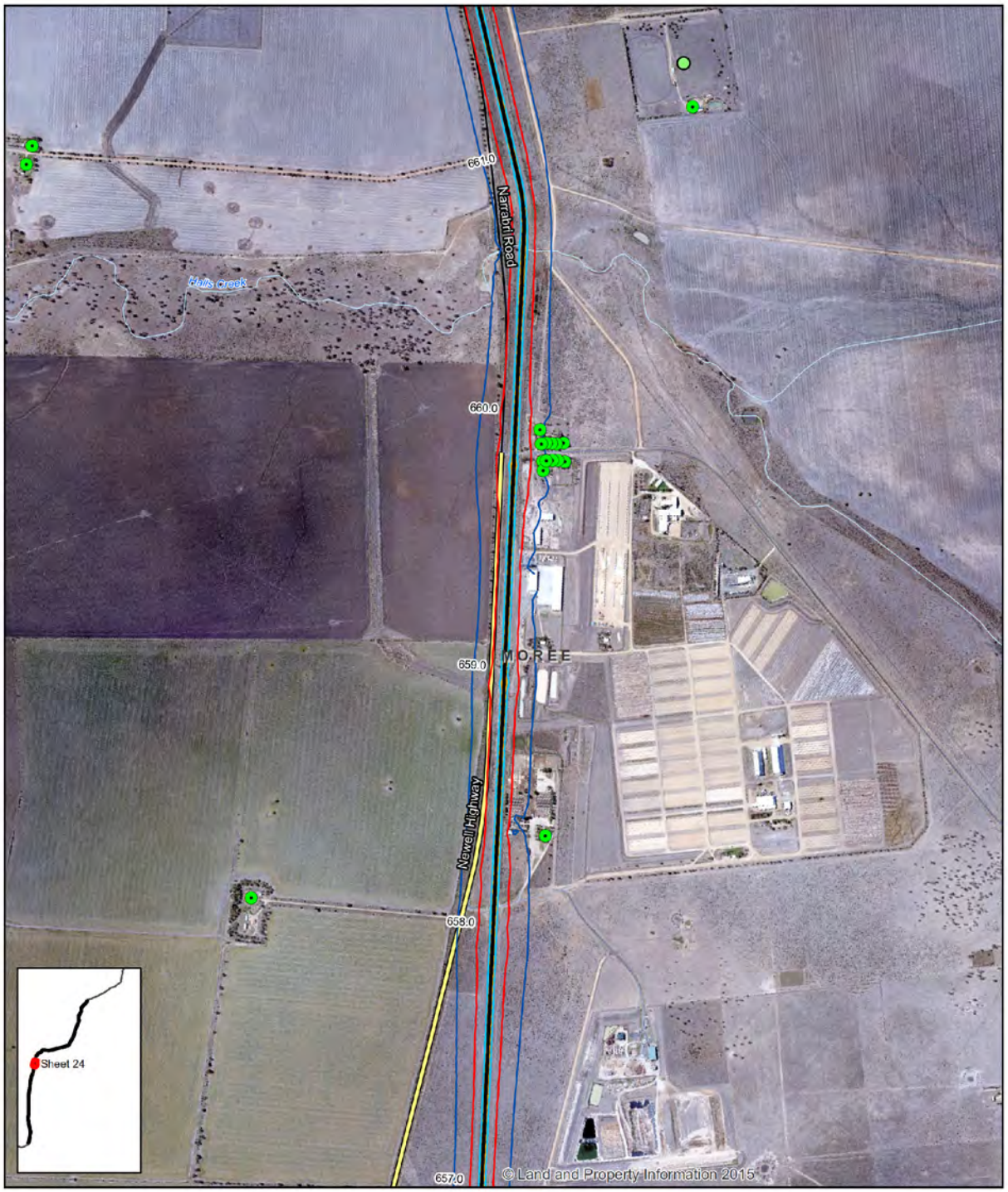
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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 24

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

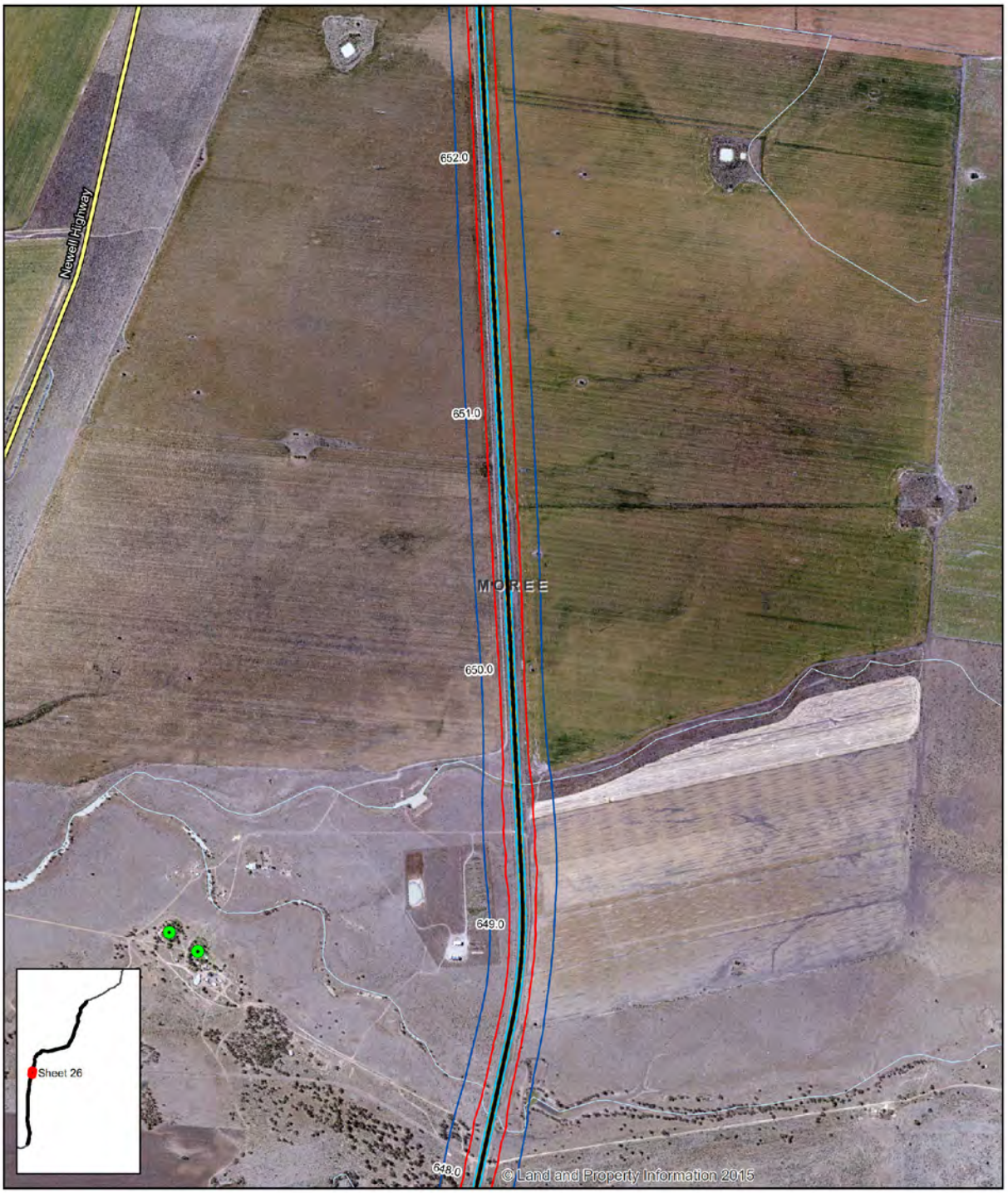
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

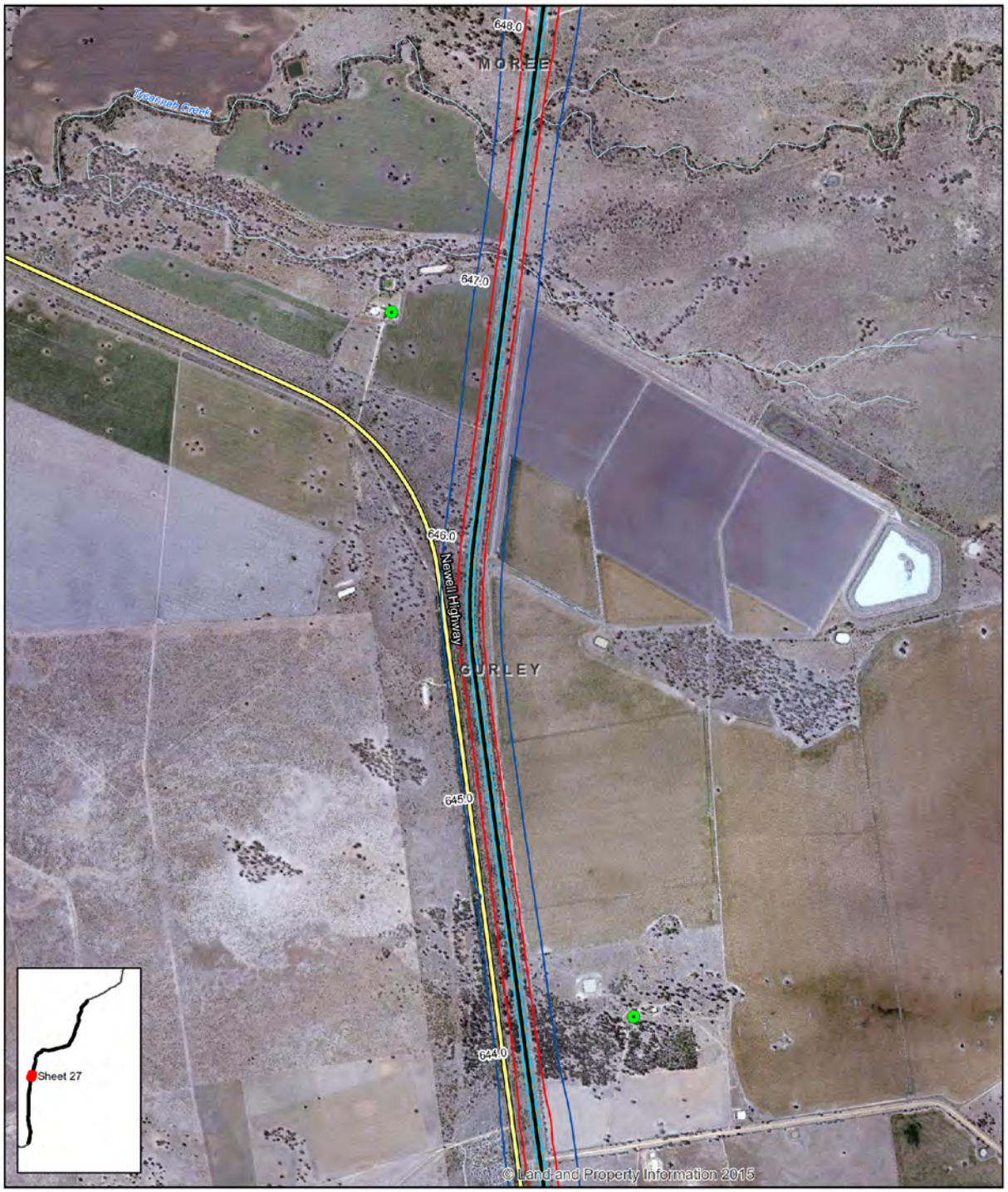
Figure E2- Sheet 26

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

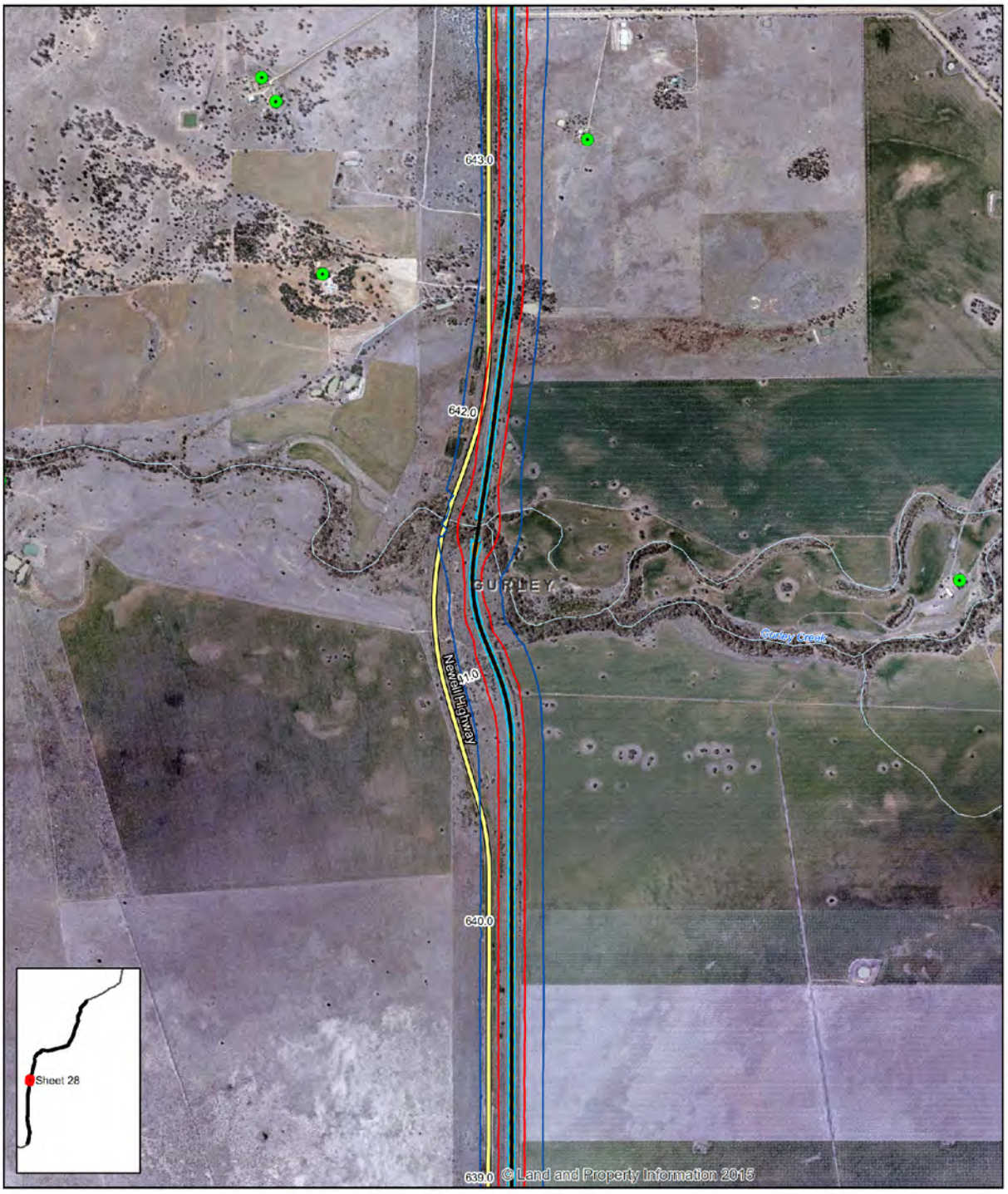
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

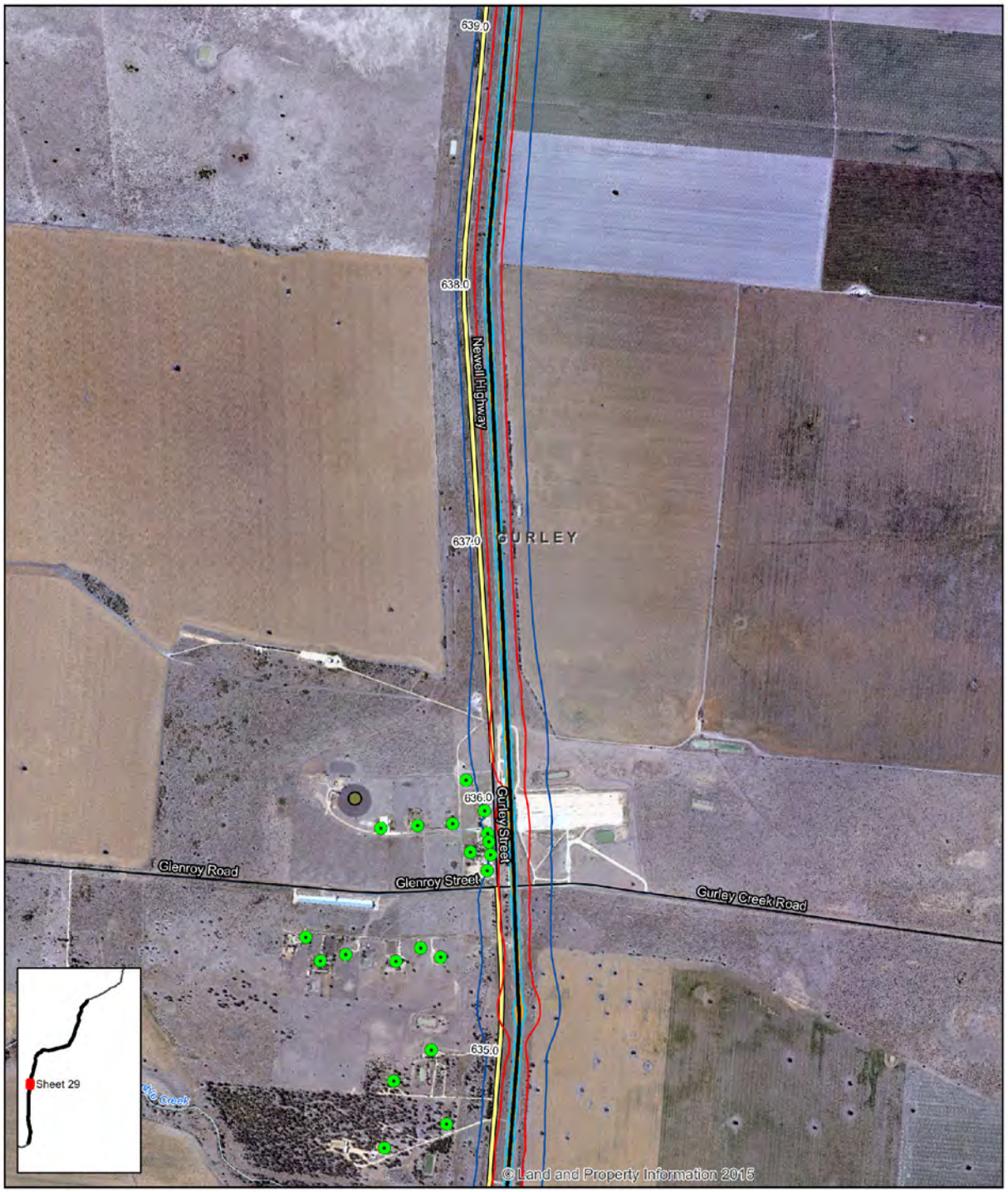
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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E2- Sheet 29

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Figure E2- Sheet 30

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

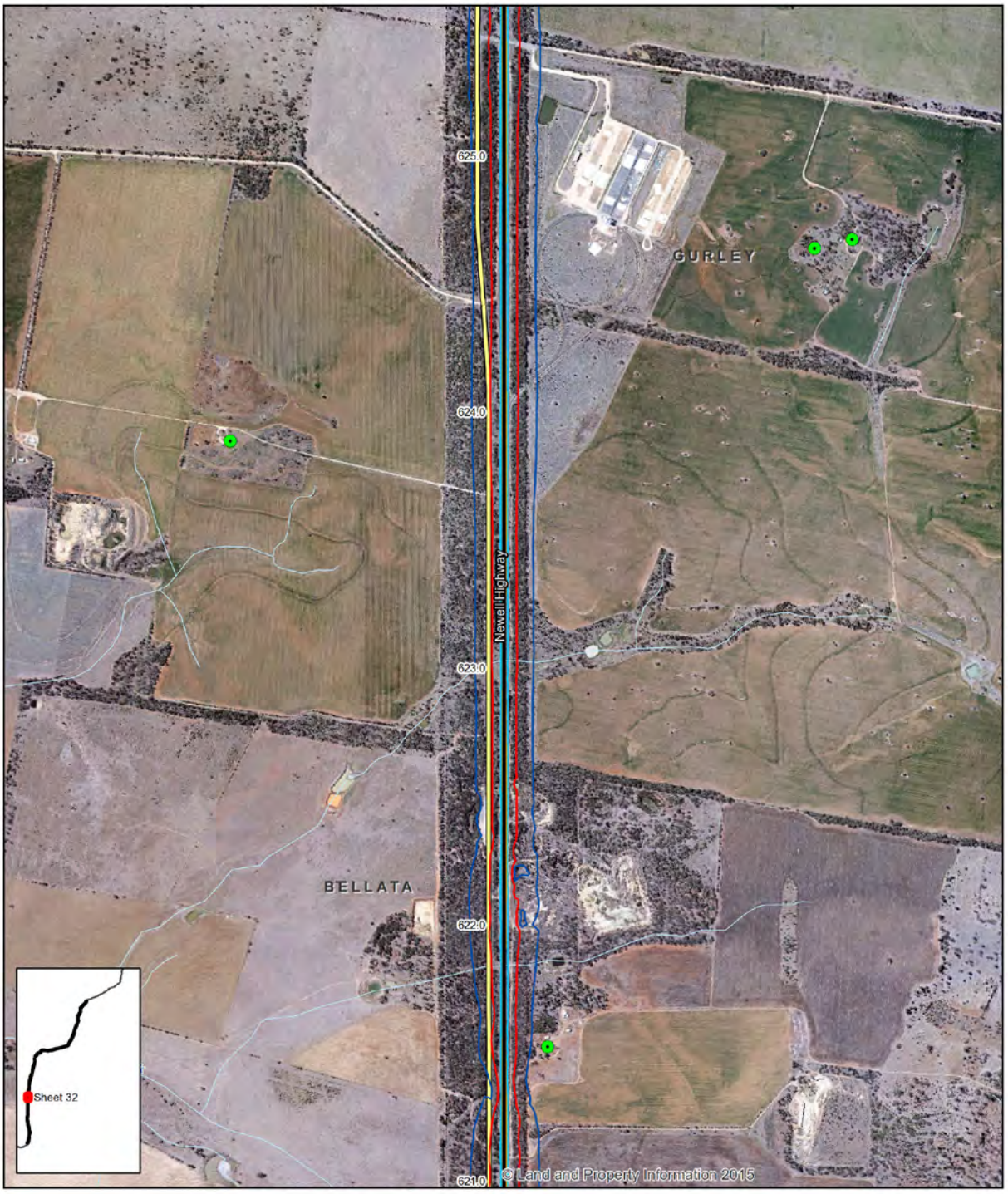
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

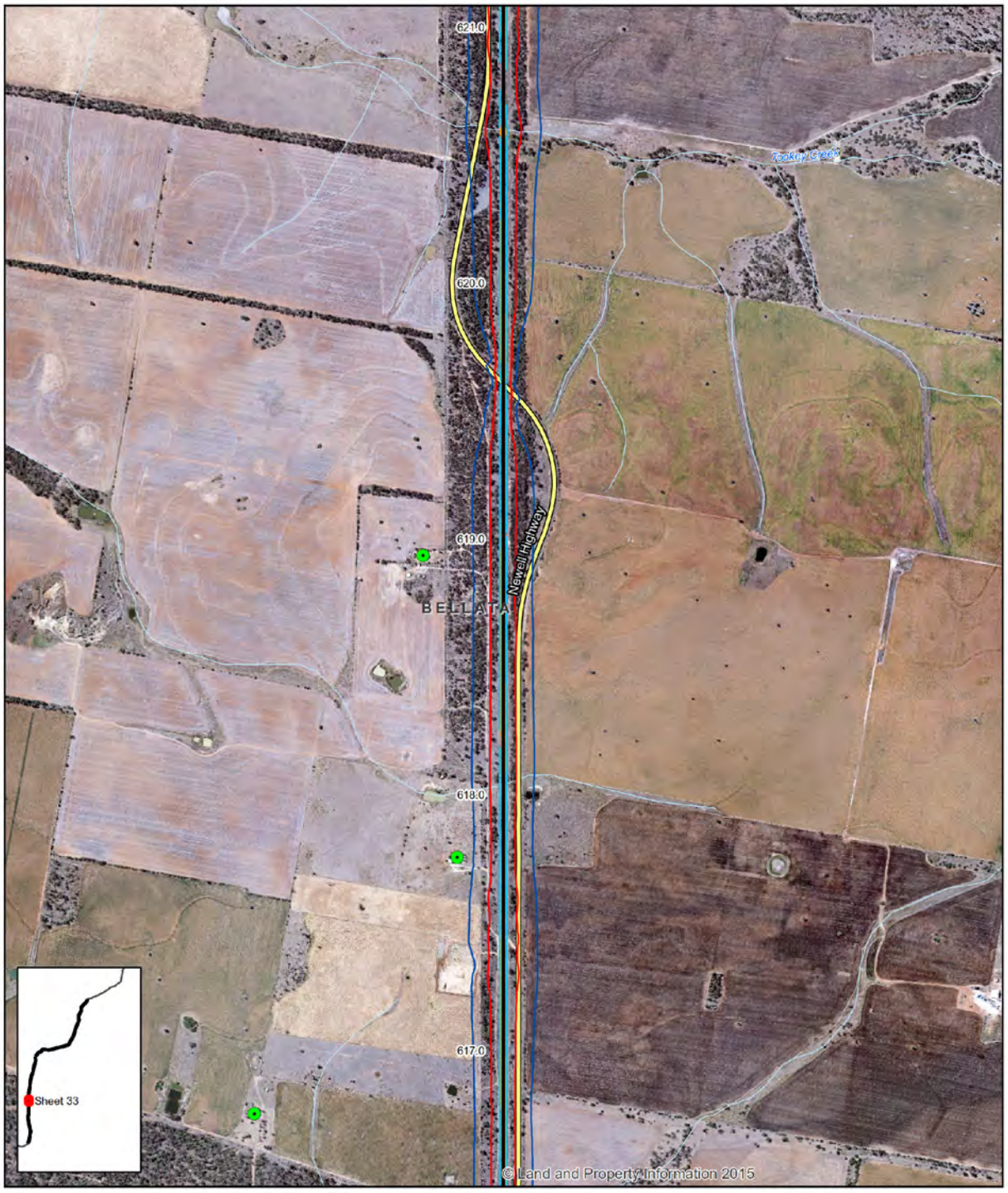
Figure E2- Sheet 32

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number	22-17916
Revision	0
Date	02 Jun 2017

Figure E2- Sheet 33

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Figure E2- Sheet 34

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

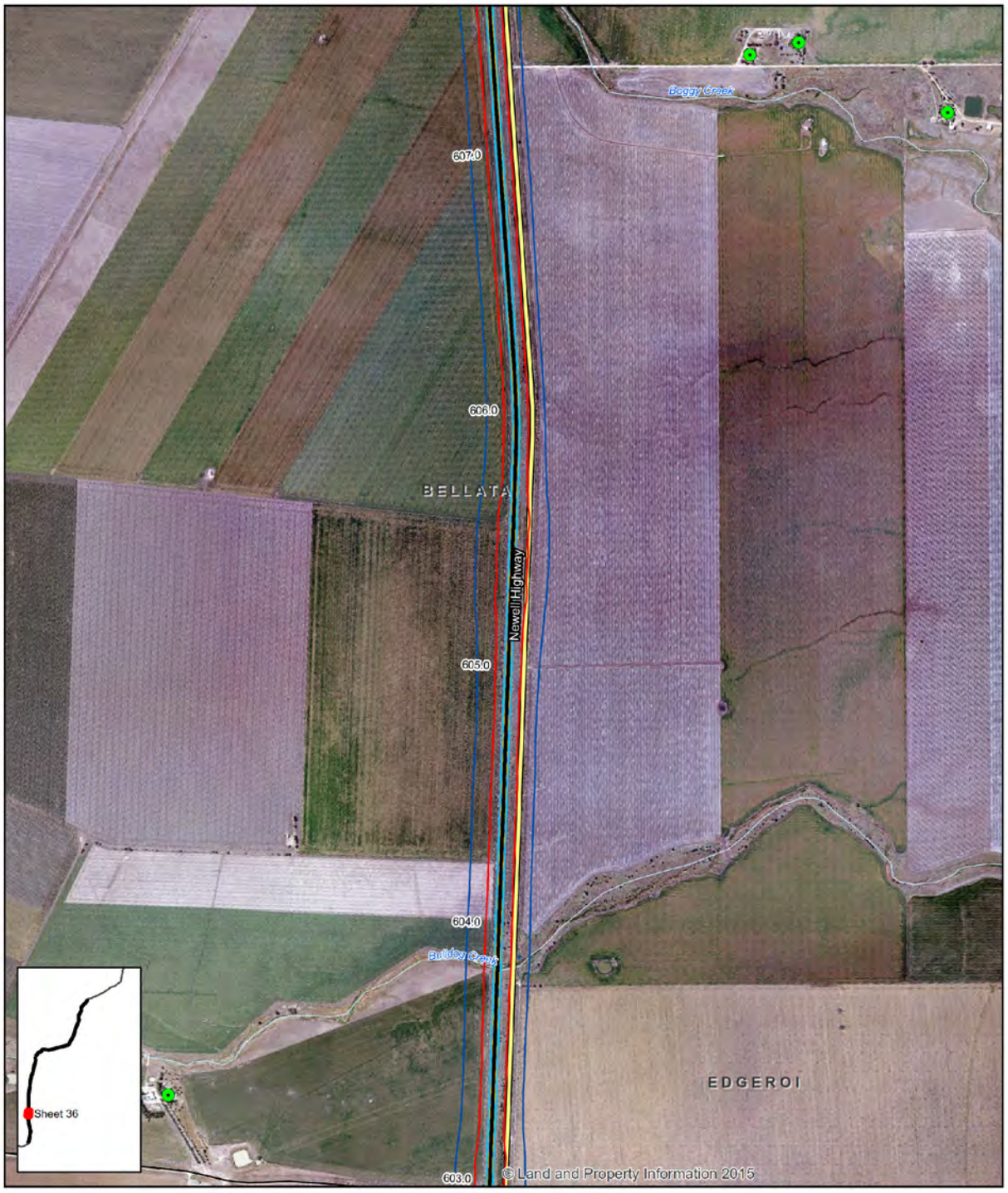
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

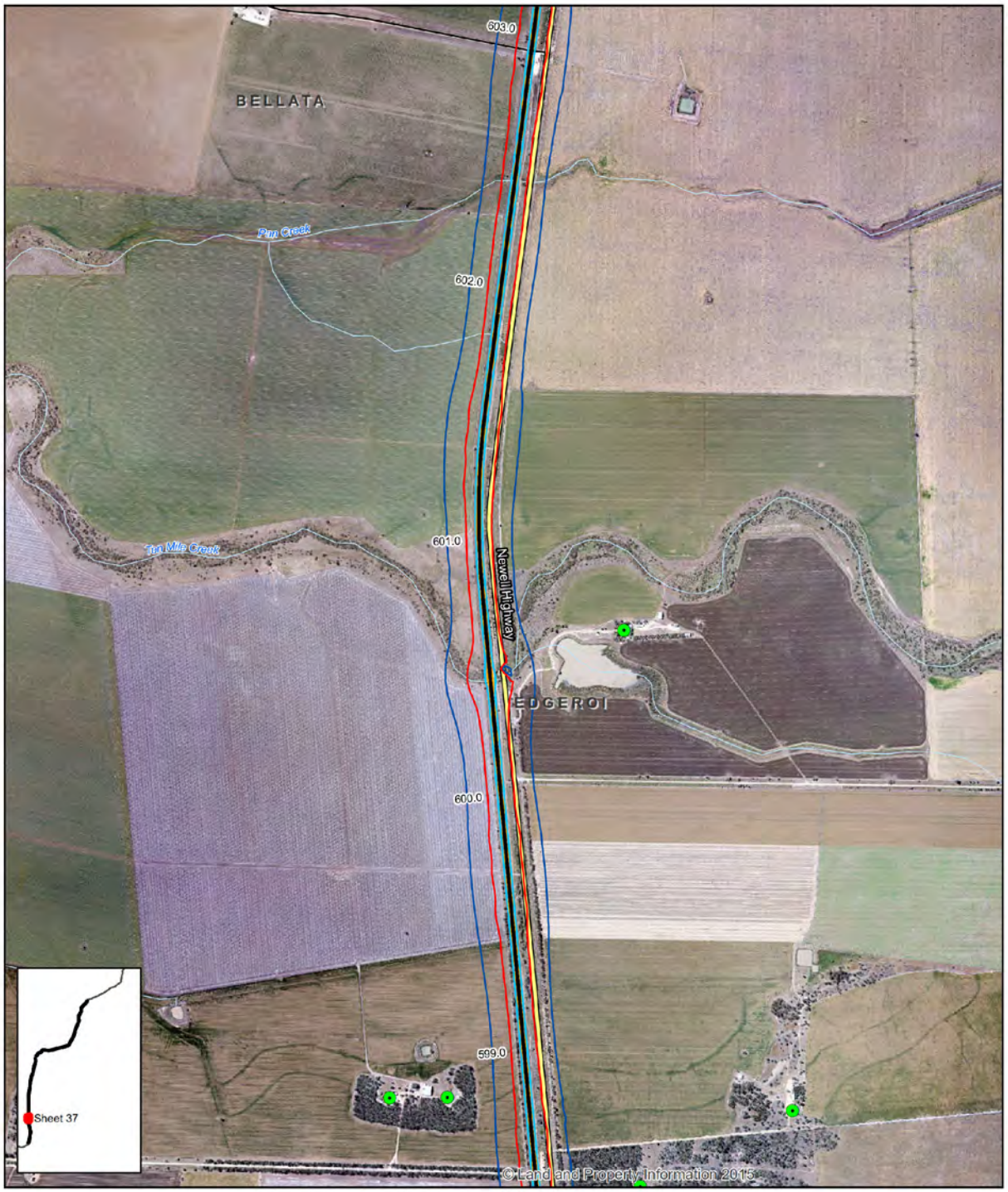
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

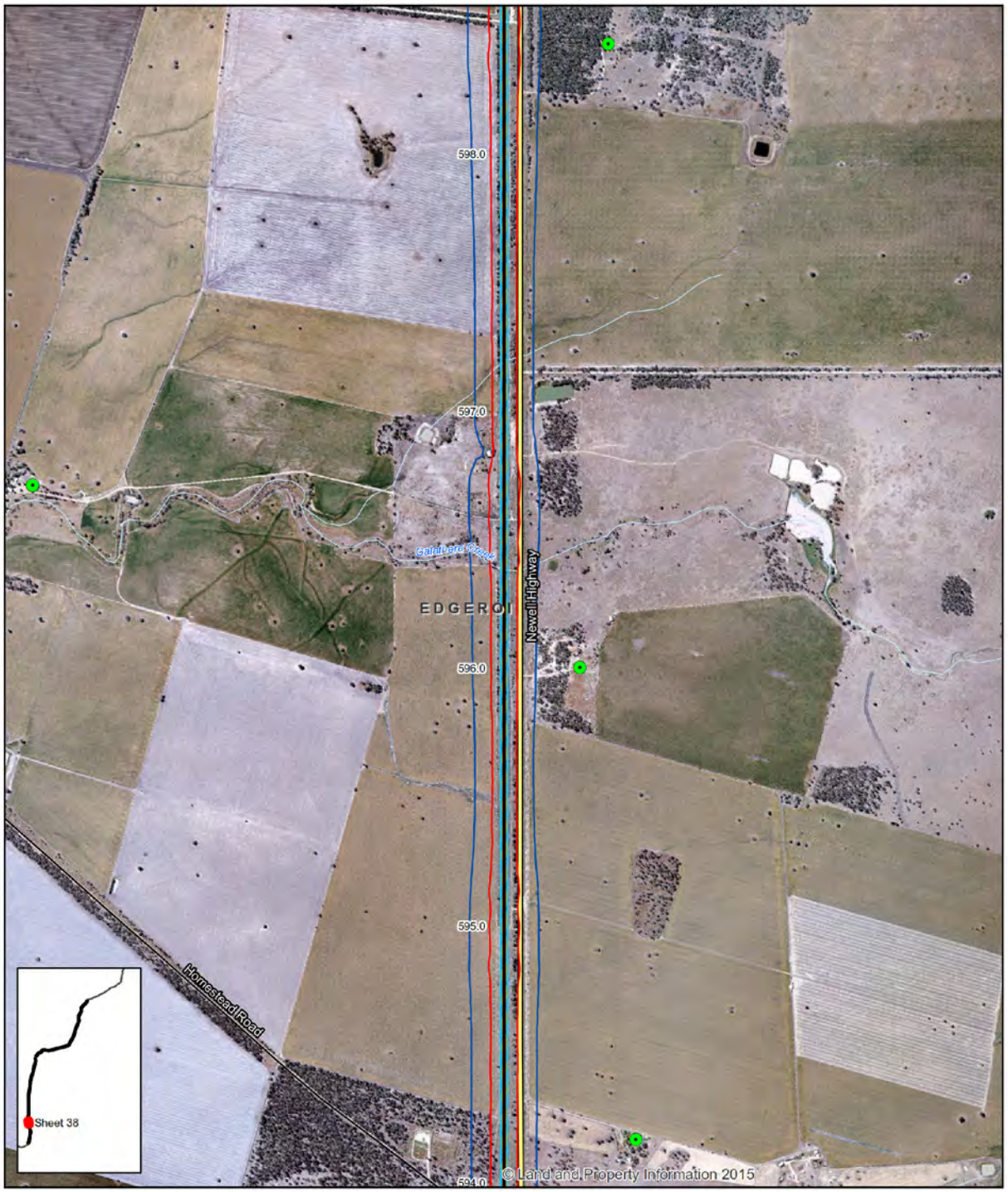
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

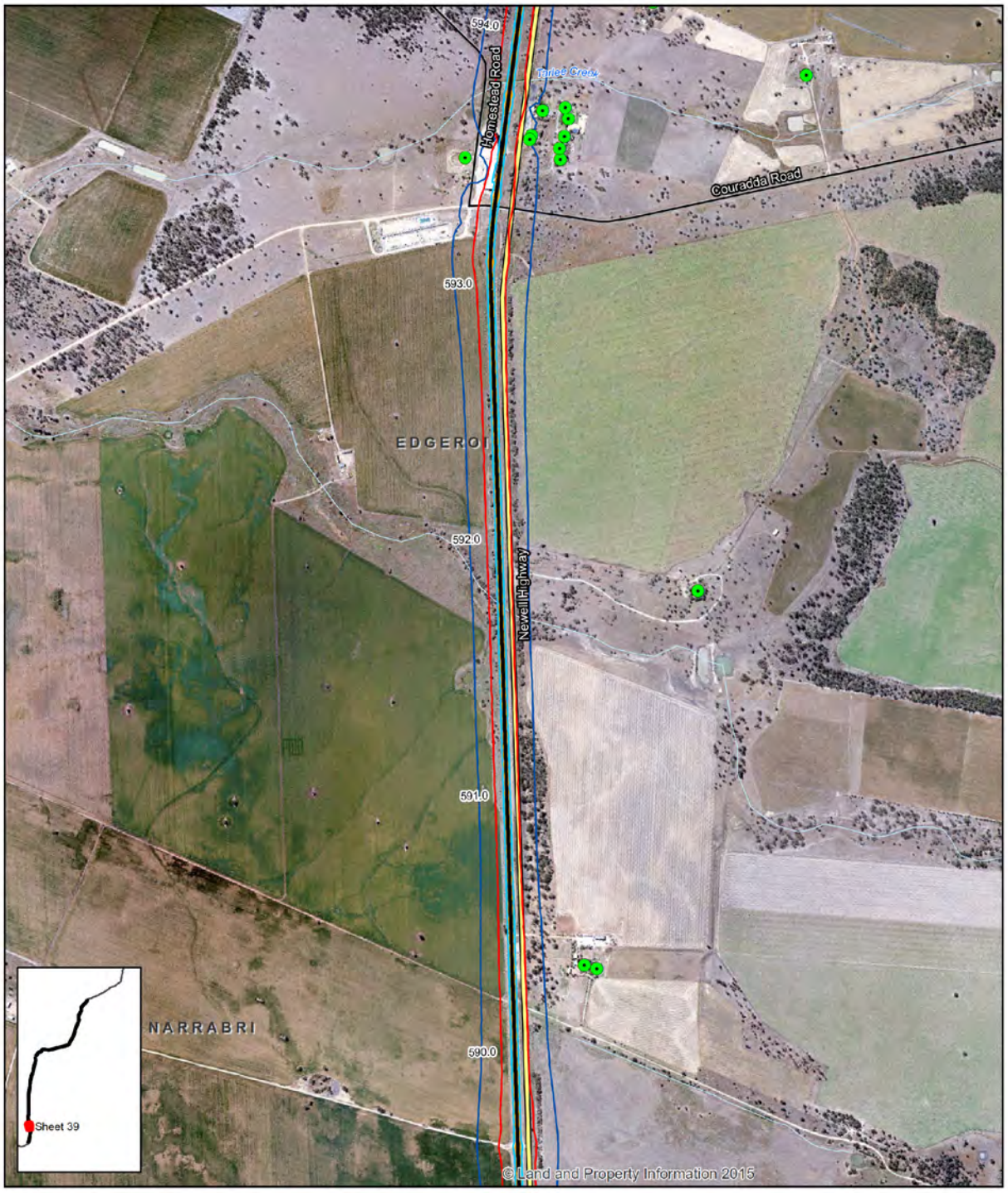
Figure E2- Sheet 38

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

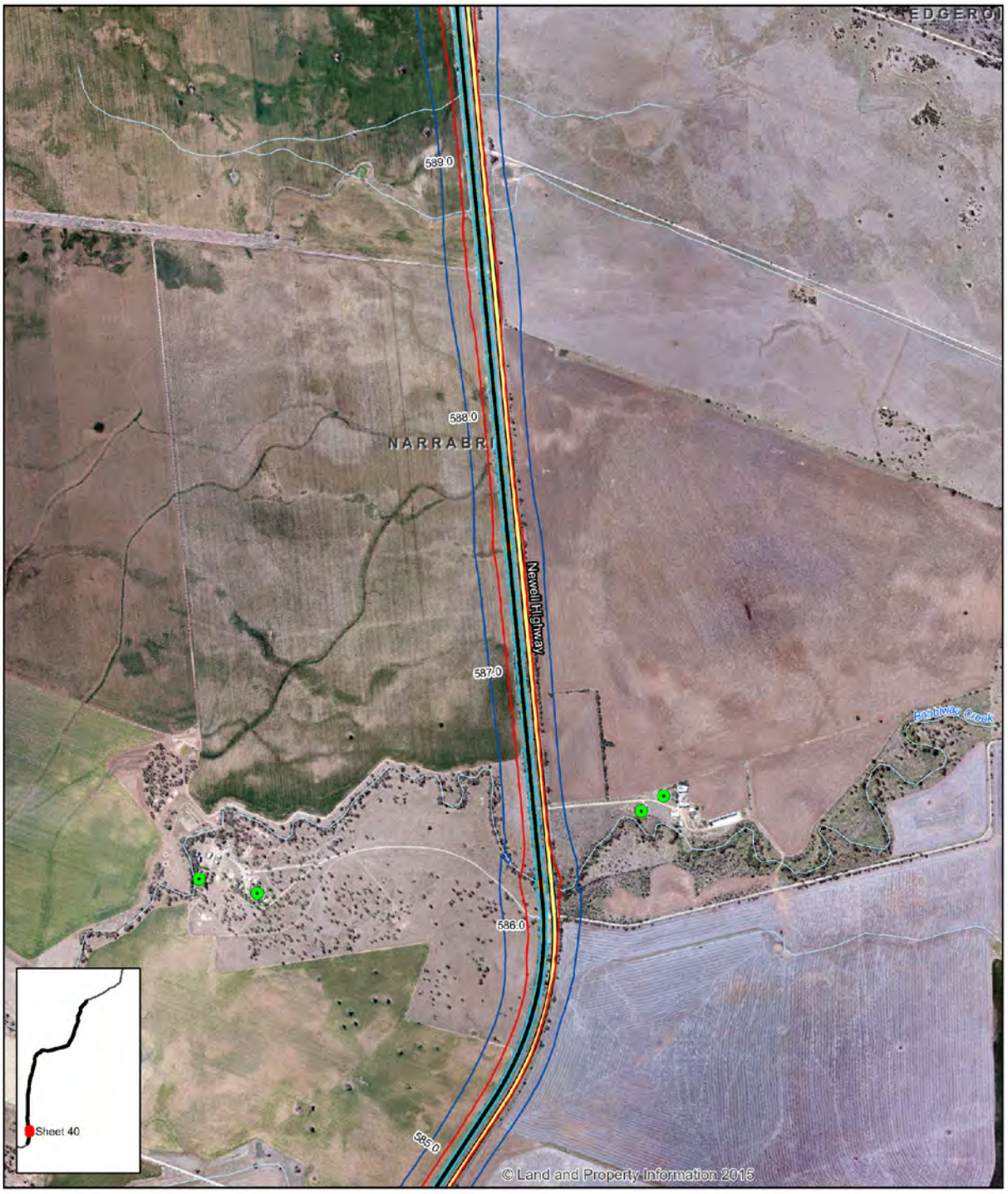
Figure E2- Sheet 39

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

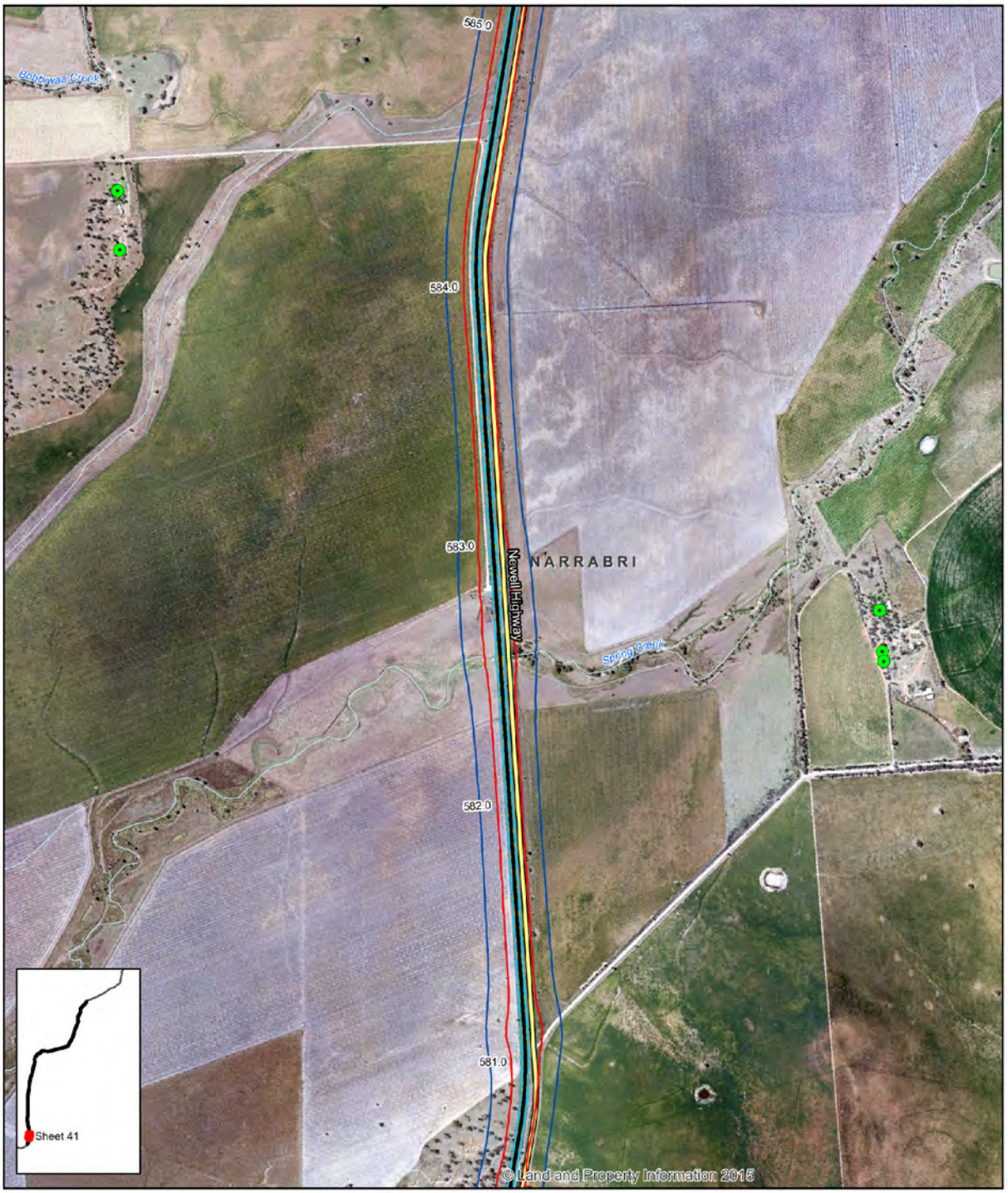
Figure E2- Sheet 40

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2025 build vs 2025 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

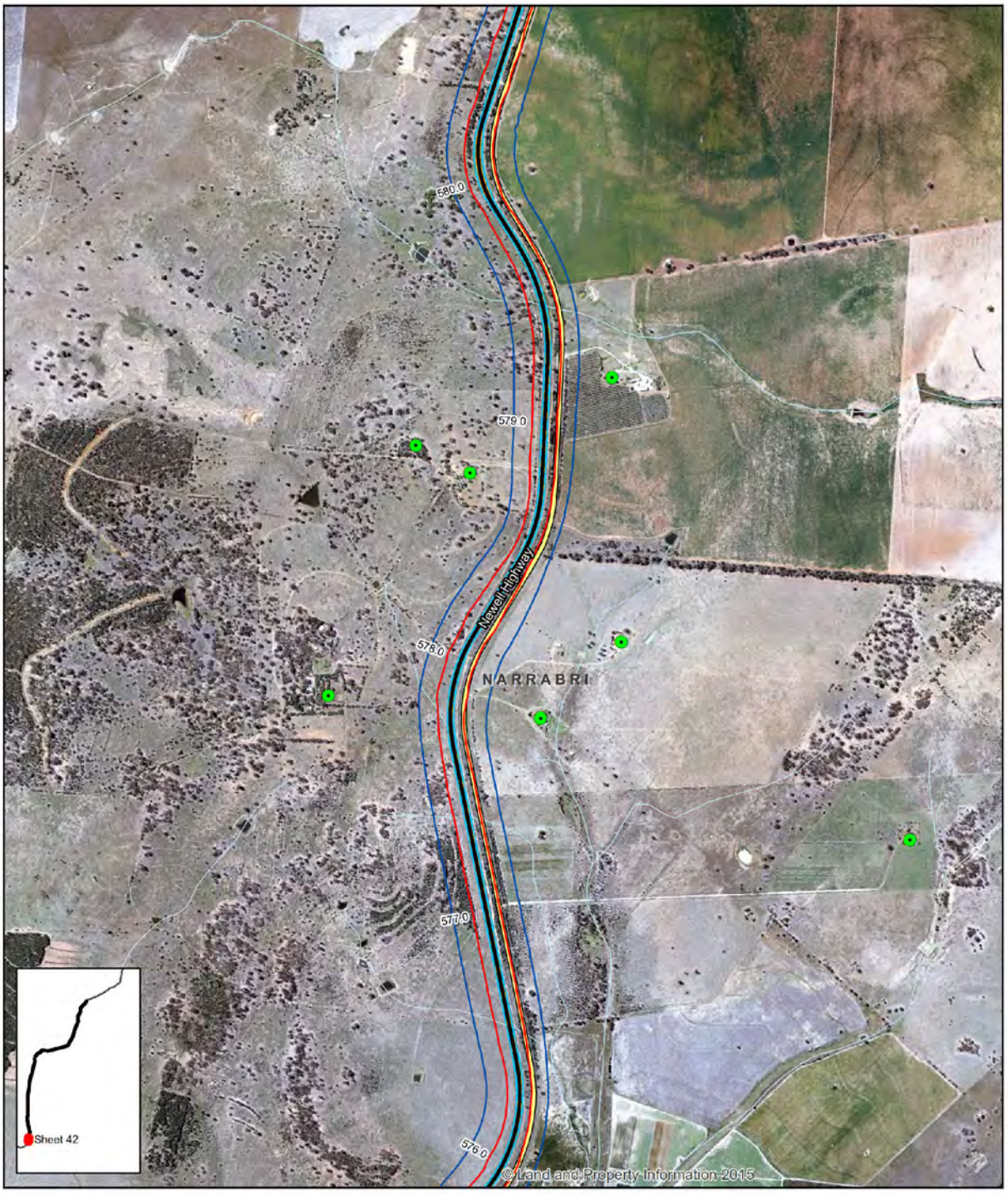
Figure E2- Sheet 41

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

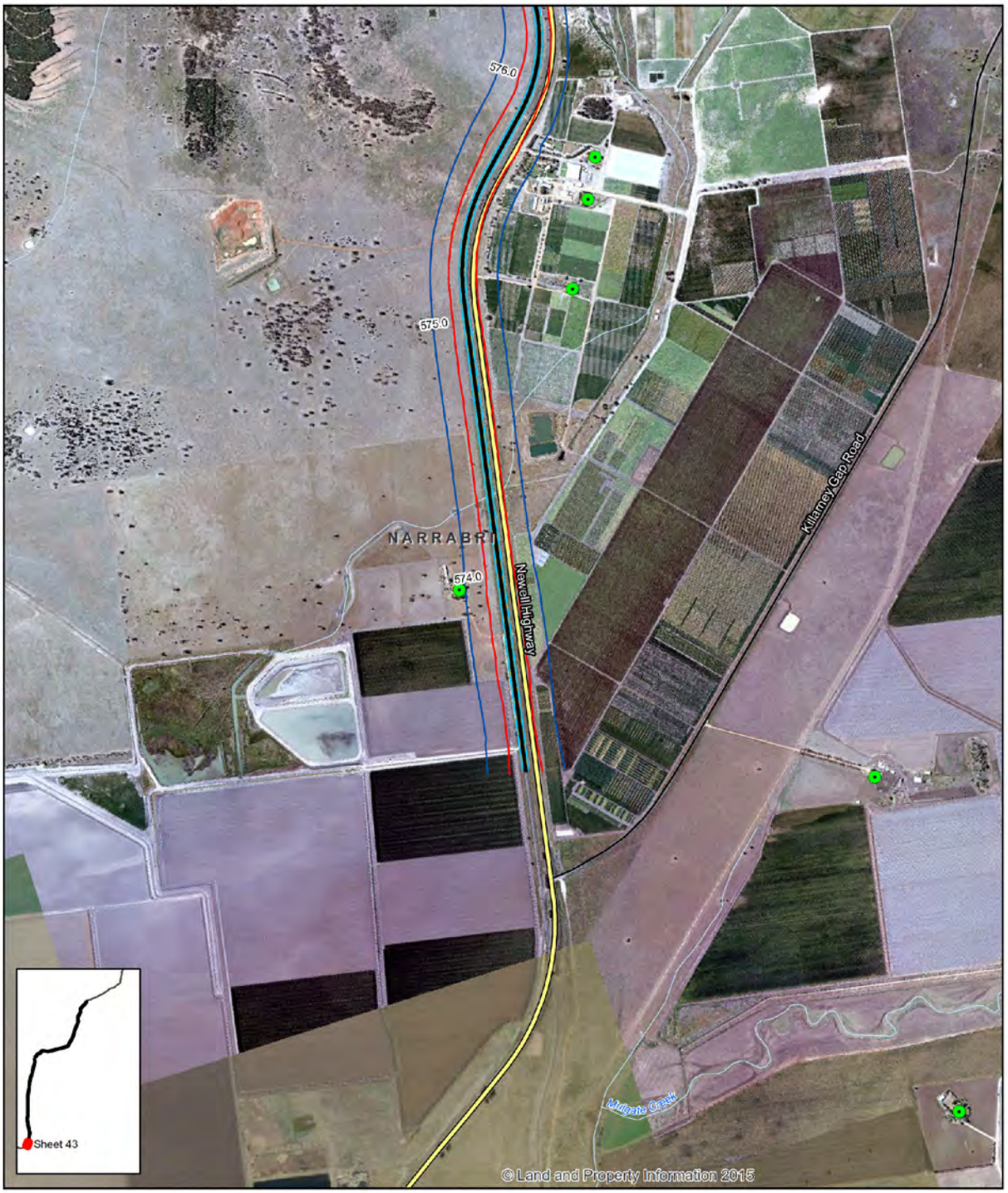
Figure E2- Sheet 42

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2025 Build 60dB(A) LAeq 9-hour
- 2025 Build 65dB(A) LAeq 15-hour
- 2025 No-Build 60dB(A) LAeq 9-hour
- 2025 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2025 build vs 2025 no build

Figure E2- Sheet 43

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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

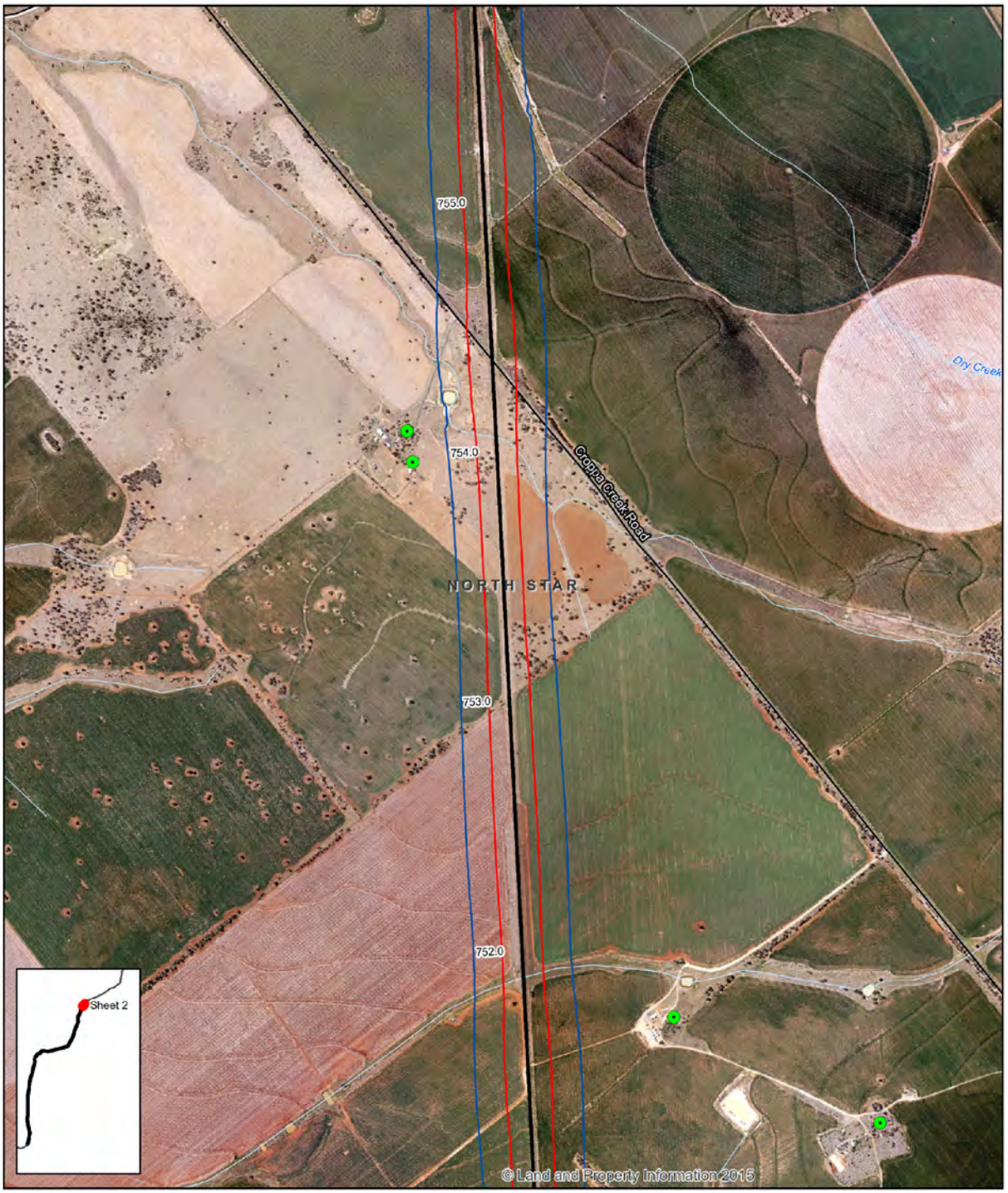
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

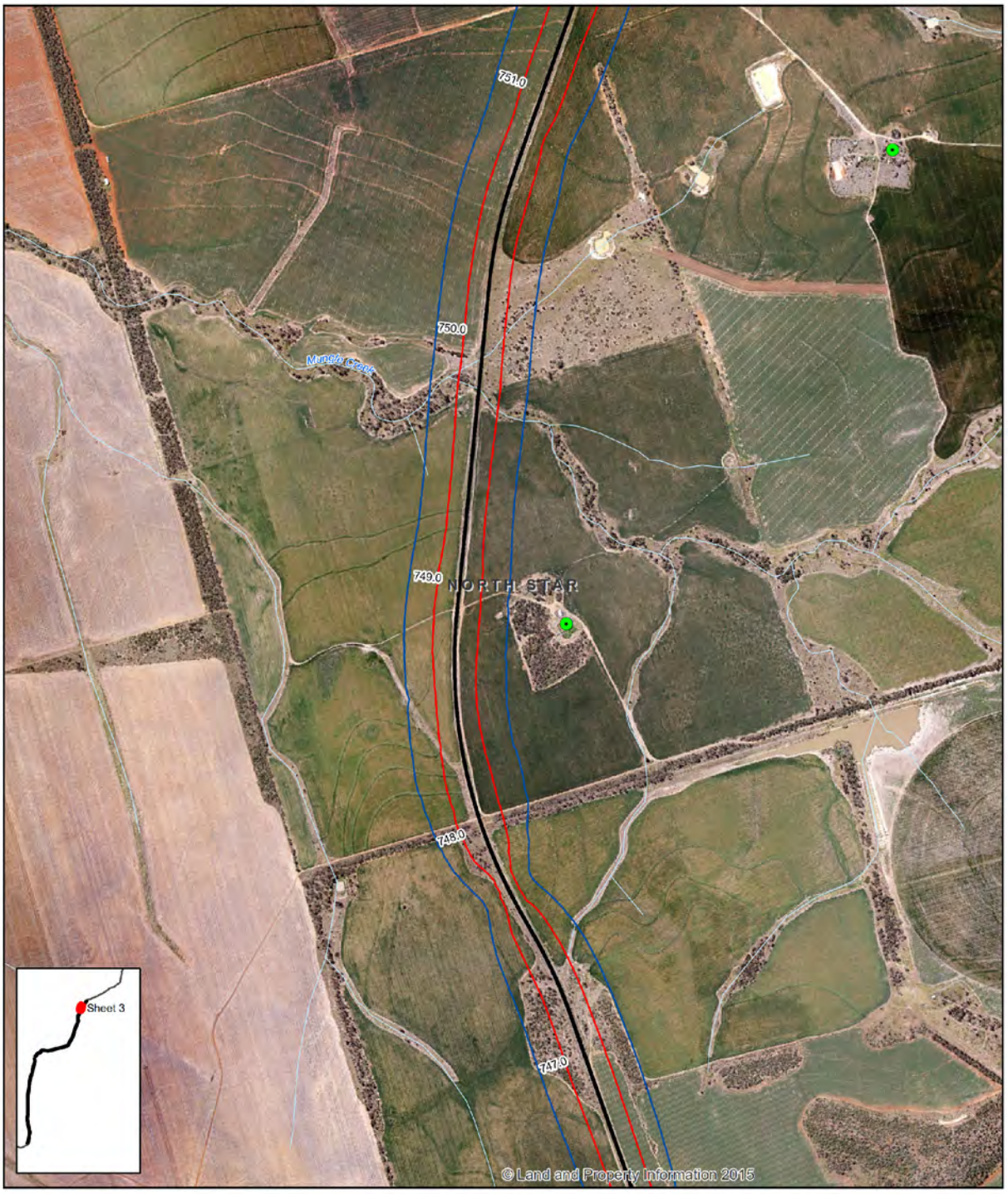
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

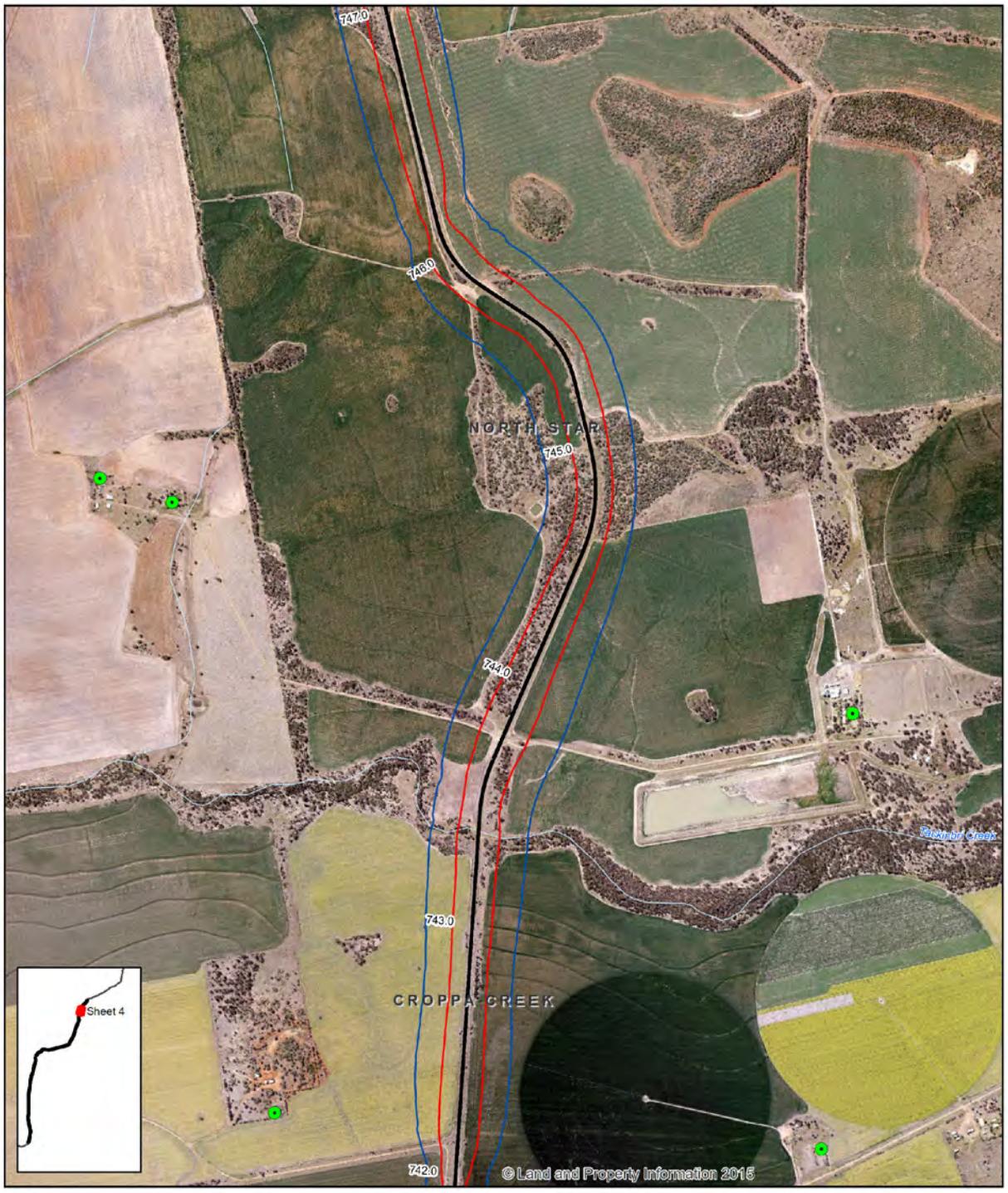
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

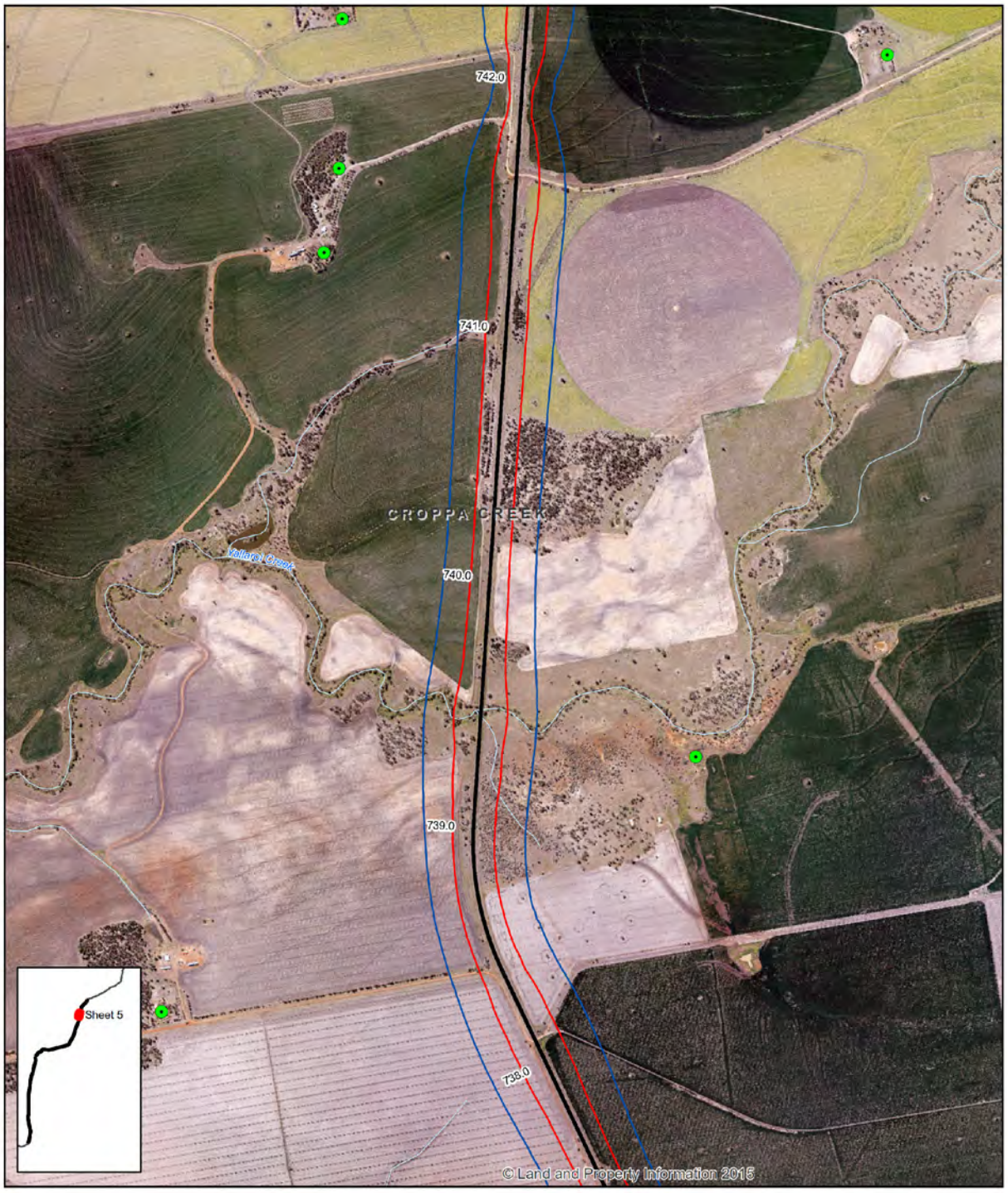
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

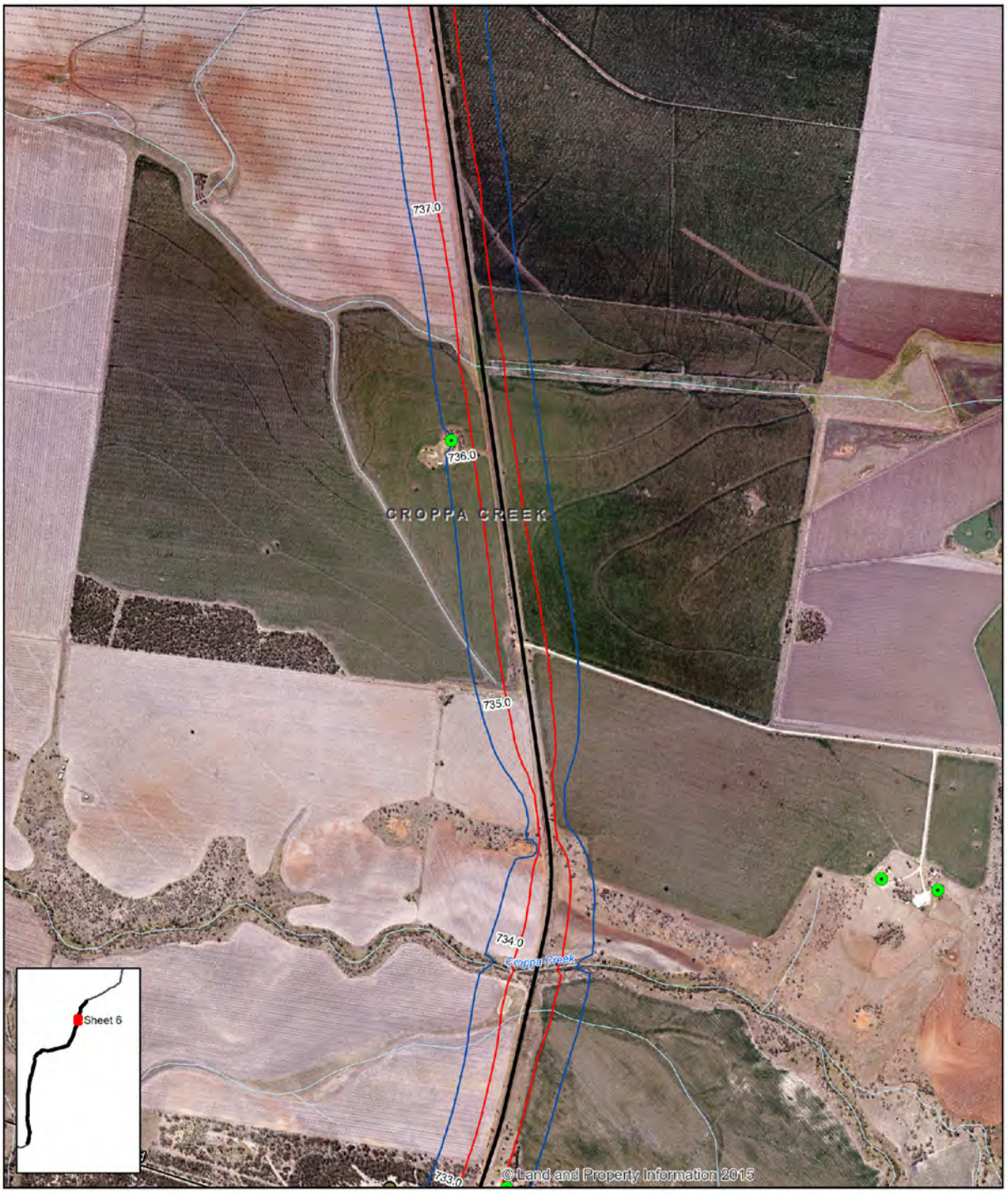
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

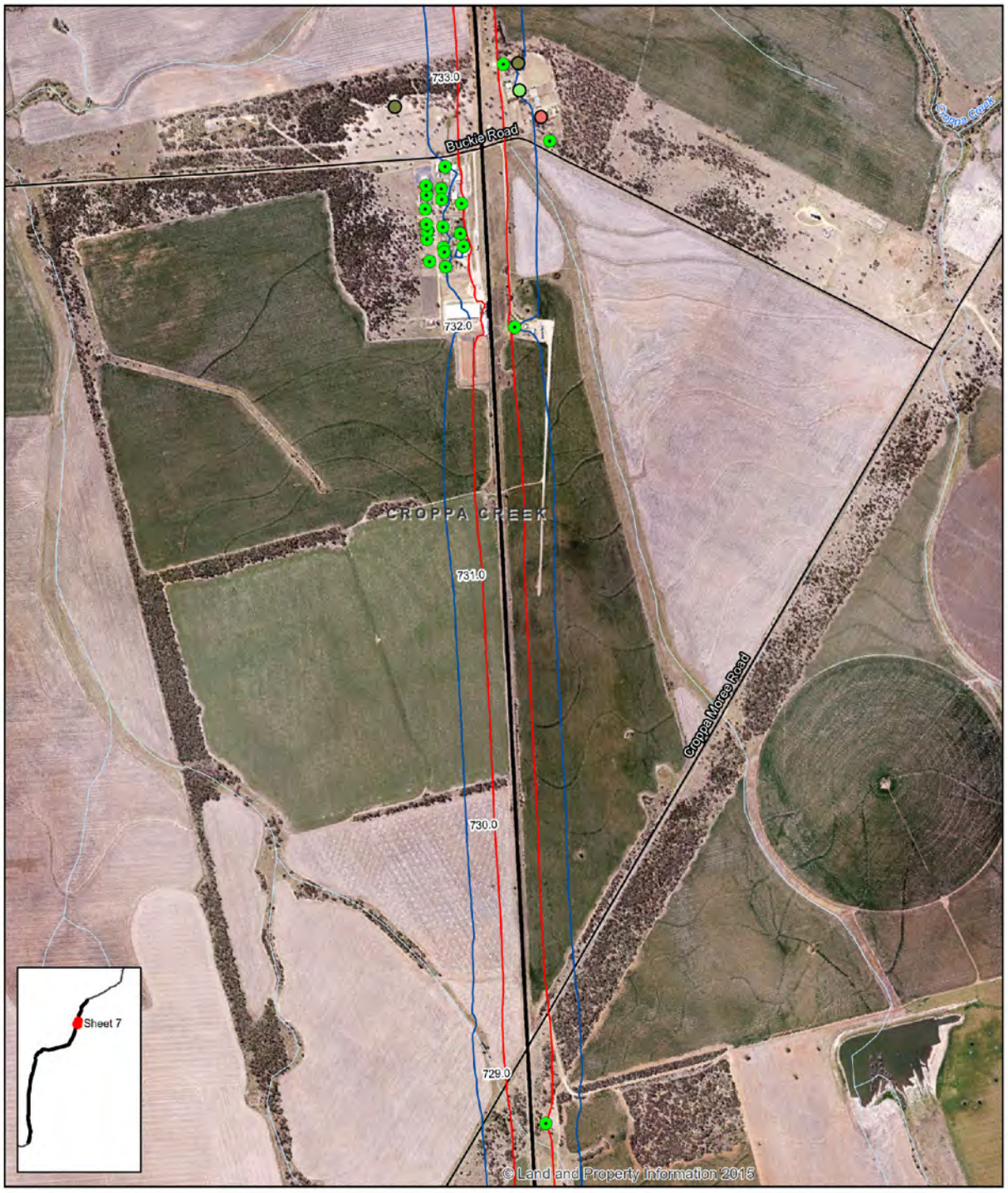
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

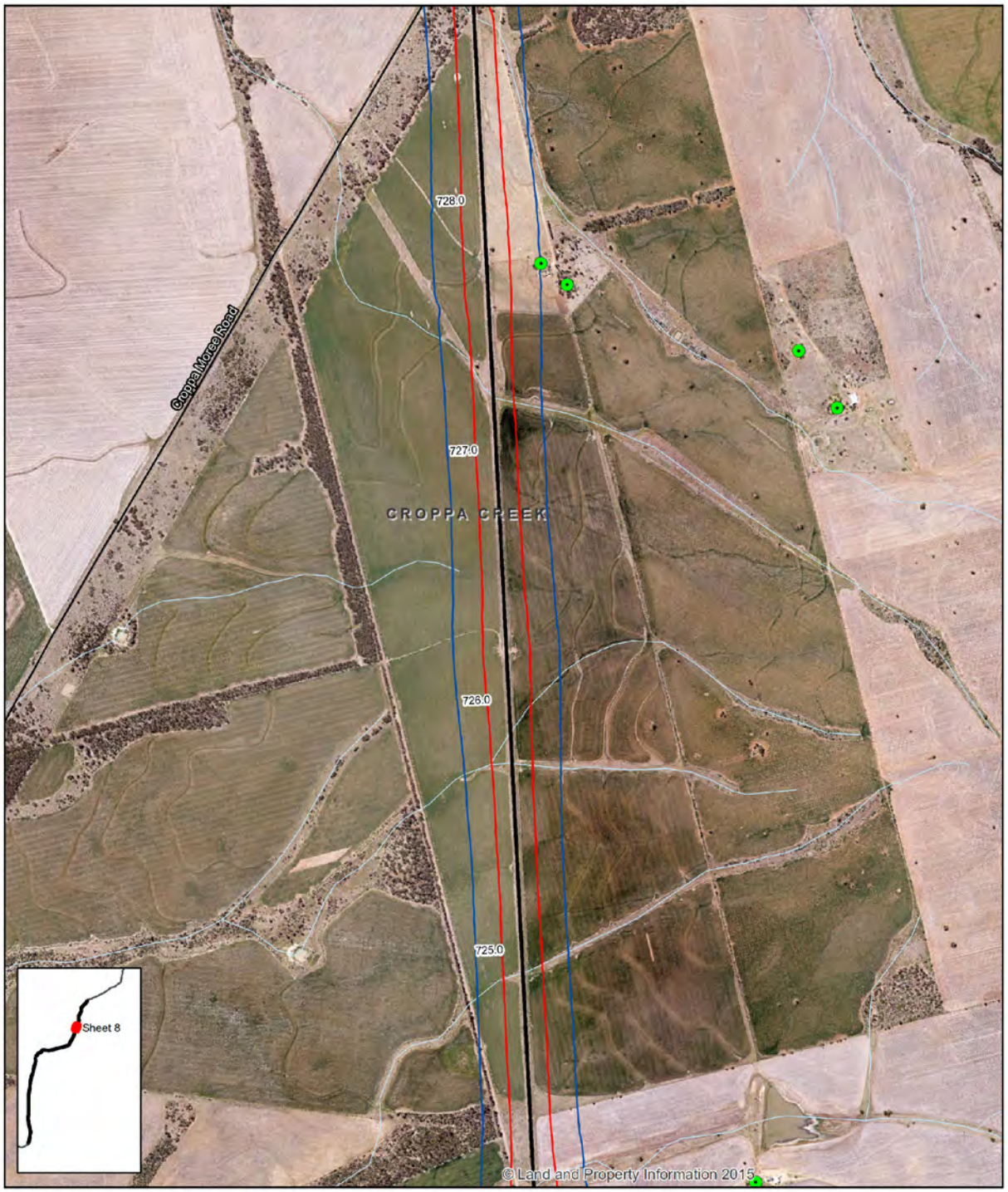
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

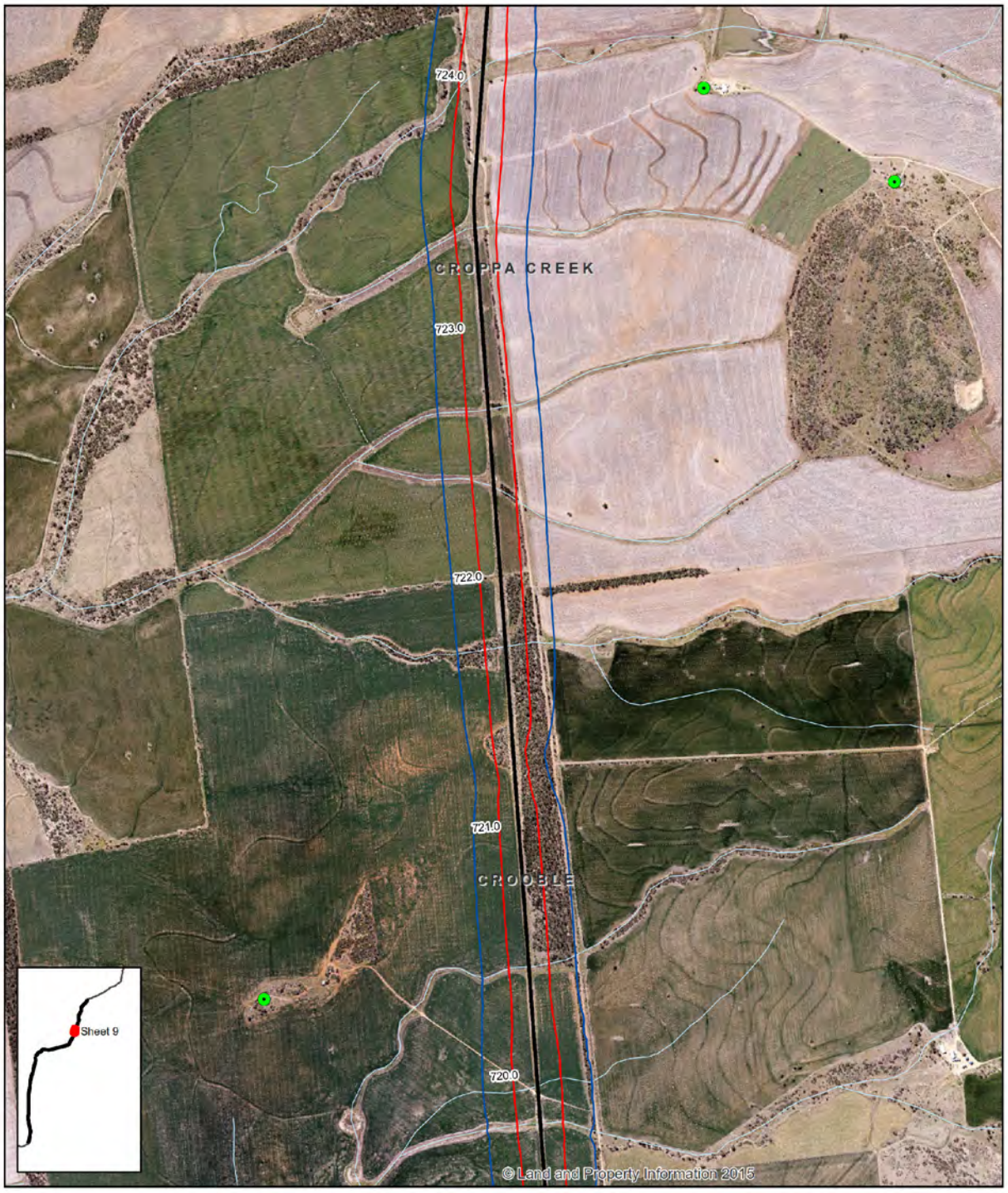
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

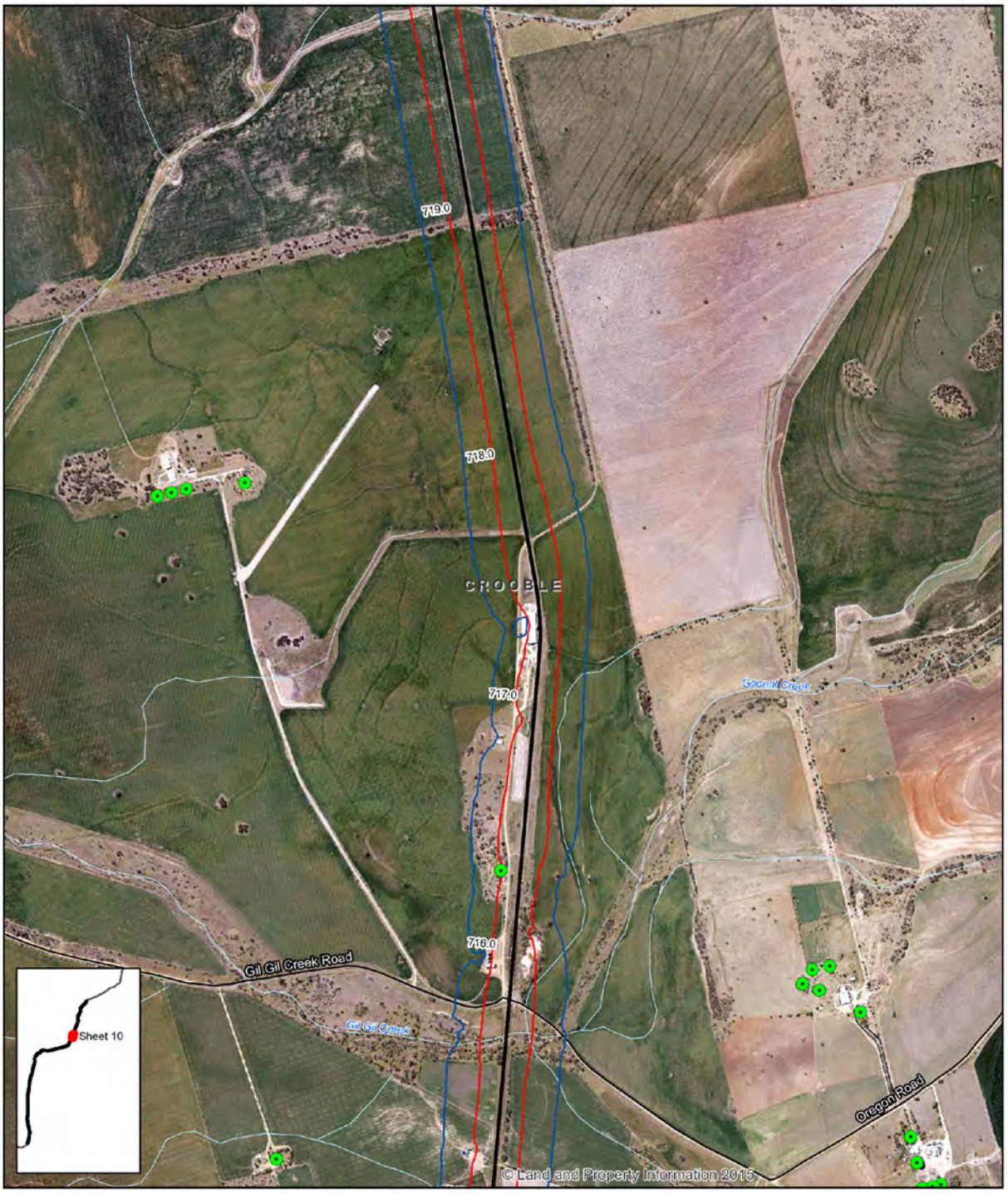
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

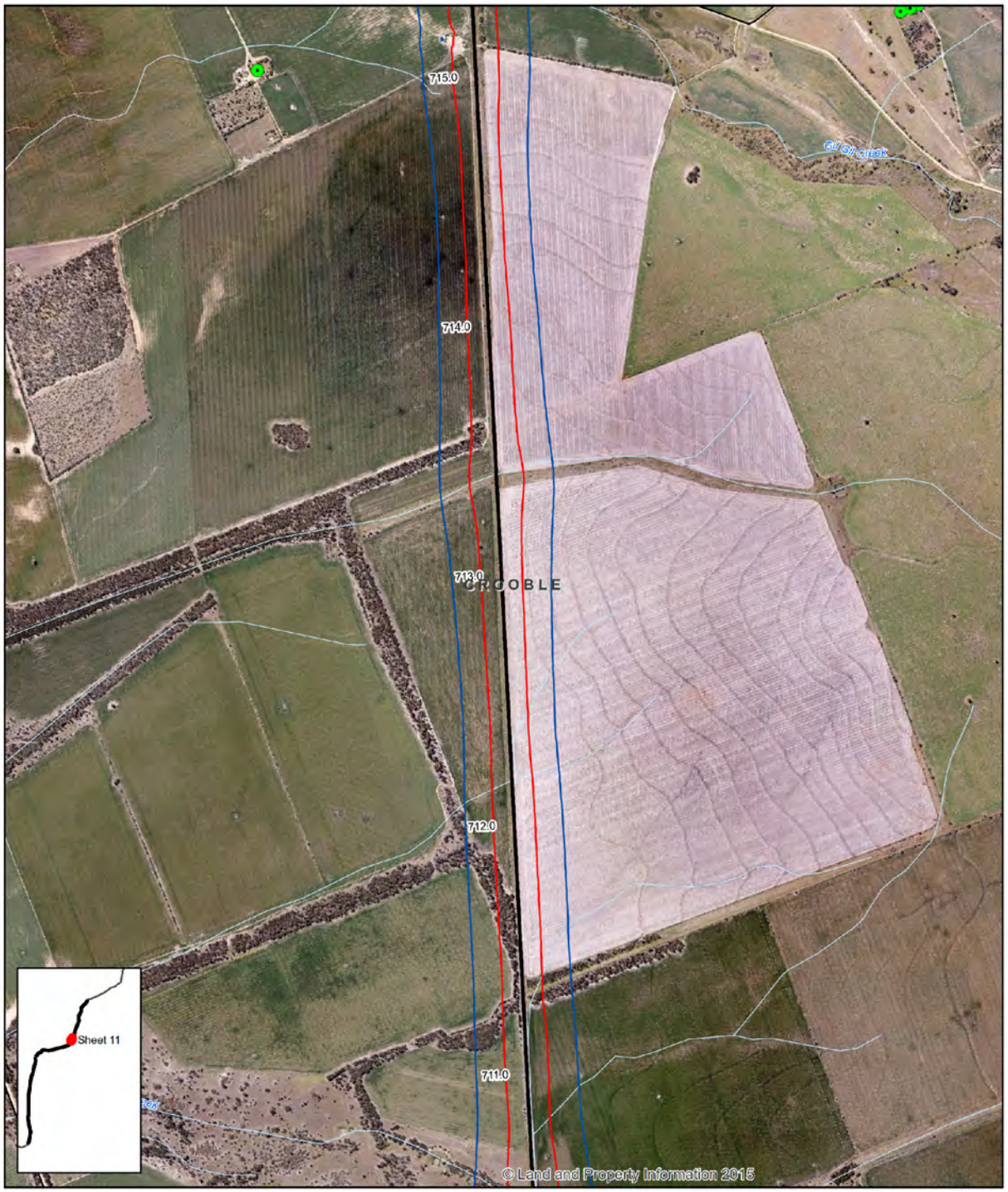
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

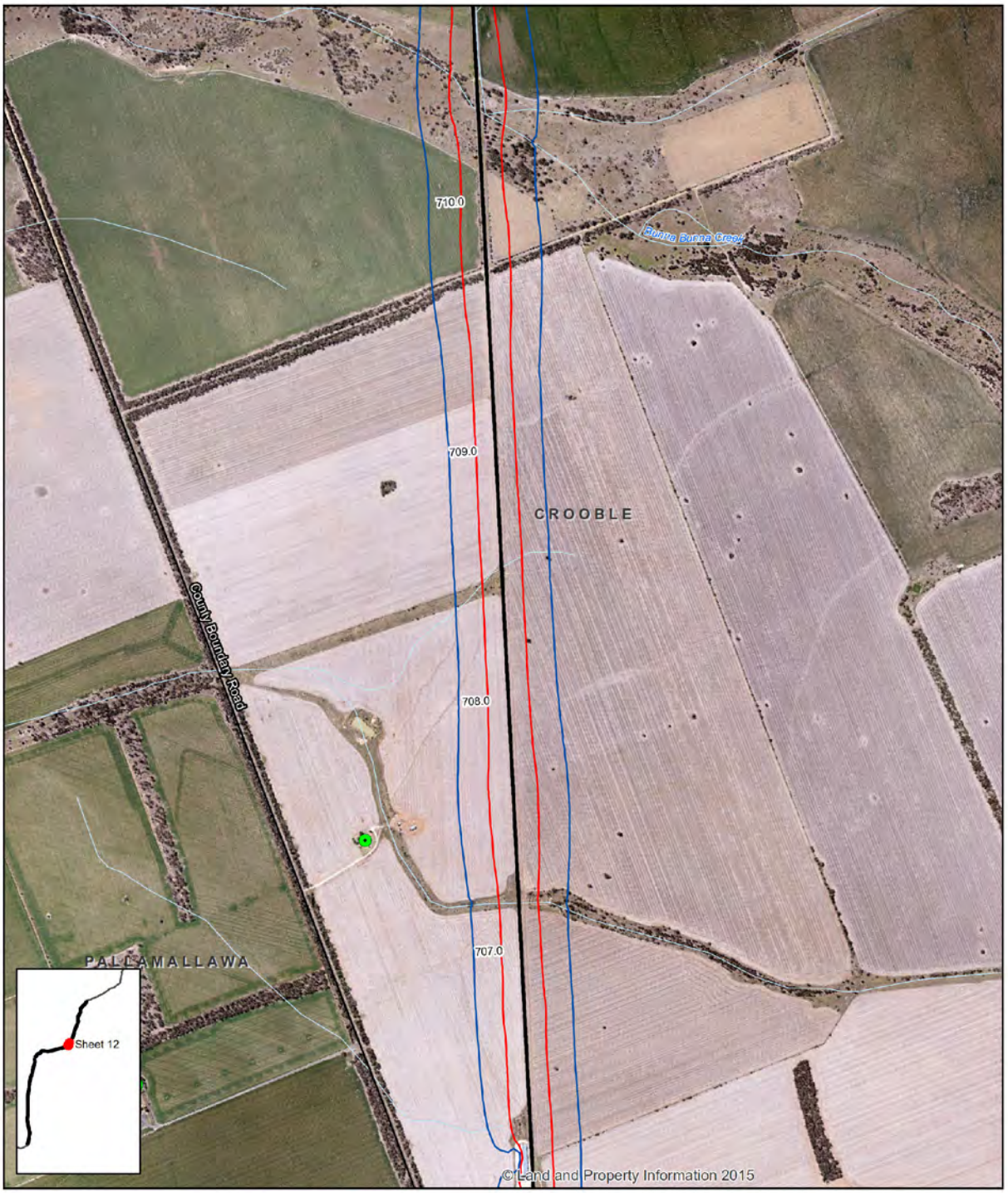
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

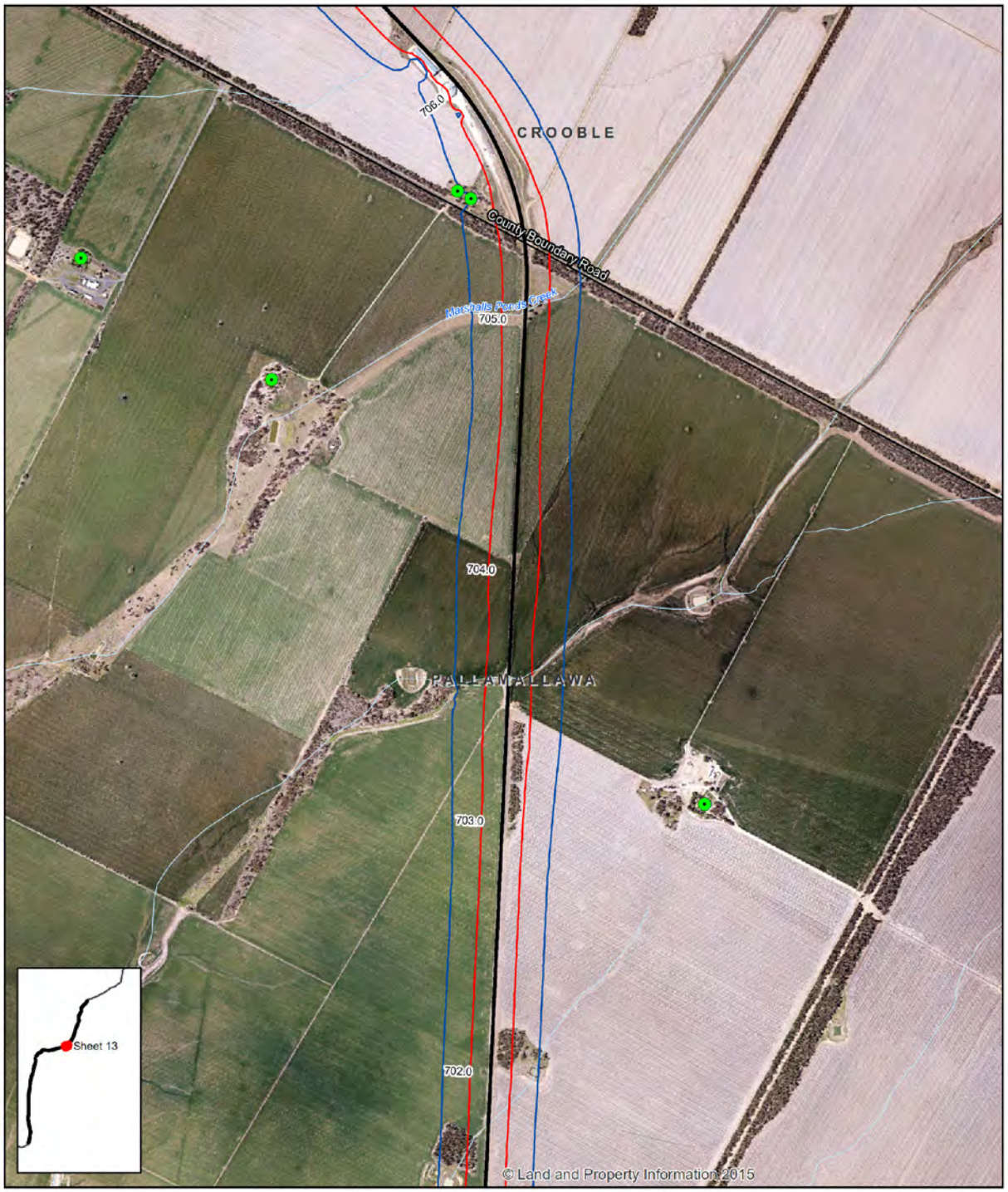
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

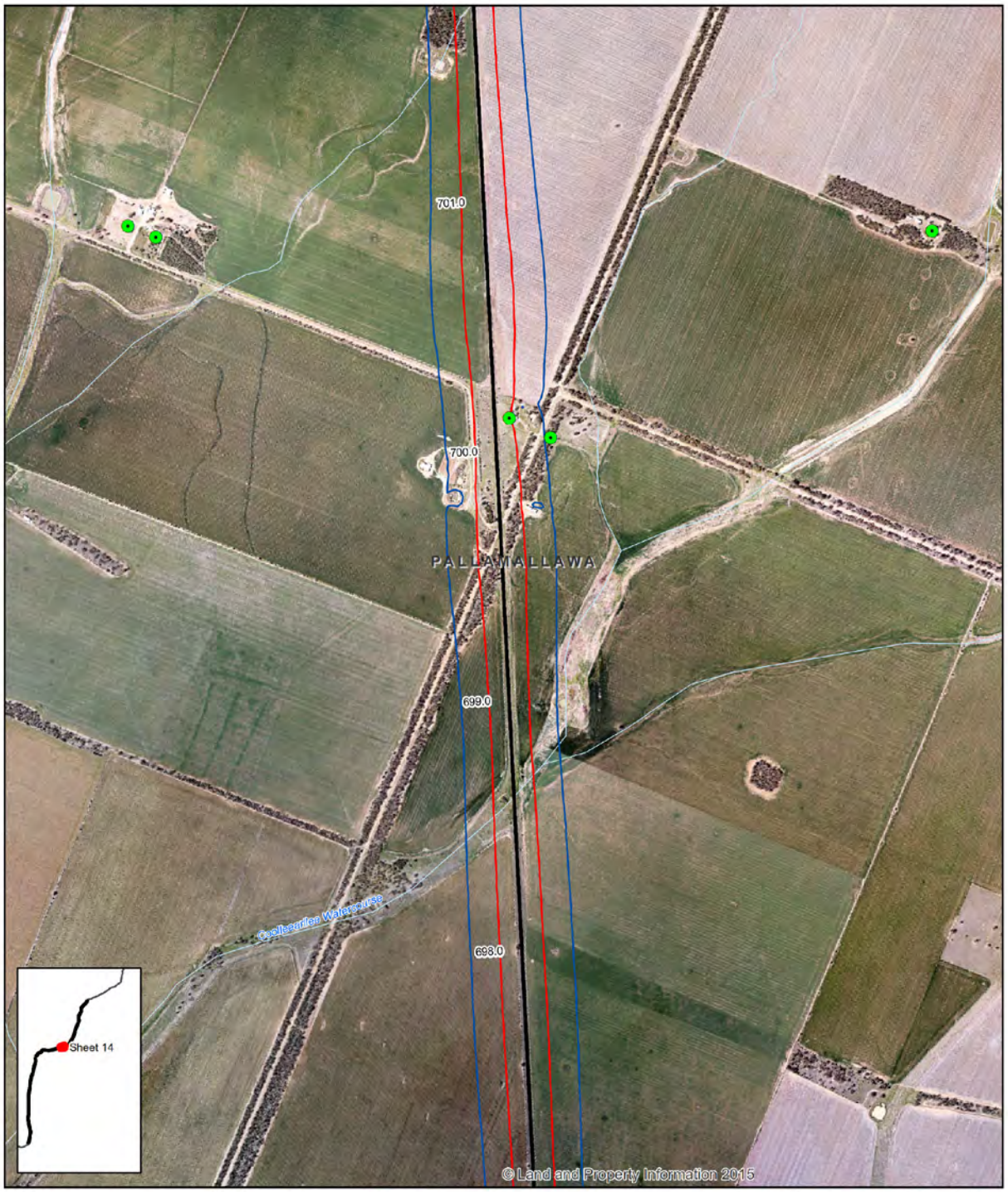
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LEGEND

Residential receiver
The proposal
Watercourse
2040 Build 60dB(A) LAeq 9-hour
2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 14

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LEGEND

- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

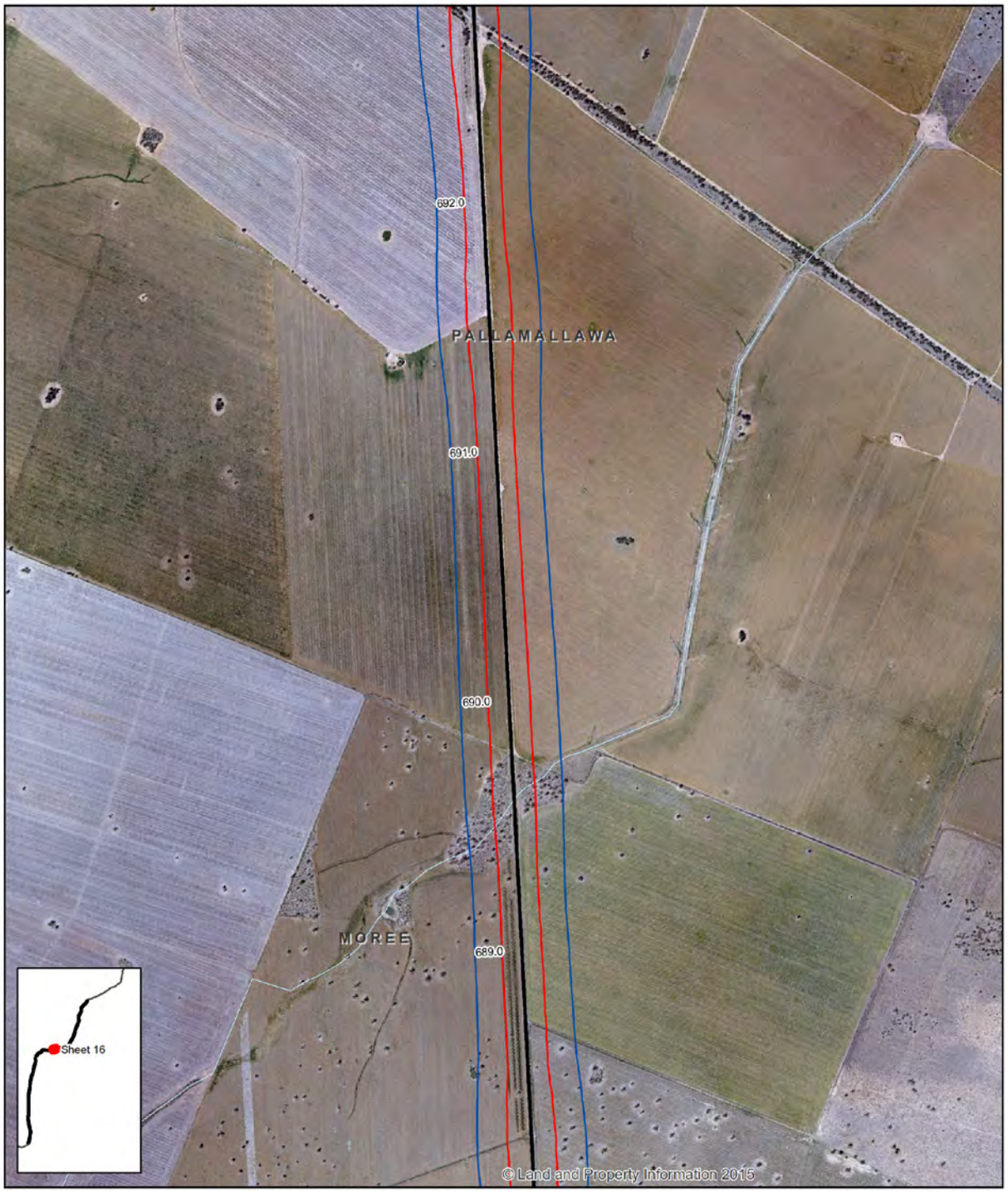
Figure E3- Sheet 15

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LEGEND

- The proposal
- Watercourse
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 16

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LEGEND

- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Figure E3- Sheet 17

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

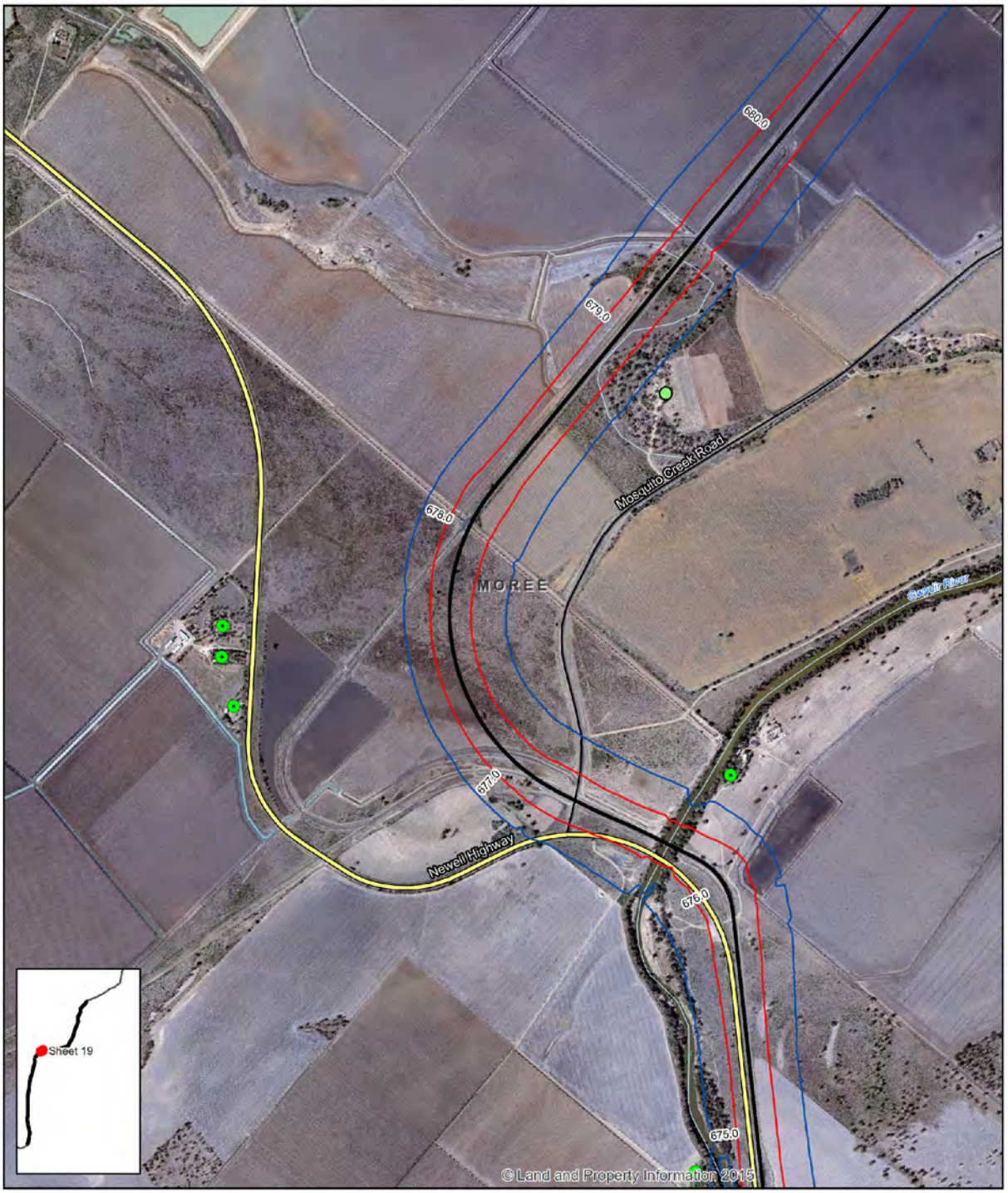
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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

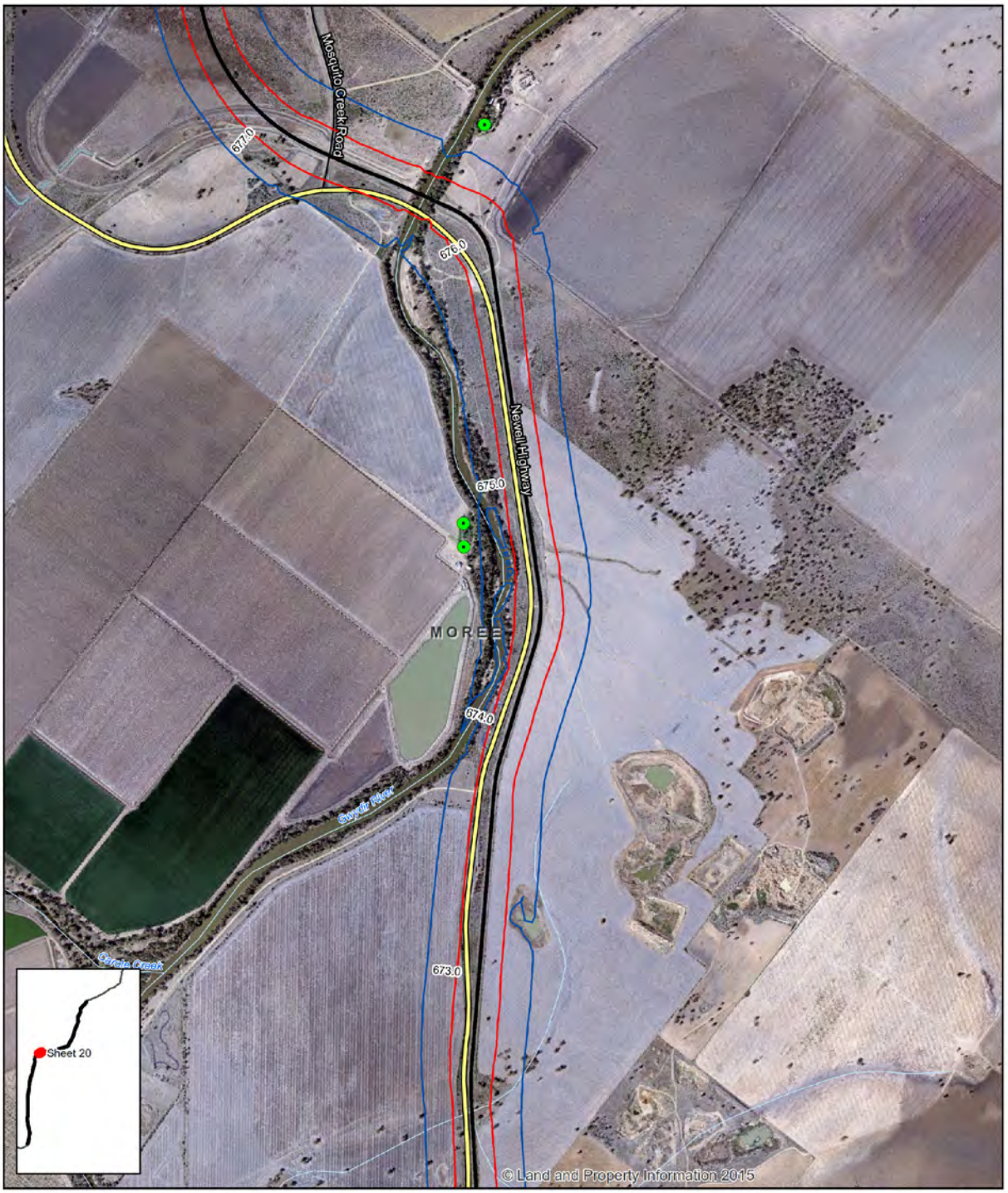
Figure E3- Sheet 19

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

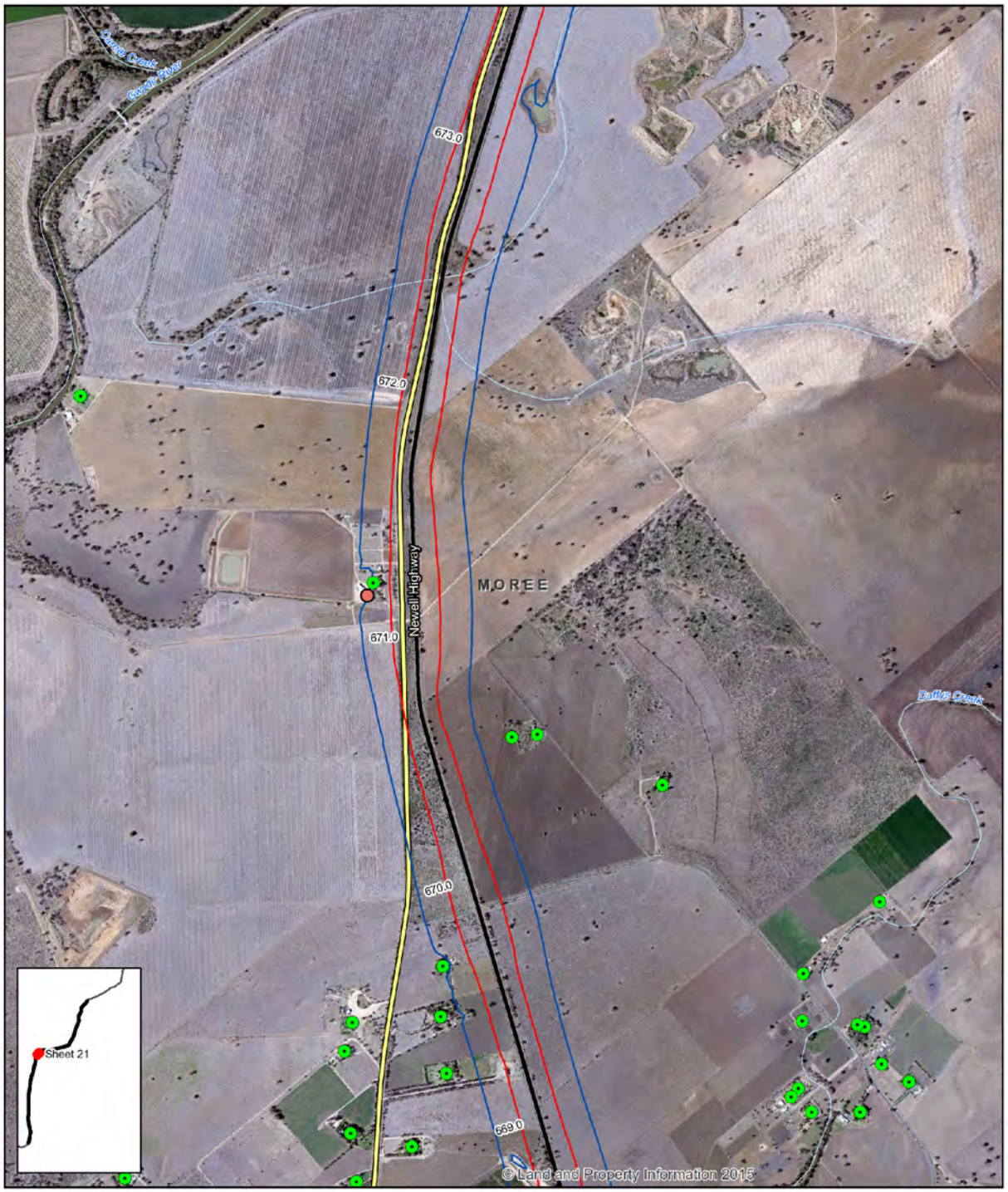
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LEGEND

- Residential receiver
- Education
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

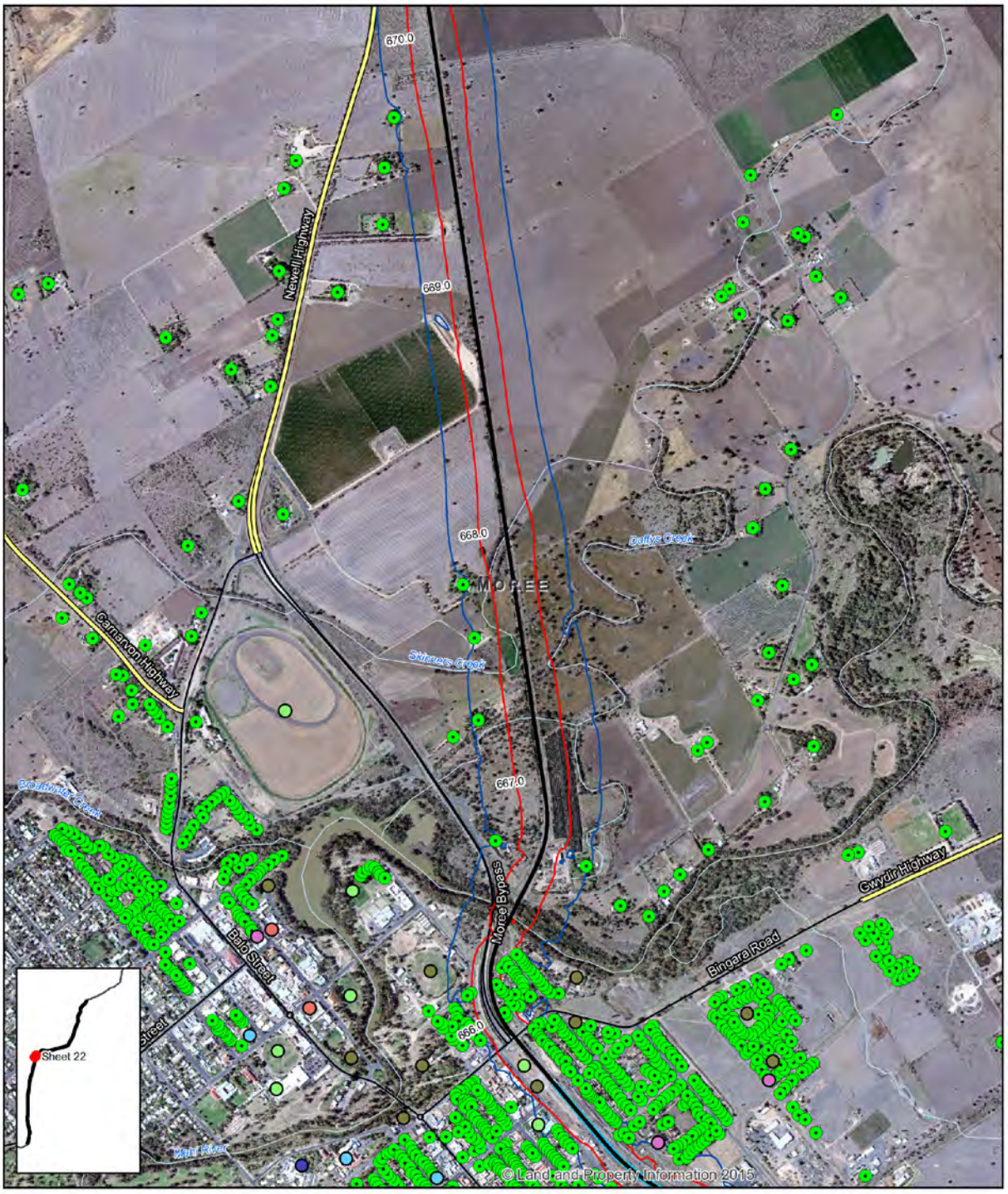
Figure E3- Sheet 21

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

Residential receiver	Health	The proposal	2040 Build 60dB(A) LAeq 9-hour
Active recreation	Passive recreation	Watercourse	2040 Build 65dB(A) LAeq 15-hour
Aged care	Religous	Highway	2040 No-Build 60dB(A) LAeq 9-hour
Education		Road	2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

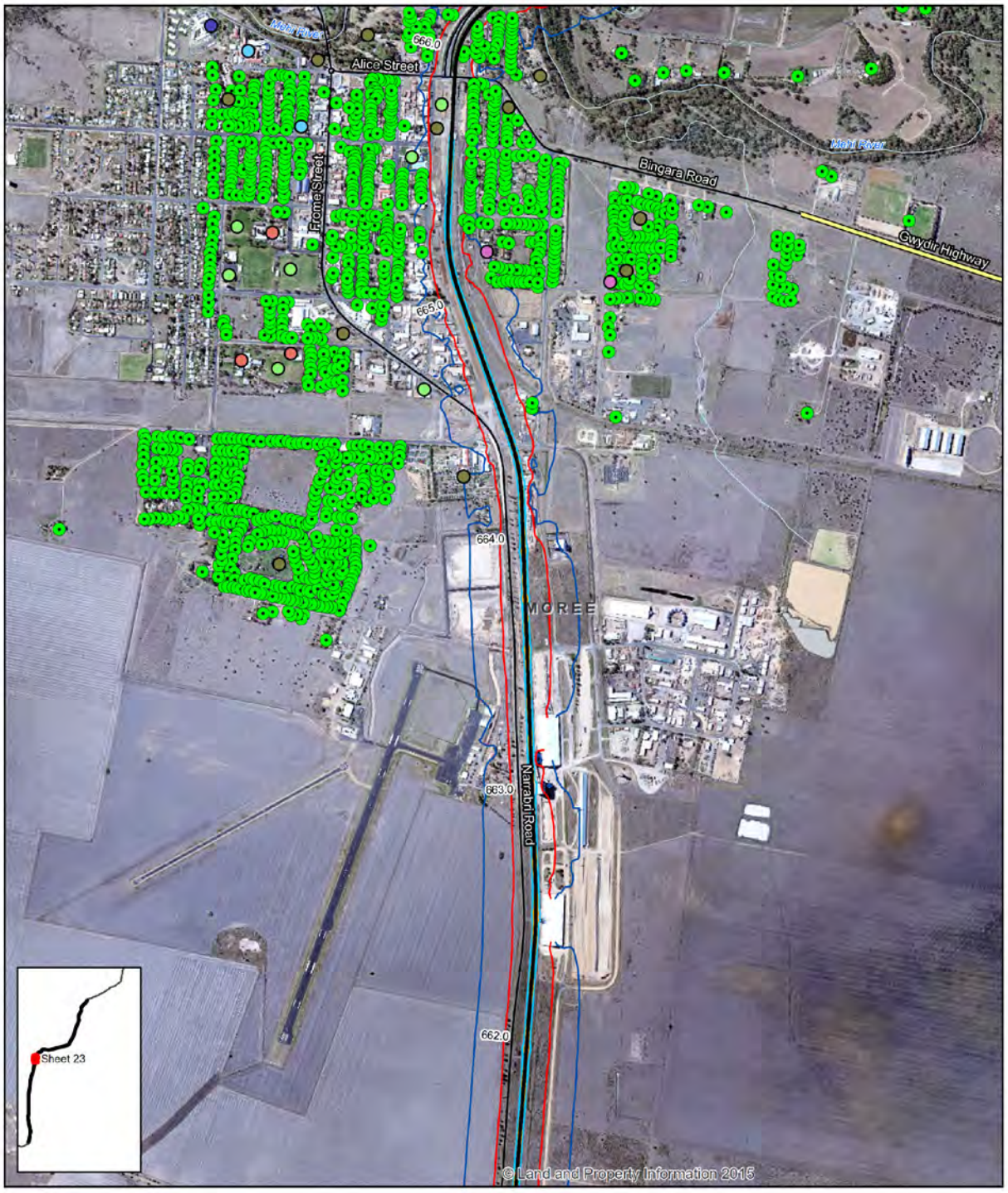
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LEGEND

- Residential receiver
- Active recreation
- Aged care
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

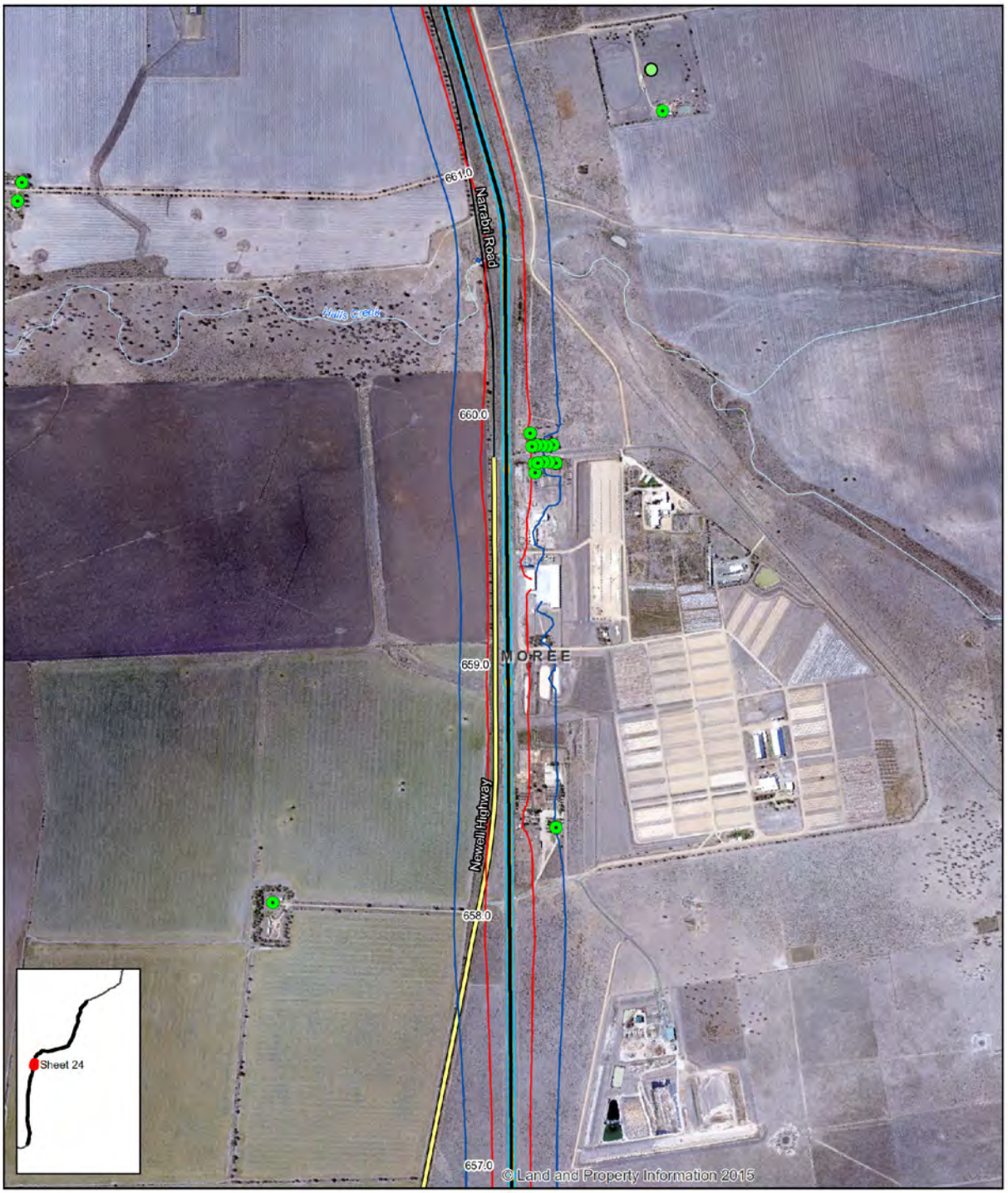
Figure E3- Sheet 23

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LEGEND

- Residential receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 24

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

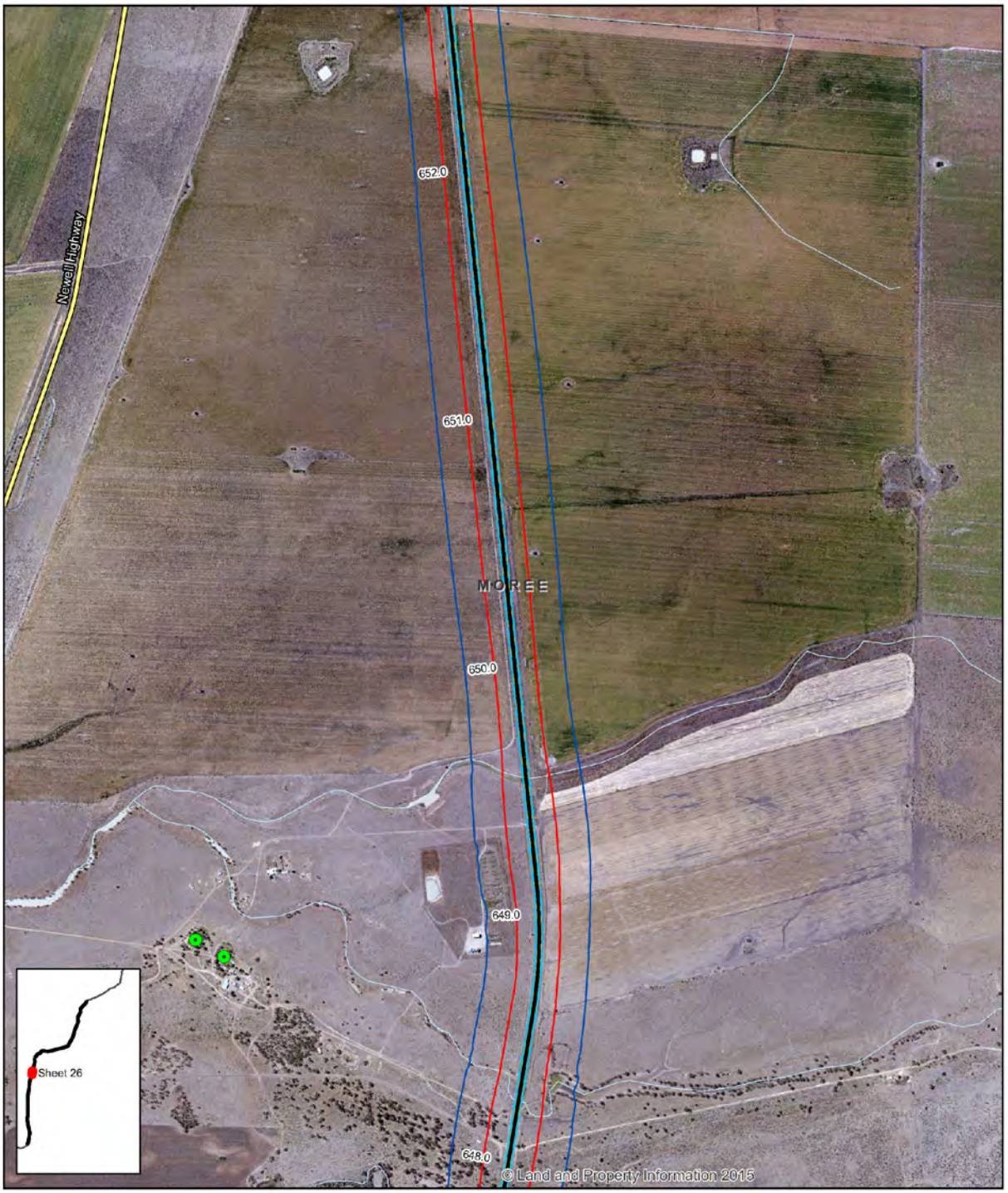
Figure E3- Sheet 25

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

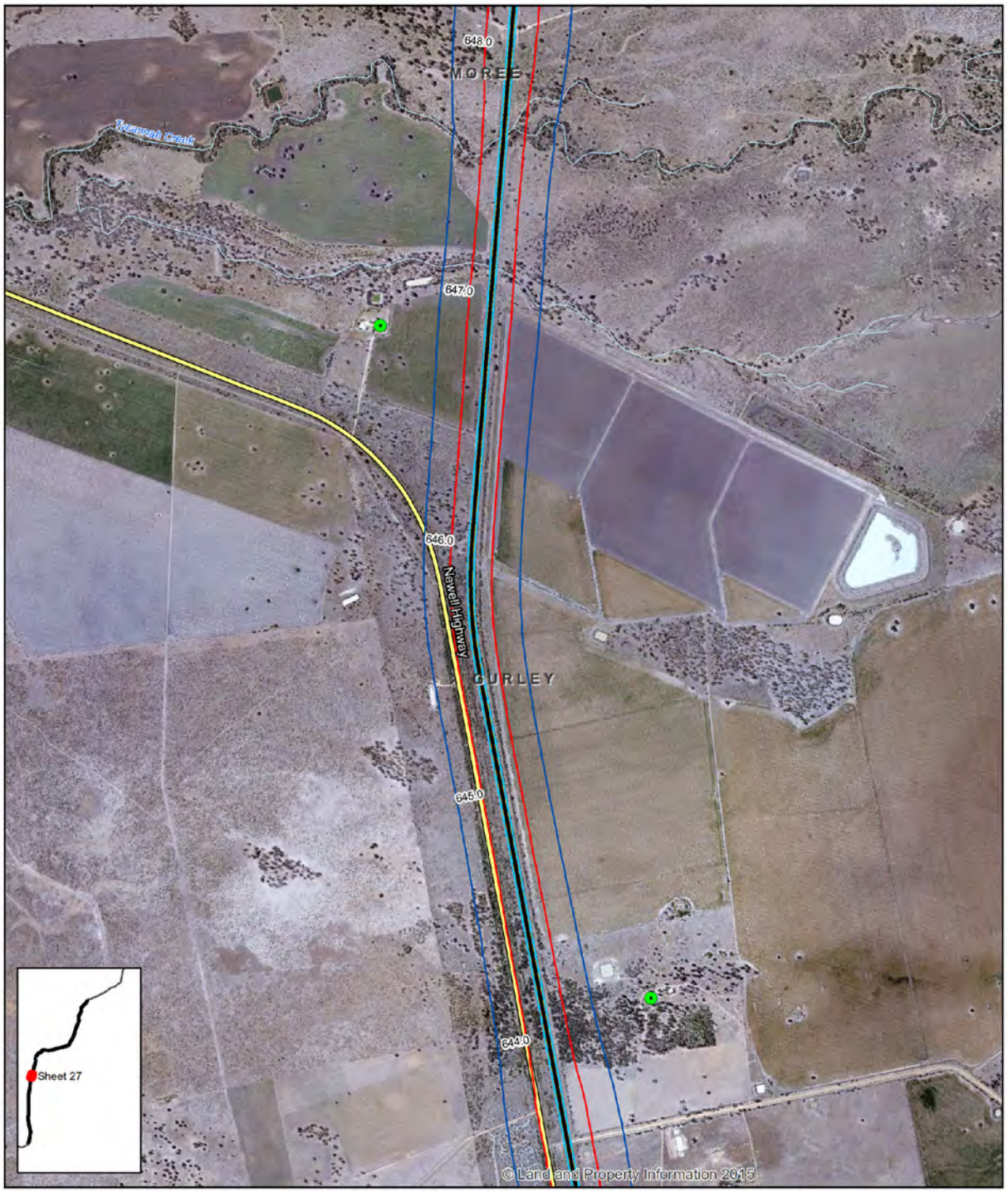
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

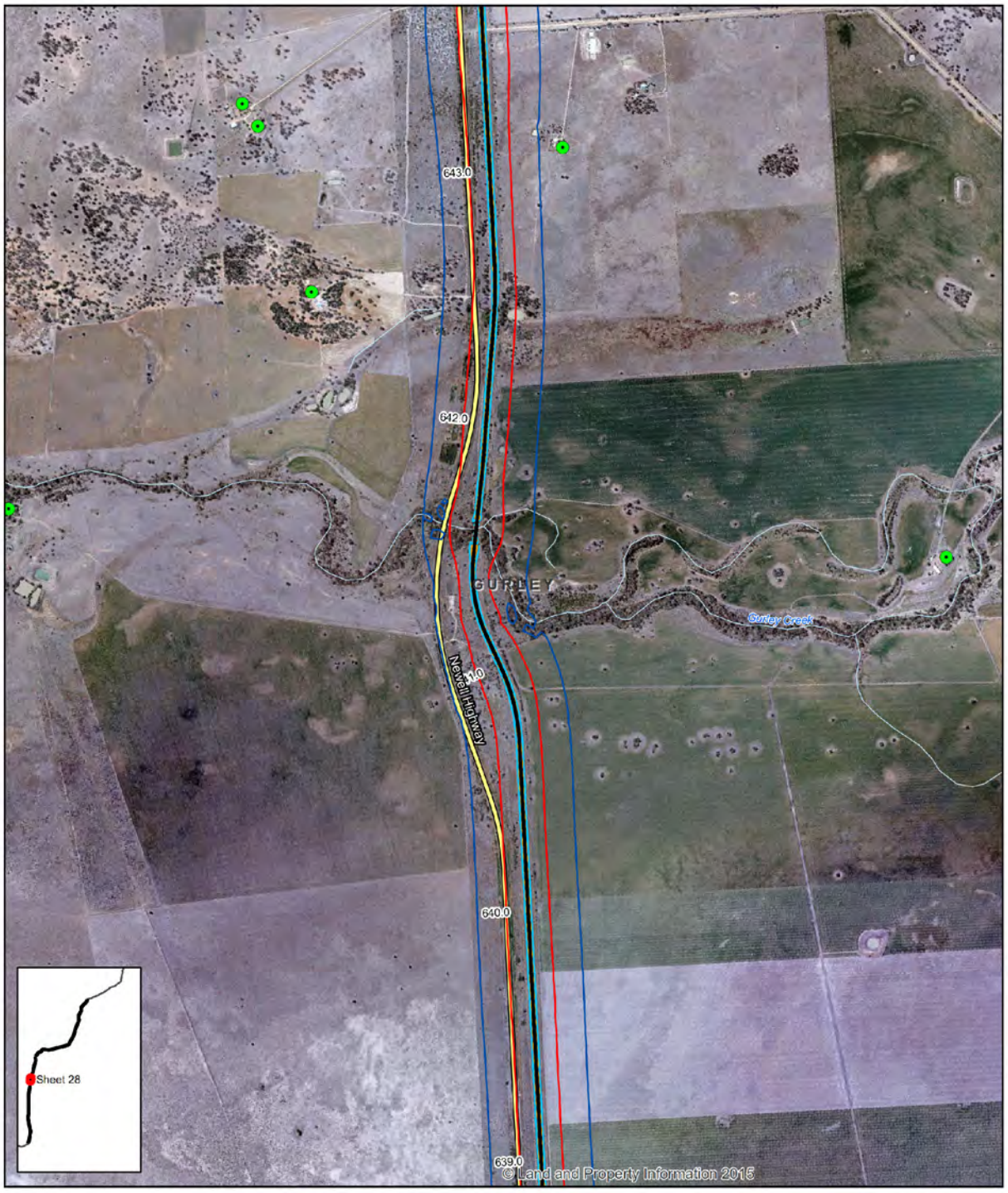
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

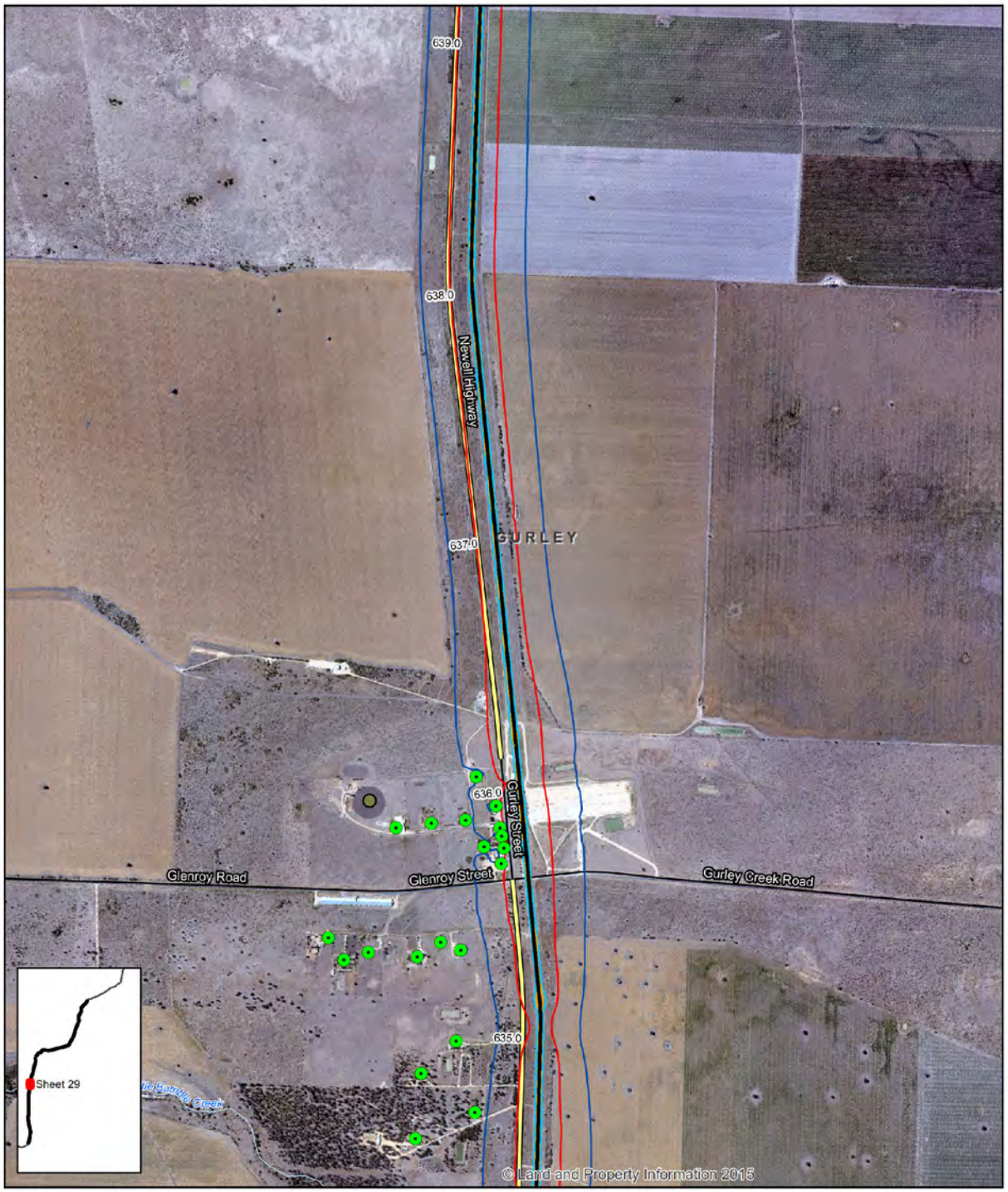
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LEGEND

- Residential receiver
- Passive recreation
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 29

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 30

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

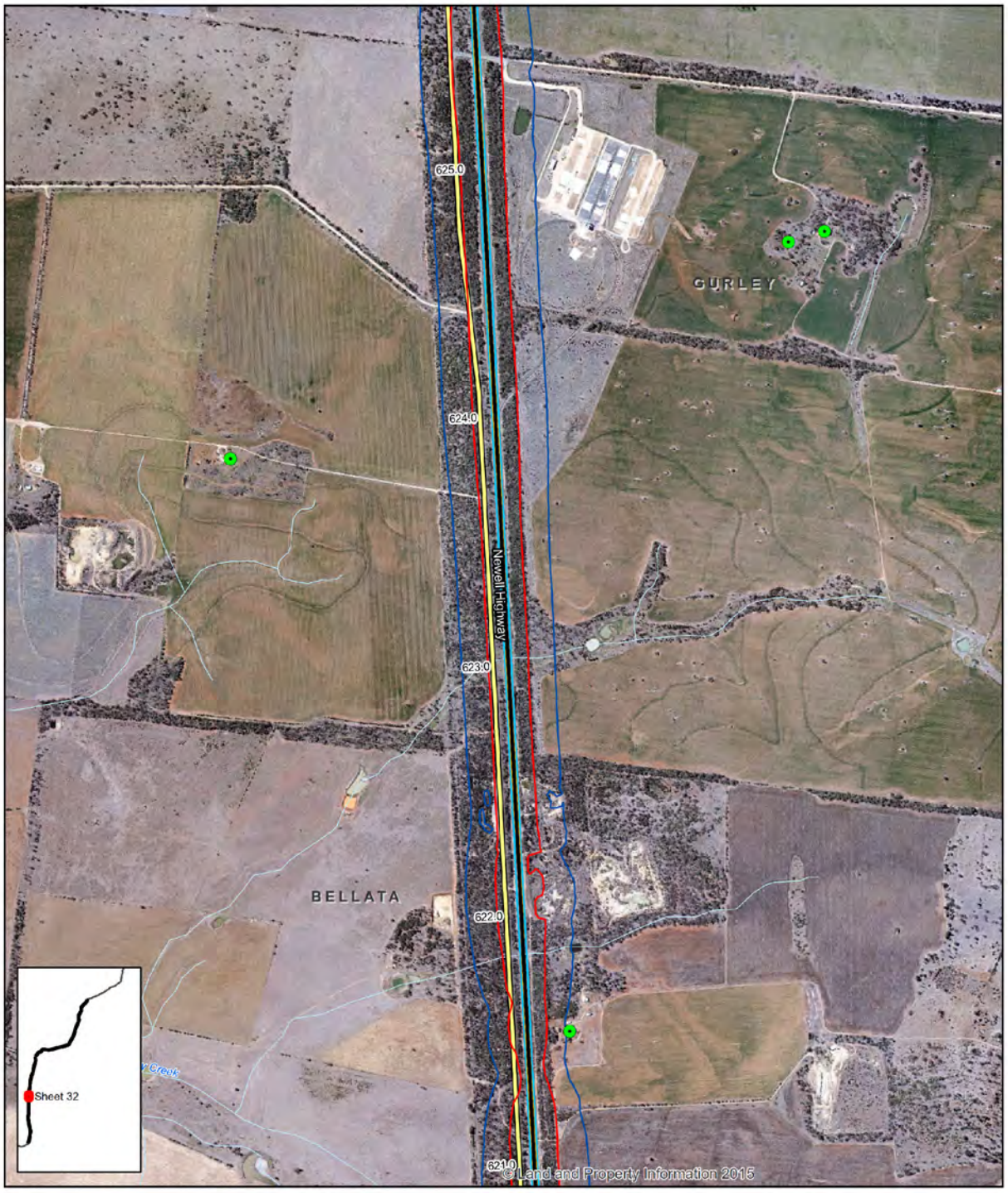
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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Figure E3- Sheet 32

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

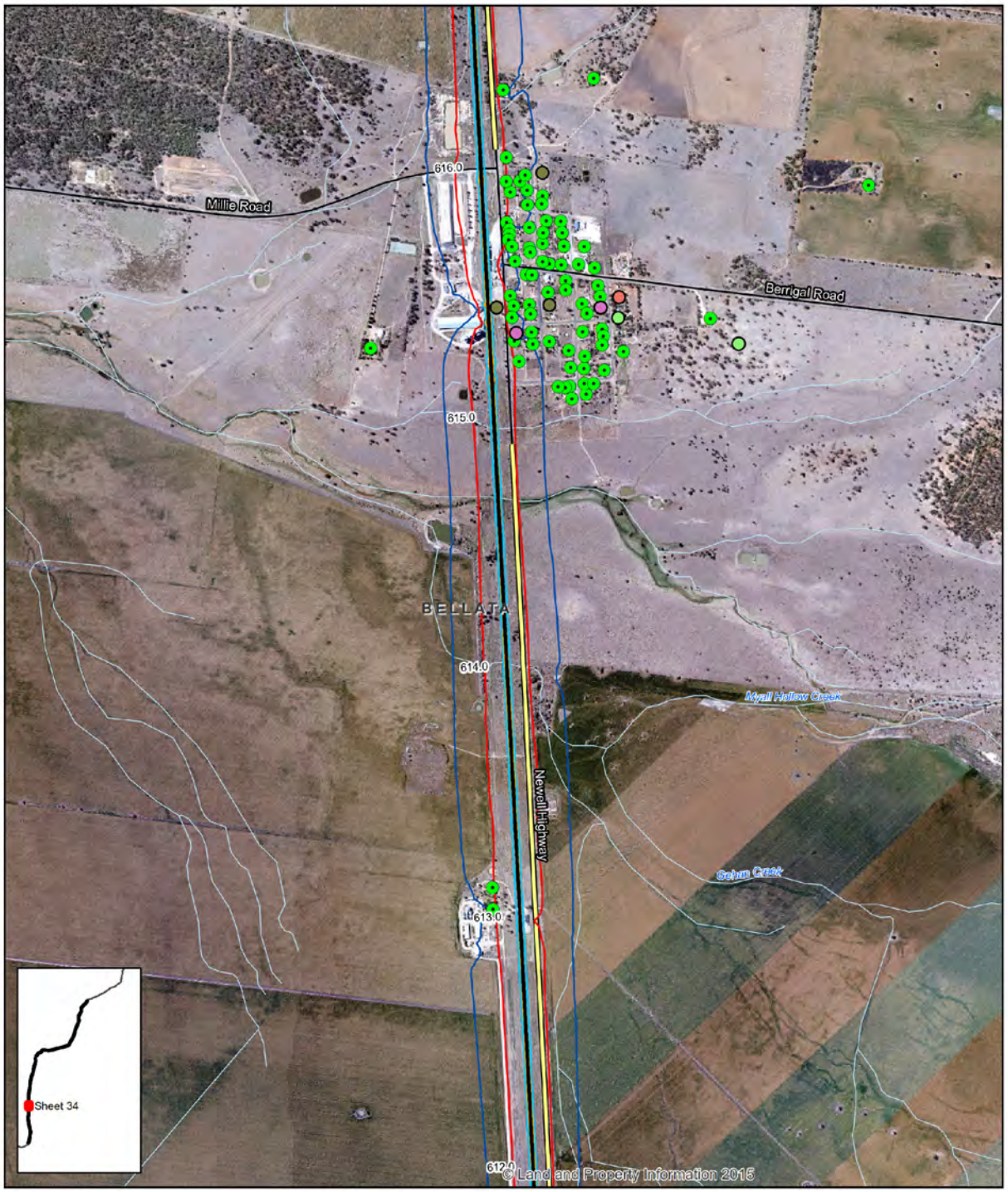
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LEGEND

- Residential receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Figure E3- Sheet 34

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N005_NNS_2040_Leq_0.mxd

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

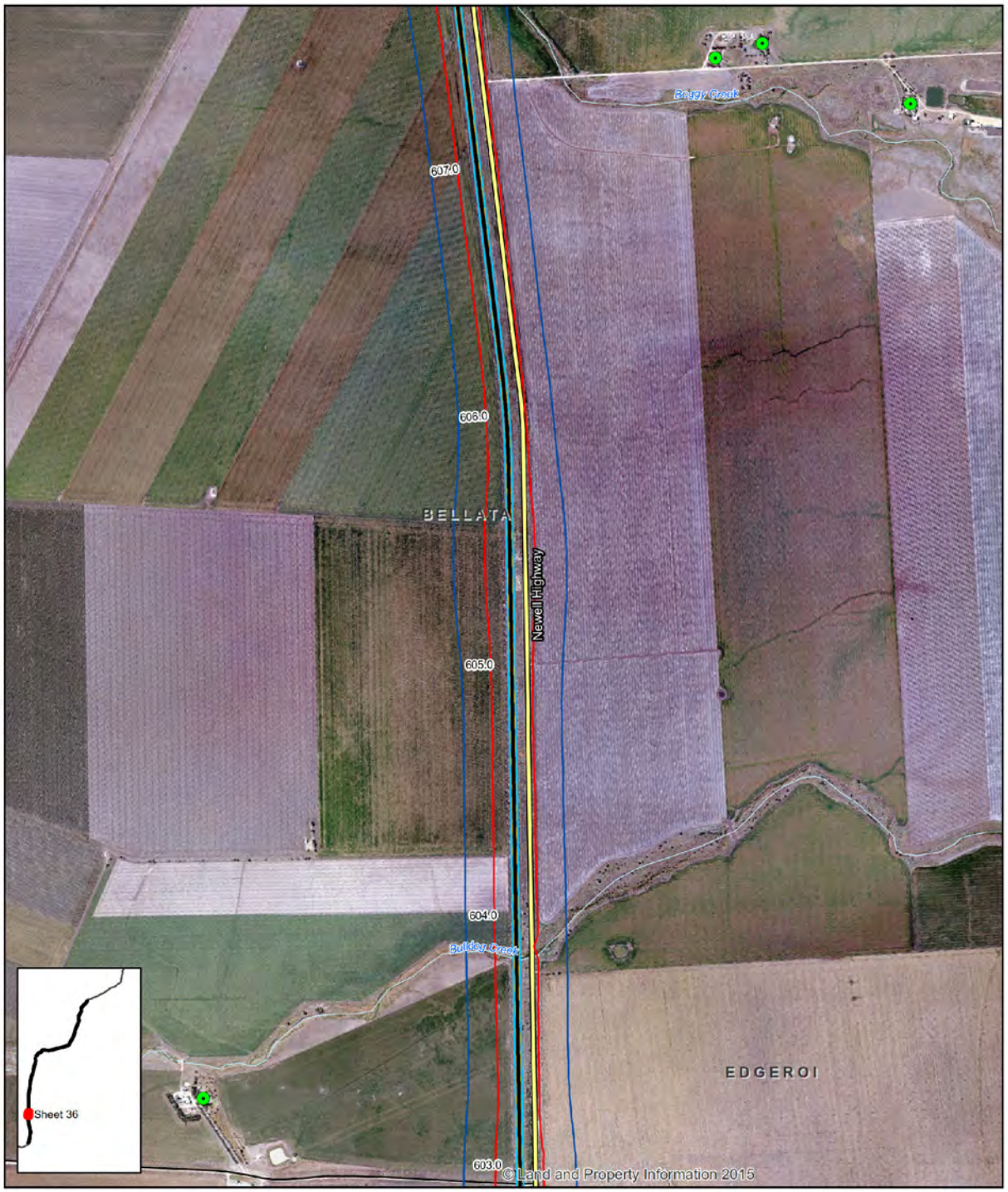
Figure E3- Sheet 35

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

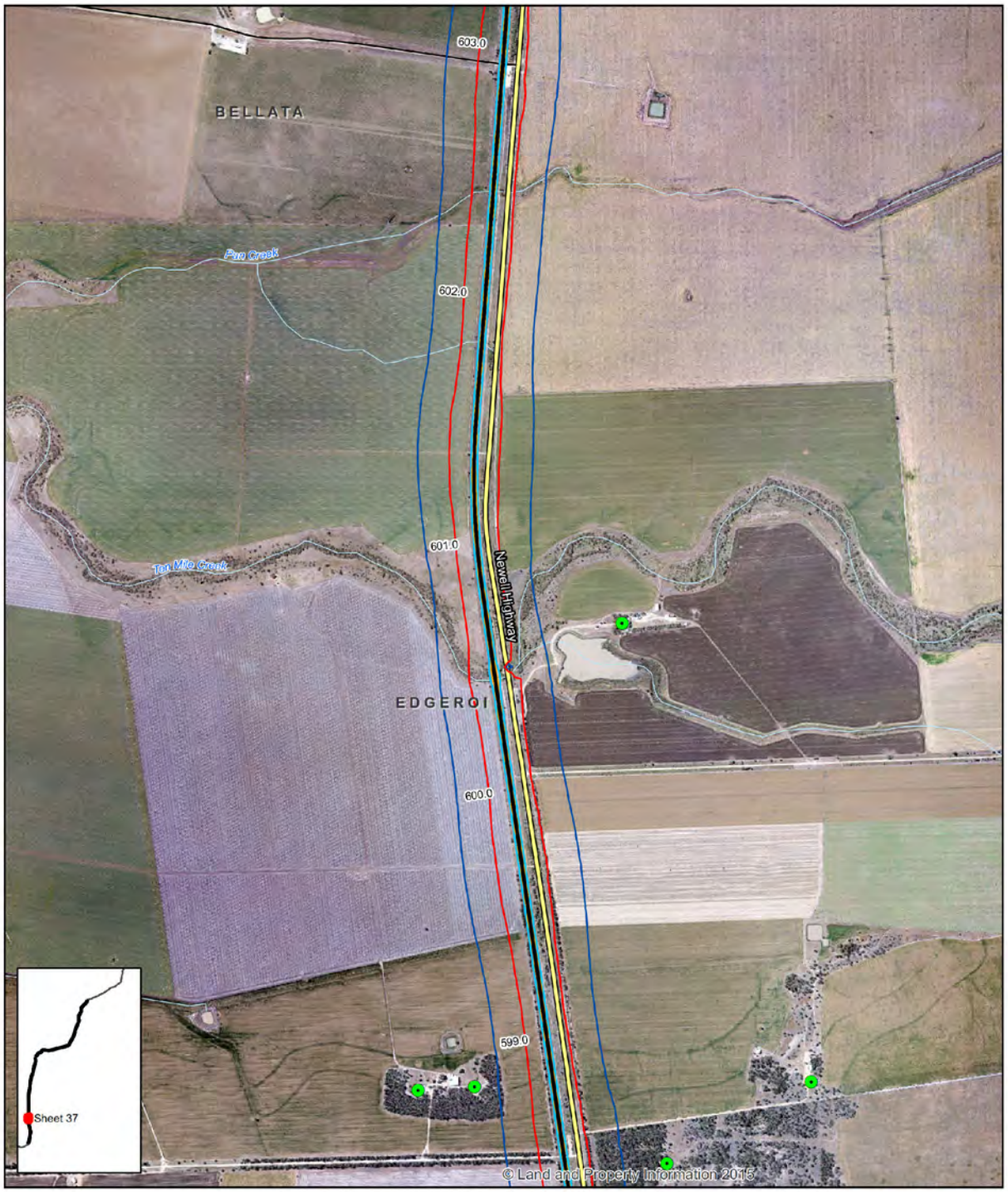
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

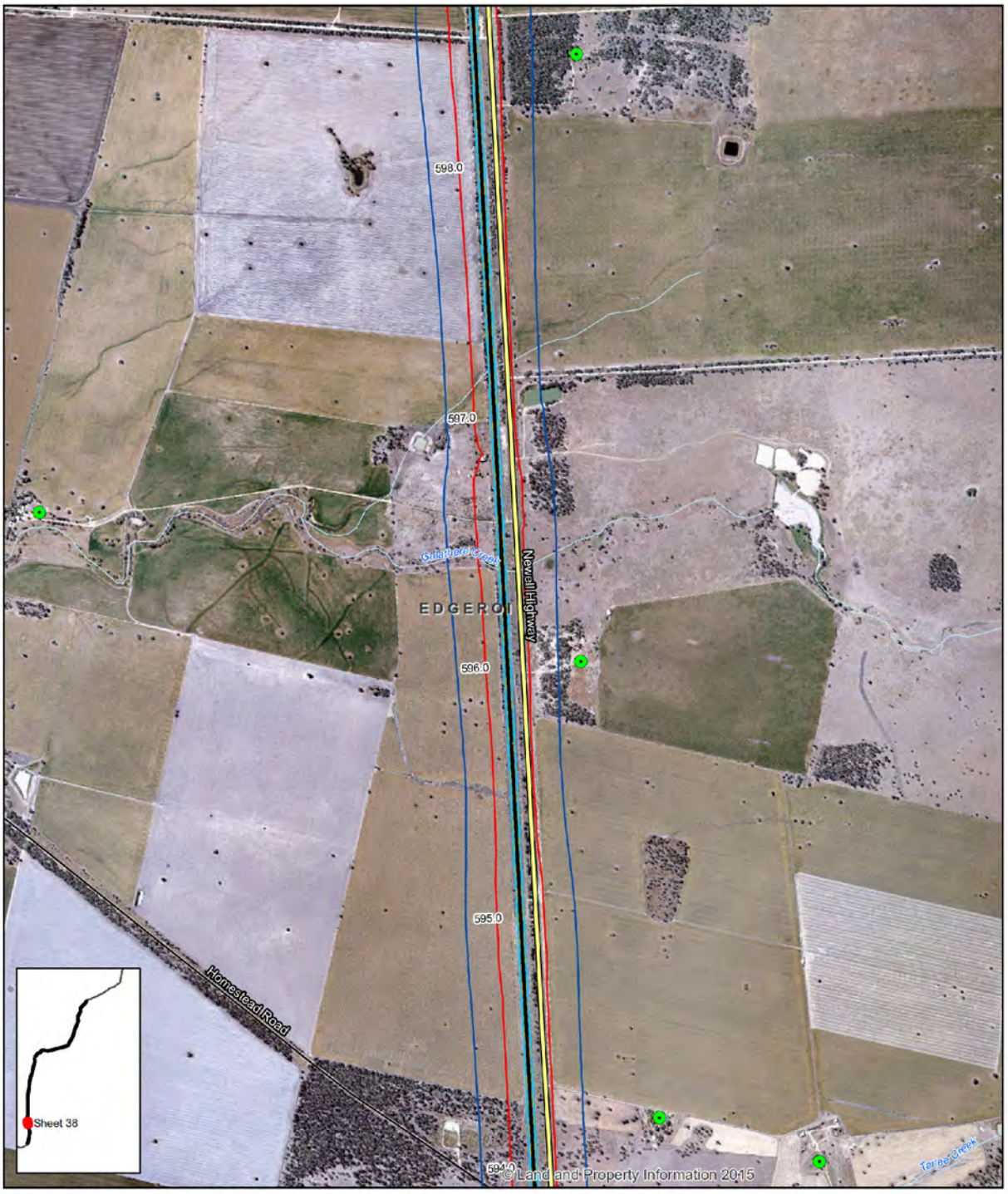
Figure E3- Sheet 37

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

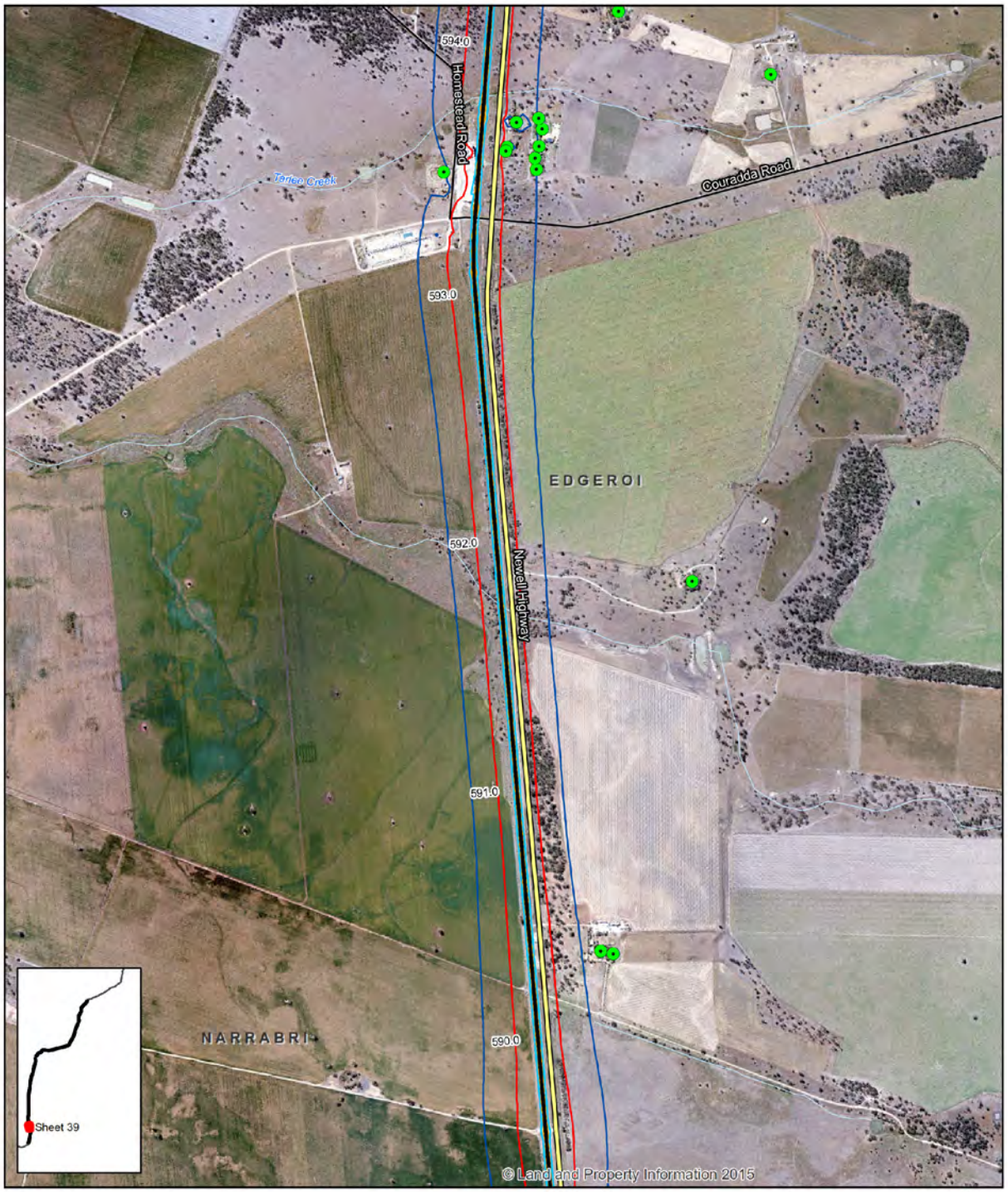
Figure E3- Sheet 38

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

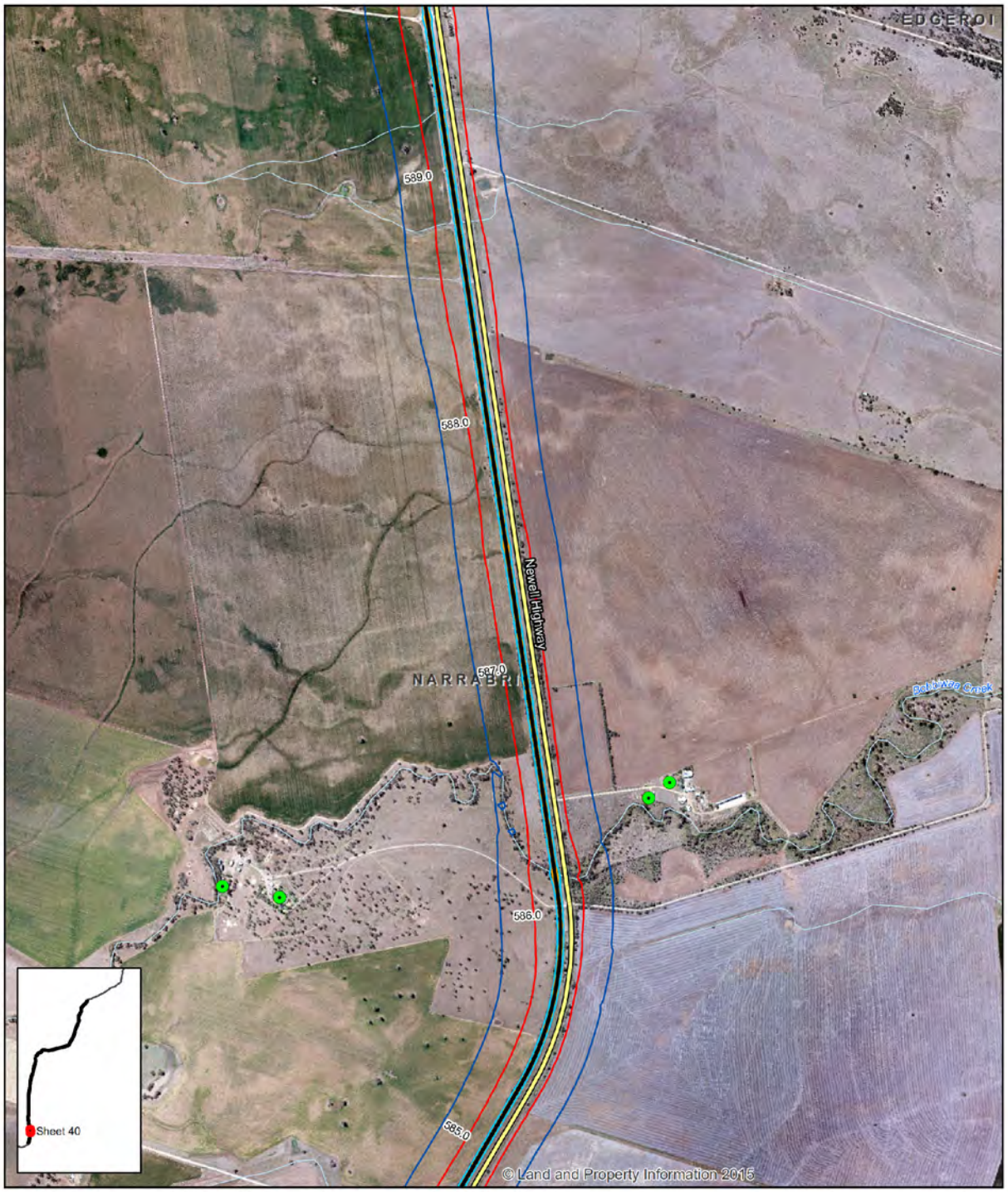
Figure E3- Sheet 39

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LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

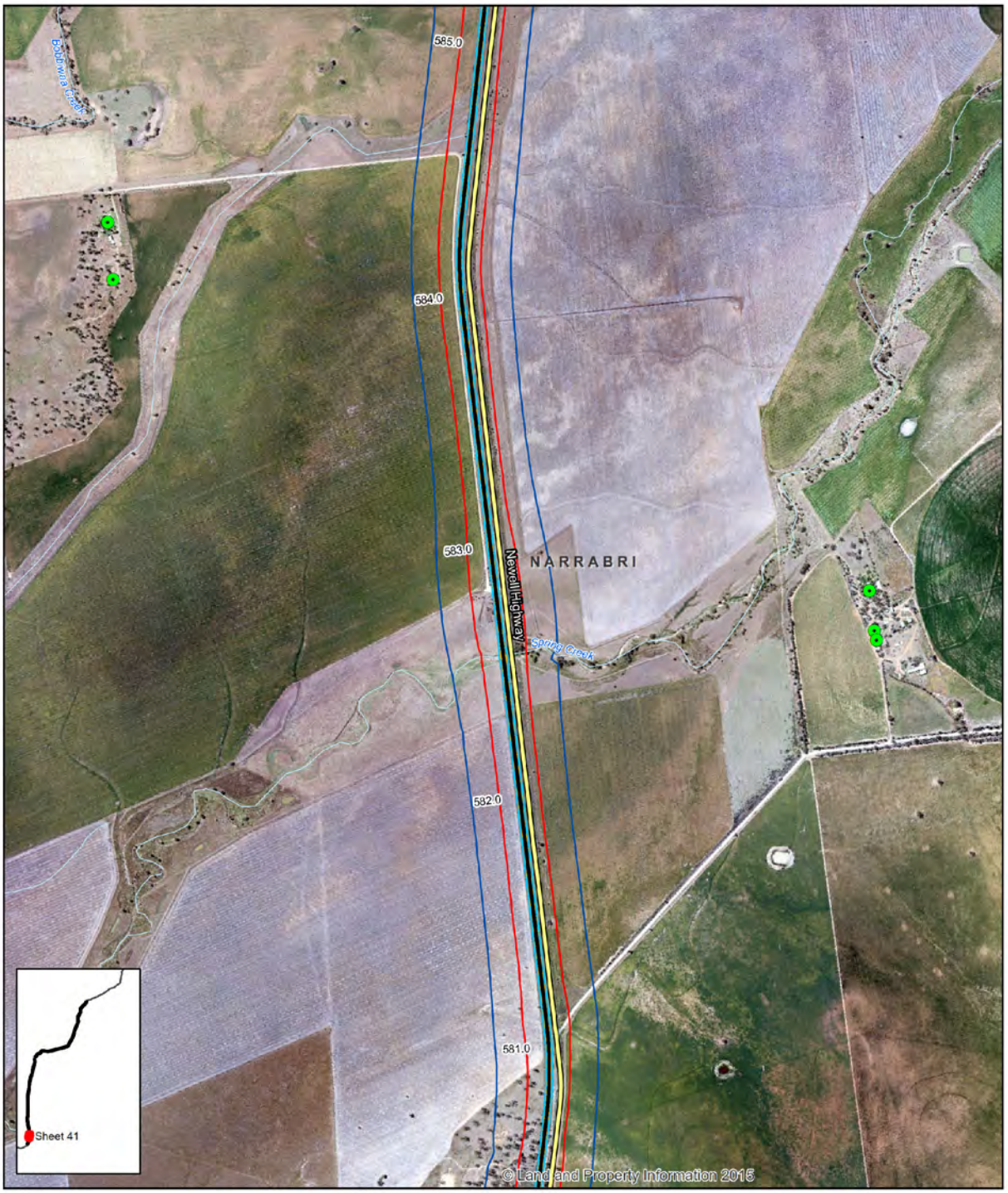
Figure E3- Sheet 40

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours, LAeq
2040 build vs 2040 no build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

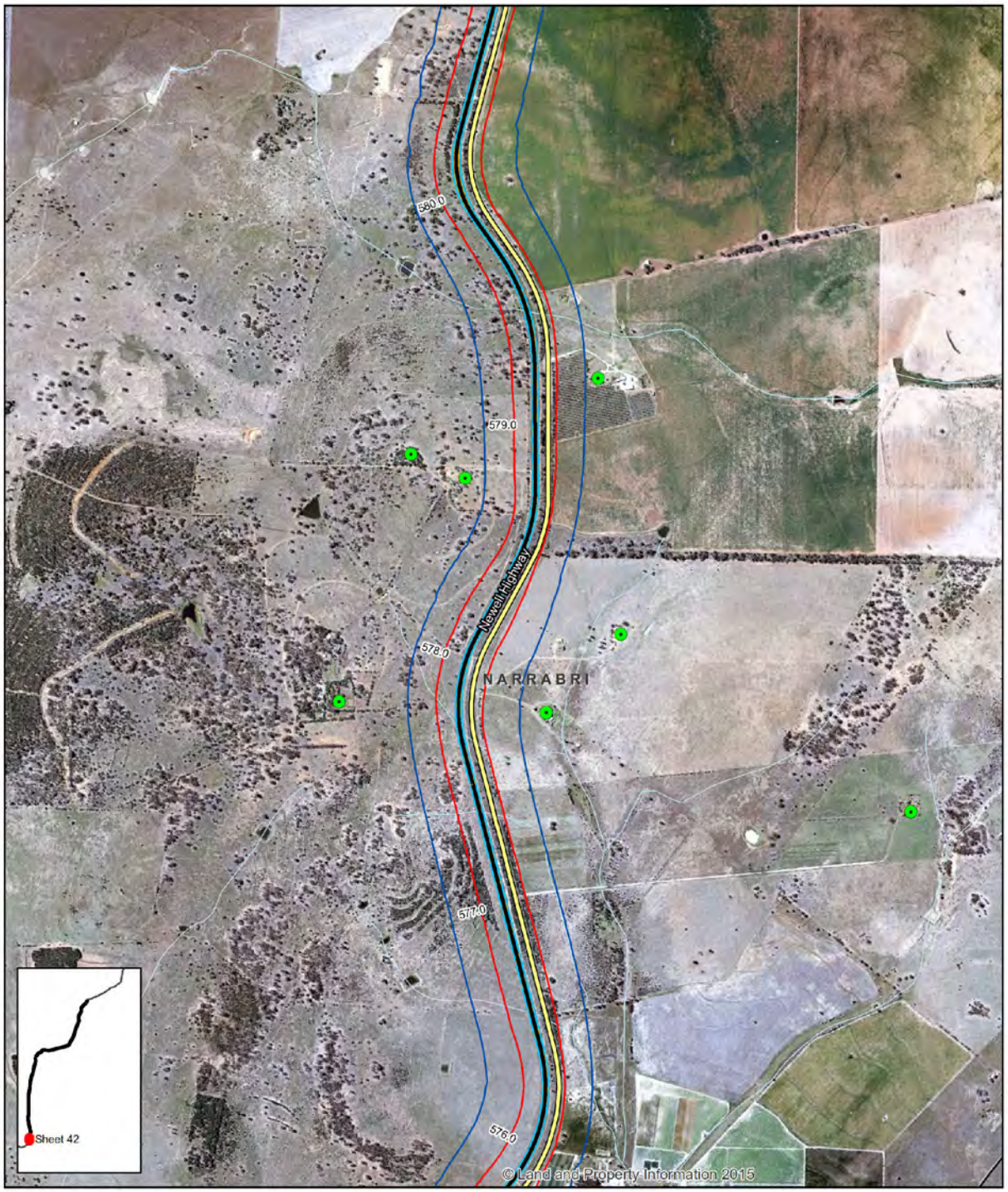
Figure E3- Sheet 41

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Figure E3- Sheet 42

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N005_NNS_2040_Leq_0.mxd

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Residential receiver
- The proposal
- Watercourse
- Highway
- Road
- 2040 Build 60dB(A) LAeq 9-hour
- 2040 Build 65dB(A) LAeq 15-hour
- 2040 No-Build 60dB(A) LAeq 9-hour
- 2040 No-Build 65dB(A) LAeq 15-hour

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours, LAeq 2040 build vs 2040 no build

Figure E3- Sheet 43

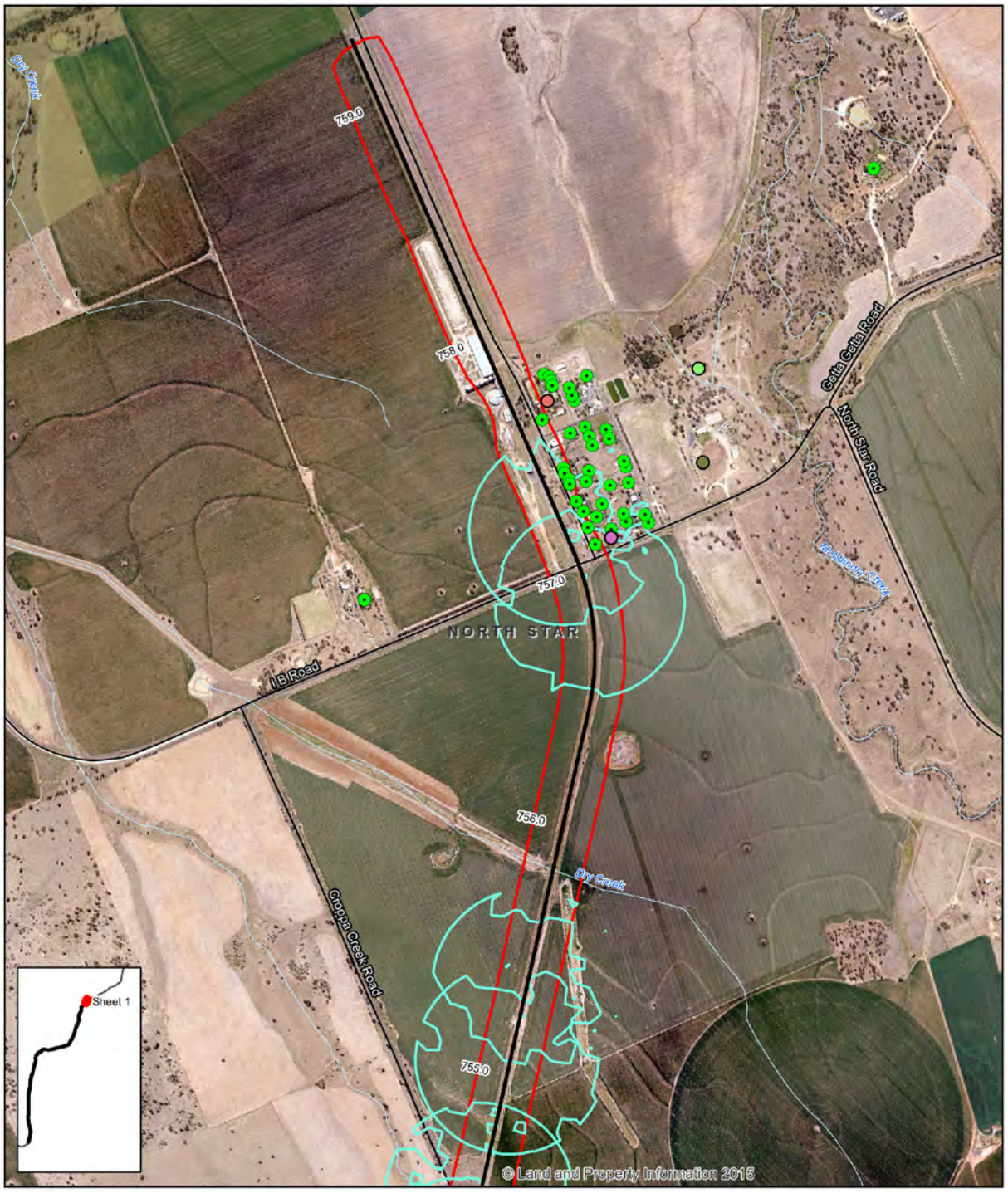
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba

Appendix F – Operational rail noise contours, LAMax



LEGEND

- Sensitive receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

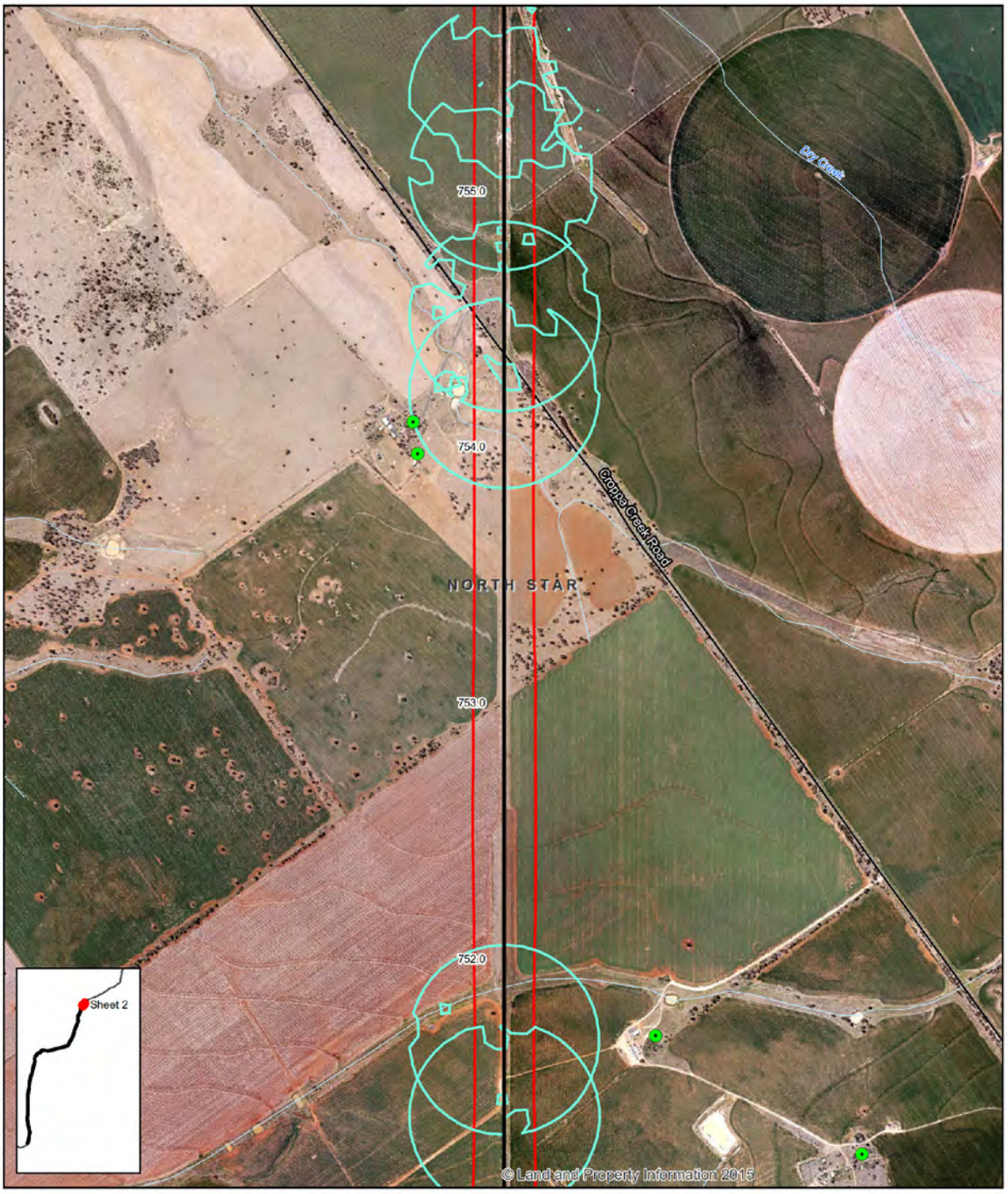
Figure F1- Sheet 1

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

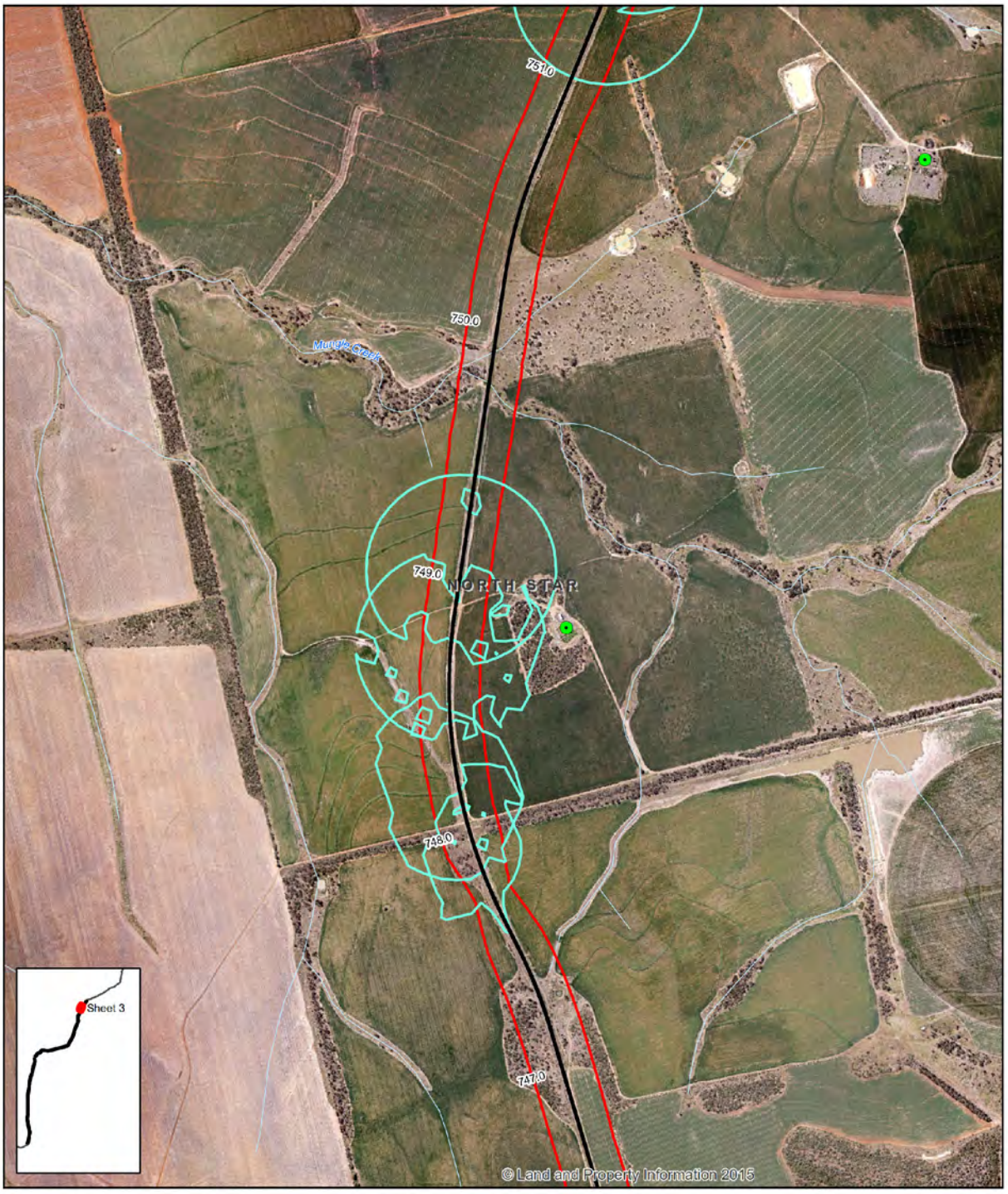
Figure F1- Sheet 2

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- LAMax 85dB(A) - Rail
- Watercourse
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours LMax build

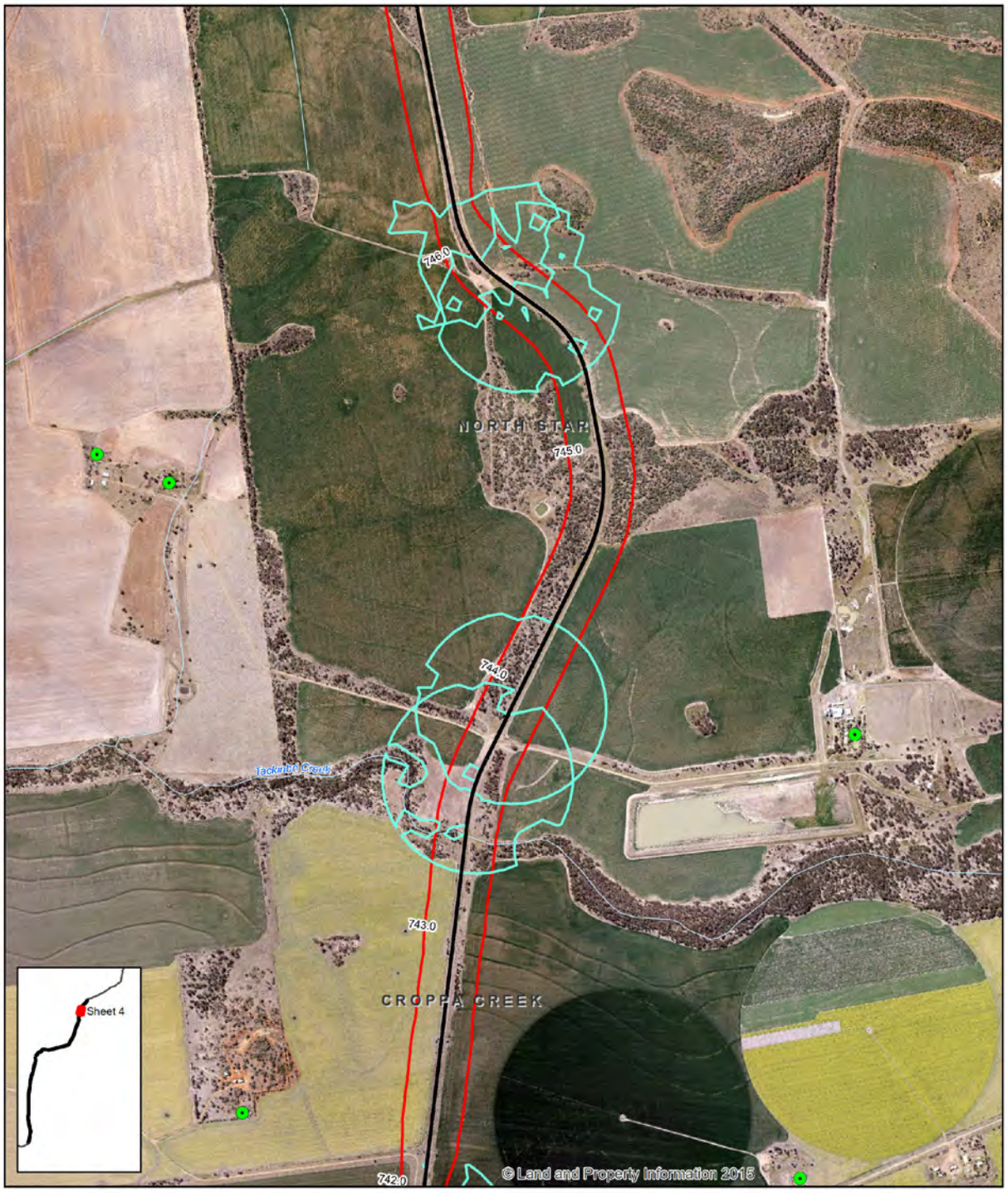
Figure F1- Sheet 3

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

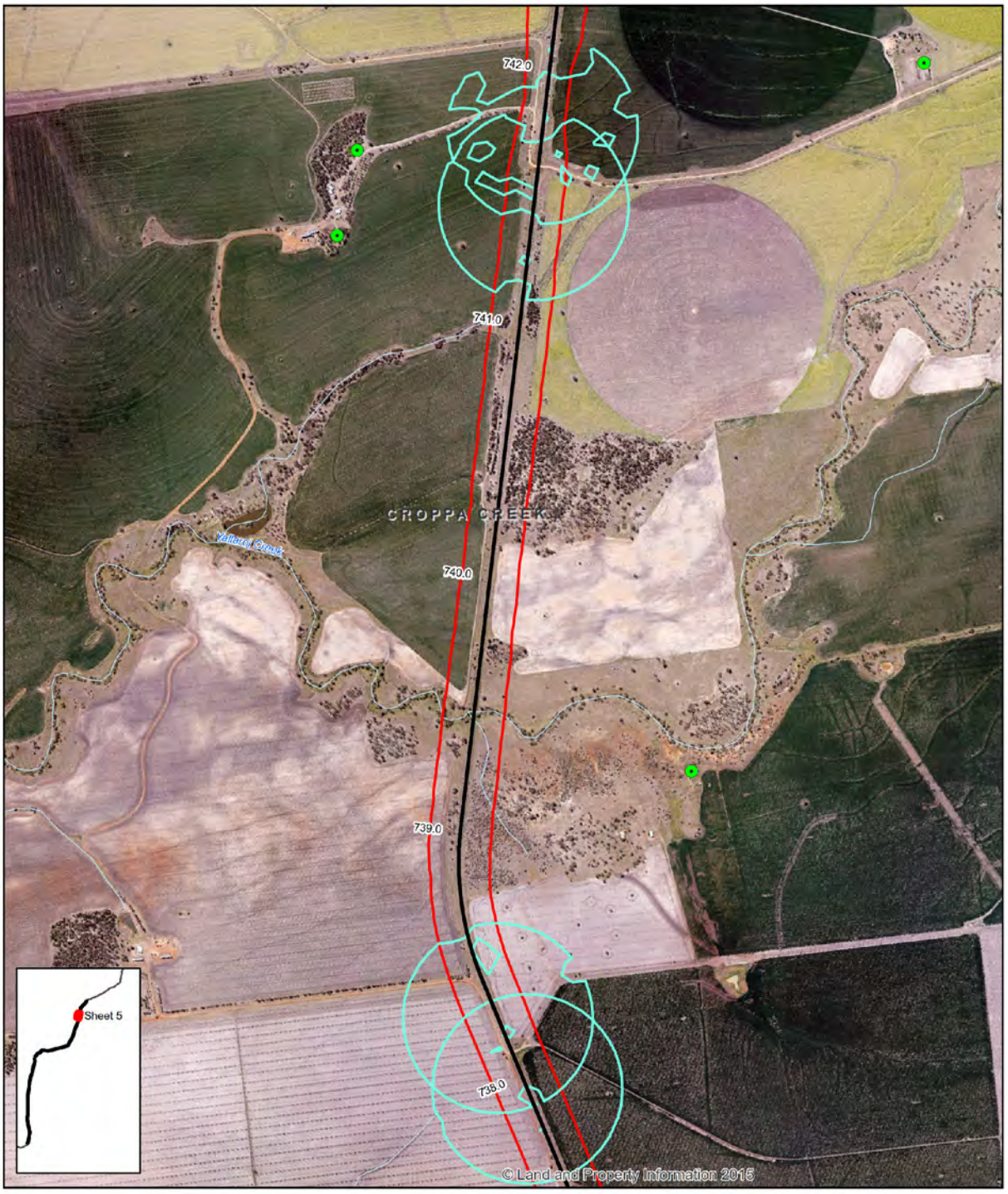
Figure F1- Sheet 4

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

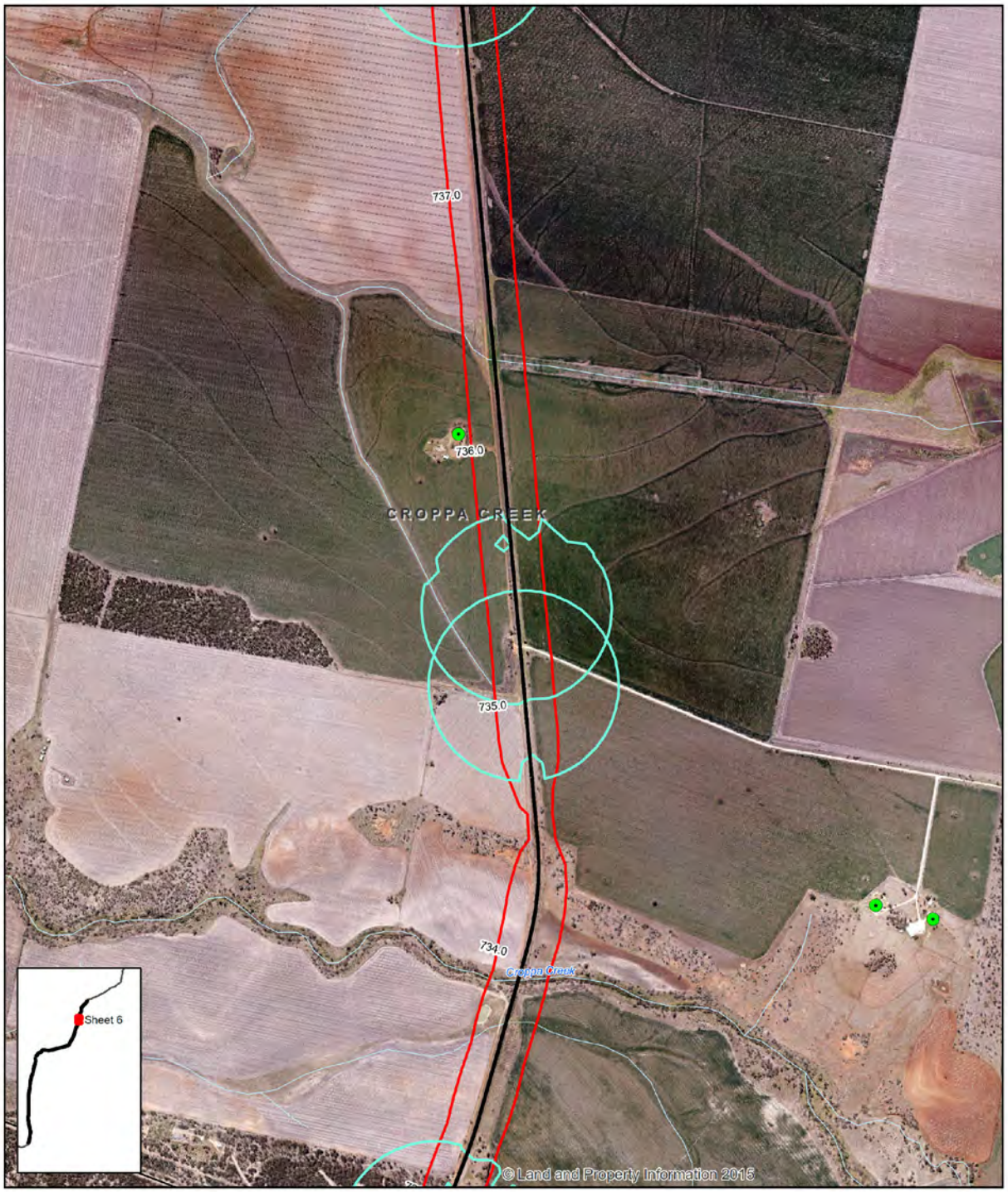
Figure F1- Sheet 5

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Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

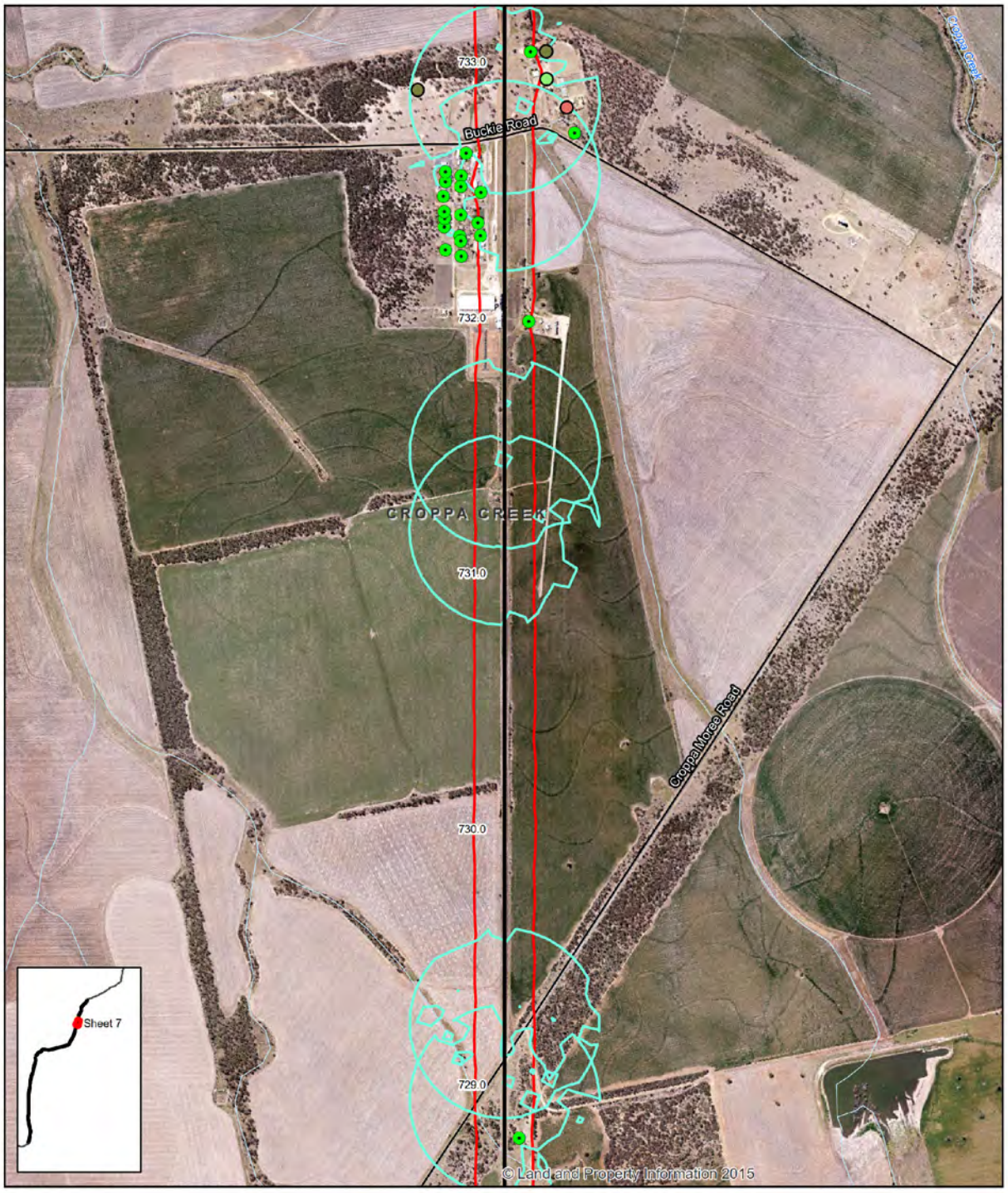
Figure F1- Sheet 6

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- Active recreation
- Education
- Passive recreation
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

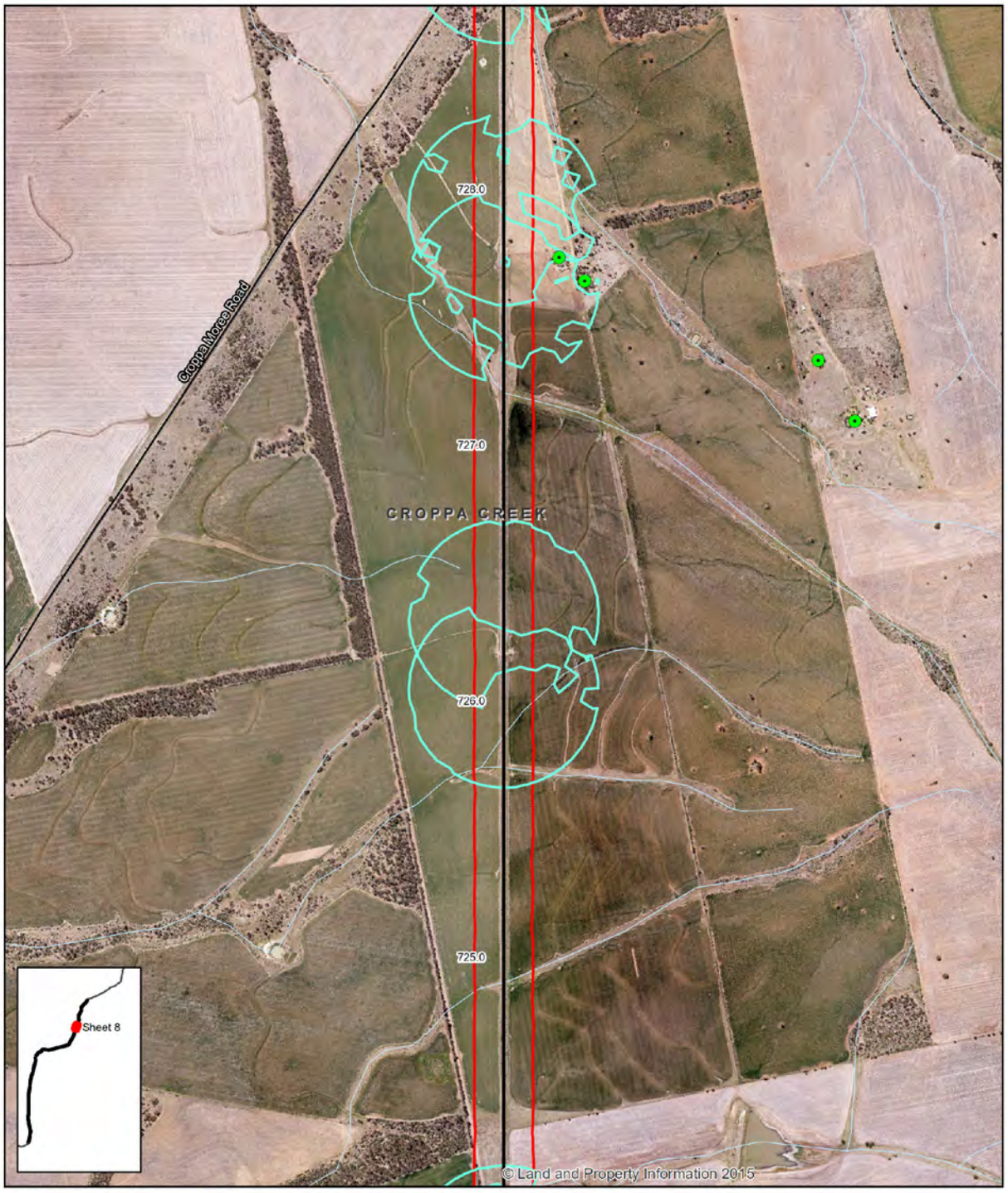
Figure F1- Sheet 7

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Operational rail noise contours
LMax build

Job Number 22-17916
Revision 0
Date 02 Jun 2017

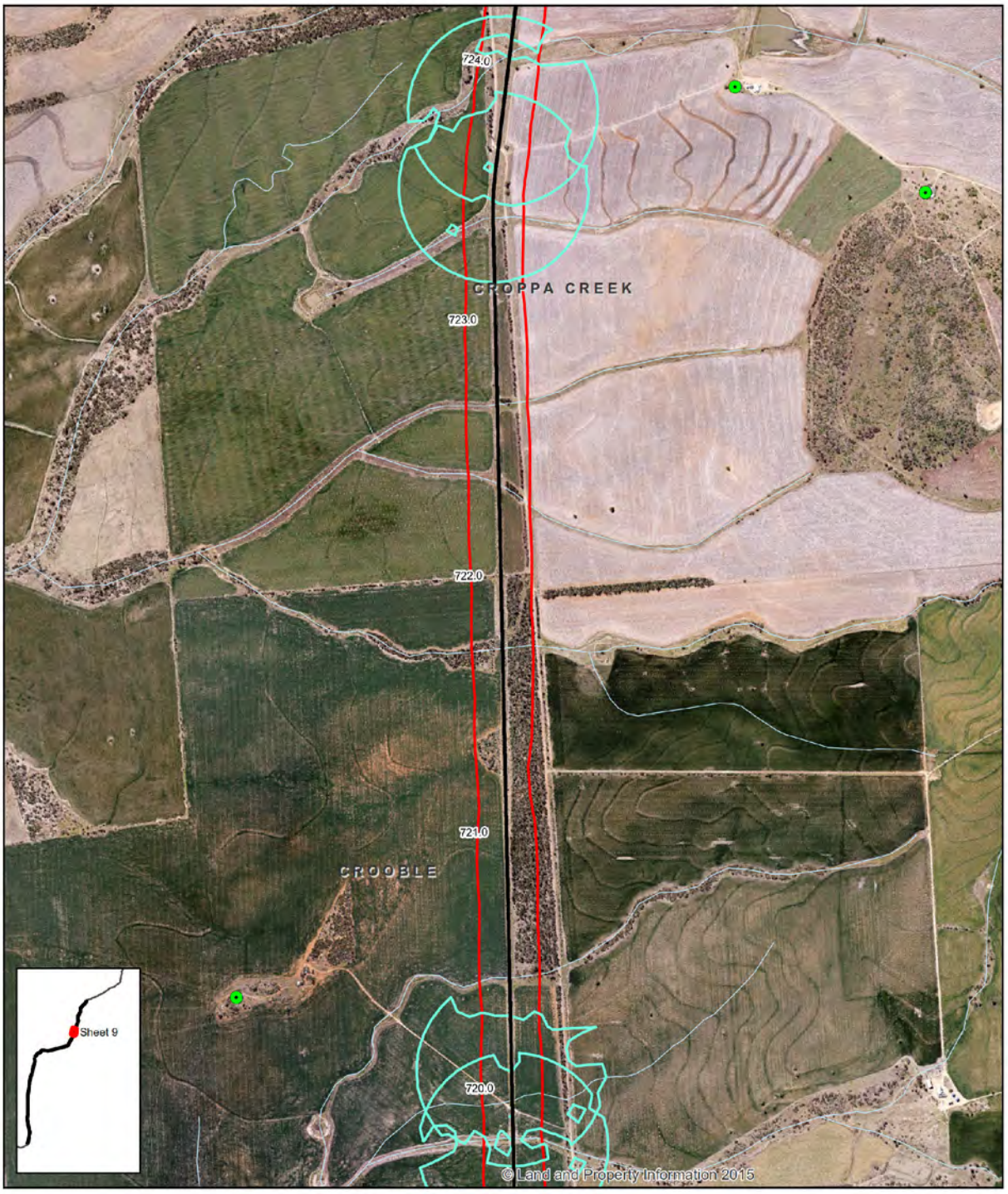
Figure F1- Sheet 8

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

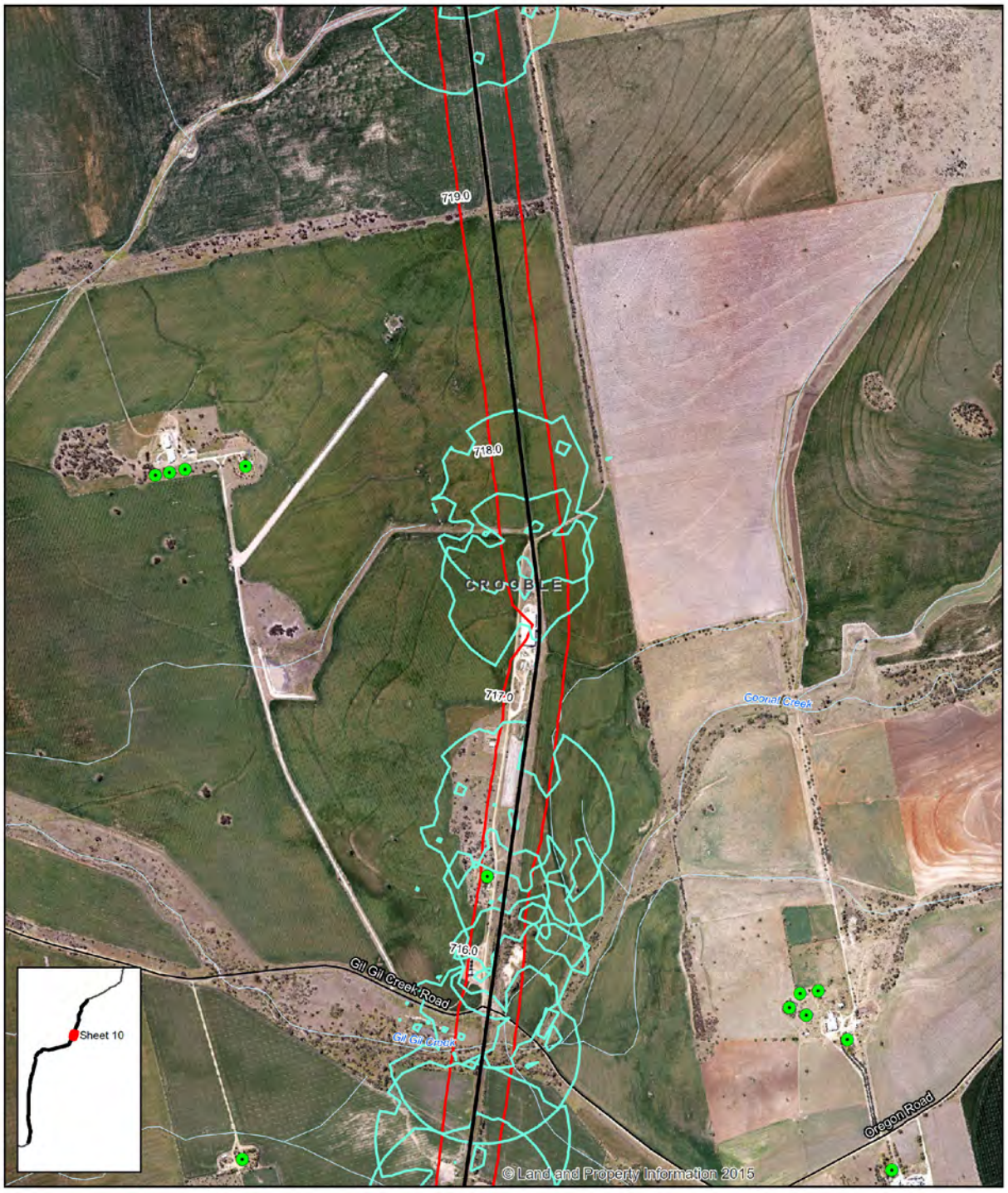
Figure F1- Sheet 9

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

Figure F1- Sheet 10

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

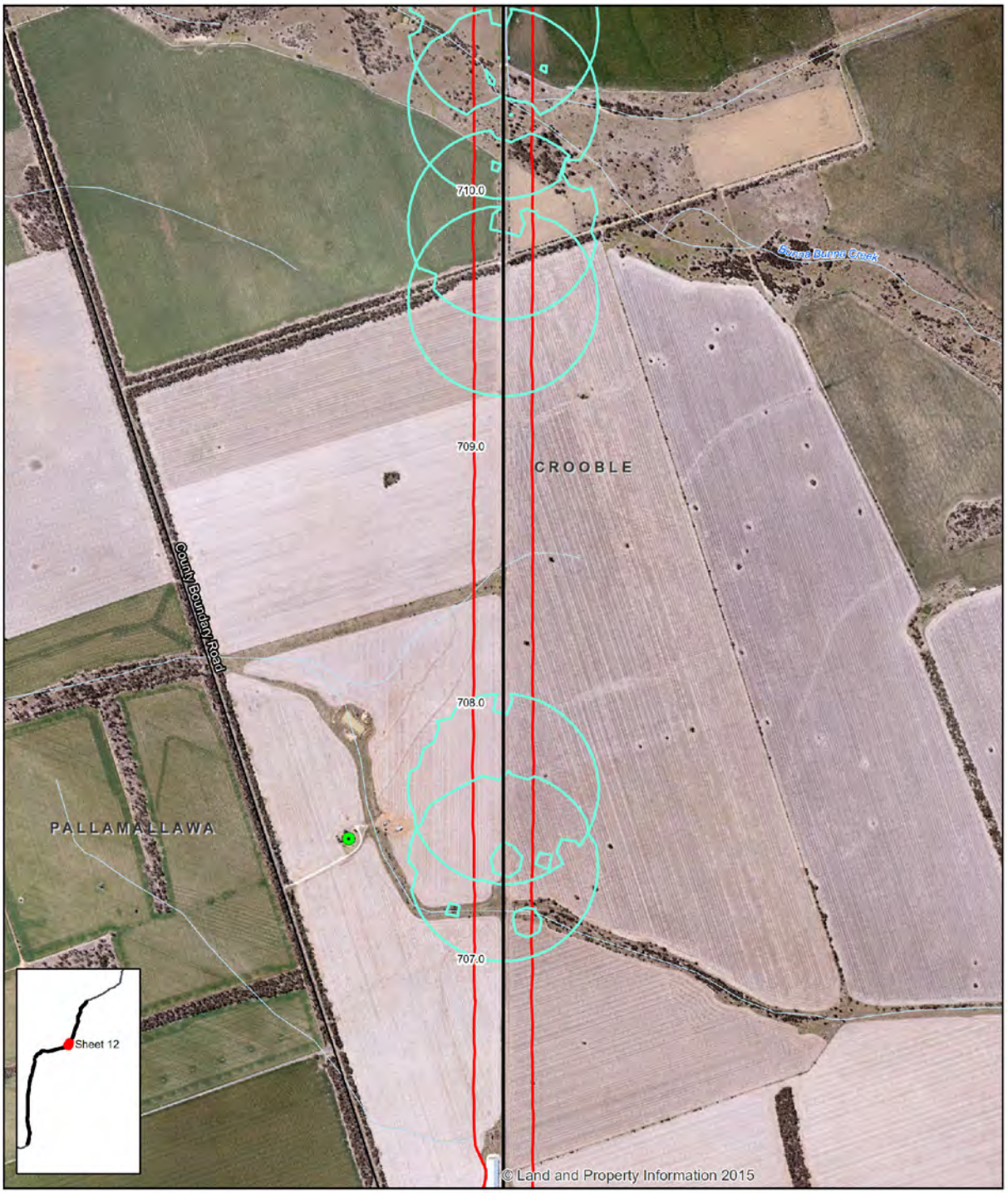
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

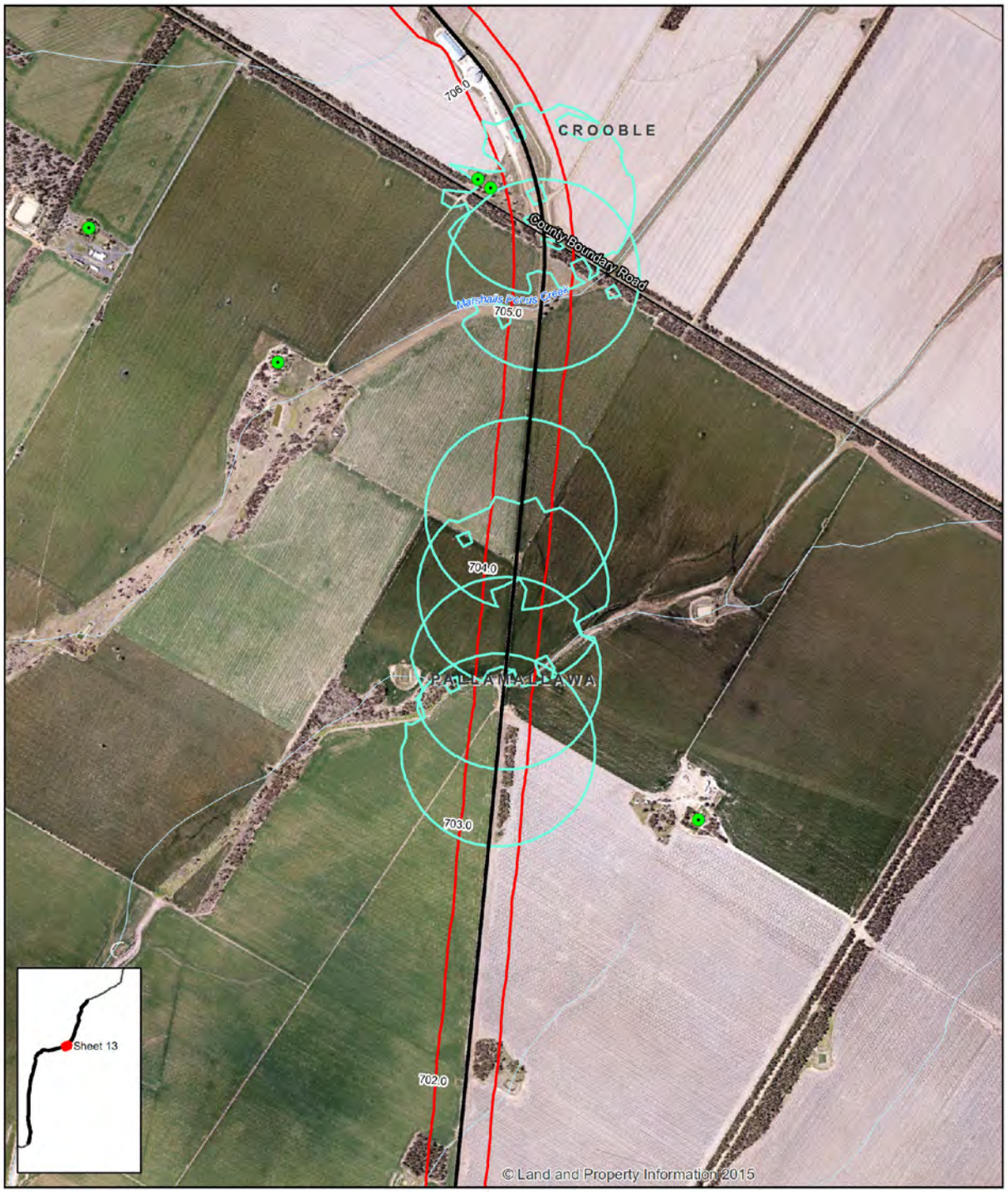
Figure F1- Sheet 12

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

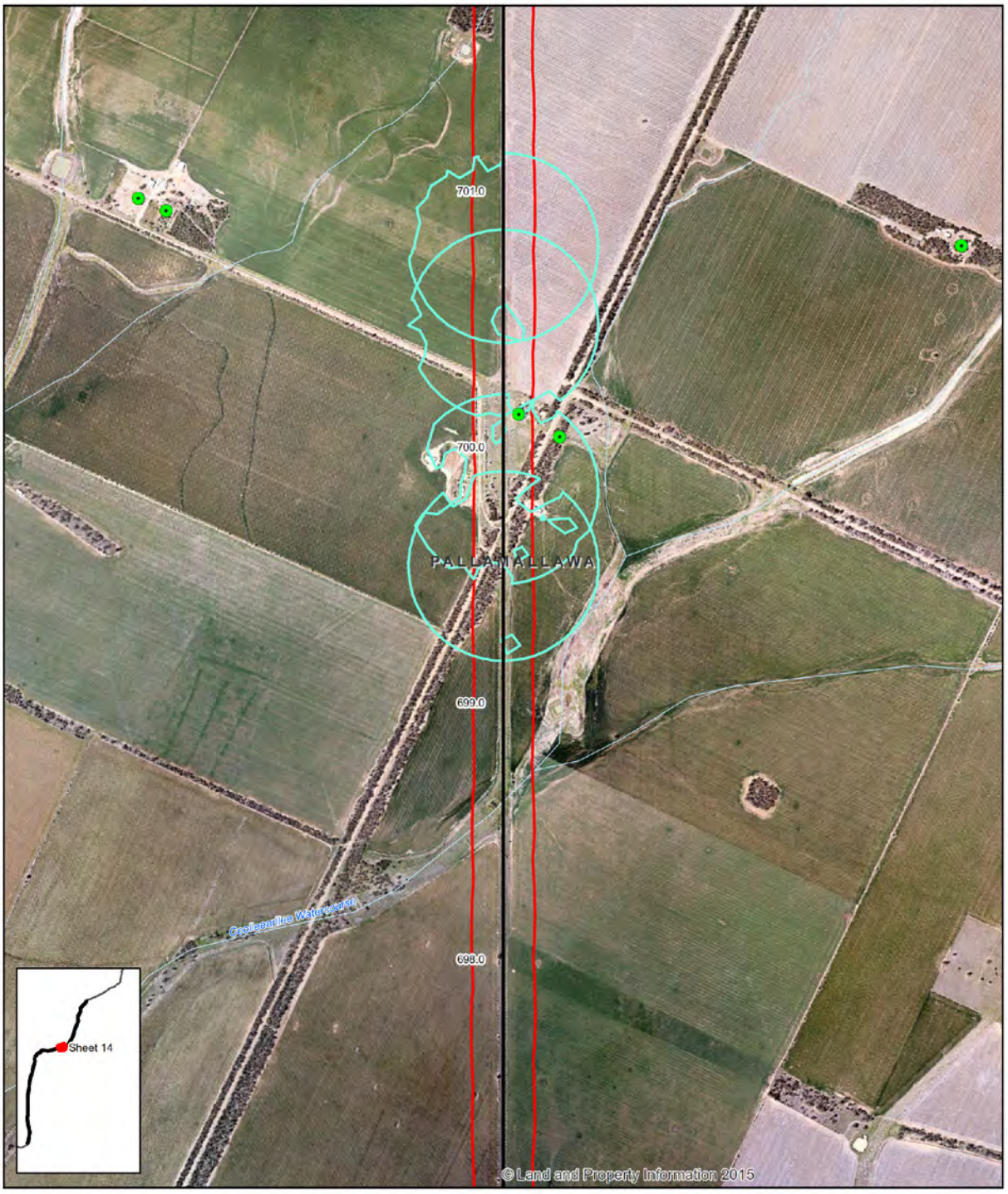
Figure F1- Sheet 13

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

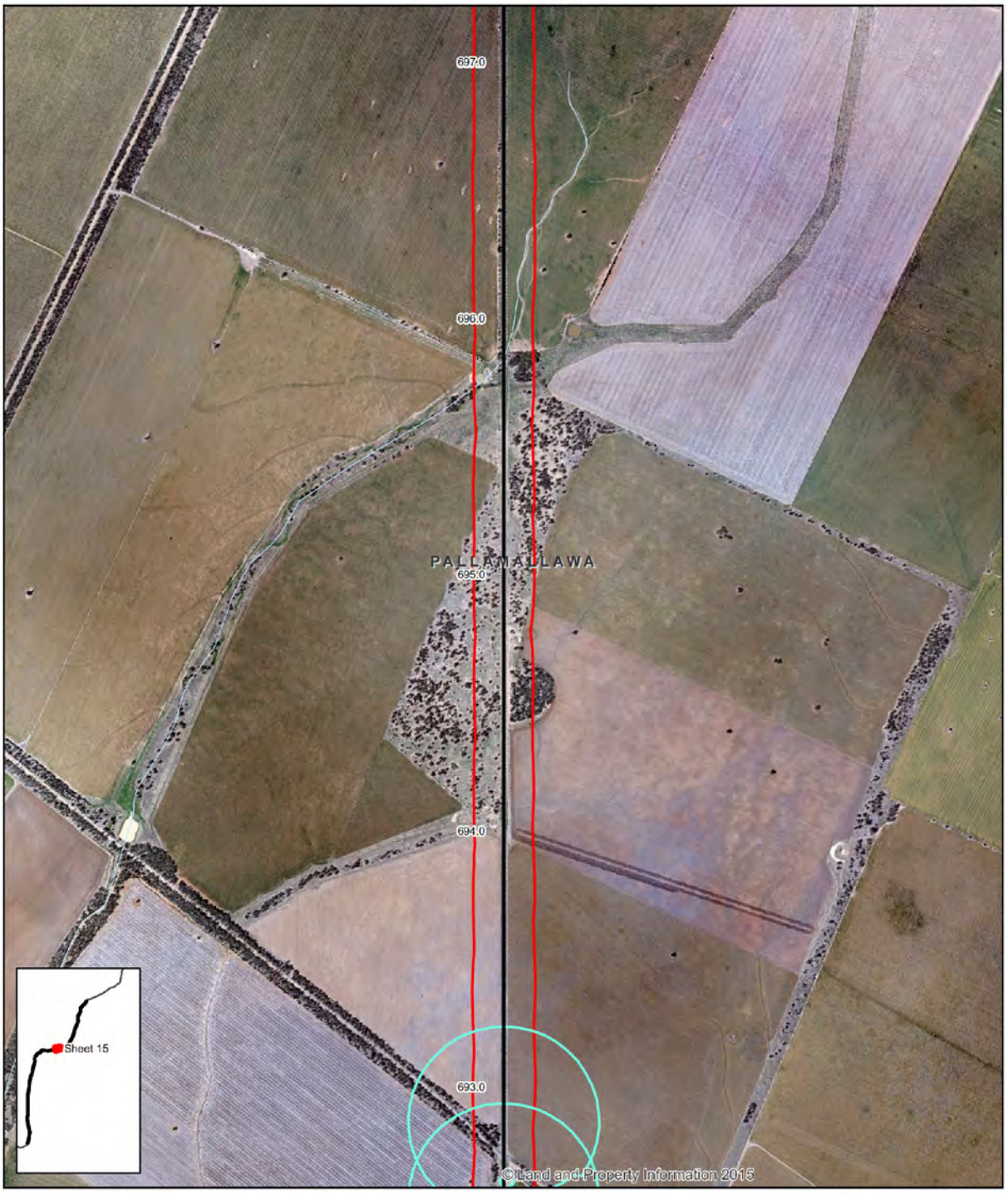
Figure F1- Sheet 14

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LEGEND

- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

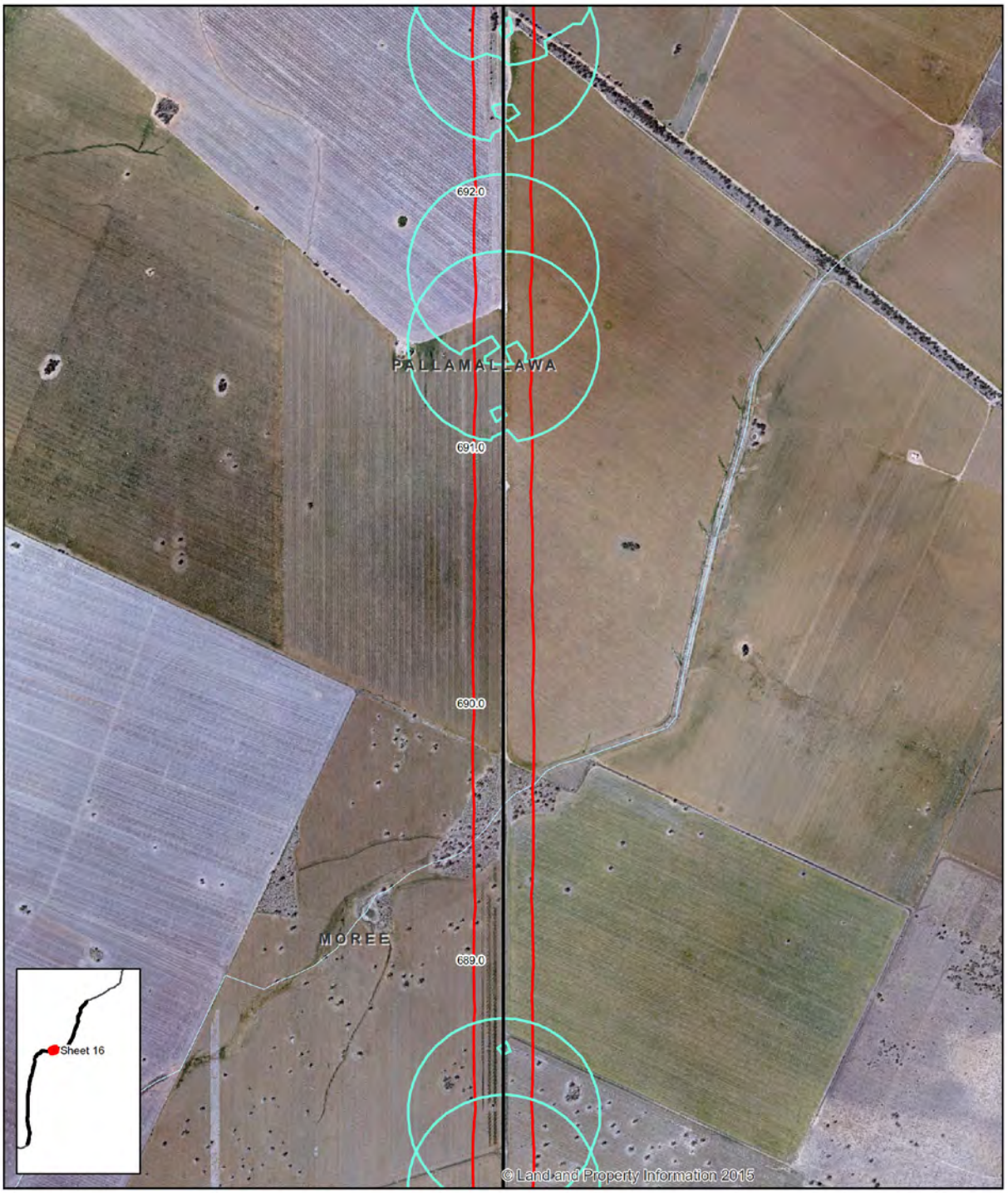
Figure F1- Sheet 15

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LEGEND

- The proposal
- Watercourse
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

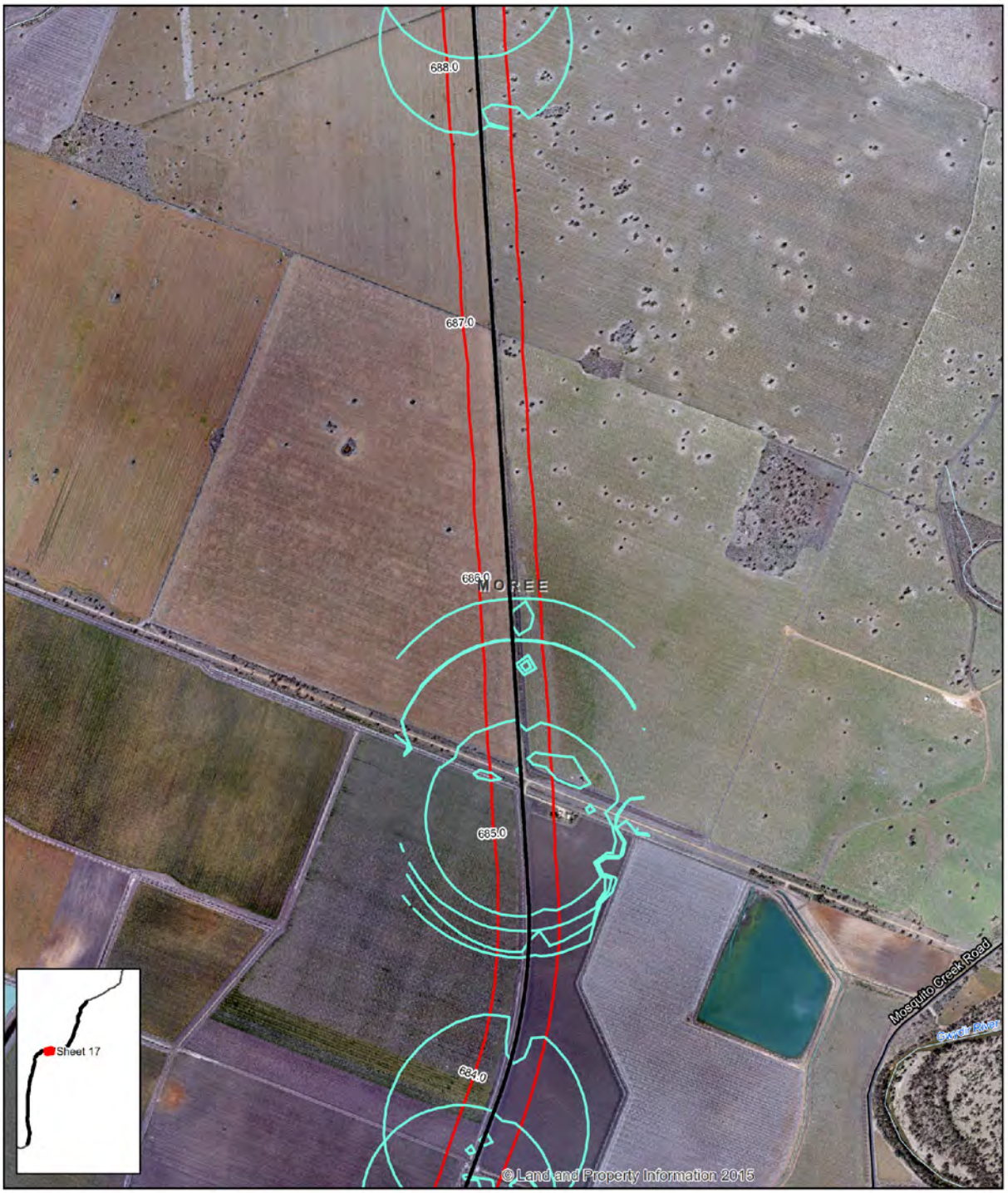
Figure F1- Sheet 16

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LEGEND

- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

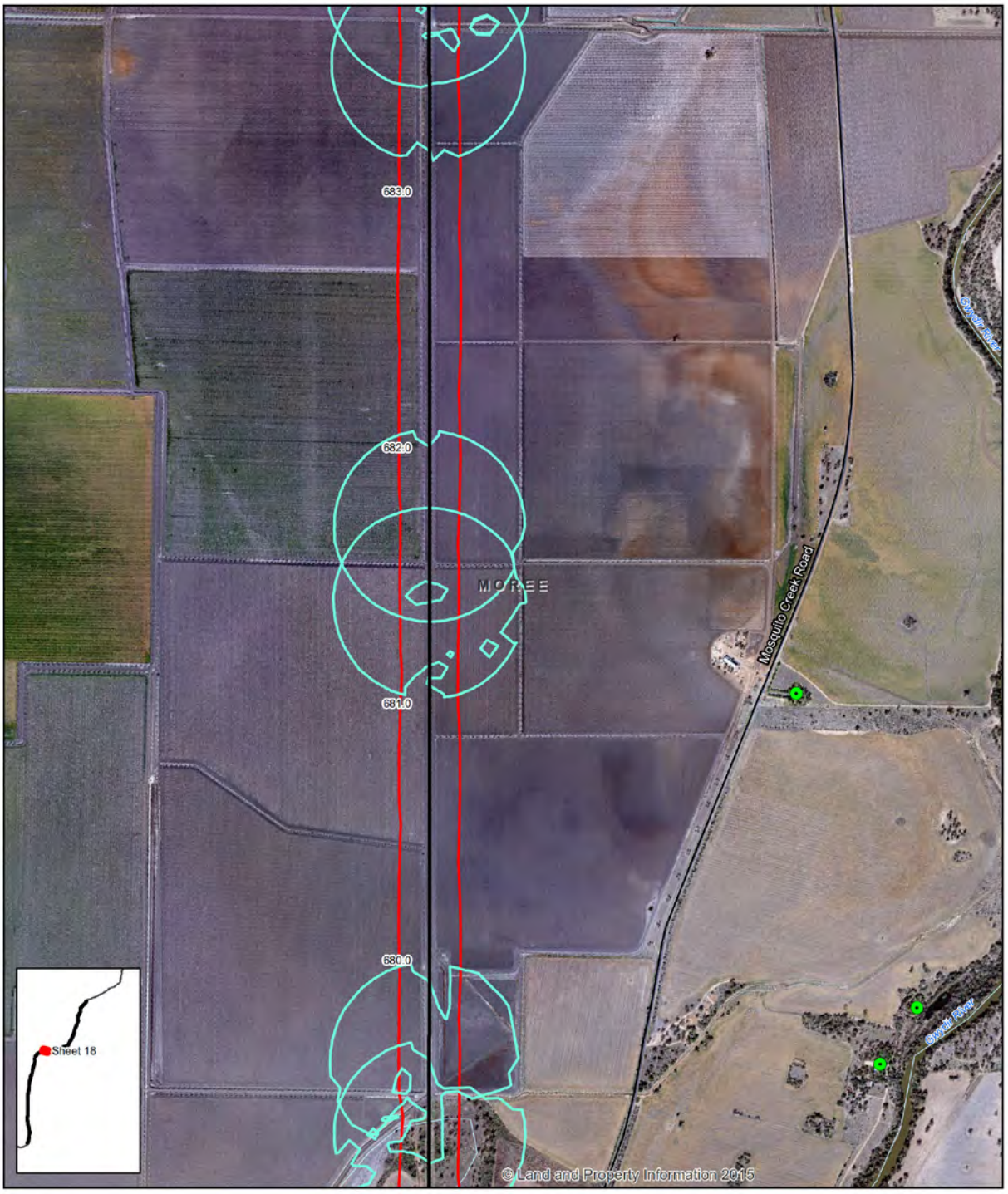
Figure F1- Sheet 17

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

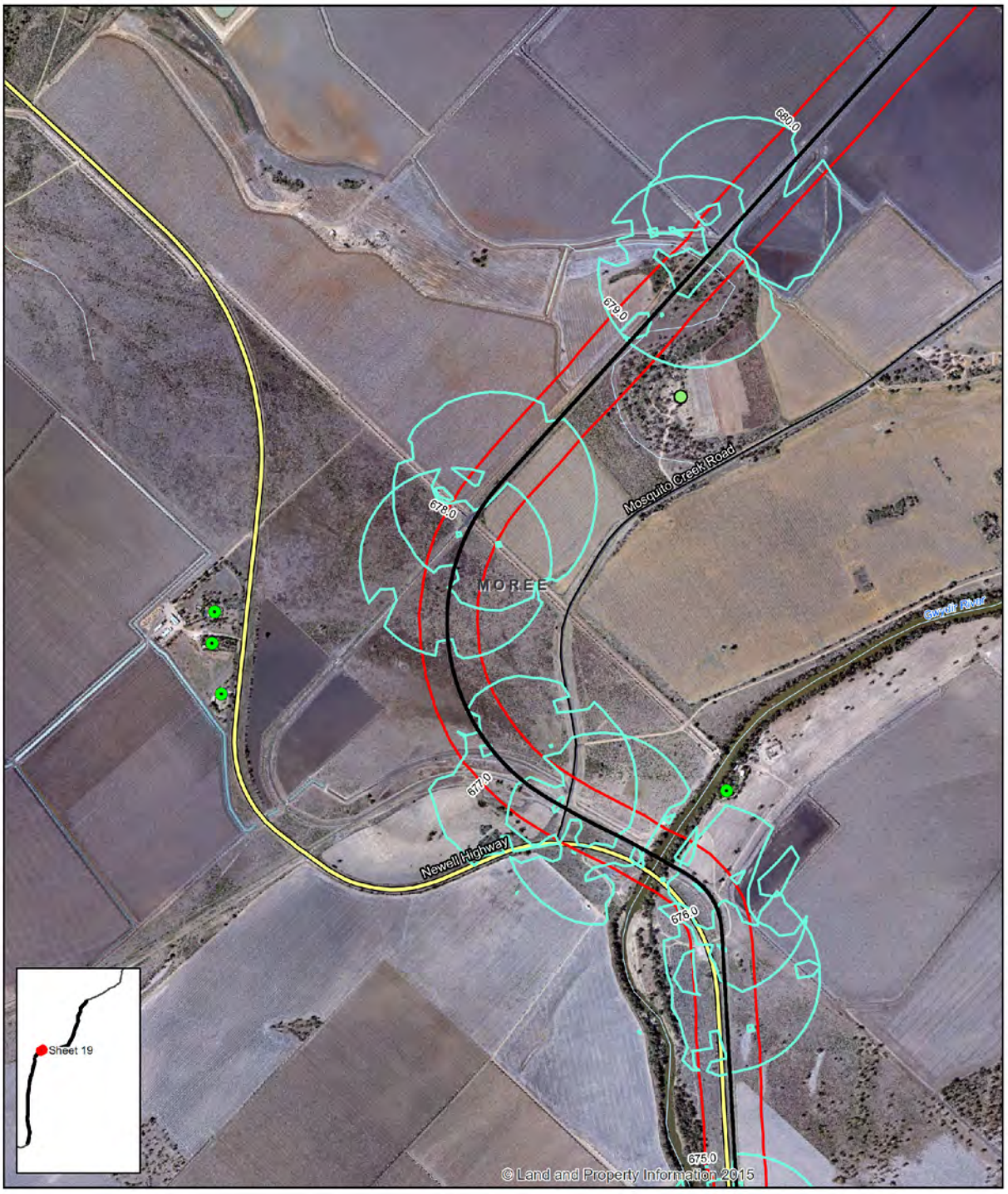
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LEGEND

- Sensitive receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

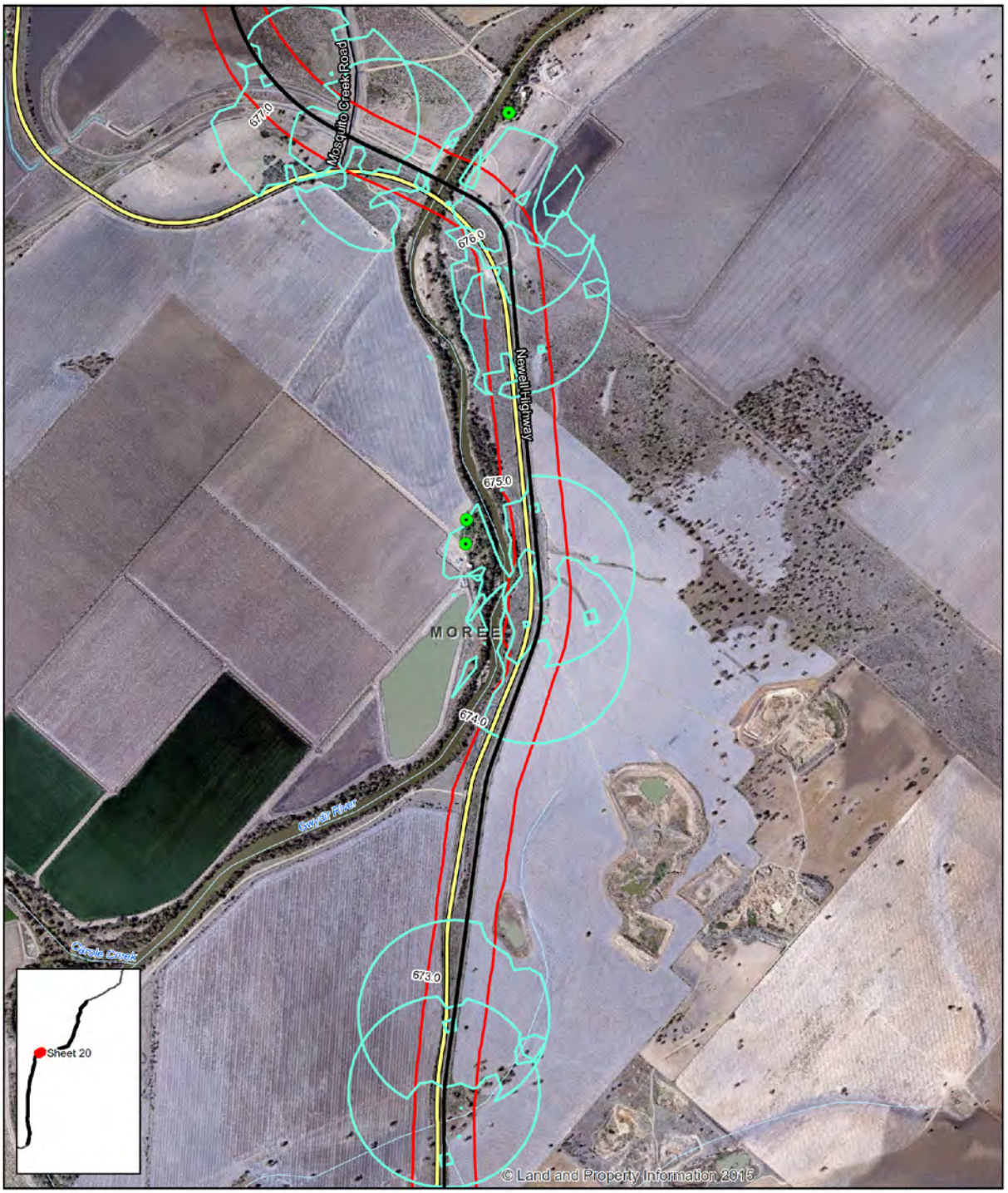
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

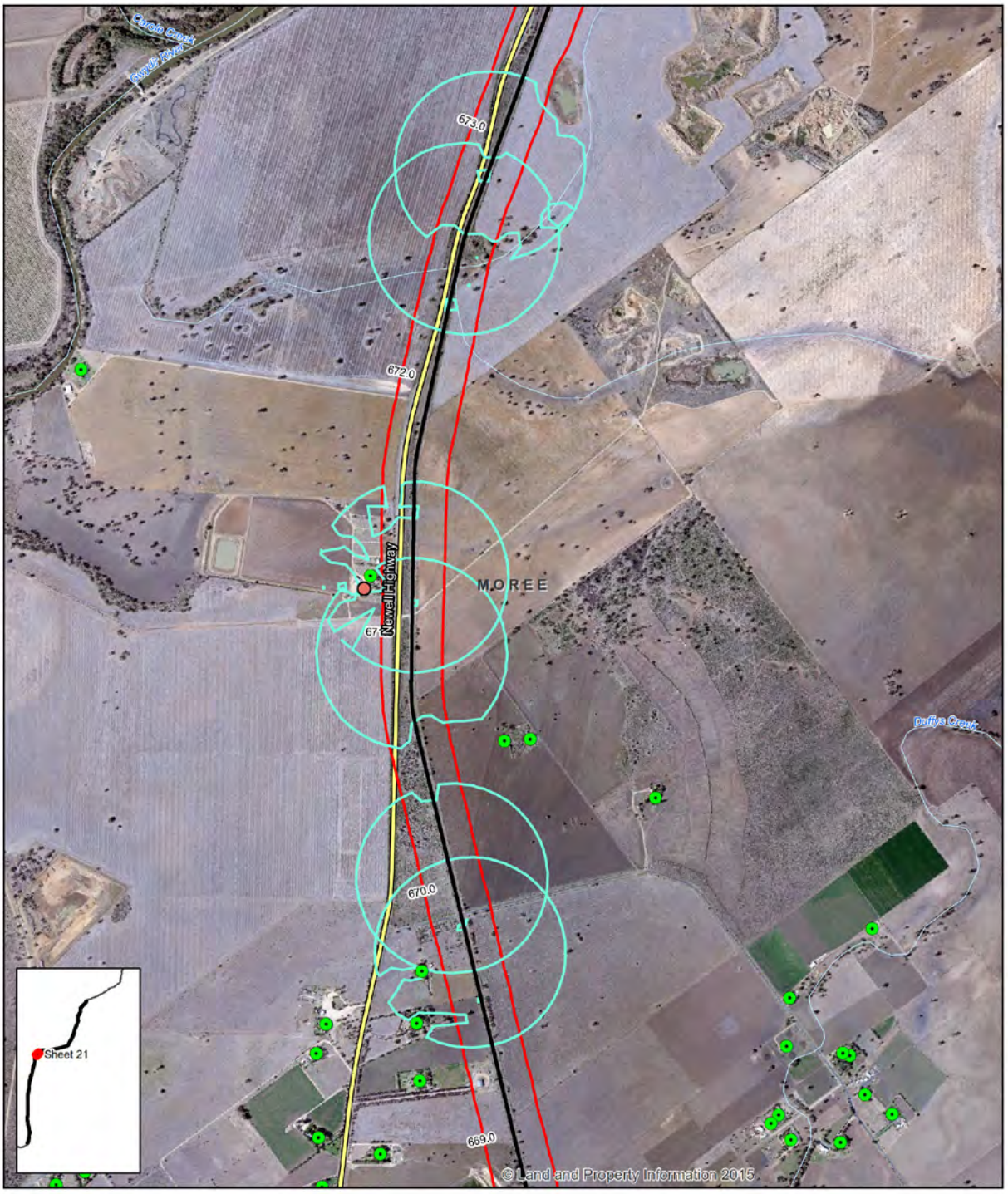
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LEGEND

- Sensitive receiver
- Education
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

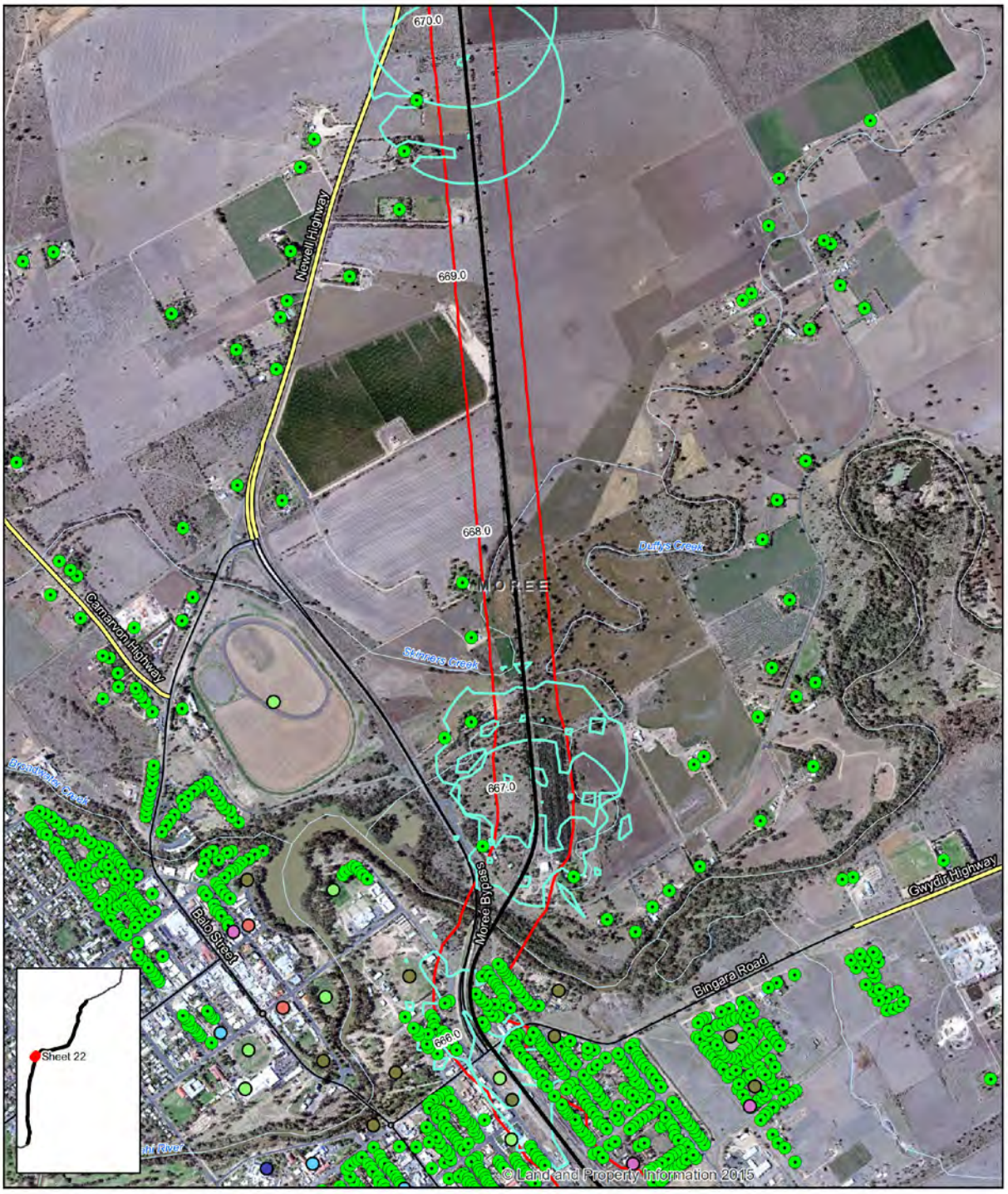
Figure F1- Sheet 21

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- Active recreation
- Aged care
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

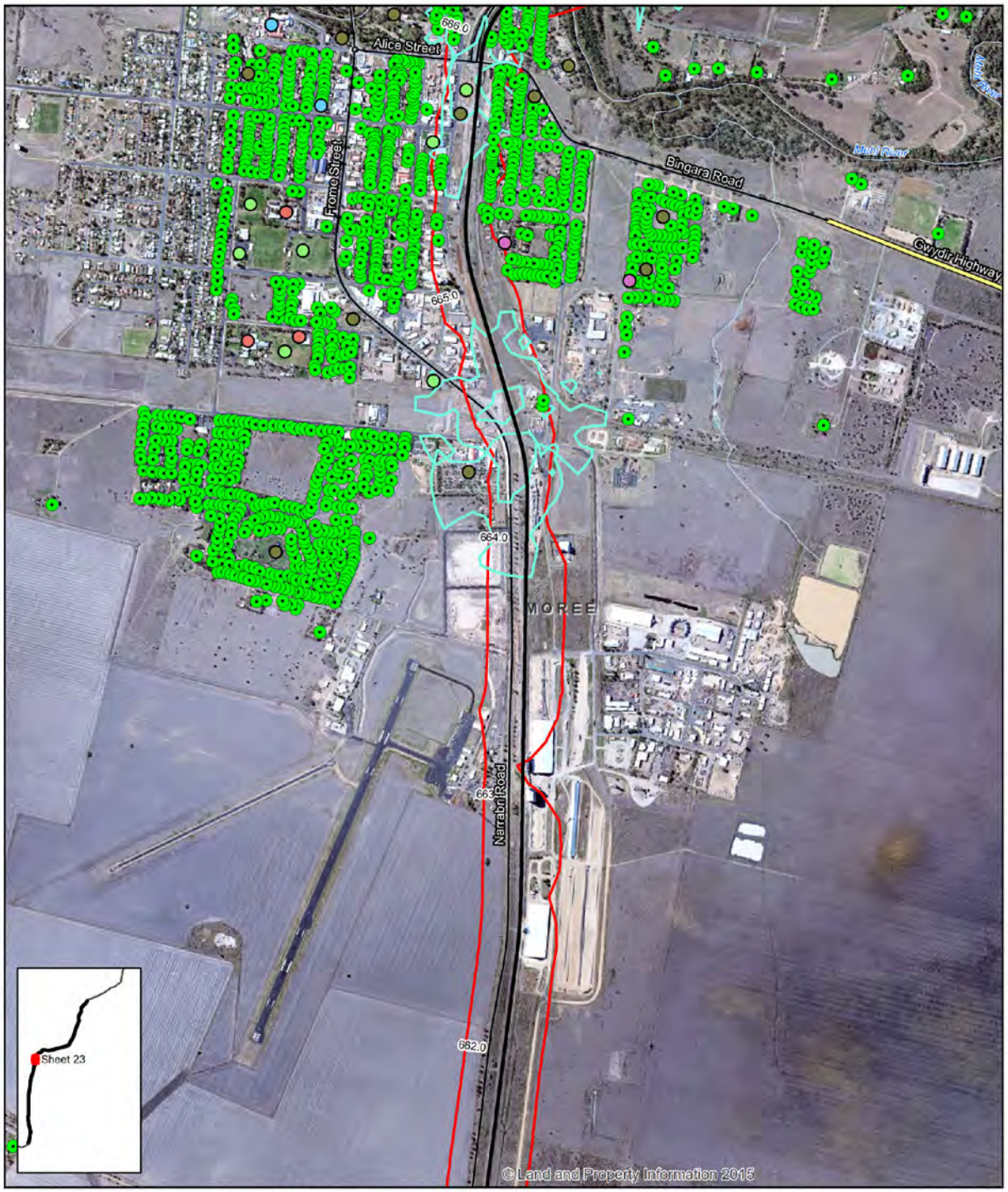
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- Active recreation
- Education
- Health
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

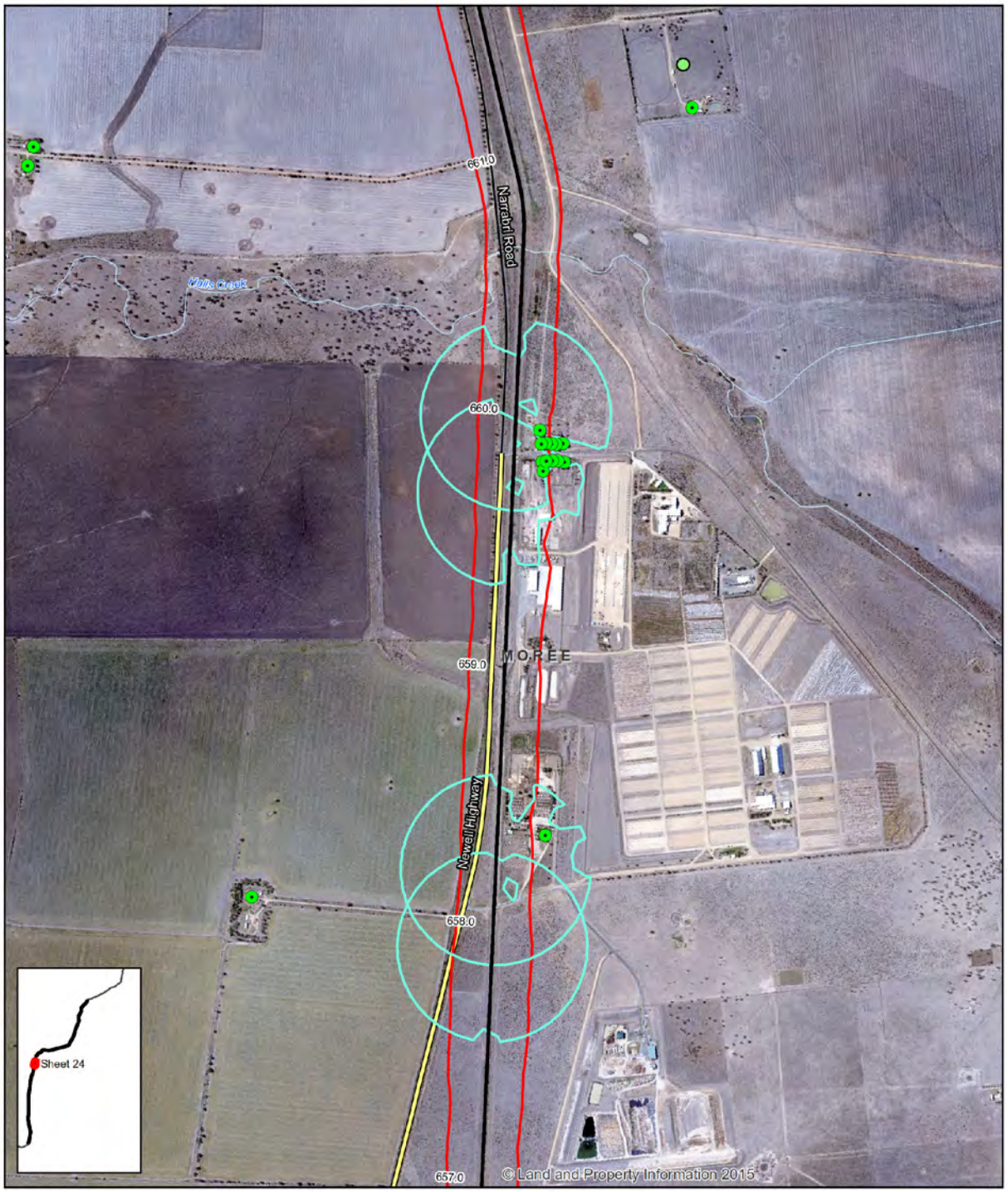
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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- Active recreation
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

Figure F1- Sheet 24

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LEGEND

- Sensitive receiver
- The proposal
- LAMax 85dB(A) - Rail
- Watercourse
- Highway
- Road

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

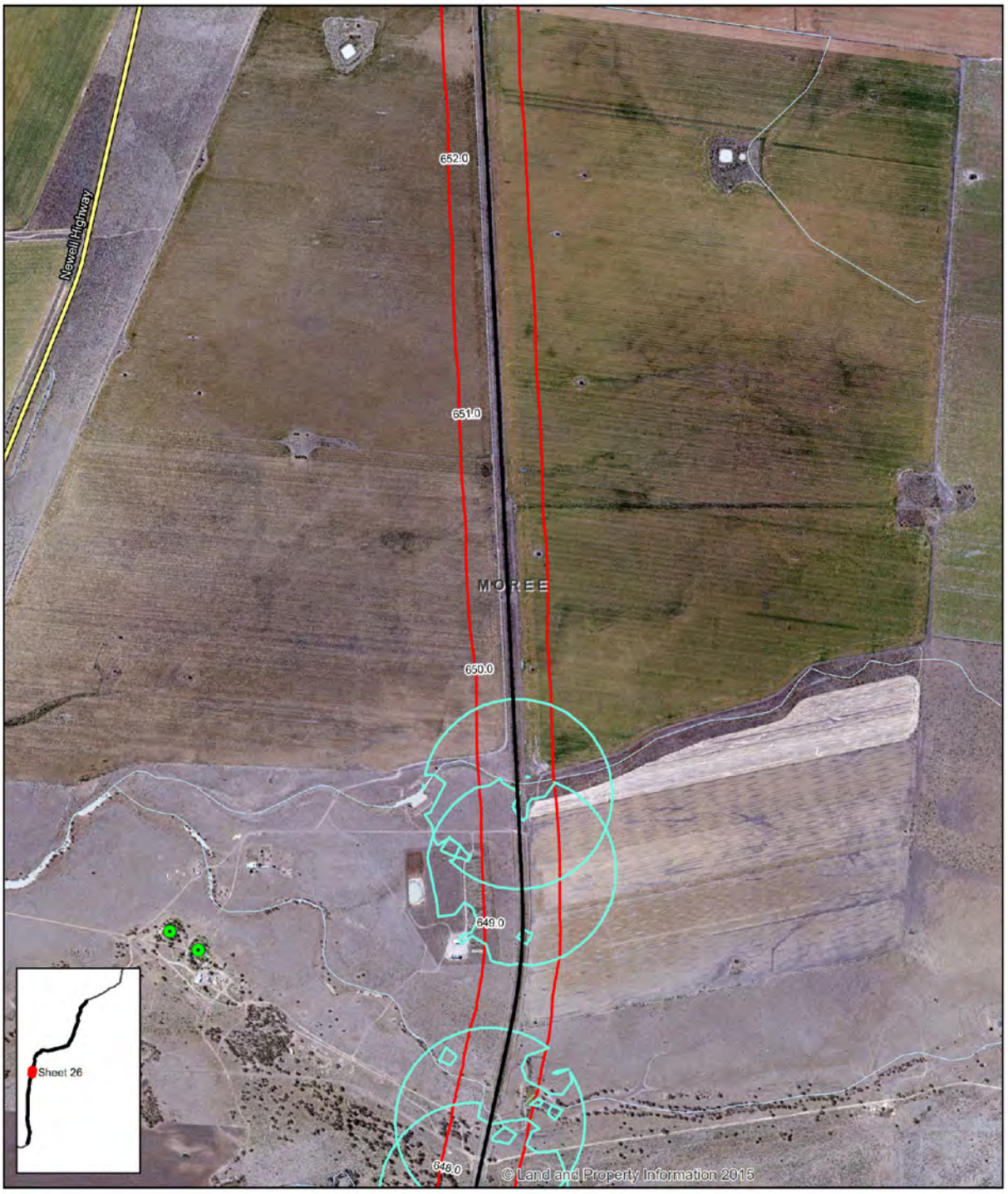
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

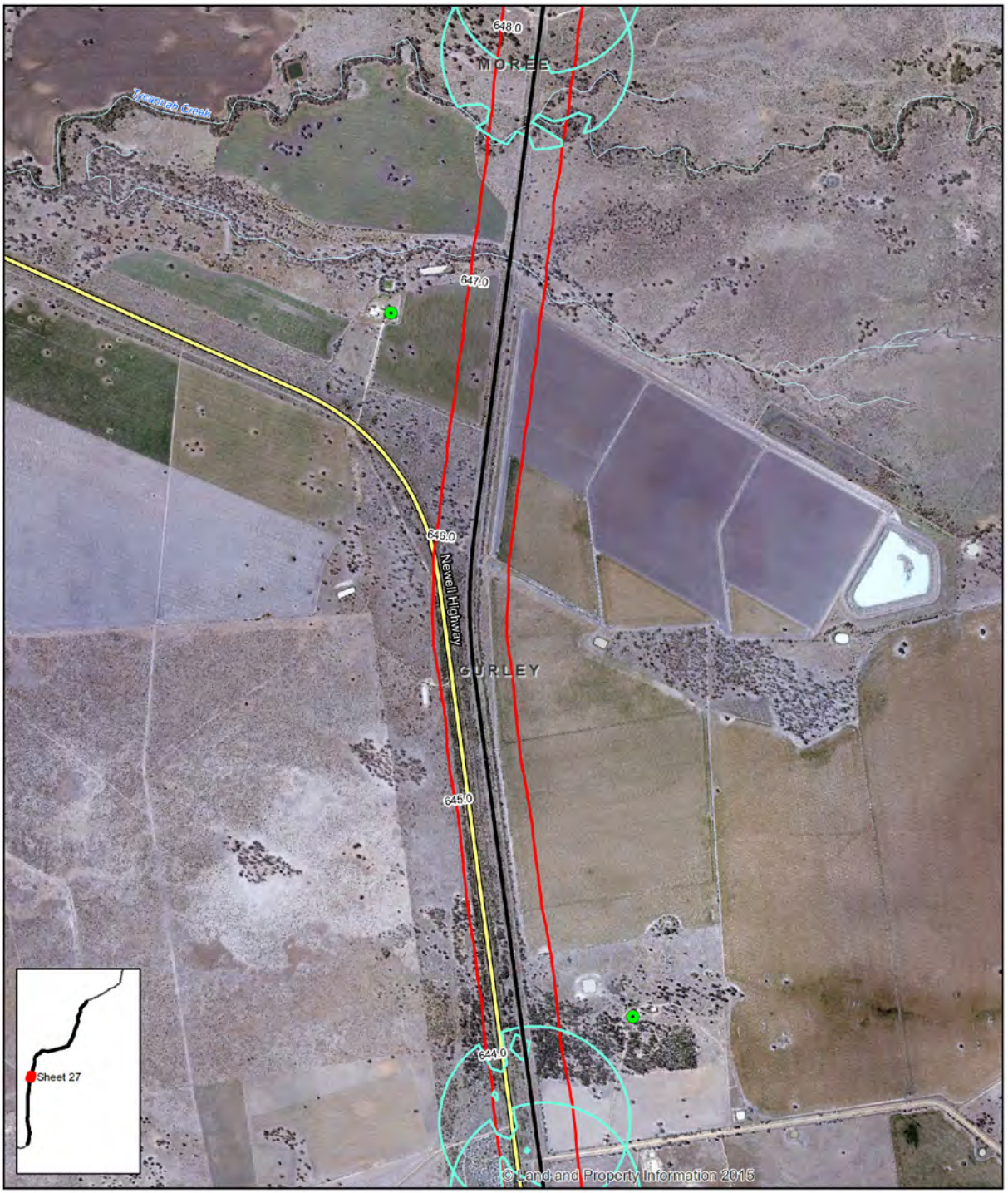
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

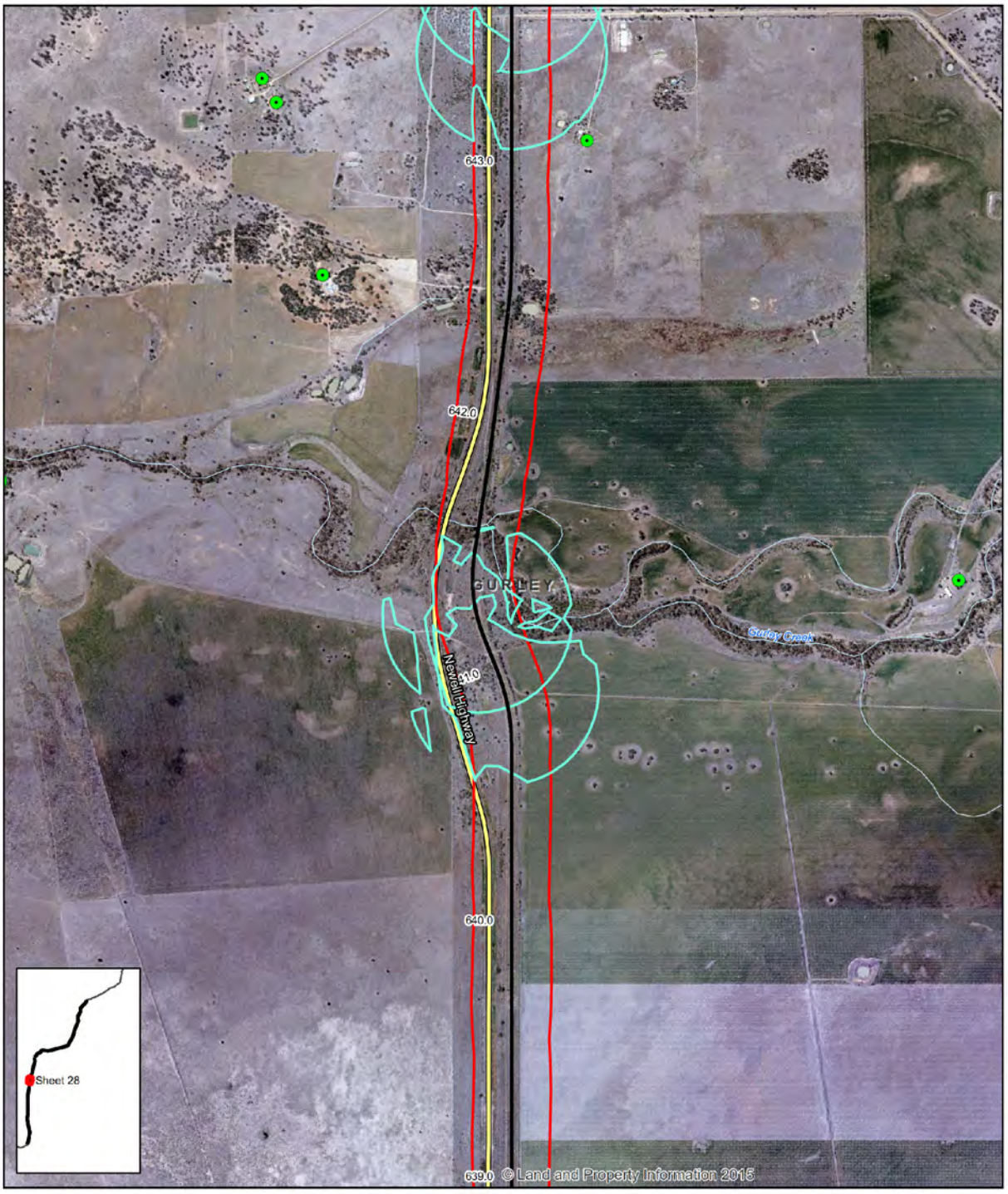
Figure F1- Sheet 27

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

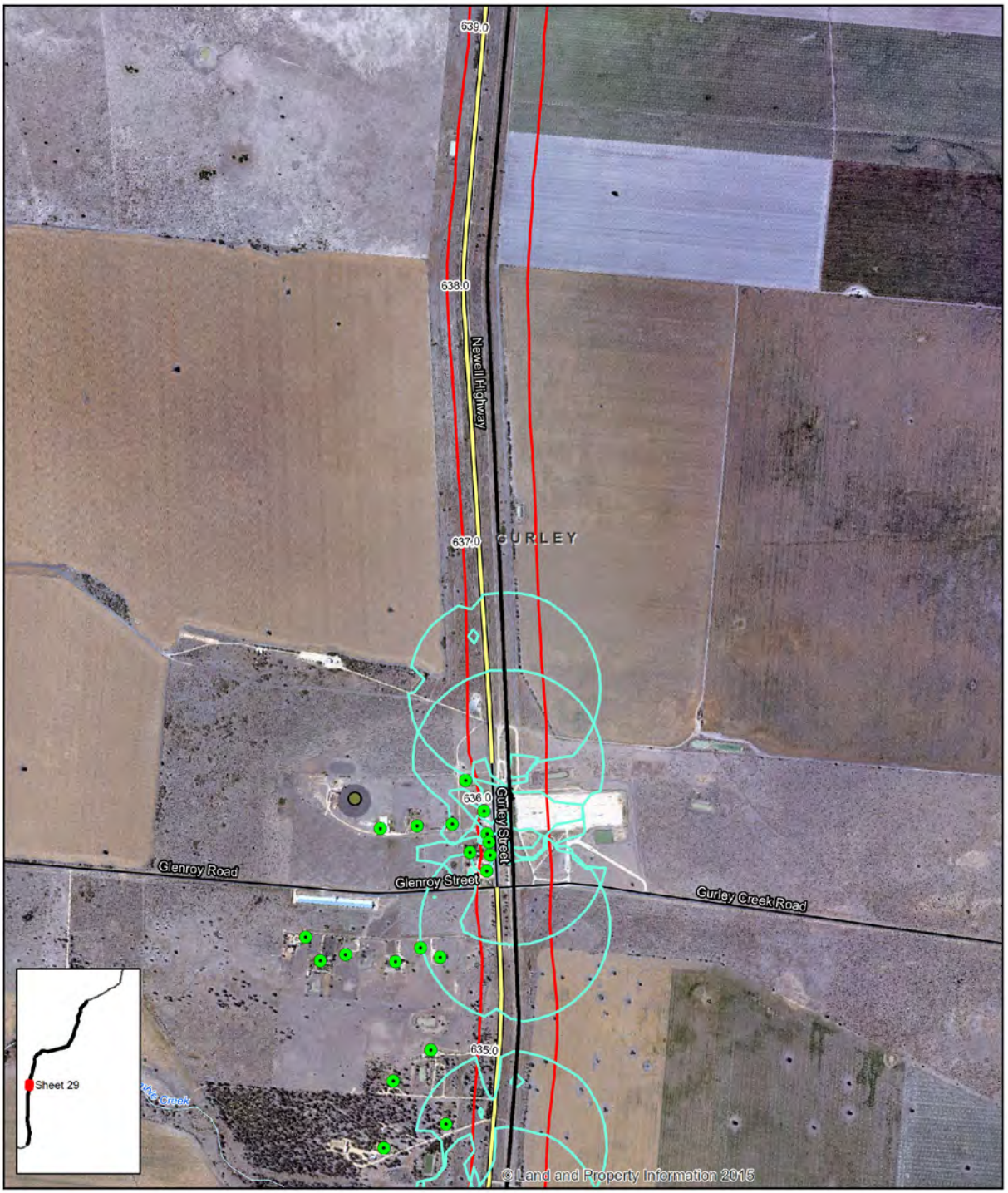
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LEGEND

- Sensitive receiver
- Passive recreation
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

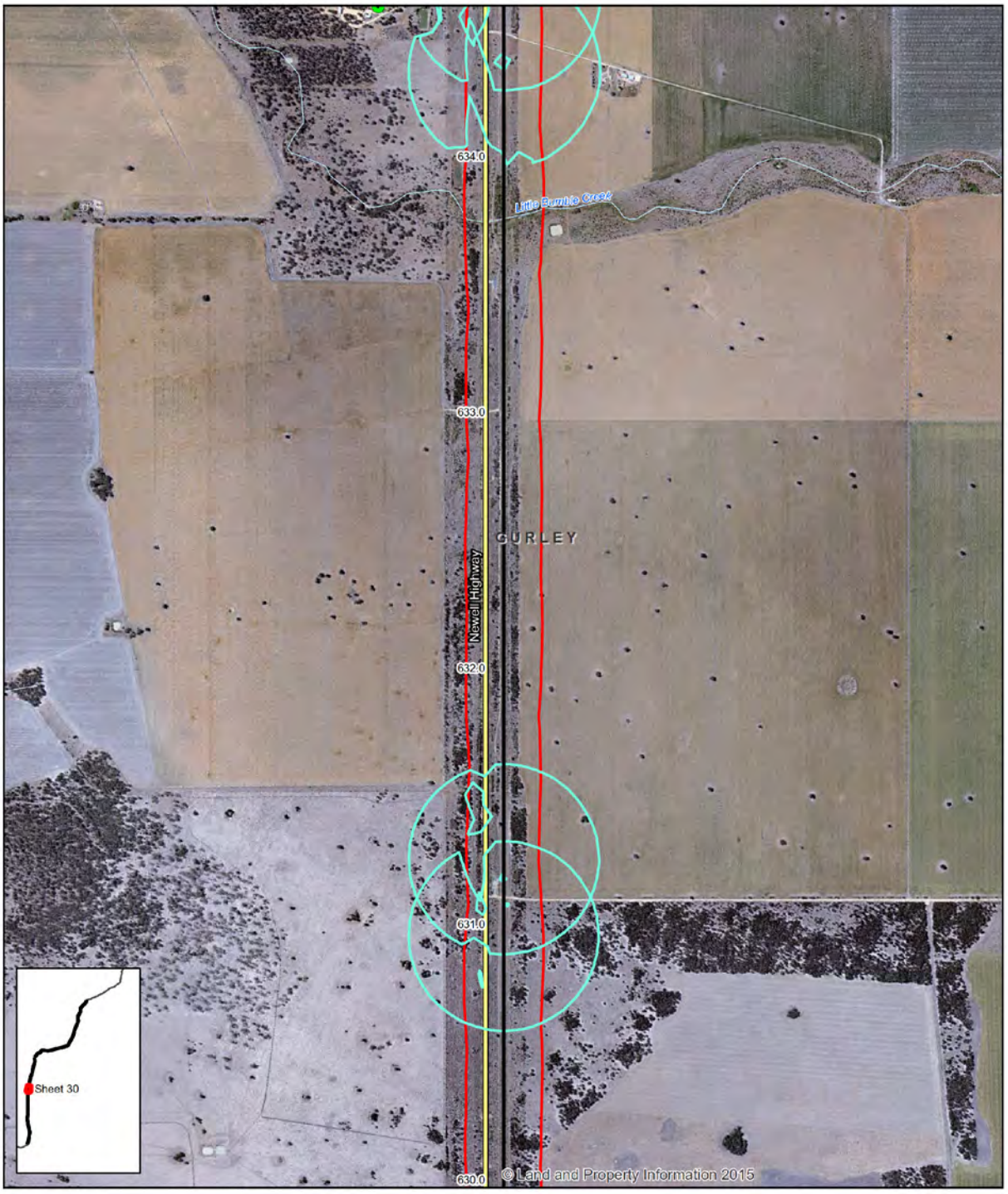
Figure F1- Sheet 29

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

Figure F1- Sheet 30

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

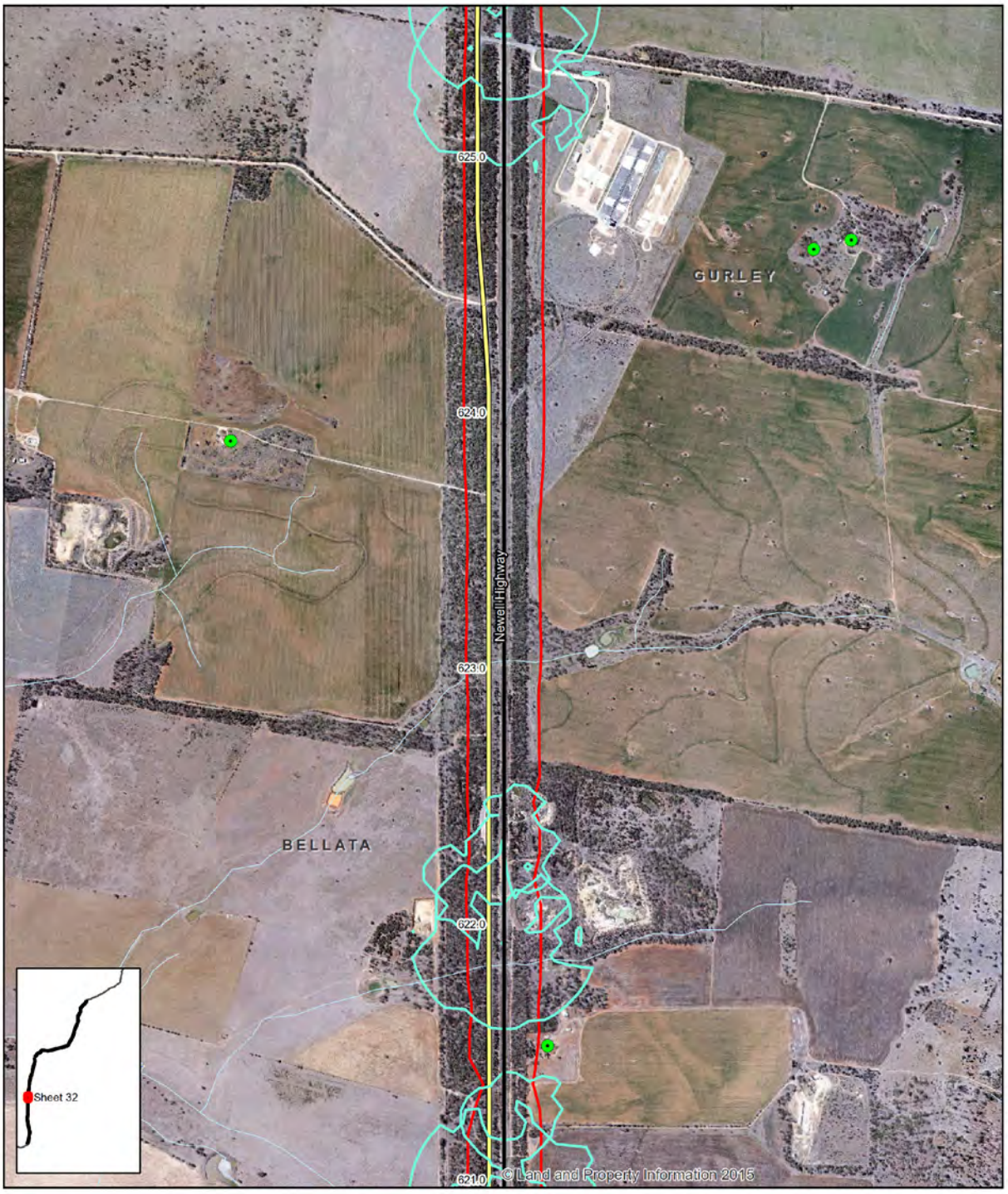
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

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Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

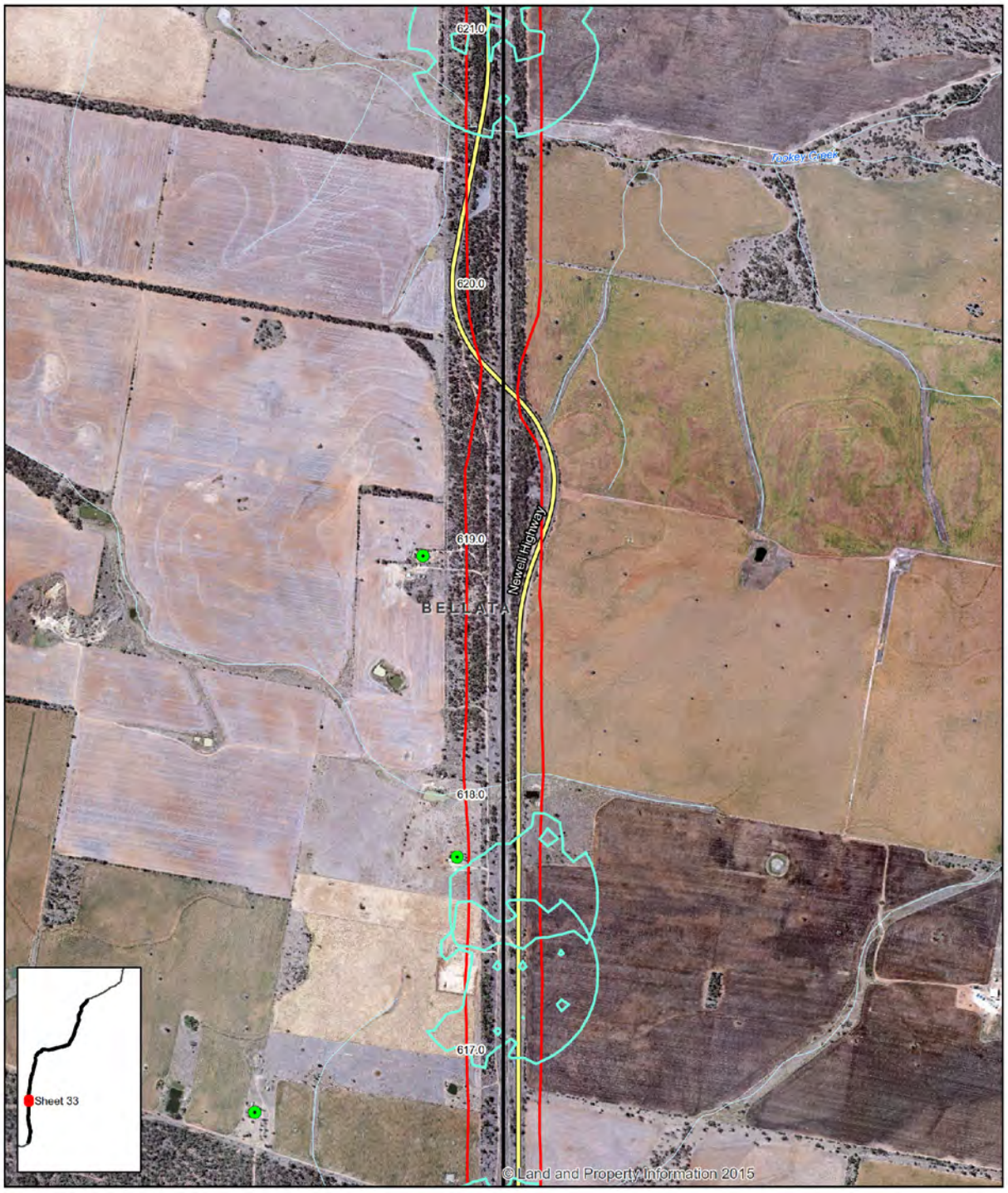
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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

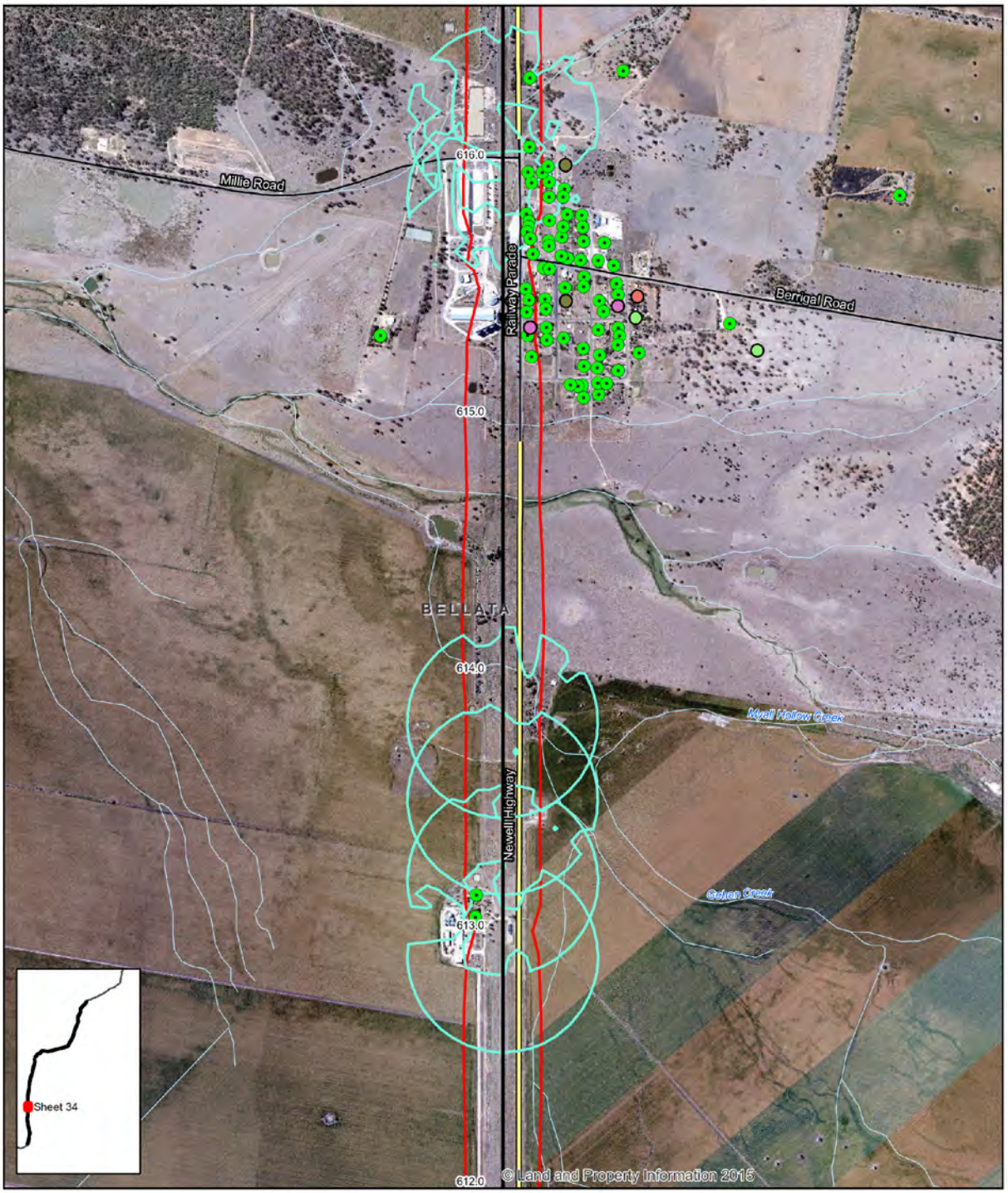
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LEGEND

- Sensitive receiver
- Active recreation
- Education
- Passive recreation
- Religous
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

Figure F1- Sheet 34

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

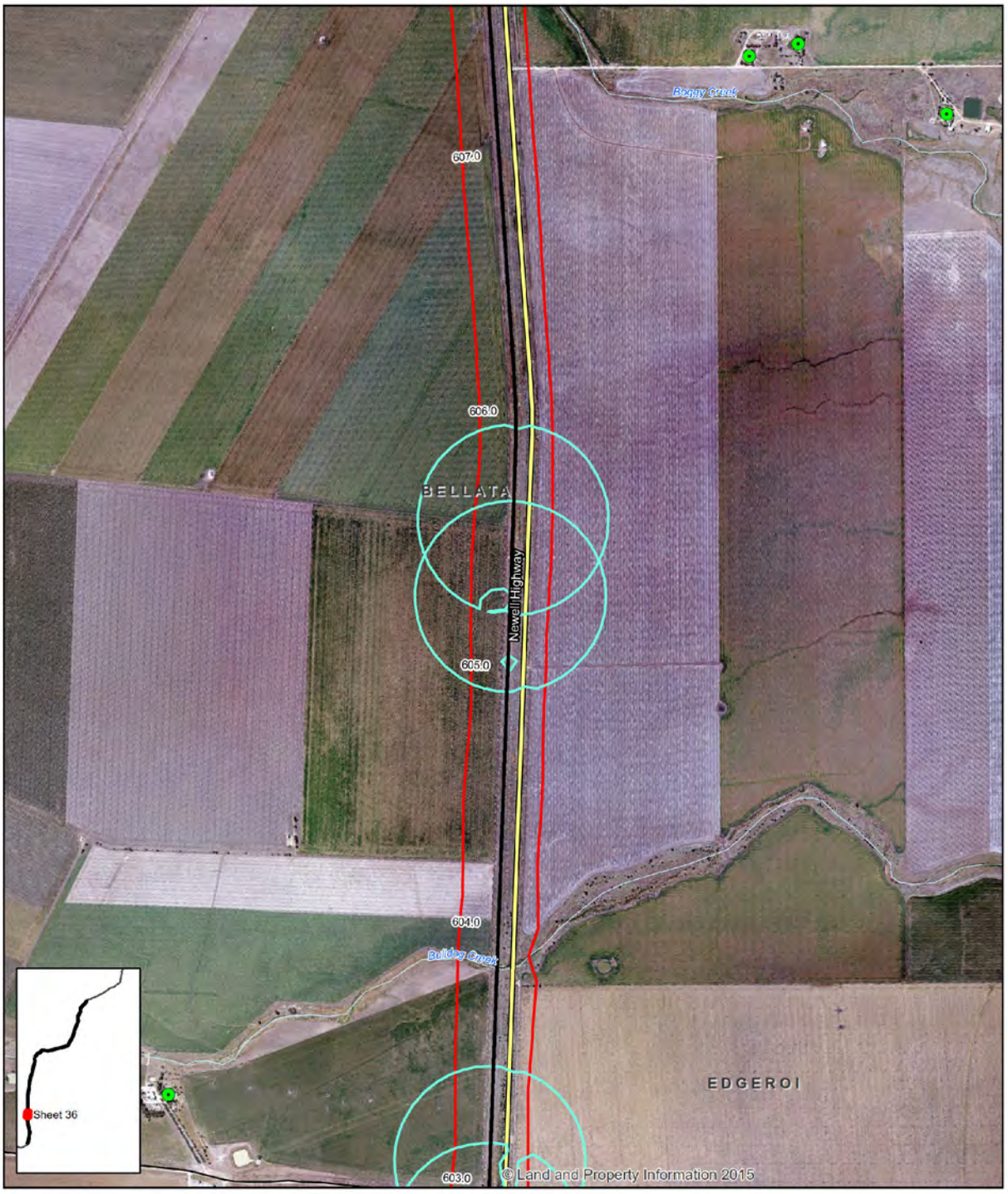
Figure F1- Sheet 35

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LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
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Operational rail noise contours
LMax build

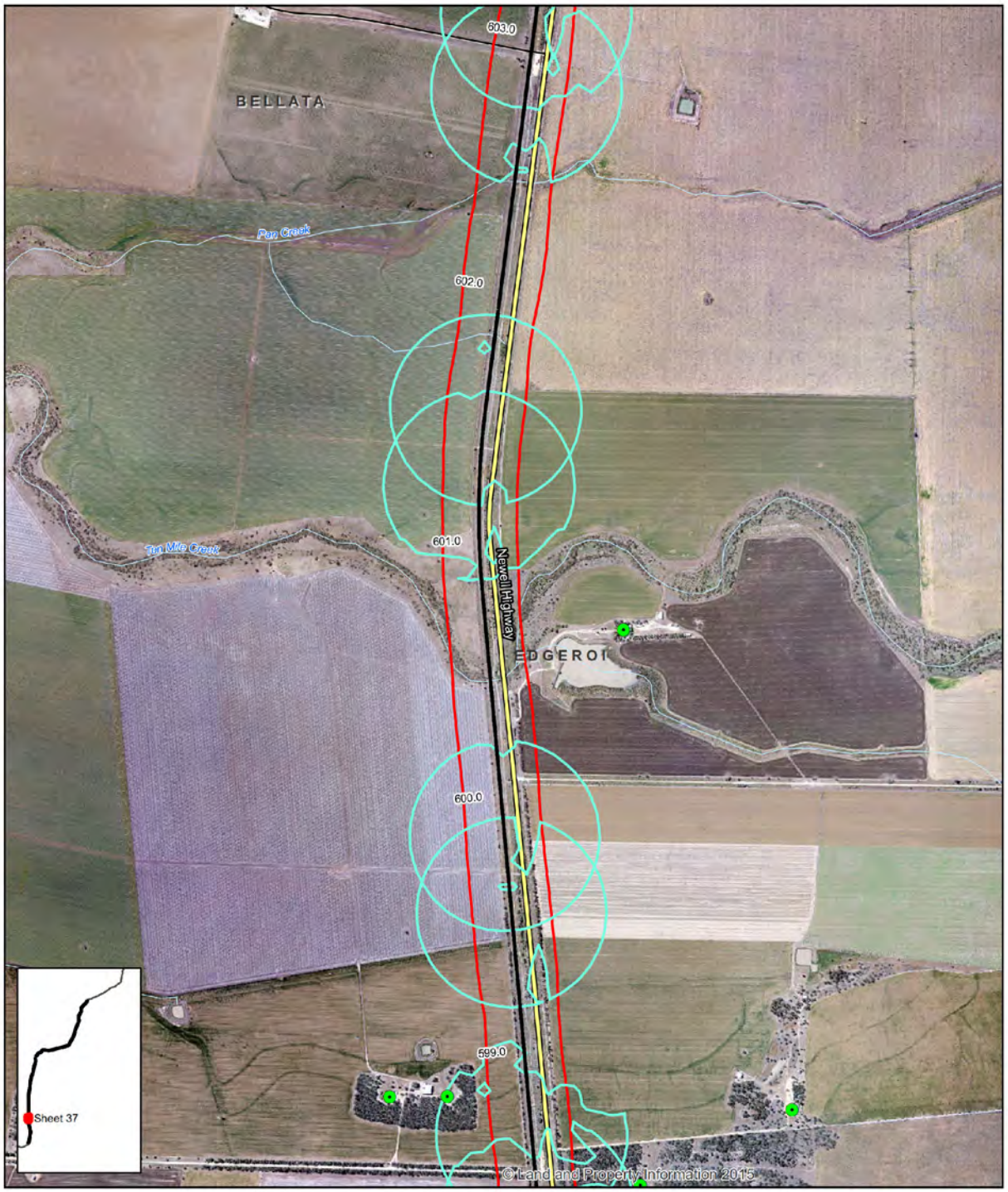
Figure F1- Sheet 36

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

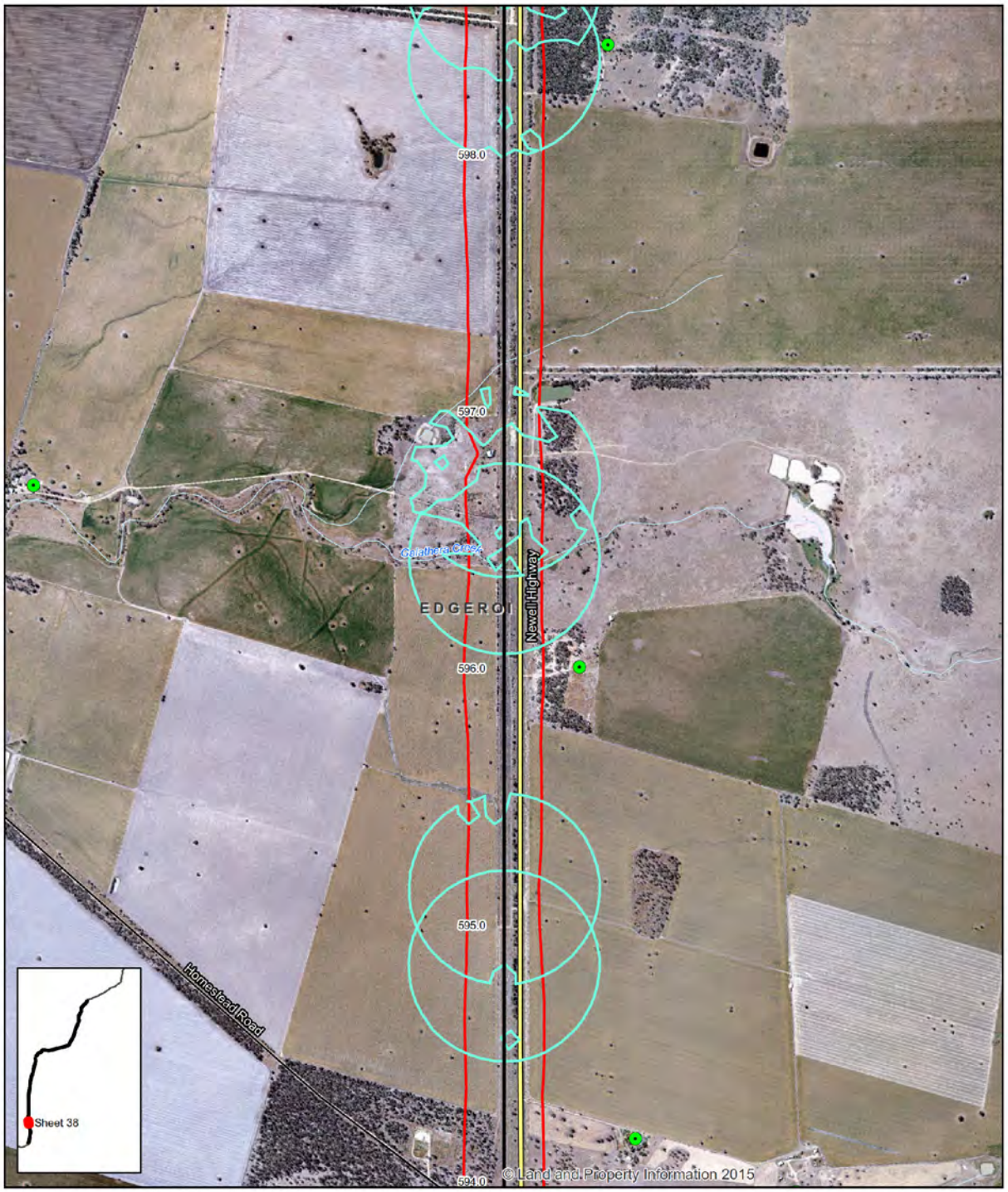
Figure F1- Sheet 37

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

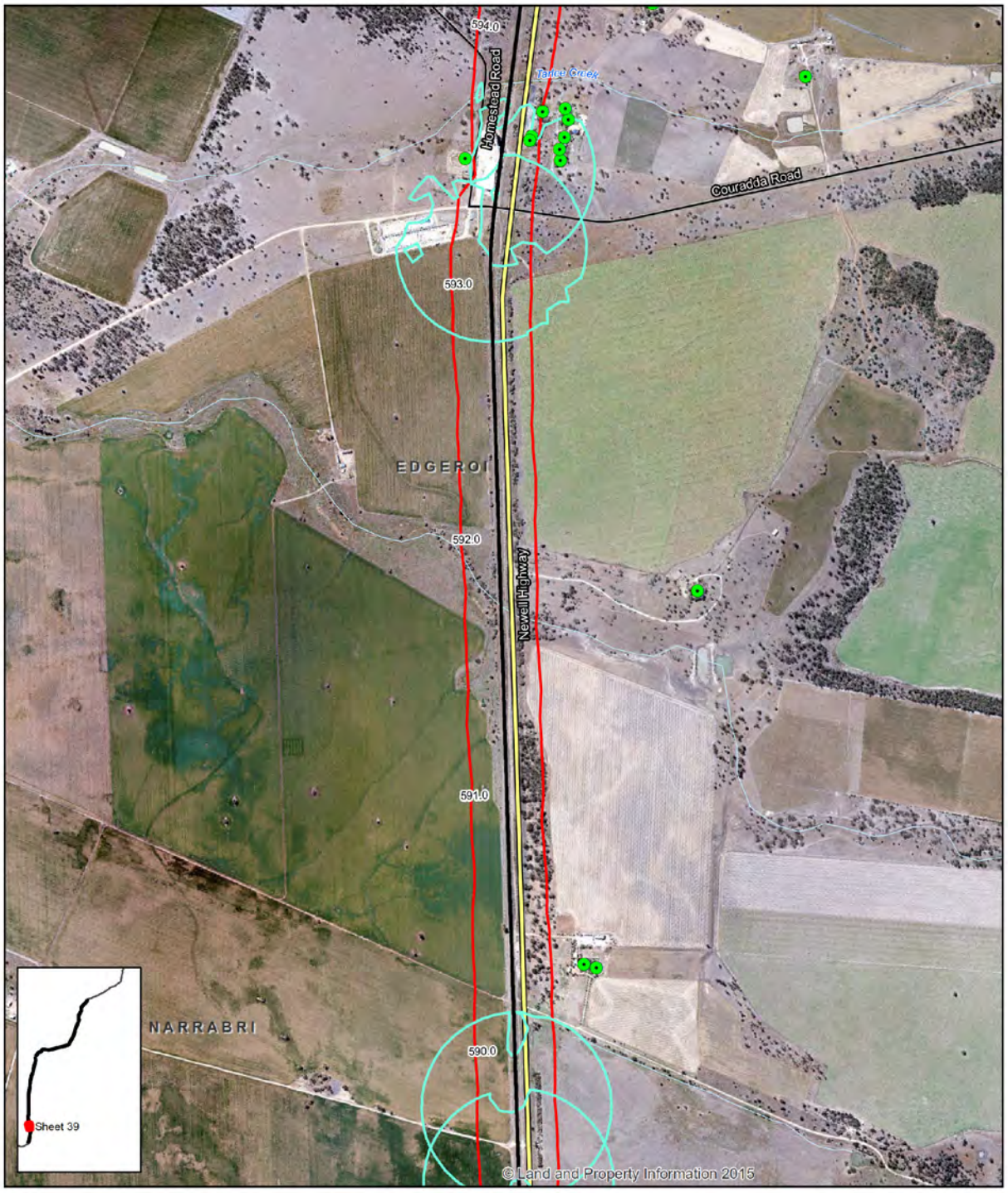
Figure F1- Sheet 38

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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LEGEND

- Sensitive receiver
- The proposal
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- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

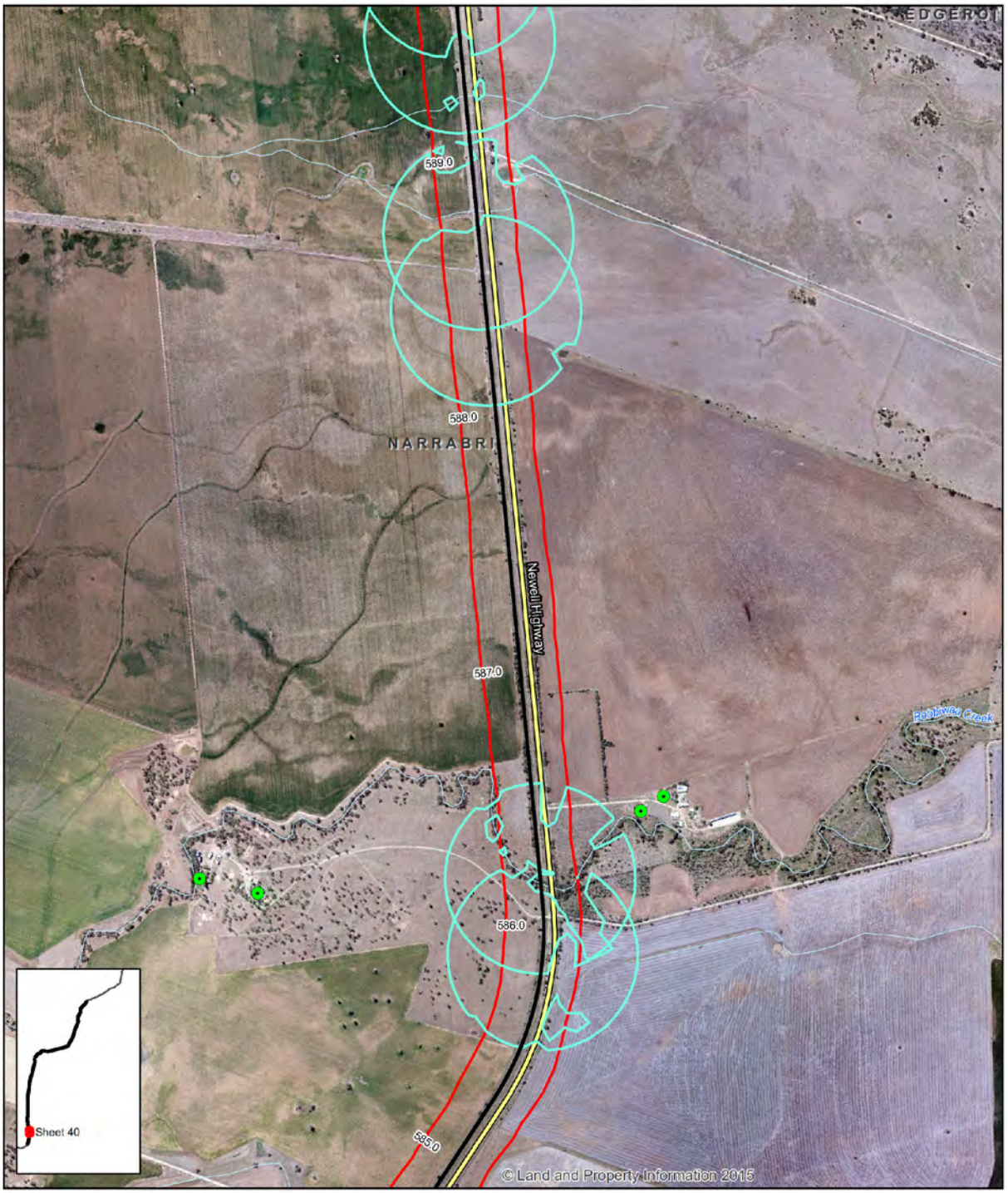
Figure F1- Sheet 39

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
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- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

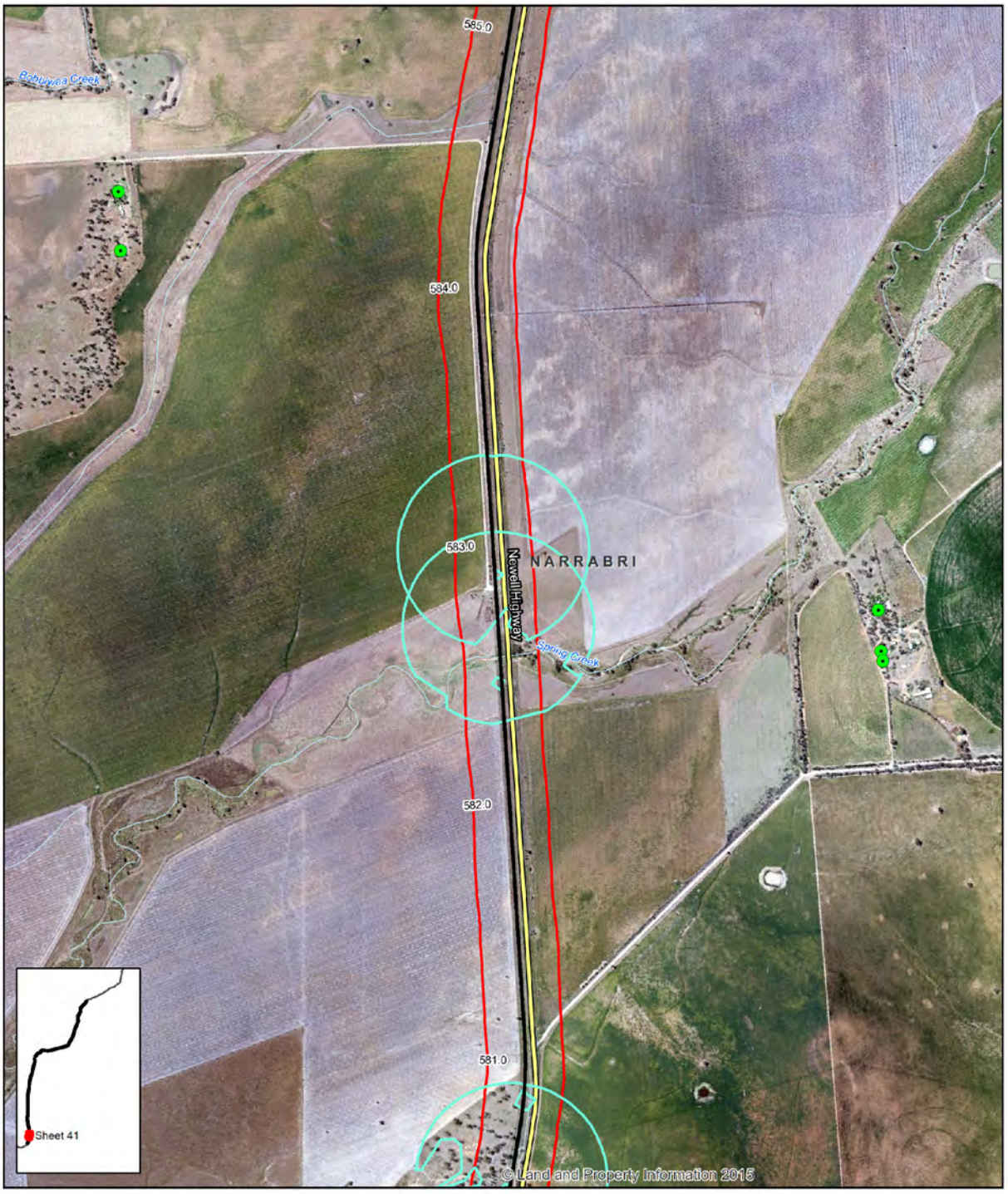
Figure F1- Sheet 40

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
- Watercourse
- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

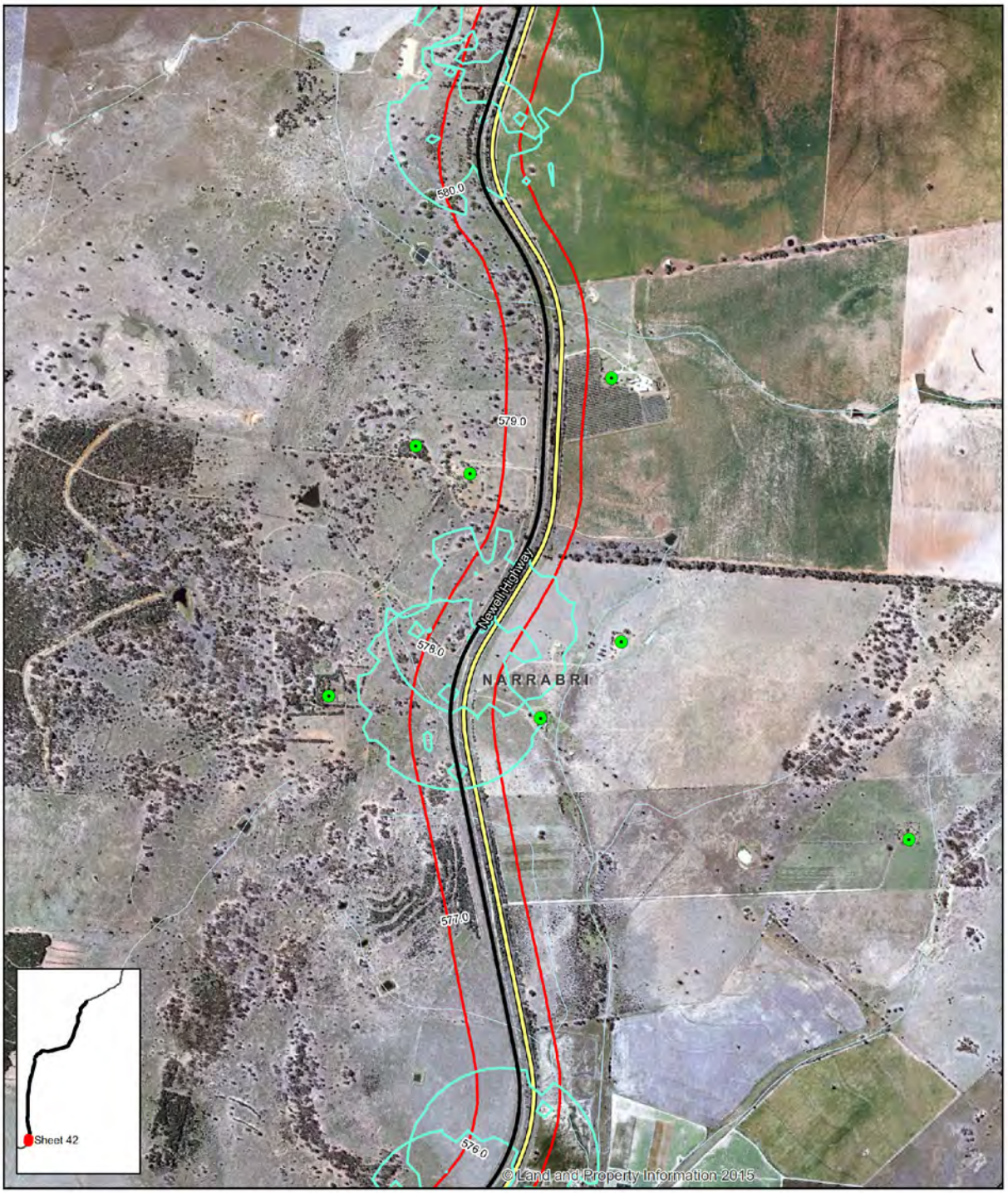
Figure F1- Sheet 41

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
- The proposal
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- Highway
- Road
- LAMax 85dB(A) - Rail
- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

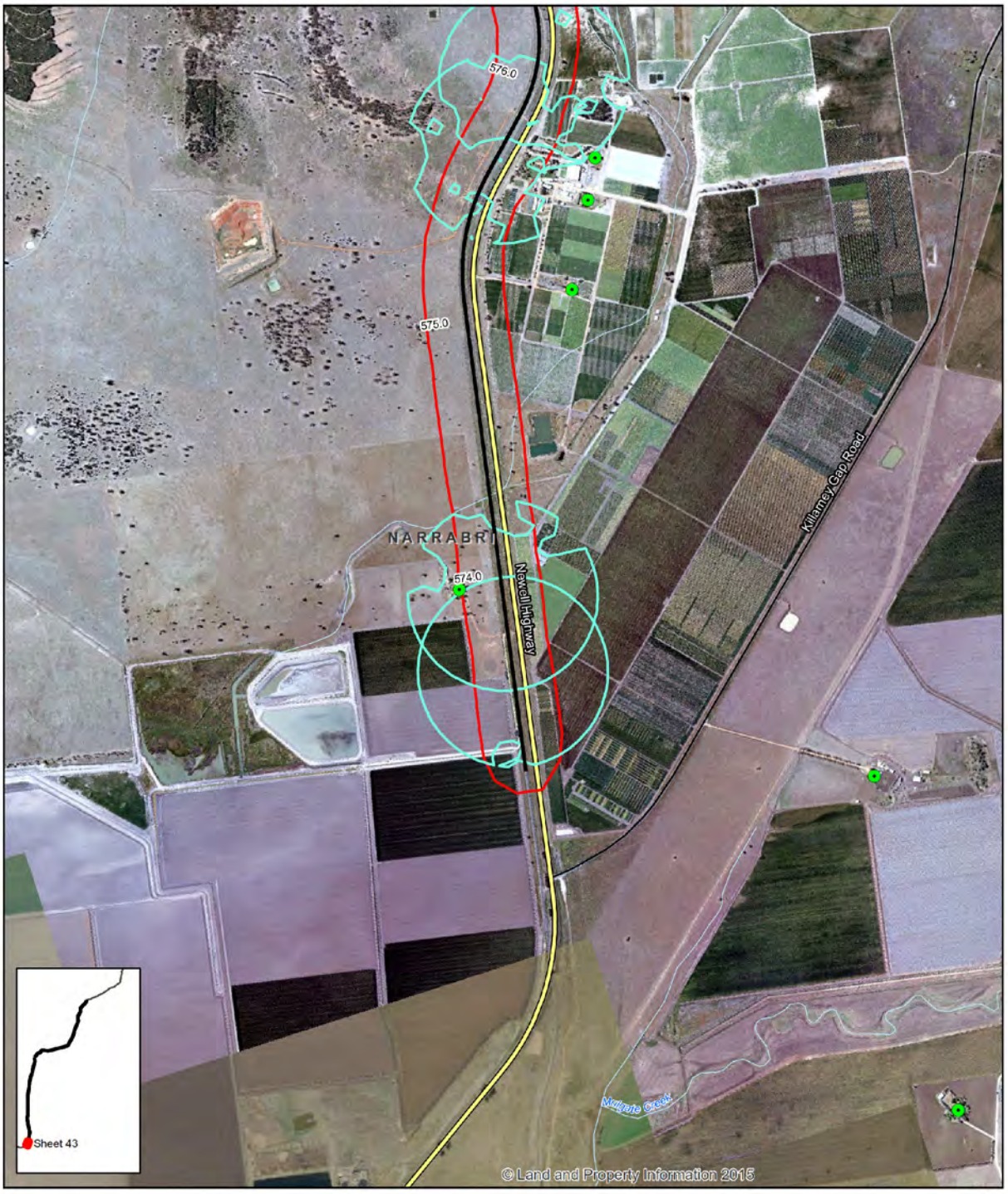
Figure F1- Sheet 42

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E ntlmail@ghd.com W www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba



LEGEND

- Sensitive receiver
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- LAMax 85dB(A) - Indicative horn locations

Paper Size A4

0 75 150 300 450 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Australian Rail Track Corporation
Inland Rail - Narrabri to North Star

Job Number 22-17916
Revision 0
Date 02 Jun 2017

Operational rail noise contours
LMax build

Figure F1- Sheet 43

G:\22\17916\GIS\Maps\Deliverables\N2NS\Noise\2217916_N007_NNS_LMax_0.mxd

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 **T** 61 2 4979 9999 **F** 61 2 4979 9988 **E** ntlmail@ghd.com **W** www.ghd.com.au

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Data source: LPI: DTDB, 2012. LPI: Imagery, 2012. Created by: tmorton, fmackay, kpsroba

Appendix G – Construction noise, table of results

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0001	769016	6640187	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx0002	769369	6640213	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx0003	768925	6640219	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx0004	768916	6640292	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx0005	768384	6640599	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0006	768366	6640604	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0007	768347	6640615	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0008	768463	6640625	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0009	768330	6640628	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0010	768484	6640633	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0011	768619	6640636	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0012	768509	6640639	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0013	768525	6640650	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0014	768548	6640657	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0015	768584	6640670	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0016	768272	6640673	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0017	768672	6640674	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0018	768565	6640685	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0019	768660	6640686	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0020	768233	6640700	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0021	768549	6640701	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0022	768626	6640708	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0023	768265	6640710	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0024	768692	6640713	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0025	768534	6640714	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0026	768615	6640722	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0027	768284	6640722	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0028	768707	6640726	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0029	768515	6640727	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0030	768301	6640729	29	0	0	0	0	0	0	0	0	0	24

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0031	768199	6640730	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0032	768323	6640735	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0033	768604	6640739	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0034	768717	6640743	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0035	768494	6640744	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0036	768174	6640744	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0037	768338	6640746	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0038	768213	6640748	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0039	768586	6640749	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0040	768660	6640749	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0041	768159	6640753	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0042	768728	6640755	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0043	768352	6640756	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0044	768481	6640757	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0045	768577	6640760	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0046	768653	6640762	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0048	768235	6640763	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0049	768267	6640766	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0050	768740	6640771	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0054	768636	6640777	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0055	768282	6640778	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0056	768409	6640781	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0057	768545	6640784	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0058	768751	6640784	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0059	768307	6640785	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0060	768428	6640790	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0061	768693	6640791	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0063	768326	6640792	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0064	768764	6640798	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0065	768530	6640799	30	0	0	0	0	0	0	0	0	0	25

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0067	768677	6640803	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0069	768344	6640810	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0070	768785	6640811	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0071	768516	6640813	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0072	768662	6640816	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0073	768714	6640816	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0074	768364	6640817	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0075	768588	6640817	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0076	768795	6640824	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0078	768398	6640825	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0079	768647	6640830	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0080	768571	6640830	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0081	768728	6640834	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0082	768490	6640835	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0083	768815	6640837	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0084	768632	6640841	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0085	768560	6640842	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0086	768833	6640842	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0087	768472	6640848	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0088	768699	6640849	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0089	768544	6640855	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0090	768618	6640856	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0091	768457	6640863	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0092	768762	6640866	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0093	768681	6640868	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0094	768602	6640868	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0096	768527	6640869	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0097	768781	6640880	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0098	768586	6640881	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0099	768430	6640882	30	0	0	0	0	0	0	0	0	0	25

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0100	768514	6640883	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0101	768666	6640884	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0102	768796	6640887	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0104	768650	6640893	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0105	768495	6640894	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0106	768820	6640896	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0107	768575	6640897	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0108	768720	6640902	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0109	768636	6640903	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0110	768559	6640908	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0111	768481	6640908	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0112	768703	6640912	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0113	768927	6640920	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0114	768623	6640921	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0115	768548	6640922	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0116	768691	6640926	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0117	768604	6640927	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0118	768535	6640940	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0119	768675	6640941	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0120	768215	6640942	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0121	768592	6640951	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0122	768206	6640959	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0123	768673	6640967	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0124	768263	6640969	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0125	768199	6640972	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0126	768607	6640974	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0127	768314	6640985	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0128	768258	6640985	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0129	768694	6640988	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0130	768193	6640989	31	0	0	0	0	0	0	0	0	0	26

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0131	768626	6640989	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0132	768702	6640999	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0133	768347	6641003	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0134	768304	6641004	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0135	768185	6641006	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0136	768639	6641006	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0137	768252	6641009	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0138	768717	6641013	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0139	768365	6641014	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0140	768650	6641018	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0141	768173	6641021	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0142	768244	6641023	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0143	768877	6641025	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0144	768298	6641026	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0145	768405	6641031	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0146	768348	6641033	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0147	768663	6641037	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0148	768166	6641037	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0149	768428	6641039	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0150	768234	6641042	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0151	768289	6641044	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0152	768777	6641045	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0153	768676	6641047	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0154	768162	6641053	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0155	768799	6641053	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0156	768404	6641056	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0157	768690	6641059	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0158	768225	6641059	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0159	768278	6641064	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0160	768466	6641065	32	0	0	0	0	0	0	0	0	0	27

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx0161	768393	6641072	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0162	768716	6641072	31	0	0	0	0	0	0	0	0	0	26
NNS_Rx0163	768159	6641074	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0164	768221	6641078	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0165	768273	6641080	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0166	768149	6641081	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0167	768457	6641085	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0168	768385	6641087	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0169	768204	6641095	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0170	768260	6641100	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0171	768448	6641101	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0172	768378	6641103	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0173	768144	6641105	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0174	768199	6641113	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0175	768524	6641114	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0176	768251	6641116	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0177	768440	6641119	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0178	768132	6641119	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0179	768372	6641120	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0180	768505	6641126	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0181	768426	6641132	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0183	768360	6641136	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0184	768244	6641137	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0185	768125	6641140	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0186	768495	6641144	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0187	768536	6641147	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0188	768176	6641147	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0189	768417	6641153	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0191	768114	6641154	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0192	768237	6641157	33	0	0	0	0	0	0	0	0	0	28

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0193	768492	6641161	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0194	768552	6641166	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0195	768347	6641169	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0196	768226	6641169	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0197	768170	6641172	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0199	768417	6641179	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0200	768481	6641181	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0201	768567	6641182	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0202	768339	6641188	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0203	768159	6641190	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0204	768405	6641191	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0205	768577	6641199	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0207	768331	6641201	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0208	768199	6641209	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0209	768400	6641212	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0210	768215	6641215	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0211	768467	6641220	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0212	768321	6641222	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0213	768232	6641223	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0214	768501	6641225	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0215	768593	6641232	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0216	768393	6641233	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0217	768516	6641235	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0218	768254	6641237	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0219	768538	6641242	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0220	768286	6641247	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0221	768553	6641249	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0223	768157	6641255	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0224	768066	6641257	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0225	768311	6641260	33	0	0	0	0	0	0	0	0	0	28

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0226	768571	6641262	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0227	768323	6641264	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0228	768593	6641267	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0229	768148	6641268	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0230	768433	6641269	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0231	768454	6641269	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx0232	768060	6641275	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0233	768339	6641279	34	0	0	0	0	0	29	0	0	0	29
NNS_Rx0234	768357	6641281	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0236	768473	6641282	33	0	0	0	0	0	34	0	0	0	28
NNS_Rx0237	768371	6641289	34	0	0	0	0	0	34	0	0	0	29
NNS_Rx0238	768140	6641289	34	0	0	0	0	0	28	0	0	0	29
NNS_Rx0239	768488	6641293	34	0	0	0	0	0	34	0	0	0	29
NNS_Rx0240	768052	6641294	34	0	0	0	0	0	24	0	0	0	29
NNS_Rx0241	768205	6641301	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0242	768507	6641301	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0243	768127	6641306	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0244	768527	6641307	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0245	768282	6641309	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0246	768412	6641313	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0247	768050	6641314	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0248	768549	6641316	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0249	768194	6641317	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0250	768435	6641323	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0251	768567	6641323	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0252	768122	6641325	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0253	768450	6641327	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0254	768269	6641328	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0255	768034	6641333	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0256	768472	6641334	34	0	0	0	0	0	0	0	0	0	29

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx0257	768337	6641334	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0258	768187	6641335	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0259	768107	6641341	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0260	768487	6641344	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0261	768026	6641346	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0262	768263	6641348	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0263	768326	6641351	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0265	768510	6641352	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0266	768367	6641355	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0267	768020	6641355	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0268	768524	6641359	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0269	768381	6641360	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0270	768109	6641366	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0271	768544	6641369	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0272	768319	6641369	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0275	768015	6641370	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0276	768400	6641371	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0277	768418	6641380	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0278	768099	6641382	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0279	768008	6641384	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx0280	768242	6641385	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0281	768308	6641386	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0282	768434	6641387	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0283	768163	6641389	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0284	768449	6641396	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0285	768237	6641400	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0286	768471	6641403	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0287	768154	6641406	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0288	768300	6641410	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0289	768487	6641412	35	0	0	0	0	0	0	0	0	0	30

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0290	768080	6641413	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0291	768335	6641420	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0293	768145	6641425	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0294	768354	6641425	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0295	768376	6641428	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0296	767997	6641432	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0297	768392	6641434	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0298	768214	6641437	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0299	768281	6641441	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0300	769819	6641445	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0301	768408	6641448	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0302	768143	6641449	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0303	767985	6641452	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0304	768425	6641455	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0305	768214	6641457	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0306	768277	6641460	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0307	768438	6641461	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0308	768058	6641465	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0309	768311	6641465	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0310	767968	6641465	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0311	768327	6641472	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0312	768457	6641474	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0314	768270	6641476	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0315	768346	6641478	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0316	768050	6641481	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0317	768355	6641485	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0318	768262	6641489	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0319	768642	6641490	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0320	768120	6641491	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0321	768372	6641493	36	0	0	0	0	0	0	0	0	0	31

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0322	768040	6641497	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0323	768390	6641497	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0324	767953	6641504	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0325	768263	6641504	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0326	768098	6641509	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0327	768293	6641510	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0328	768403	6641511	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0329	768419	6641516	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0330	768175	6641517	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0331	768305	6641521	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0332	768435	6641523	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0333	767943	6641523	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0334	768035	6641523	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0335	768322	6641525	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0336	768091	6641525	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0337	768337	6641532	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0338	768025	6641536	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0339	768367	6641537	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0340	768087	6641538	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0341	768348	6641538	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0342	767935	6641539	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0343	768171	6641540	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0344	768456	6641543	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0345	768080	6641546	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0346	768386	6641548	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0347	768231	6641549	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0348	768015	6641555	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0349	768249	6641556	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0350	768163	6641557	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0351	768398	6641557	36	0	0	0	0	0	0	0	0	0	31

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0352	767928	6641559	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0353	768075	6641564	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0354	768264	6641569	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0356	768412	6641572	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0357	768152	6641573	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0358	768288	6641575	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0359	767984	6641575	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0360	768443	6641576	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0361	768302	6641579	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0362	768077	6641583	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0363	768008	6641586	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0364	768212	6641588	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0365	768324	6641589	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0366	768460	6641593	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0367	768234	6641594	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0368	768151	6641595	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0369	768485	6641598	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0370	768065	6641602	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0371	768252	6641604	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0372	768365	6641610	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0373	768143	6641613	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0374	768269	6641614	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0375	768287	6641618	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0376	768330	6641618	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0377	768052	6641618	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0378	768381	6641621	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0379	768198	6641627	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0380	768397	6641628	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0381	768417	6641631	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0382	768135	6641631	37	0	0	0	0	0	0	0	0	0	32

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0383	767894	6641633	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0384	768429	6641637	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0385	768188	6641643	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0386	768449	6641644	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0387	768120	6641644	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0388	768235	6641645	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0389	767966	6641647	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0390	767892	6641651	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0391	768246	6641654	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0392	768465	6641654	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0393	768267	6641656	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0394	768182	6641657	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0395	768490	6641664	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0396	767886	6641665	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0397	767964	6641669	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0398	768283	6641671	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0399	768508	6641674	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0401	768028	6641676	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0402	768302	6641679	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0403	768411	6641680	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0405	767956	6641681	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0406	767866	6641682	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0407	768206	6641690	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0408	767948	6641693	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0409	768215	6641694	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0410	768228	6641698	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0411	767868	6641701	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0413	768243	6641706	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0414	768033	6641710	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0415	767944	6641711	38	0	0	0	0	0	0	0	0	0	33

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0416	768268	6641712	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0417	768487	6641715	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0418	768286	6641718	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0419	768008	6641725	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0420	767932	6641732	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0421	767855	6641735	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0422	768001	6641739	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0423	768190	6641748	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0424	767927	6641748	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0425	769385	6641753	32	0	0	0	0	0	0	0	0	0	27
NNS_Rx0426	767989	6641762	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0427	767919	6641764	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0428	769076	6641764	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0429	767891	6641786	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0430	768057	6641786	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0431	768300	6641797	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0432	768339	6641814	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0433	768356	6641822	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0434	767957	6641824	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0435	768045	6641826	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0436	767982	6641837	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0437	767853	6641844	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0438	768000	6641849	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0439	768337	6641852	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0440	768026	6641853	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0441	767881	6641854	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0442	768092	6641855	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0443	768397	6641857	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0444	767870	6641867	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0445	768330	6641868	41	0	0	0	0	0	0	0	0	0	36

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0446	768086	6641871	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0447	767930	6641875	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0448	768322	6641881	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0449	768832	6641883	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0450	768077	6641889	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0451	767921	6641893	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0452	768314	6641898	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0453	768114	6641899	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0454	768867	6641901	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0455	767915	6641904	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0456	768131	6641909	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0457	768308	6641911	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0458	768151	6641916	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0459	767912	6641916	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0460	768169	6641923	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0461	767904	6641927	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0462	768301	6641931	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0463	768190	6641932	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0464	767967	6641933	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0465	768205	6641934	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0466	767990	6641943	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0467	768049	6641943	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0468	767900	6641947	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0469	768292	6641948	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0470	768233	6641950	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0471	767972	6641957	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0472	768083	6641960	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0473	768285	6641962	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0474	767894	6641967	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0475	768276	6641980	43	0	0	0	0	0	0	0	0	0	38

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0476	767972	6641981	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0477	768033	6641983	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0478	767888	6641984	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0479	768160	6641985	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0480	768177	6641997	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0481	767963	6641998	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0482	768197	6642000	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0483	768021	6642002	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0484	767880	6642003	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0485	768218	6642010	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0486	767952	6642014	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0487	767865	6642020	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0488	768011	6642023	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0489	768256	6642024	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0491	767943	6642034	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0492	767722	6642037	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0493	767738	6642041	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0494	768252	6642042	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0495	767757	6642051	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0496	767937	6642054	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0497	767703	6642058	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0498	768241	6642061	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0499	768059	6642065	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0500	767769	6642066	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0501	767929	6642070	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0502	767782	6642073	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0503	769063	6642073	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0504	768079	6642076	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0505	767689	6642077	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0506	768233	6642079	45	0	0	0	0	0	0	0	0	0	40

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0507	768092	6642080	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0508	767831	6642084	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0509	768106	6642089	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0510	767847	6642091	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0511	767979	6642093	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0512	768224	6642096	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0513	768129	6642099	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0514	767998	6642100	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0515	767861	6642100	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0516	767765	6642101	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0517	767683	6642102	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0518	768148	6642104	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0519	768014	6642106	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0520	768057	6642112	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0521	768168	6642114	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0522	768212	6642114	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0523	767758	6642116	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0524	767907	6642118	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0525	768031	6642120	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0526	767816	6642124	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0527	768051	6642127	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0528	768068	6642131	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0529	768206	6642134	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0530	767748	6642134	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0531	767814	6642138	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0532	767661	6642140	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0533	768084	6642145	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0534	767836	6642151	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0535	767975	6642151	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0536	768111	6642151	46	0	0	0	0	0	0	0	0	0	41

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0537	768197	6642153	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0538	767889	6642153	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0539	767742	6642154	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0540	767952	6642156	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0541	768125	6642157	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0542	767800	6642159	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0543	767656	6642160	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0544	767996	6642167	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0545	768145	6642168	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0546	767730	6642169	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0547	767880	6642170	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0548	768187	6642171	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0549	767643	6642175	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0550	767964	6642176	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0551	767792	6642178	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0552	768045	6642182	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0553	768018	6642182	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0554	768180	6642186	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0555	767725	6642186	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0556	768062	6642188	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0557	767872	6642190	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0558	767934	6642193	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0559	767636	6642194	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0560	768077	6642196	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0561	767785	6642199	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0562	768087	6642202	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0563	767714	6642207	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0564	767864	6642207	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0565	768099	6642210	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0566	767971	6642215	45	0	0	0	0	0	0	0	0	0	40

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0567	767926	6642216	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0568	768117	6642217	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0570	767986	6642221	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0571	768137	6642226	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0572	767710	6642227	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0573	767857	6642230	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0574	767917	6642232	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0575	767768	6642233	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0576	768003	6642233	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0577	768149	6642244	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0578	768024	6642245	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0579	767849	6642248	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0581	767917	6642250	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0582	768041	6642251	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0583	768167	6642254	50	0	0	0	0	0	0	0	0	0	45
NNS_Rx0584	768061	6642258	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0585	767782	6642259	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0586	767656	6642264	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0587	768071	6642266	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0588	767899	6642269	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0590	768097	6642275	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0591	767834	6642278	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0592	767606	6642278	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0593	767887	6642291	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0594	767588	6642297	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0595	767681	6642298	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0596	767729	6642301	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0597	767675	6642305	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0598	767758	6642311	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0599	767892	6642312	45	0	0	0	0	0	0	0	0	0	40

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NNS_Rx0600	767581	6642313	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0601	767658	6642329	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0602	767716	6642329	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0603	767943	6642330	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0604	767574	6642333	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0605	767999	6642334	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0606	767813	6642334	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0607	767959	6642335	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0608	769264	6642340	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx0609	767649	6642345	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0610	767973	6642347	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0611	767709	6642349	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0612	767560	6642354	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0613	767806	6642355	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0614	767643	6642358	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0615	768015	6642358	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0616	767857	6642358	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0617	767875	6642363	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0618	768027	6642363	50	0	0	0	0	0	0	0	0	0	45
NNS_Rx0619	767701	6642367	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0620	767791	6642367	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0621	767890	6642371	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0622	768050	6642373	51	0	0	0	0	0	0	0	0	0	46
NNS_Rx0623	767909	6642381	46	0	0	0	0	0	0	0	0	0	41
NNS_Rx0624	767781	6642382	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0625	767641	6642385	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0626	768063	6642385	52	0	0	0	0	0	0	0	0	0	47
NNS_Rx0627	767699	6642388	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0628	767936	6642389	47	0	0	0	0	0	0	0	0	0	42
NNS_Rx0629	768076	6642391	52	0	0	0	0	0	0	0	0	0	47

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx0630	767954	6642398	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0631	767777	6642399	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0632	767628	6642400	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0633	768117	6642400	55	0	0	0	0	0	0	0	0	0	50
NNS_Rx0634	768091	6642401	53	0	0	0	0	0	0	0	0	0	48
NNS_Rx0635	767683	6642402	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0636	767832	6642408	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0637	767963	6642410	48	0	0	0	0	0	0	0	0	0	43
NNS_Rx0638	767613	6642413	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0639	767768	6642422	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0640	768002	6642423	50	0	0	0	0	0	0	0	0	0	45
NNS_Rx0641	767676	6642426	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0642	767829	6642427	45	0	0	0	0	0	0	0	0	0	40
NNS_Rx0643	767610	6642430	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0644	768020	6642431	50	0	0	0	0	0	0	0	0	0	45
NNS_Rx0645	767757	6642437	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0646	768040	6642441	51	0	0	0	0	0	0	0	0	0	46
NNS_Rx0647	767672	6642441	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0648	767820	6642445	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0649	767520	6642450	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0650	768058	6642451	53	0	0	0	0	0	0	0	0	0	48
NNS_Rx0651	767748	6642454	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0652	767663	6642457	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0653	767510	6642469	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0654	767811	6642477	44	0	0	0	0	0	0	0	0	0	39
NNS_Rx0655	767746	6642478	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0656	767498	6642483	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0657	767588	6642484	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0658	767728	6642490	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0659	767585	6642501	40	0	0	0	0	0	0	0	0	0	35

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx0660	767495	6642505	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0661	768499	6642512	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0662	767574	6642518	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0663	767629	6642523	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0664	767493	6642528	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0665	768490	6642533	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0666	767621	6642535	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0667	767565	6642539	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0668	767712	6642540	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0669	767475	6642544	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0670	767619	6642546	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0671	768479	6642548	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0672	767559	6642555	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0673	767617	6642558	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0674	767472	6642562	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0675	768473	6642565	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0676	767546	6642572	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0677	767692	6642574	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0678	767459	6642577	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0679	767609	6642582	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0680	768465	6642583	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0681	767446	6642589	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0682	767683	6642590	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0683	767540	6642593	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0684	767606	6642600	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0685	768460	6642603	49	0	0	0	0	0	0	0	0	0	44
NNS_Rx0686	767529	6642609	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0687	767442	6642615	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0688	767595	6642618	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0689	767526	6642628	39	0	0	0	0	0	0	0	0	0	34

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0690	767583	6642632	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0691	767492	6642635	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0692	767514	6642643	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0693	767578	6642656	40	0	0	0	0	0	0	0	0	0	35
NNS_Rx0694	767566	6642673	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0695	767401	6642693	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0696	767489	6642694	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0697	767507	6642702	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx0698	767522	6642711	39	0	0	0	0	0	0	0	0	0	34
NNS_Rx0699	767395	6642716	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0700	767372	6642749	37	0	0	0	0	0	0	0	0	0	32
NNS_Rx0701	767363	6642774	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0702	767328	6642835	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx0703	767952	6642842	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx0704	767909	6642891	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx0705	767799	6642901	41	0	0	0	0	0	0	0	0	0	36
NNS_Rx0706	766851	6643307	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0707	766831	6643325	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0708	766772	6643364	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx0709	766751	6643385	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0710	766691	6643437	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0711	766666	6643451	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx0712	766640	6643472	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0713	766623	6643488	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0714	766610	6643502	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0715	770163	6643919	25	0	0	0	0	0	0	0	0	0	20
NNS_Rx0716	770607	6643969	19	0	0	0	0	0	0	0	0	0	14
NNS_Rx0717	770251	6645262	33	0	18	0	28	0	0	0	0	0	28
NNS_Rx0718	768945	6646456	52	0	36	0	41	0	0	0	0	0	47
NNS_Rx0719	769712	6647433	44	0	26	0	34	0	0	0	0	0	39

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0720	769938	6647903	47	0	34	0	42	0	0	0	0	0	42
NNS_Rx0721	771521	6649354	31	0	15	0	25	0	0	0	0	0	26
NNS_Rx0722	770143	6649968	48	0	32	0	39	0	0	0	0	0	43
NNS_Rx0723	769332	6650136	44	0	28	0	35	0	0	0	0	0	39
NNS_Rx0724	770485	6650230	42	0	27	0	36	0	0	0	0	0	37
NNS_Rx0725	769966	6650941	46	0	26	0	43	0	0	0	0	0	41
NNS_Rx0726	769768	6651069	41	0	24	0	38	0	0	0	0	0	36
NNS_Rx0727	770552	6651254	48	0	20	0	42	22	0	0	0	0	43
NNS_Rx0728	772163	6654164	35	0	18	0	27	33	0	0	0	0	30
NNS_Rx0729	772166	6654202	35	0	18	0	27	33	0	0	0	0	30
NNS_Rx0730	772195	6654360	35	0	18	0	27	33	0	0	0	0	30
NNS_Rx0731	769694	6656429	33	0	15	0	26	0	0	0	0	0	28
NNS_Rx0732	769742	6656652	33	0	0	0	27	0	0	0	0	0	28
NNS_Rx0733	770430	6657780	39	0	21	0	28	37	0	0	0	0	34
NNS_Rx0734	770197	6657797	37	0	19	0	27	35	0	0	0	0	32
NNS_Rx0735	771851	6658349	47	0	28	0	34	46	0	0	0	0	42
NNS_Rx0736	771927	6658421	46	0	27	0	34	44	0	0	0	0	41
NNS_Rx0737	770741	6662094	48	0	25	0	41	0	0	0	0	0	43
NNS_Rx0738	770690	6662096	49	0	25	0	43	0	0	0	0	0	44
NNS_Rx0739	770783	6663619	42	0	16	0	34	0	27	0	0	0	37
NNS_Rx0740	767751	6664564	28	0	15	0	24	0	24	0	0	0	23
NNS_Rx0741	769516	6665067	51	0	37	0	42	0	52	0	0	0	46
NNS_Rx0742	769870	6665132	49	0	34	0	41	0	45	0	0	0	44
NNS_Rx0743	769856	6665174	50	0	33	0	43	0	46	0	0	0	45
NNS_Rx0744	769723	6665184	57	0	34	0	46	0	53	0	0	0	52
NNS_Rx0745	769723	6665202	58	0	34	0	47	0	53	0	0	0	53
NNS_Rx0746	769863	6665224	50	0	32	0	43	0	45	0	0	0	45
NNS_Rx0747	769863	6665295	50	0	30	0	44	0	45	0	0	0	45
NNS_Rx0748	769745	6665311	56	0	31	0	50	0	52	0	0	0	51
NNS_Rx0749	769841	6665335	51	0	30	0	45	0	46	0	0	0	46

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx0750	770726	6665675	36	0	19	0	30	0	30	0	0	0	31
NNS_Rx0751	770079	6665815	43	0	23	0	36	0	36	0	0	0	38
NNS_Rx0752	769666	6667616	48	0	27	0	39	0	0	0	0	0	43
NNS_Rx0753	767474	6668093	30	0	15	0	24	0	0	0	0	0	25
NNS_Rx0754	769516	6670040	40	0	31	19	31	0	0	0	0	0	35
NNS_Rx0755	770105	6670345	33	0	22	18	29	0	0	0	0	0	28
NNS_Rx0756	768530	6670369	40	0	27	22	34	32	0	0	0	0	35
NNS_Rx0757	768755	6670374	45	0	30	23	36	33	0	0	0	0	40
NNS_Rx0758	767336	6670466	28	0	16	16	25	0	0	0	0	0	23
NNS_Rx0759	767315	6670489	28	0	15	15	25	0	0	0	0	0	23
NNS_Rx0760	769414	6672210	46	0	23	22	37	44	0	0	0	0	41
NNS_Rx0761	767800	6674966	37	0	19	0	28	0	0	0	0	0	32
NNS_Rx0762	771110	6678554	30	0	0	0	24	0	0	0	0	0	25
NNS_Rx0763	770358	6678835	36	0	0	0	30	0	0	0	0	0	31
NNS_Rx0764	770552	6678869	34	0	0	0	29	0	0	0	0	0	29
NNS_Rx0765	770160	6680532	37	0	24	0	32	0	0	0	0	0	32
NNS_Rx0766	769298	6684556	55	0	47	27	49	0	0	0	0	0	50
NNS_Rx0767	769302	6684642	59	0	43	29	54	0	23	0	0	0	54
NNS_Rx0768	769724	6686577	47	0	23	18	42	0	43	0	0	0	42
NNS_Rx0769	769783	6686589	46	0	22	18	41	0	41	0	0	0	41
NNS_Rx0770	769701	6686622	48	0	23	18	42	0	43	0	0	0	43
NNS_Rx0771	769719	6686625	47	0	23	18	42	0	43	0	0	0	42
NNS_Rx0772	769672	6686627	49	0	23	18	43	0	44	0	0	0	44
NNS_Rx0773	769814	6686631	45	0	23	18	40	0	40	0	0	0	40
NNS_Rx0774	769778	6686634	46	0	23	18	40	0	41	0	0	0	41
NNS_Rx0775	769860	6686682	44	0	23	17	38	0	39	0	0	0	39
NNS_Rx0776	769779	6686693	45	0	24	17	40	0	41	0	0	0	40
NNS_Rx0777	769725	6686699	46	0	24	17	41	0	43	0	0	0	41
NNS_Rx0778	769516	6686737	55	0	25	17	43	0	54	0	0	0	50
NNS_Rx0779	769787	6686743	45	0	24	17	39	0	41	0	0	0	40

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NNS_Rx0780	769941	6686751	42	0	23	17	36	0	38	0	0	0	37
NNS_Rx0781	769723	6686769	45	0	25	17	40	0	43	0	0	0	40
NNS_Rx0782	769858	6686782	43	0	24	16	37	0	39	0	0	0	38
NNS_Rx0783	769570	6686803	49	0	26	17	41	0	49	0	0	0	44
NNS_Rx0784	769647	6686809	46	0	26	17	40	0	45	0	0	0	41
NNS_Rx0785	769865	6686817	42	0	24	16	37	0	39	0	0	0	37
NNS_Rx0786	769500	6686819	55	0	26	17	41	0	53	0	0	0	50
NNS_Rx0787	768932	6686824	42	0	24	16	37	0	39	0	0	0	37
NNS_Rx0788	769783	6686841	43	0	25	16	38	0	41	0	0	0	38
NNS_Rx0789	769861	6686847	42	0	25	16	37	0	39	0	0	0	37
NNS_Rx0790	769572	6686850	47	0	26	16	40	0	48	0	0	0	42
NNS_Rx0792	770295	6686863	38	0	21	15	32	0	33	0	0	0	33
NNS_Rx0793	769804	6686912	42	0	26	16	37	0	40	0	0	0	37
NNS_Rx0794	769496	6686911	53	0	28	16	39	0	56	0	0	0	48
NNS_Rx0795	769572	6686924	46	0	28	16	39	0	49	0	0	0	41
NNS_Rx0796	769787	6686953	42	0	27	15	36	0	41	0	0	0	37
NNS_Rx0797	769500	6686959	52	0	28	16	38	0	56	0	0	0	47
NNS_Rx0798	769566	6686961	45	0	28	16	38	0	49	0	0	0	40
NNS_Rx0799	769861	6686977	42	0	26	15	35	0	39	0	0	0	37
NNS_Rx0800	769491	6687002	54	0	29	15	37	0	55	0	0	0	49
NNS_Rx0801	769653	6687006	43	0	28	15	37	0	45	0	0	0	38
NNS_Rx0802	769725	6687010	43	0	28	15	36	0	42	0	0	0	38
NNS_Rx0803	769855	6687021	42	0	27	15	35	0	39	0	0	0	37
NNS_Rx0804	769728	6687049	43	0	28	15	35	0	42	0	0	0	38
NNS_Rx0805	769584	6687074	45	0	30	15	36	0	47	0	0	0	40
NNS_Rx0806	769563	6687083	46	0	30	15	37	0	48	0	0	0	41
NNS_Rx0807	769845	6687093	43	0	28	14	35	0	39	0	0	0	38
NNS_Rx0808	769783	6687111	44	0	29	14	36	0	40	0	0	0	39
NNS_Rx0809	769714	6687113	44	0	29	15	36	0	42	0	0	0	39
NNS_Rx0810	769665	6687120	45	0	30	15	37	0	43	0	0	0	40

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NNS_Rx0811	769640	6687129	45	0	31	14	37	0	44	0	0	0	40
NNS_Rx0812	769520	6687131	51	0	32	15	38	0	48	0	0	0	46
NNS_Rx0813	769584	6687170	46	0	32	0	38	0	45	0	0	0	41
NNS_Rx0814	769810	6687180	44	0	29	0	36	0	39	0	0	0	39
NNS_Rx0815	769728	6687186	45	0	30	0	37	0	41	0	0	0	40
NNS_Rx0816	769582	6687190	46	0	33	0	38	0	44	0	0	0	41
NNS_Rx0817	769511	6687198	52	0	34	0	39	0	46	0	0	0	47
NNS_Rx0818	769643	6687204	46	0	32	0	38	0	43	0	0	0	41
NNS_Rx0819	769510	6687224	53	0	34	0	39	0	45	0	0	0	48
NNS_Rx0820	769724	6687241	46	0	31	0	38	0	41	0	0	0	41
NNS_Rx0821	769648	6687245	47	0	33	0	39	0	43	0	0	0	42
NNS_Rx0822	769508	6687244	53	0	35	0	40	0	46	0	0	0	48
NNS_Rx0823	769509	6687265	53	0	36	0	40	0	47	0	0	0	48
NNS_Rx0824	769581	6687269	48	0	35	0	40	0	45	0	0	0	43
NNS_Rx0825	769721	6687288	47	0	32	0	39	0	42	0	0	0	42
NNS_Rx0826	769664	6687292	48	0	33	0	39	0	43	0	0	0	43
NNS_Rx0827	769499	6687293	55	0	37	0	41	0	48	0	0	0	50
NNS_Rx0828	770960	6687358	35	0	17	0	26	0	26	0	0	0	30
NNS_Rx0829	769641	6687362	49	0	35	0	41	0	45	0	0	0	44
NNS_Rx0830	769582	6687362	50	0	37	0	42	0	48	0	0	0	45
NNS_Rx0831	769643	6687394	50	0	36	0	42	0	45	0	0	0	45
NNS_Rx0832	769516	6687418	52	0	43	0	45	0	54	0	0	0	47
NNS_Rx0833	769582	6687420	51	0	39	0	43	0	48	0	0	0	46
NNS_Rx0834	769561	6687457	53	0	41	0	45	0	50	0	0	0	48
NNS_Rx0835	769506	6687458	55	0	46	0	46	0	56	0	0	0	50
NNS_Rx0836	769581	6687484	53	0	40	0	45	0	49	0	0	0	48
NNS_Rx0837	769510	6687556	58	0	45	0	51	0	53	0	0	0	53
NNS_Rx0838	769516	6687824	56	0	33	0	47	0	42	0	0	0	51
NNS_Rx0839	769887	6687850	47	0	28	0	38	0	37	0	0	0	42
NNS_Rx0840	768447	6688286	38	0	20	0	31	0	29	0	0	0	33

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NNS_Rx0841	769253	6689283	51	0	33	0	43	0	25	37	0	0	46
NNS_Rx0842	**769120**	**6690462**	48	0	18	0	42	32	0	48	0	0	43
NNS_Rx0843	769614	6693047	50	0	30	0	42	39	0	33	0	0	45
NNS_Rx0844	768400	6695421	35	21	0	0	28	0	0	0	0	0	30
NNS_Rx0845	770685	6696155	35	24	0	0	29	0	0	0	0	0	30
NNS_Rx0846	770833	6696190	33	23	0	0	28	0	0	0	0	0	28
NNS_Rx0847	770473	6698685	40	21	21	0	32	0	0	0	0	0	35
NNS_Rx0848	770259	6706094	43	27	29	0	35	0	35	0	0	0	38
NNS_Rx0849	770510	6706164	49	29	33	0	39	0	39	0	0	0	44
NNS_Rx0850	770320	6706350	44	30	28	0	38	0	38	0	0	0	39
NNS_Rx0851	770479	6706457	47	32	28	0	42	0	41	0	0	0	42
NNS_Rx0852	769077	6706786	30	22	15	0	25	0	25	0	0	0	25
NNS_Rx0853	770550	6706815	43	38	23	0	43	0	42	0	0	0	38
NNS_Rx0854	770374	6706816	41	35	23	0	39	0	38	0	0	0	36
NNS_Rx0855	770081	6706846	38	31	21	0	34	0	34	0	0	0	33
NNS_Rx0856	770476	6706858	41	37	23	0	41	0	40	0	0	0	36
NNS_Rx0857	770183	6706861	39	32	21	0	35	0	35	0	0	0	34
NNS_Rx0858	770034	6706943	37	30	21	0	33	0	33	0	0	0	32
NNS_Rx0859	770779	6707134	53	51	28	0	41	0	49	0	0	0	48
NNS_Rx0860	770791	6707193	55	48	29	0	40	0	53	0	0	0	50
NNS_Rx0861	770713	6707213	47	44	29	0	39	0	49	0	0	0	42
NNS_Rx0862	770796	6707241	56	45	30	0	39	0	57	0	0	0	51
NNS_Rx0863	770799	6707269	57	44	31	0	38	0	58	0	0	0	52
NNS_Rx0864	770646	6707329	48	39	31	0	37	0	46	0	0	0	43
NNS_Rx0865	770510	6707335	44	37	29	0	36	0	41	0	0	0	39
NNS_Rx0866	770365	6707339	42	34	27	0	34	0	38	0	0	0	37
NNS_Rx0867	770794	6707372	56	40	33	0	36	0	58	0	0	0	51
NNS_Rx0868	770719	6707492	53	36	35	0	37	0	49	0	0	0	48
NNS_Rx0869	773301	6712366	33	0	15	15	0	31	0	0	0	0	28
NNS_Rx0870	769692	6713431	33	0	0	0	0	31	0	0	0	0	28

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NNS_Rx0871	771075	6713993	41	0	20	17	34	37	0	0	0	0	36
NNS_Rx0872	772188	6714320	48	0	28	0	43	33	0	0	0	0	43
NNS_Rx0873	771021	6714688	37	0	23	0	32	31	0	0	0	0	32
NNS_Rx0874	770982	6714791	36	0	22	0	31	31	0	0	0	0	31
NNS_Rx0875	772505	6715270	45	0	27	0	39	0	0	0	0	0	40
NNS_Rx0876	772465	6718167	47	0	20	0	38	0	0	0	0	0	42
NNS_Rx0877	772091	6720101	35	0	17	0	26	0	0	0	0	0	30
NNS_Rx0878	772495	6720139	37	0	19	0	29	0	0	0	0	0	32
NNS_Rx0879	772404	6720236	36	0	18	0	28	0	0	0	0	0	31
NNS_Rx0880	772760	6724295	30	0	0	0	25	27	0	0	0	0	25
NNS_Rx0881	774070	6726975	36	0	0	0	31	0	0	0	0	0	31
NNS_Rx0882	773841	6727284	34	0	0	0	28	0	0	0	0	0	29
NNS_Rx0883	773662	6727383	32	0	0	0	27	0	0	0	0	0	27
NNS_Rx0884	773191	6727634	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx0885	775930	6729006	50	39	0	0	37	0	37	0	0	0	45
NNS_Rx0886	774771	6729085	34	29	0	0	29	0	29	0	0	0	29
NNS_Rx0887	776308	6730373	54	50	0	0	33	0	55	0	0	0	49
NNS_Rx0888	776399	6730383	48	45	0	0	33	0	48	0	0	0	43
NNS_Rx0889	776374	6730395	49	46	0	0	33	0	49	0	0	0	44
NNS_Rx0890	776354	6730409	51	48	0	0	33	0	51	0	0	0	46
NNS_Rx0891	776340	6730414	52	50	0	0	33	0	52	0	0	0	47
NNS_Rx0892	776313	6730410	55	52	0	0	33	0	55	0	0	0	50
NNS_Rx0893	776407	6730455	48	45	0	0	34	0	48	0	0	0	43
NNS_Rx0894	776387	6730460	49	47	0	0	34	0	49	0	0	0	44
NNS_Rx0895	776369	6730467	50	48	0	0	34	0	50	0	0	0	45
NNS_Rx0896	776359	6730483	52	49	0	0	34	0	51	0	0	0	47
NNS_Rx0897	776328	6730479	55	52	0	0	34	0	54	0	0	0	50
NNS_Rx0898	776333	6730531	56	50	0	0	35	0	52	0	0	0	51
NNS_Rx0899	777264	6731578	41	24	0	0	33	0	30	0	0	0	36
NNS_Rx0900	774707	6732068	32	0	0	0	24	0	24	0	0	0	27

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx0901	774749	6732132	32	0	0	0	24	0	24	0	0	0	27
NNS_Rx0902	775744	6734158	33	28	0	0	33	0	34	0	35	0	28
NNS_Rx0903	775643	6734242	32	27	0	0	32	0	32	0	36	0	27
NNS_Rx0904	775601	6734254	32	27	0	0	31	0	32	0	36	0	27
NNS_Rx0905	775651	6734257	32	28	0	0	32	0	33	0	36	0	27
NNS_Rx0906	775489	6734258	31	26	0	0	30	0	31	0	35	0	26
NNS_Rx0907	775625	6734258	32	27	0	0	32	0	32	0	36	0	27
NNS_Rx0908	775527	6734266	31	27	0	0	31	0	31	0	36	0	26
NNS_Rx0909	775591	6734269	32	27	0	0	31	0	32	0	36	0	27
NNS_Rx0910	775794	6734278	34	29	0	0	33	0	34	0	36	0	29
NNS_Rx0911	775762	6734291	34	29	0	0	33	0	34	0	37	0	29
NNS_Rx0912	775743	6734292	34	28	0	0	33	0	34	0	36	0	29
NNS_Rx0913	775731	6734292	33	28	0	0	33	0	34	0	36	0	28
NNS_Rx0914	775711	6734294	33	28	0	0	32	0	33	0	36	0	28
NNS_Rx0915	775691	6734301	33	28	0	0	32	0	33	0	36	0	28
NNS_Rx0917	775800	6734302	34	29	0	0	33	0	34	0	37	0	29
NNS_Rx0918	775646	6734307	32	28	0	0	32	0	33	0	36	0	27
NNS_Rx0919	775660	6734308	33	28	0	0	32	0	33	0	36	0	28
NNS_Rx0920	775623	6734314	32	28	0	0	31	0	32	0	36	0	27
NNS_Rx0922	775594	6734316	32	27	0	0	31	0	32	0	36	0	27
NNS_Rx0923	775573	6734320	32	27	0	0	31	0	32	0	36	0	27
NNS_Rx0924	775555	6734323	31	27	0	0	31	0	32	0	36	0	26
NNS_Rx0925	775809	6734328	34	29	0	0	33	0	35	0	37	0	29
NNS_Rx0926	775539	6734328	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0928	775488	6734336	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0929	775737	6734336	33	29	0	0	32	0	34	0	37	0	28
NNS_Rx0930	775475	6734337	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0931	775456	6734340	30	26	0	0	30	0	30	0	36	0	25
NNS_Rx0932	775727	6734341	33	29	0	0	32	0	34	0	37	0	28
NNS_Rx0933	775816	6734341	35	29	0	0	33	0	35	0	37	0	30

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NNS_Rx0934	775764	6734341	34	29	0	0	33	0	34	0	37	0	29
NNS_Rx0935	775436	6734346	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0937	775678	6734350	33	28	0	0	32	0	33	0	37	0	28
NNS_Rx0938	775664	6734353	33	28	0	0	32	0	33	0	37	0	28
NNS_Rx0939	775399	6734354	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0940	775638	6734354	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx0941	775821	6734355	35	30	0	0	33	0	35	0	37	0	30
NNS_Rx0942	775383	6734356	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0943	775368	6734359	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0944	775705	6734360	33	29	0	0	32	0	33	0	37	0	28
NNS_Rx0946	775346	6734361	29	26	0	0	29	0	29	0	36	0	24
NNS_Rx0947	775330	6734361	29	26	0	0	29	0	29	0	36	0	24
NNS_Rx0948	775574	6734364	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx0949	775774	6734365	34	29	0	0	33	0	34	0	37	0	29
NNS_Rx0950	775555	6734365	31	27	0	0	31	0	32	0	37	0	26
NNS_Rx0951	775604	6734367	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx0952	775827	6734369	35	30	0	0	33	0	35	0	37	0	30
NNS_Rx0953	775535	6734372	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0954	775492	6734377	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0955	775767	6734381	34	29	0	0	33	0	34	0	37	0	29
NNS_Rx0956	775830	6734386	35	30	0	0	33	0	35	0	38	0	30
NNS_Rx0957	775473	6734388	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx0958	775413	6734389	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0959	775372	6734390	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0960	775452	6734391	30	27	0	0	29	0	30	0	36	0	25
NNS_Rx0961	775343	6734395	29	26	0	0	29	0	29	0	36	0	24
NNS_Rx0962	775738	6734395	34	29	0	0	32	0	34	0	37	0	29
NNS_Rx0963	775434	6734397	30	27	0	0	29	0	30	0	36	0	25
NNS_Rx0964	775673	6734400	33	29	0	0	31	0	33	0	37	0	28
NNS_Rx0965	775306	6734400	29	26	0	0	28	0	29	0	36	0	24

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NNS_Rx0966	775840	6734402	35	30	0	0	33	0	35	0	38	0	30
NNS_Rx0967	775692	6734405	33	29	0	0	32	0	33	0	37	0	28
NNS_Rx0968	775654	6734407	33	29	0	0	31	0	33	0	37	0	28
NNS_Rx0970	775745	6734418	34	29	0	0	32	0	34	0	38	0	29
NNS_Rx0971	775369	6734418	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx0972	775243	6734418	28	25	0	0	28	0	29	0	36	0	23
NNS_Rx0973	775842	6734420	35	30	0	0	33	0	35	0	38	0	30
NNS_Rx0974	775767	6734421	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx0975	775796	6734422	34	30	0	0	33	0	34	0	38	0	29
NNS_Rx0976	775692	6734426	33	29	0	0	32	0	33	0	37	0	28
NNS_Rx0977	775849	6734434	35	31	0	0	33	0	35	0	38	0	30
NNS_Rx0978	775803	6734438	34	30	0	0	33	0	35	0	38	0	29
NNS_Rx0979	775354	6734439	29	26	0	0	29	0	30	0	36	0	24
NNS_Rx0980	775626	6734440	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx0981	775307	6734444	29	26	0	0	28	0	29	0	36	0	24
NNS_Rx0982	775688	6734447	33	29	0	0	31	0	33	0	38	0	28
NNS_Rx0983	775855	6734457	35	31	0	0	33	0	35	0	38	0	30
NNS_Rx0984	775738	6734458	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx0985	775680	6734462	33	29	0	0	31	0	33	0	38	0	28
NNS_Rx0986	775614	6734465	32	28	0	0	31	0	32	0	38	0	27
NNS_Rx0987	775799	6734466	34	30	0	0	32	0	35	0	38	0	29
NNS_Rx0988	775320	6734466	29	26	0	0	28	0	29	0	36	0	24
NNS_Rx0989	775764	6734468	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx0990	775732	6734468	33	30	0	0	32	0	34	0	38	0	28
NNS_Rx0991	775778	6734471	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx0992	775854	6734472	35	31	0	0	33	0	35	0	38	0	30
NNS_Rx0993	775359	6734475	29	26	0	0	28	0	30	0	36	0	24
NNS_Rx0994	775668	6734483	33	29	0	0	31	0	33	0	38	0	28
NNS_Rx0995	775607	6734486	32	29	0	0	30	0	32	0	38	0	27
NNS_Rx0996	775850	6734488	35	31	0	0	33	0	35	0	39	0	30

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NNS_Rx0997	775316	6734491	29	26	0	0	28	0	29	0	36	0	24
NNS_Rx0998	775715	6734501	33	30	0	0	31	0	34	0	38	0	28
NNS_Rx0999	775658	6734503	33	29	0	0	31	0	33	0	38	0	28
NNS_Rx1000	775767	6734503	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx1001	775753	6734505	34	30	0	0	32	0	34	0	38	0	29
NNS_Rx1002	775790	6734506	34	30	0	0	32	0	35	0	39	0	29
NNS_Rx1003	775731	6734509	33	30	0	0	31	0	34	0	38	0	28
NNS_Rx1004	775850	6734509	35	31	0	0	33	0	35	0	39	0	30
NNS_Rx1005	775371	6734510	29	27	0	0	29	0	30	0	37	0	24
NNS_Rx1006	775604	6734510	32	29	0	0	30	0	32	0	38	0	27
NNS_Rx1007	775655	6734517	32	29	0	0	31	0	33	0	38	0	27
NNS_Rx1008	775809	6734518	34	31	0	0	32	0	35	0	39	0	29
NNS_Rx1009	775851	6734520	35	31	0	0	32	0	35	0	39	0	30
NNS_Rx1010	775320	6734520	29	26	0	0	28	0	29	0	37	0	24
NNS_Rx1011	775422	6734525	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1012	775497	6734534	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1013	775477	6734535	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1014	775370	6734538	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1015	775325	6734540	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1016	775909	6734540	36	32	0	0	33	0	36	0	39	0	31
NNS_Rx1017	775649	6734541	32	29	0	0	31	0	33	0	38	0	27
NNS_Rx1018	775850	6734543	35	31	0	0	32	0	35	0	39	0	30
NNS_Rx1019	775430	6734546	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1020	775518	6734547	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1021	775540	6734547	31	28	0	0	30	0	32	0	38	0	26
NNS_Rx1022	775558	6734548	31	28	0	0	30	0	32	0	38	0	26
NNS_Rx1023	775702	6734549	33	30	0	0	31	0	33	0	39	0	28
NNS_Rx1024	775809	6734550	34	31	0	0	32	0	35	0	39	0	29
NNS_Rx1025	775765	6734551	34	31	0	0	32	0	34	0	39	0	29
NNS_Rx1026	775745	6734552	33	30	0	0	31	0	34	0	39	0	28

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NNS_Rx1027	775726	6734555	33	30	0	0	31	0	34	0	39	0	28
NNS_Rx1028	775849	6734558	35	32	0	0	32	0	35	0	39	0	30
NNS_Rx1029	775788	6734558	34	31	0	0	32	0	35	0	39	0	29
NNS_Rx1030	775371	6734561	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1031	775637	6734564	32	29	0	0	31	0	33	0	39	0	27
NNS_Rx1032	775318	6734569	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1033	775694	6734571	33	30	0	0	31	0	33	0	39	0	28
NNS_Rx1034	774665	6734573	24	21	0	0	24	0	24	0	33	0	19
NNS_Rx1035	775457	6734574	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1036	775381	6734577	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1037	775286	6734578	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1038	775620	6734579	32	29	0	0	31	0	32	0	39	0	27
NNS_Rx1040	775587	6734580	32	29	0	0	31	0	32	0	38	0	27
NNS_Rx1041	775472	6734582	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1042	775569	6734584	32	29	0	0	31	0	32	0	38	0	27
NNS_Rx1043	775529	6734589	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1044	775548	6734592	31	28	0	0	30	0	32	0	38	0	26
NNS_Rx1046	775513	6734593	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1047	775392	6734594	30	27	0	0	29	0	30	0	38	0	25
NNS_Rx1048	775815	6734596	34	31	0	0	32	0	35	0	40	0	29
NNS_Rx1049	775774	6734600	34	31	0	0	32	0	34	0	39	0	29
NNS_Rx1050	775227	6734606	29	26	0	0	28	0	29	0	37	0	24
NNS_Rx1051	775399	6734614	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1052	775375	6734615	30	27	0	0	29	0	30	0	38	0	25
NNS_Rx1053	775334	6734617	30	27	0	0	29	0	29	0	37	0	25
NNS_Rx1054	775655	6734617	33	30	0	0	31	0	33	0	39	0	28
NNS_Rx1055	775275	6734619	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1056	775351	6734620	30	27	0	0	29	0	30	0	37	0	25
NNS_Rx1058	775317	6734624	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1059	775025	6734624	27	24	0	0	27	0	27	0	35	0	22

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NNS_Rx1061	775665	6734625	33	30	0	0	32	0	33	0	39	0	28
NNS_Rx1062	775117	6734625	28	25	0	0	28	0	28	0	36	0	23
NNS_Rx1063	775635	6734626	32	30	0	0	31	0	33	0	39	0	27
NNS_Rx1064	775092	6734626	28	25	0	0	27	0	27	0	36	0	23
NNS_Rx1065	775221	6734628	29	26	0	0	28	0	28	0	37	0	24
NNS_Rx1066	775076	6734628	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1067	775457	6734629	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1068	775050	6734630	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1069	775160	6734631	28	25	0	0	28	0	28	0	36	0	23
NNS_Rx1070	775612	6734632	32	29	0	0	31	0	32	0	39	0	27
NNS_Rx1071	775592	6734636	32	29	0	0	31	0	32	0	39	0	27
NNS_Rx1072	775474	6734637	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1073	775139	6734638	28	25	0	0	28	0	28	0	36	0	23
NNS_Rx1074	775495	6734638	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx1075	775571	6734639	32	29	0	0	31	0	32	0	39	0	27
NNS_Rx1076	775675	6734640	33	30	0	0	32	0	33	0	39	0	28
NNS_Rx1077	775513	6734647	31	28	0	0	31	0	31	0	39	0	26
NNS_Rx1078	775834	6734648	35	32	0	0	33	0	35	0	40	0	30
NNS_Rx1079	775530	6734649	31	28	0	0	31	0	31	0	39	0	26
NNS_Rx1080	775818	6734649	35	32	0	0	33	0	35	0	40	0	30
NNS_Rx1081	775799	6734650	34	32	0	0	33	0	35	0	40	0	29
NNS_Rx1083	775731	6734652	34	31	0	0	32	0	34	0	40	0	29
NNS_Rx1084	775439	6734656	31	28	0	0	30	0	30	0	38	0	26
NNS_Rx1085	775417	6734661	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1086	775233	6734661	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1087	775176	6734663	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1088	775399	6734667	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1089	775344	6734668	30	27	0	0	29	0	30	0	38	0	25
NNS_Rx1090	775199	6734668	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1091	775213	6734668	29	26	0	0	28	0	28	0	37	0	24

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1092	775325	6734669	30	27	0	0	29	0	29	0	38	0	25
NNS_Rx1093	775357	6734670	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1094	775383	6734670	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1095	775735	6734670	34	31	0	0	32	0	34	0	40	0	29
NNS_Rx1096	775307	6734675	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1097	775278	6734676	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1098	775675	6734676	33	30	0	0	32	0	33	0	40	0	28
NNS_Rx1099	775680	6734694	33	30	0	0	32	0	33	0	40	0	28
NNS_Rx1100	775795	6734696	35	32	0	0	33	0	34	0	41	0	30
NNS_Rx1101	775819	6734708	35	32	0	0	33	0	35	0	41	0	30
NNS_Rx1102	775215	6734711	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1104	775758	6734713	34	31	0	0	33	0	34	0	41	0	29
NNS_Rx1105	775739	6734715	34	31	0	0	33	0	34	0	40	0	29
NNS_Rx1106	775894	6734718	36	33	0	0	34	0	36	0	41	0	31
NNS_Rx1107	775687	6734718	33	30	0	0	32	0	33	0	40	0	28
NNS_Rx1108	775281	6734719	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1109	775318	6734720	30	27	0	0	29	0	29	0	38	0	25
NNS_Rx1110	775309	6734721	30	27	0	0	29	0	29	0	38	0	25
NNS_Rx1111	775346	6734723	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1112	775966	6734728	37	34	0	0	35	0	37	0	41	0	32
NNS_Rx1113	775169	6734728	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1114	775091	6734730	28	25	0	0	28	0	28	0	36	0	23
NNS_Rx1116	775832	6734730	35	32	0	0	34	0	35	0	41	0	30
NNS_Rx1117	775919	6734730	37	34	0	0	34	0	36	0	41	0	32
NNS_Rx1118	775118	6734731	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1120	775008	6734732	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1121	775367	6734735	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1122	775870	6734738	36	33	0	0	34	0	35	0	41	0	31
NNS_Rx1123	775683	6734738	34	31	0	0	33	0	33	0	40	0	29
NNS_Rx1124	775219	6734742	29	26	0	0	29	0	29	0	37	0	24

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1125	775366	6734755	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1126	775935	6734760	37	34	0	0	35	0	36	0	42	0	32
NNS_Rx1127	775171	6734761	28	25	0	0	29	0	28	0	37	0	23
NNS_Rx1128	775689	6734761	34	31	0	0	33	0	33	0	41	0	29
NNS_Rx1129	775784	6734764	35	32	0	0	34	0	34	0	41	0	30
NNS_Rx1130	775743	6734766	34	31	0	0	33	0	34	0	41	0	29
NNS_Rx1131	775871	6734767	36	33	0	0	34	0	35	0	42	0	31
NNS_Rx1132	775326	6734767	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1134	775301	6734769	30	27	0	0	30	0	30	0	38	0	25
NNS_Rx1135	775234	6734769	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1136	775112	6734770	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1137	775977	6734771	38	35	0	0	35	0	37	0	42	0	33
NNS_Rx1138	775197	6734771	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx1139	775218	6734773	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1140	775809	6734775	35	32	0	0	34	0	34	0	41	0	30
NNS_Rx1141	775170	6734776	28	25	0	0	29	0	29	0	37	0	23
NNS_Rx1142	774996	6734777	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1143	775044	6734779	27	24	0	0	28	0	28	0	36	0	22
NNS_Rx1144	775374	6734780	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1145	775933	6734783	37	34	0	0	35	0	36	0	42	0	32
NNS_Rx1146	775881	6734784	36	33	0	0	35	0	35	0	42	0	31
NNS_Rx1147	775698	6734787	34	31	0	0	33	0	33	0	41	0	29
NNS_Rx1148	775764	6734789	35	32	0	0	34	0	34	0	41	0	30
NNS_Rx1149	775117	6734790	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1150	774992	6734799	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1151	775325	6734800	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1152	775703	6734801	34	31	0	0	33	0	33	0	41	0	29
NNS_Rx1153	775930	6734802	37	34	0	0	35	0	36	0	42	0	32
NNS_Rx1154	775285	6734803	29	26	0	0	30	0	30	0	38	0	24
NNS_Rx1155	775876	6734805	36	33	0	0	35	0	35	0	42	0	31

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NNS_Rx1156	775377	6734805	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1157	775769	6734806	35	32	0	0	34	0	34	0	42	0	30
NNS_Rx1158	775359	6734818	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1159	775046	6734818	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1160	775335	6734818	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1161	775109	6734819	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1162	775785	6734823	35	32	0	0	34	0	34	0	42	0	30
NNS_Rx1163	775926	6734825	37	34	0	0	36	0	36	0	43	0	32
NNS_Rx1164	775282	6734825	29	26	0	0	30	0	30	0	38	0	24
NNS_Rx1165	775717	6734826	34	31	0	0	34	0	33	0	42	0	29
NNS_Rx1166	775975	6734826	38	35	0	0	36	0	36	0	43	0	33
NNS_Rx1167	775218	6734826	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1168	775172	6734827	29	25	0	0	29	0	29	0	38	0	24
NNS_Rx1169	775816	6734834	36	33	0	0	35	0	34	0	42	0	31
NNS_Rx1170	775887	6734840	37	34	0	0	35	0	35	0	43	0	32
NNS_Rx1171	775724	6734840	34	31	0	0	34	0	34	0	42	0	29
NNS_Rx1172	775949	6734842	38	35	0	0	36	0	36	0	43	0	33
NNS_Rx1173	774992	6734842	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx1174	775972	6734843	38	35	0	0	36	30	36	0	43	0	33
NNS_Rx1175	775927	6734843	37	34	0	0	36	0	36	0	43	0	32
NNS_Rx1176	775866	6734844	36	33	0	0	35	0	35	0	43	0	31
NNS_Rx1177	775173	6734848	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1178	775370	6734850	30	27	0	0	31	0	30	0	39	0	25
NNS_Rx1179	775352	6734852	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1180	775226	6734853	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1181	775046	6734853	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1182	775329	6734854	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1183	775090	6734855	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1184	775307	6734856	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1185	775283	6734856	30	27	0	0	30	0	30	0	39	0	25

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NNS_Rx1186	775068	6734857	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1187	775109	6734859	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1188	775765	6734867	35	32	0	0	34	0	34	0	42	0	30
NNS_Rx1189	774996	6734872	27	24	0	0	28	0	28	0	36	0	22
NNS_Rx1190	775705	6734872	34	31	0	0	34	0	34	0	42	0	29
NNS_Rx1191	776013	6734873	39	36	0	0	37	30	37	0	44	0	34
NNS_Rx1192	775392	6734874	31	28	0	0	31	0	31	0	40	0	26
NNS_Rx1193	775870	6734888	37	34	0	0	36	30	35	0	43	0	32
NNS_Rx1194	775806	6734889	36	33	0	0	35	30	35	0	43	0	31
NNS_Rx1195	775938	6734891	38	35	0	0	37	30	36	0	44	0	33
NNS_Rx1196	775768	6734891	35	32	0	0	35	0	34	0	43	0	30
NNS_Rx1197	775847	6734893	36	33	0	0	36	30	35	0	43	0	31
NNS_Rx1198	775912	6734893	37	34	0	0	36	30	36	0	44	0	32
NNS_Rx1199	775820	6734894	36	33	0	0	35	30	35	0	43	0	31
NNS_Rx1200	775715	6734895	34	31	0	0	34	0	34	0	42	0	29
NNS_Rx1201	774994	6734897	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1202	775965	6734898	38	35	0	0	37	31	36	0	44	0	33
NNS_Rx1204	775392	6734899	31	28	0	0	31	0	31	0	40	0	26
NNS_Rx1206	776018	6734902	39	36	0	0	37	31	37	0	44	0	34
NNS_Rx1207	775127	6734903	28	25	0	0	29	0	29	0	38	0	23
NNS_Rx1208	775287	6734903	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1209	775309	6734904	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1210	775750	6734905	35	32	0	0	35	0	34	0	43	0	30
NNS_Rx1211	775071	6734905	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1212	775348	6734905	30	27	0	0	31	0	31	0	39	0	25
NNS_Rx1213	775083	6734906	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1214	775731	6734907	35	32	0	0	34	0	34	0	43	0	30
NNS_Rx1215	775107	6734907	28	25	0	0	29	0	29	0	38	0	23
NNS_Rx1216	775374	6734907	30	27	0	0	31	0	31	0	40	0	25
NNS_Rx1217	775048	6734909	28	24	0	0	28	0	28	0	37	0	23

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NNS_Rx1218	774995	6734919	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1219	776016	6734922	39	36	0	0	38	31	37	0	44	0	34
NNS_Rx1220	775966	6734934	38	35	0	0	37	31	37	0	44	0	33
NNS_Rx1221	775938	6734935	38	35	0	0	37	31	37	0	44	0	33
NNS_Rx1222	775894	6734936	37	34	0	0	37	31	36	0	44	0	32
NNS_Rx1223	775829	6734938	36	33	0	0	36	31	36	0	44	0	31
NNS_Rx1224	775847	6734940	36	33	0	0	36	31	36	0	44	0	31
NNS_Rx1225	776019	6734941	40	36	0	0	38	31	38	0	45	0	35
NNS_Rx1226	775690	6734941	34	31	0	0	34	30	34	0	43	0	29
NNS_Rx1227	775649	6734942	34	30	0	0	34	0	34	0	42	0	29
NNS_Rx1228	775757	6734942	35	32	0	0	35	30	35	0	43	0	30
NNS_Rx1230	775873	6734942	37	34	0	0	36	31	36	0	44	0	32
NNS_Rx1232	775609	6734943	33	30	0	0	33	0	33	0	42	0	28
NNS_Rx1233	775001	6734943	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1234	775735	6734943	35	32	0	0	35	30	35	0	43	0	30
NNS_Rx1235	775627	6734944	33	30	0	0	34	0	33	0	42	0	28
NNS_Rx1236	775463	6734945	32	28	0	0	32	0	32	0	41	0	27
NNS_Rx1237	775432	6734946	32	28	0	0	32	0	32	0	41	0	27
NNS_Rx1238	775175	6734948	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx1239	775503	6734948	32	29	0	0	32	0	32	0	41	0	27
NNS_Rx1240	775569	6734949	33	30	0	0	33	0	33	0	42	0	28
NNS_Rx1242	775527	6734950	32	29	0	0	33	0	32	0	41	0	27
NNS_Rx1243	775371	6734950	31	27	0	0	31	0	31	0	40	0	26
NNS_Rx1244	775071	6734950	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1245	775289	6734951	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1246	775409	6734951	32	28	0	0	31	0	31	0	40	0	27
NNS_Rx1247	775311	6734952	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx1248	775387	6734953	32	28	0	0	31	0	31	0	40	0	27
NNS_Rx1249	775049	6734954	28	25	0	0	28	0	28	0	37	0	23
NNS_Rx1250	775348	6734954	31	27	0	0	31	0	31	0	40	0	26

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx1251	775141	6734954	28	25	0	0	29	0	29	0	38	0	23
NNS_Rx1252	775327	6734954	30	27	0	0	31	0	31	0	40	0	25
NNS_Rx1253	775094	6734955	28	25	0	0	29	0	29	0	38	0	23
NNS_Rx1254	775116	6734955	28	25	0	0	29	0	29	0	38	0	23
NNS_Rx1255	774994	6734961	27	24	0	0	28	0	28	0	37	0	22
NNS_Rx1256	776879	6735080	40	37	0	0	36	32	36	0	44	0	35
NNS_Rx1257	776534	6735107	52	46	0	0	42	32	41	0	48	0	47
NNS_Rx1258	777642	6735116	32	27	0	0	28	30	29	0	37	0	27
NNS_Rx1259	776535	6735130	51	45	0	14	43	33	41	0	49	0	46
NNS_Rx1260	775783	6735159	36	32	0	0	37	32	37	0	47	0	31
NNS_Rx1261	775697	6735171	35	31	0	0	36	32	36	0	46	0	30
NNS_Rx1262	775646	6735176	34	30	0	0	35	32	35	0	45	0	29
NNS_Rx1263	775719	6735181	35	31	0	0	36	32	36	0	46	0	30
NNS_Rx1264	775739	6735190	36	31	0	0	37	32	37	0	46	0	31
NNS_Rx1265	775762	6735191	36	31	0	0	37	32	37	0	47	0	31
NNS_Rx1266	775643	6735193	35	30	0	0	35	32	35	0	45	0	30
NNS_Rx1267	775782	6735199	36	32	0	0	37	32	37	0	47	0	31
NNS_Rx1268	775653	6735222	35	30	0	0	35	32	35	0	46	0	30
NNS_Rx1269	775712	6735230	36	31	0	0	36	32	36	0	47	0	31
NNS_Rx1270	775743	6735242	36	31	0	0	37	32	37	0	47	0	31
NNS_Rx1271	775656	6735244	35	30	0	0	36	32	36	0	46	0	30
NNS_Rx1272	775706	6735246	36	31	0	0	36	32	36	0	47	0	31
NNS_Rx1273	775761	6735247	37	31	0	0	37	32	37	0	48	0	32
NNS_Rx1274	775781	6735257	37	31	0	0	38	32	38	0	48	0	32
NNS_Rx1275	775650	6735260	35	30	0	0	36	32	36	0	46	0	30
NNS_Rx1276	775706	6735264	36	30	0	0	36	32	36	0	47	0	31
NNS_Rx1277	775783	6735278	37	31	0	0	38	33	38	0	48	0	32
NNS_Rx1278	775764	6735280	37	31	0	0	37	33	37	0	48	0	32
NNS_Rx1279	775708	6735281	36	30	0	0	37	32	37	0	47	0	31
NNS_Rx1280	775654	6735282	35	30	0	0	36	32	36	0	46	0	30

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx1281	775703	6735302	36	30	0	0	37	32	37	0	47	0	31
NNS_Rx1282	775653	6735302	35	30	0	0	36	32	36	0	46	0	30
NNS_Rx1283	775785	6735309	38	31	0	0	38	33	38	0	49	0	33
NNS_Rx1284	775745	6735312	37	31	0	0	37	33	37	0	48	0	32
NNS_Rx1285	775710	6735318	36	30	0	0	37	33	37	0	47	0	31
NNS_Rx1286	775649	6735319	35	30	0	0	36	32	36	0	46	0	30
NNS_Rx1287	776844	6735340	38	35	0	16	38	34	37	0	48	0	33
NNS_Rx1288	775692	6735360	36	30	0	0	37	33	37	0	48	0	31
NNS_Rx1289	775555	6735363	35	28	0	0	35	32	35	0	45	0	30
NNS_Rx1290	775638	6735363	36	29	0	0	36	33	36	0	46	0	31
NNS_Rx1291	775655	6735364	36	29	0	0	36	33	36	0	47	0	31
NNS_Rx1292	775575	6735364	35	29	0	0	35	32	35	0	45	0	30
NNS_Rx1293	775672	6735366	36	30	0	0	36	33	37	0	47	0	31
NNS_Rx1294	775488	6735367	35	28	0	0	34	32	34	0	44	0	30
NNS_Rx1295	775533	6735370	35	28	0	0	34	32	35	0	45	0	30
NNS_Rx1297	775465	6735372	35	28	0	0	34	32	34	0	44	0	30
NNS_Rx1298	775312	6735389	34	26	0	0	32	31	32	0	42	0	29
NNS_Rx1299	775536	6735394	35	28	0	0	35	32	35	0	45	0	30
NNS_Rx1300	775649	6735398	36	29	0	0	36	33	36	0	47	0	31
NNS_Rx1301	775488	6735398	35	28	0	0	34	32	34	0	44	0	30
NNS_Rx1302	776847	6735408	37	34	0	17	38	34	37	0	49	0	32
NNS_Rx1303	775299	6735409	34	26	0	0	32	32	32	0	41	0	29
NNS_Rx1304	775705	6735410	37	30	0	0	37	33	37	0	48	0	32
NNS_Rx1305	775534	6735418	35	28	0	0	35	33	35	0	45	0	30
NNS_Rx1306	775637	6735420	36	29	0	0	36	33	36	0	47	0	31
NNS_Rx1307	775487	6735420	35	28	0	0	34	32	34	0	44	0	30
NNS_Rx1308	775689	6735423	37	29	0	0	37	33	37	0	48	0	32
NNS_Rx1309	775303	6735426	34	26	0	0	32	32	32	0	42	0	29
NNS_Rx1310	775537	6735434	35	28	0	0	35	33	35	0	45	0	30
NNS_Rx1311	775485	6735435	35	27	0	0	34	32	34	0	44	0	30

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1312	776839	6735439	37	33	0	17	38	35	37	0	49	0	32
NNS_Rx1313	775931	6735443	42	32	0	15	42	34	42	0	57	0	37
NNS_Rx1314	775237	6735459	34	25	0	0	31	32	31	0	41	0	29
NNS_Rx1315	775485	6735459	35	27	0	0	34	33	34	0	44	0	30
NNS_Rx1316	775933	6735461	42	32	0	15	42	34	42	0	60	0	37
NNS_Rx1317	775537	6735476	36	28	0	0	35	33	35	0	45	0	31
NNS_Rx1318	776844	6735478	37	33	0	17	38	35	37	0	49	0	32
NNS_Rx1319	775484	6735480	36	27	0	0	34	33	34	0	44	0	31
NNS_Rx1320	775893	6735491	41	31	0	15	41	34	42	0	61	0	36
NNS_Rx1321	775239	6735495	35	25	0	0	31	32	31	0	41	0	30
NNS_Rx1322	775939	6735500	43	31	0	15	42	35	43	0	73	0	38
NNS_Rx1323	775925	6735501	42	31	0	15	42	35	43	0	71	0	37
NNS_Rx1324	775834	6735502	40	30	0	15	40	34	40	0	53	0	35
NNS_Rx1325	775536	6735503	36	28	0	0	35	33	35	0	45	0	31
NNS_Rx1326	775557	6735506	36	28	0	0	35	33	35	0	45	0	31
NNS_Rx1327	775469	6735508	36	27	0	0	34	33	34	0	44	0	31
NNS_Rx1328	775492	6735509	36	27	0	0	34	33	34	0	44	0	31
NNS_Rx1329	775237	6735525	35	25	0	0	31	32	31	0	41	0	30
NNS_Rx1330	775992	6735541	45	31	0	16	44	35	45	0	76	0	40
NNS_Rx1331	775899	6735549	42	30	0	15	41	35	42	0	64	0	37
NNS_Rx1332	775931	6735549	43	31	0	15	42	35	43	0	71	0	38
NNS_Rx1333	776843	6735551	37	32	0	18	37	35	37	0	49	0	32
NNS_Rx1334	775796	6735551	39	30	0	15	39	34	39	0	51	0	34
NNS_Rx1335	775868	6735552	41	30	0	15	40	35	41	0	57	0	36
NNS_Rx1336	775849	6735552	40	30	0	15	40	35	41	0	54	0	35
NNS_Rx1337	777002	6735554	37	31	0	18	35	35	35	0	45	0	32
NNS_Rx1338	776981	6735554	37	31	0	18	35	35	35	0	46	0	32
NNS_Rx1340	777021	6735555	37	30	0	18	35	35	34	0	45	0	32
NNS_Rx1341	776880	6735557	37	32	0	18	37	35	36	0	48	0	32
NNS_Rx1342	776963	6735558	37	31	0	18	35	35	35	0	46	0	32

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NNS_Rx1343	776911	6735558	37	31	0	18	36	35	36	0	47	0	32
NNS_Rx1344	775989	6735560	44	31	0	16	44	35	45	0	67	0	39
NNS_Rx1345	776919	6735561	37	31	0	18	36	35	36	0	47	0	32
NNS_Rx1346	777541	6735561	35	26	0	17	29	33	29	0	38	0	30
NNS_Rx1347	777565	6735565	35	26	0	17	29	33	29	0	38	0	30
NNS_Rx1348	775235	6735567	35	26	0	0	31	32	31	0	41	0	30
NNS_Rx1349	777516	6735567	35	26	0	17	29	33	29	0	39	0	30
NNS_Rx1350	775941	6735568	43	31	0	16	42	35	43	0	65	0	38
NNS_Rx1351	775792	6735570	39	29	0	15	39	35	39	0	51	0	34
NNS_Rx1352	775849	6735574	40	30	0	15	40	35	41	0	53	0	35
NNS_Rx1353	775986	6735575	44	31	0	16	44	35	45	0	63	0	39
NNS_Rx1354	777494	6735579	36	26	0	17	29	34	29	0	39	0	31
NNS_Rx1355	775791	6735584	39	29	0	15	39	35	39	0	51	0	34
NNS_Rx1356	775943	6735587	43	31	0	16	42	35	43	0	60	0	38
NNS_Rx1357	775850	6735588	40	30	0	15	40	35	41	0	53	0	35
NNS_Rx1358	775989	6735588	44	31	0	16	43	35	45	0	60	0	39
NNS_Rx1359	775237	6735590	35	26	0	0	31	32	31	0	41	0	30
NNS_Rx1361	776552	6735592	42	33	0	18	43	36	43	0	60	0	37
NNS_Rx1362	776997	6735604	37	30	0	18	35	35	35	0	45	0	32
NNS_Rx1363	775790	6735607	39	29	0	15	39	35	39	0	50	0	34
NNS_Rx1364	775726	6735608	38	29	0	15	37	35	38	0	49	0	33
NNS_Rx1365	776383	6735607	50	33	0	17	49	36	51	0	62	0	45
NNS_Rx1366	775940	6735609	43	30	0	16	42	35	43	0	56	0	38
NNS_Rx1367	776963	6735609	38	30	0	18	35	36	35	0	46	0	33
NNS_Rx1368	776553	6735609	42	33	0	18	43	36	43	0	59	0	37
NNS_Rx1369	777571	6735610	35	26	0	17	29	33	29	0	38	0	30
NNS_Rx1370	776499	6735610	44	33	0	18	44	36	45	0	61	0	39
NNS_Rx1371	775853	6735611	40	30	0	15	40	35	41	0	52	0	35
NNS_Rx1372	776458	6735611	45	33	0	17	46	36	46	0	61	0	40
NNS_Rx1373	776521	6735612	43	33	0	18	44	36	44	0	60	0	38

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NNS_Rx1374	776483	6735612	44	33	0	18	45	36	45	0	61	0	39
NNS_Rx1376	775992	6735613	45	31	0	16	43	36	45	0	59	0	40
NNS_Rx1377	776846	6735613	38	31	0	18	37	36	37	0	49	0	33
NNS_Rx1378	776900	6735613	38	31	0	18	36	36	36	0	47	0	33
NNS_Rx1379	776918	6735614	38	31	0	18	36	36	36	0	47	0	33
NNS_Rx1380	776440	6735613	46	33	0	17	46	37	47	0	61	0	41
NNS_Rx1381	776611	6735615	41	32	0	18	41	36	41	0	56	0	36
NNS_Rx1382	776417	6735618	47	33	0	17	47	37	48	0	61	0	42
NNS_Rx1383	775241	6735616	35	26	0	0	31	32	31	0	41	0	30
NNS_Rx1384	776881	6735616	38	31	0	18	36	36	36	0	48	0	33
NNS_Rx1385	777546	6735618	36	26	0	17	29	34	29	0	38	0	31
NNS_Rx1386	777521	6735618	36	26	0	17	29	34	29	0	39	0	31
NNS_Rx1387	776357	6735622	51	32	0	17	49	37	52	0	61	0	46
NNS_Rx1388	775849	6735625	40	30	0	16	40	35	41	0	52	0	35
NNS_Rx1389	775793	6735627	39	30	0	15	39	35	39	0	50	0	34
NNS_Rx1390	777492	6735628	36	26	0	17	29	34	29	0	39	0	31
NNS_Rx1391	775735	6735628	38	29	0	15	37	35	38	0	49	0	33
NNS_Rx1392	775991	6735629	45	31	0	16	43	36	45	0	58	0	40
NNS_Rx1393	776919	6735635	38	30	0	18	36	36	36	0	47	0	33
NNS_Rx1394	776614	6735636	40	32	0	18	41	37	41	0	55	0	35
NNS_Rx1395	776968	6735636	38	30	0	18	35	36	35	0	46	0	33
NNS_Rx1396	775933	6735636	42	30	0	16	41	36	43	0	55	0	37
NNS_Rx1397	775239	6735639	35	26	0	0	31	32	31	0	41	0	30
NNS_Rx1398	775991	6735641	45	31	0	16	43	36	45	0	57	0	40
NNS_Rx1400	776846	6735641	38	31	0	18	36	36	37	0	48	0	33
NNS_Rx1401	776556	6735645	42	32	0	18	42	37	43	0	57	0	37
NNS_Rx1402	775852	6735648	40	30	0	16	40	35	41	0	52	0	35
NNS_Rx1403	776521	6735653	43	32	0	18	43	37	43	0	57	0	38
NNS_Rx1404	776615	6735655	40	32	0	18	41	37	41	0	55	0	35
NNS_Rx1405	776970	6735657	38	30	0	18	35	36	35	0	46	0	33

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NNS_Rx1406	776502	6735657	43	32	0	18	44	37	44	0	57	0	38
NNS_Rx1407	776482	6735658	44	32	0	18	44	37	45	0	58	0	39
NNS_Rx1409	775937	6735659	42	31	0	16	41	36	43	0	54	0	37
NNS_Rx1410	777521	6735659	36	26	0	18	29	34	29	0	38	0	31
NNS_Rx1411	776435	6735659	46	32	0	18	45	37	47	0	58	0	41
NNS_Rx1412	776404	6735660	47	32	0	18	46	37	48	0	58	0	42
NNS_Rx1413	775993	6735662	45	31	0	16	43	36	44	0	56	0	40
NNS_Rx1414	776556	6735664	42	32	0	18	42	37	42	0	56	0	37
NNS_Rx1415	775853	6735666	40	30	0	16	39	36	40	0	52	0	35
NNS_Rx1416	775241	6735666	35	26	0	0	31	33	31	0	41	0	30
NNS_Rx1417	775795	6735666	39	30	0	16	38	35	39	0	50	0	34
NNS_Rx1418	777499	6735667	36	26	0	18	29	34	29	0	39	0	31
NNS_Rx1419	776388	6735668	47	32	0	18	46	37	49	0	57	0	42
NNS_Rx1420	776367	6735668	49	32	0	18	47	37	50	0	57	0	44
NNS_Rx1421	776850	6735673	38	31	0	19	36	36	36	0	48	0	33
NNS_Rx1422	776614	6735675	40	32	0	18	41	37	41	0	54	0	35
NNS_Rx1423	777014	6735678	38	29	0	19	34	36	34	0	45	0	33
NNS_Rx1424	776966	6735679	38	30	0	19	35	36	35	0	46	0	33
NNS_Rx1425	775851	6735685	40	31	0	16	39	36	40	0	51	0	35
NNS_Rx1426	775995	6735685	44	31	0	16	42	36	44	0	55	0	39
NNS_Rx1427	775793	6735687	39	30	0	16	38	35	39	0	50	0	34
NNS_Rx1428	775730	6735688	38	30	0	15	37	35	38	0	48	0	33
NNS_Rx1429	776543	6735689	42	32	0	18	42	37	42	0	55	0	37
NNS_Rx1430	776618	6735691	40	31	0	18	40	37	41	0	53	0	35
NNS_Rx1431	775239	6735694	36	26	0	0	31	33	31	0	41	0	31
NNS_Rx1432	776964	6735694	38	30	0	19	35	36	35	0	46	0	33
NNS_Rx1433	776848	6735701	39	30	0	19	36	37	36	0	48	0	34
NNS_Rx1434	777539	6735707	36	25	0	18	29	34	29	0	38	0	31
NNS_Rx1436	776615	6735708	40	31	0	19	40	37	41	0	53	0	35
NNS_Rx1437	776543	6735712	41	31	0	18	42	37	42	0	54	0	36

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NNS_Rx1438	777019	6735712	38	29	0	19	34	36	34	0	45	0	33
NNS_Rx1439	776907	6735714	39	30	0	19	35	37	35	0	46	0	34
NNS_Rx1440	776923	6735714	39	30	0	19	35	37	35	0	46	0	34
NNS_Rx1441	776863	6735715	39	30	0	19	36	37	36	0	47	0	34
NNS_Rx1442	776881	6735715	39	30	0	19	36	37	36	0	47	0	34
NNS_Rx1443	776967	6735717	38	29	0	19	34	36	35	0	45	0	33
NNS_Rx1444	775246	6735717	36	27	0	0	31	33	31	0	41	0	31
NNS_Rx1445	776095	6735719	52	32	0	17	44	37	47	0	55	0	47
NNS_Rx1446	775989	6735721	44	32	0	17	42	37	43	0	54	0	39
NNS_Rx1447	775943	6735724	42	32	0	16	41	36	42	0	53	0	37
NNS_Rx1448	777544	6735728	36	25	0	18	29	34	29	0	38	0	31
NNS_Rx1449	775781	6735729	39	31	0	16	38	36	39	0	49	0	34
NNS_Rx1450	776555	6735729	41	31	0	19	41	38	42	0	53	0	36
NNS_Rx1451	776615	6735730	40	31	0	19	40	38	40	0	52	0	35
NNS_Rx1452	777081	6735730	38	28	0	19	33	36	33	0	44	0	33
NNS_Rx1453	775867	6735731	40	31	0	16	39	36	40	0	51	0	35
NNS_Rx1454	775844	6735732	39	31	0	16	39	36	40	0	50	0	34
NNS_Rx1455	775803	6735733	39	31	0	16	38	36	39	0	49	0	34
NNS_Rx1456	775741	6735734	39	30	0	16	37	36	38	0	48	0	34
NNS_Rx1457	775759	6735735	39	31	0	16	37	36	38	0	48	0	34
NNS_Rx1458	775647	6735738	38	30	0	15	36	35	36	0	46	0	33
NNS_Rx1459	775995	6735738	44	32	0	17	41	37	43	0	53	0	39
NNS_Rx1460	775942	6735740	42	32	0	17	40	37	42	0	52	0	37
NNS_Rx1461	775246	6735745	36	27	0	0	31	33	31	0	40	0	31
NNS_Rx1462	777585	6735746	36	25	0	18	28	34	28	0	38	0	31
NNS_Rx1463	776618	6735746	40	31	0	19	40	38	40	0	52	0	35
NNS_Rx1464	776558	6735750	41	31	0	19	41	38	41	0	52	0	36
NNS_Rx1465	777082	6735752	38	28	0	19	33	36	33	0	43	0	33
NNS_Rx1466	775991	6735754	44	32	0	17	41	37	43	0	52	0	39
NNS_Rx1467	777543	6735755	37	25	0	18	29	35	29	0	38	0	32

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NNS_Rx1468	776981	6735758	39	29	0	19	34	37	34	0	45	0	34
NNS_Rx1469	776943	6735759	39	29	0	19	35	37	35	0	45	0	34
NNS_Rx1470	775723	6735759	39	31	0	16	37	36	37	0	47	0	34
NNS_Rx1471	777021	6735760	39	29	0	19	34	37	34	0	44	0	34
NNS_Rx1472	777000	6735760	39	29	0	19	34	37	34	0	45	0	34
NNS_Rx1473	775926	6735760	41	32	0	17	40	37	41	0	51	0	36
NNS_Rx1474	776963	6735761	39	29	0	19	34	37	34	0	45	0	34
NNS_Rx1475	776847	6735762	39	30	0	19	36	37	36	0	47	0	34
NNS_Rx1476	777040	6735763	39	28	0	19	33	37	33	0	44	0	34
NNS_Rx1477	776888	6735763	39	29	0	19	35	37	35	0	46	0	34
NNS_Rx1478	776433	6735764	43	32	0	19	43	38	44	0	53	0	38
NNS_Rx1479	775848	6735765	39	32	0	16	38	36	40	0	50	0	34
NNS_Rx1480	776863	6735765	39	29	0	19	36	37	36	0	47	0	34
NNS_Rx1481	776619	6735765	40	31	0	19	39	38	40	0	51	0	35
NNS_Rx1482	776408	6735769	44	32	0	18	43	38	45	0	52	0	39
NNS_Rx1483	775945	6735770	42	32	0	17	40	37	41	0	51	0	37
NNS_Rx1484	775802	6735771	39	31	0	16	38	36	39	0	49	0	34
NNS_Rx1485	776560	6735772	40	32	0	19	40	38	41	0	52	0	35
NNS_Rx1486	777594	6735772	36	25	0	18	28	34	28	0	38	0	31
NNS_Rx1487	776540	6735772	41	32	0	19	41	38	41	0	52	0	36
NNS_Rx1488	777084	6735772	39	28	0	19	33	36	33	0	43	0	34
NNS_Rx1489	776522	6735772	41	32	0	19	41	38	42	0	52	0	36
NNS_Rx1490	775726	6735776	39	31	0	16	36	36	37	0	47	0	34
NNS_Rx1491	776930	6735778	39	29	0	19	35	37	35	0	46	0	34
NNS_Rx1492	775250	6735779	36	27	0	0	31	33	31	0	40	0	31
NNS_Rx1493	776084	6735780	51	33	0	17	42	37	44	0	52	0	46
NNS_Rx1494	775992	6735782	44	33	0	17	41	37	42	0	52	0	39
NNS_Rx1495	777547	6735782	37	25	0	18	28	35	28	0	38	0	32
NNS_Rx1496	777504	6735783	37	25	0	18	29	35	29	0	38	0	32
NNS_Rx1497	775851	6735784	40	32	0	16	38	36	39	0	49	0	35

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1498	776618	6735787	40	31	0	19	39	38	40	0	50	0	35
NNS_Rx1499	777593	6735788	36	25	0	18	28	34	28	0	38	0	31
NNS_Rx1500	775943	6735790	42	32	0	17	40	37	41	0	51	0	37
NNS_Rx1501	776559	6735791	41	32	0	19	40	38	41	0	51	0	36
NNS_Rx1502	775942	6735794	42	32	0	17	40	37	41	0	51	0	37
NNS_Rx1503	777082	6735794	39	28	0	19	33	37	33	0	43	0	34
NNS_Rx1504	775996	6735796	44	33	0	17	40	37	42	0	51	0	39
NNS_Rx1505	776852	6735797	40	29	0	20	36	38	36	0	47	0	35
NNS_Rx1506	777507	6735798	37	25	0	19	29	35	29	0	38	0	32
NNS_Rx1507	777547	6735799	37	25	0	18	28	35	28	0	38	0	32
NNS_Rx1508	776082	6735798	51	33	0	17	42	38	44	0	52	0	46
NNS_Rx1509	776620	6735802	41	31	0	19	39	38	39	0	50	0	36
NNS_Rx1510	775850	6735804	40	32	0	16	38	37	39	0	49	0	35
NNS_Rx1511	776912	6735804	39	29	0	20	35	37	35	0	46	0	34
NNS_Rx1512	776972	6735804	39	29	0	20	34	37	34	0	45	0	34
NNS_Rx1513	776933	6735805	39	29	0	20	34	37	35	0	45	0	34
NNS_Rx1514	776991	6735805	39	28	0	20	34	37	34	0	44	0	34
NNS_Rx1515	776953	6735806	39	29	0	20	34	37	34	0	45	0	34
NNS_Rx1516	777007	6735810	39	28	0	20	34	37	34	0	44	0	34
NNS_Rx1517	775246	6735810	36	27	0	0	31	33	31	0	40	0	31
NNS_Rx1518	775944	6735810	42	33	0	17	39	37	41	0	50	0	37
NNS_Rx1519	775997	6735811	44	33	0	17	40	37	42	0	51	0	39
NNS_Rx1520	777085	6735813	39	28	0	20	33	37	33	0	43	0	34
NNS_Rx1521	776853	6735815	40	30	0	20	35	38	36	0	46	0	35
NNS_Rx1522	777550	6735815	37	25	0	19	28	35	28	0	38	0	32
NNS_Rx1523	776902	6735817	40	29	0	20	35	38	35	0	46	0	35
NNS_Rx1524	777505	6735819	37	25	0	19	29	35	29	0	38	0	32
NNS_Rx1525	776619	6735819	41	32	0	19	39	38	39	0	50	0	36
NNS_Rx1526	776261	6735823	56	34	0	18	42	38	45	0	51	0	51
NNS_Rx1527	775894	6735821	40	33	0	17	38	37	40	0	49	0	35

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1528	777041	6735823	39	28	0	20	33	37	33	0	44	0	34
NNS_Rx1529	775945	6735823	42	33	0	17	39	37	41	0	50	0	37
NNS_Rx1530	775855	6735826	40	32	0	17	38	37	39	0	49	0	35
NNS_Rx1531	776850	6735830	40	30	0	20	35	38	36	0	46	0	35
NNS_Rx1532	777025	6735831	39	28	0	20	33	37	33	0	44	0	34
NNS_Rx1533	776891	6735832	40	29	0	20	35	38	35	0	46	0	35
NNS_Rx1534	775803	6735834	40	32	0	16	37	37	38	0	48	0	35
NNS_Rx1535	775946	6735835	42	33	0	17	39	37	40	0	50	0	37
NNS_Rx1536	777084	6735835	39	28	0	20	33	37	33	0	43	0	34
NNS_Rx1537	776527	6735839	41	33	0	19	40	39	41	0	50	0	36
NNS_Rx1538	775252	6735840	36	27	0	0	31	33	31	0	40	0	31
NNS_Rx1539	776541	6735840	41	33	0	19	39	39	40	0	50	0	36
NNS_Rx1540	776565	6735840	41	32	0	19	39	39	40	0	50	0	36
NNS_Rx1542	776421	6735841	42	33	0	19	41	39	42	0	50	0	37
NNS_Rx1543	776501	6735842	41	33	0	19	40	39	41	0	50	0	36
NNS_Rx1544	776308	6735842	49	34	0	19	42	39	44	0	50	0	44
NNS_Rx1545	776437	6735843	41	33	0	19	41	39	42	0	50	0	36
NNS_Rx1546	776483	6735844	41	33	0	19	40	39	41	0	50	0	36
NNS_Rx1547	776461	6735844	41	33	0	19	40	39	42	0	50	0	36
NNS_Rx1548	776263	6735845	54	34	0	19	42	39	44	0	50	0	49
NNS_Rx1549	776890	6735846	40	30	0	20	35	38	35	0	45	0	35
NNS_Rx1550	776987	6735847	40	29	0	20	34	38	34	0	44	0	35
NNS_Rx1551	776855	6735851	40	30	0	20	35	38	35	0	46	0	35
NNS_Rx1552	776244	6735851	59	34	0	18	42	39	44	0	50	0	54
NNS_Rx1553	775741	6735855	40	32	0	16	36	36	37	0	46	0	35
NNS_Rx1554	777030	6735857	39	28	0	20	33	37	33	0	43	0	34
NNS_Rx1555	775809	6735857	40	32	0	17	37	37	38	0	47	0	35
NNS_Rx1556	775898	6735859	40	33	0	17	38	37	39	0	48	0	35
NNS_Rx1557	775881	6735859	40	33	0	17	38	37	39	0	48	0	35
NNS_Rx1558	775845	6735860	40	33	0	17	37	37	38	0	48	0	35

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			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1559	775781	6735860	40	32	0	16	36	37	37	0	47	0	35
NNS_Rx1560	775764	6735862	40	32	0	16	36	37	37	0	47	0	35
NNS_Rx1561	775946	6735863	41	34	0	17	39	38	40	0	49	0	36
NNS_Rx1562	776890	6735865	40	30	0	20	35	38	35	0	45	0	35
NNS_Rx1563	775532	6735865	38	30	0	15	33	35	34	0	43	0	33
NNS_Rx1564	776853	6735866	40	30	0	20	35	38	35	0	46	0	35
NNS_Rx1565	775504	6735866	38	30	0	15	33	35	34	0	43	0	33
NNS_Rx1566	775208	6735874	36	27	0	0	30	33	31	0	40	0	31
NNS_Rx1567	776851	6735885	40	30	0	20	35	38	35	0	45	0	35
NNS_Rx1568	776893	6735886	40	30	0	20	34	38	35	0	45	0	35
NNS_Rx1569	777034	6735891	40	29	0	20	33	38	33	0	43	0	35
NNS_Rx1570	776560	6735894	42	33	0	20	38	39	39	0	48	0	37
NNS_Rx1571	776619	6735894	42	33	0	20	38	39	38	0	48	0	37
NNS_Rx1572	778030	6735897	35	22	0	17	25	33	25	0	34	0	30
NNS_Rx1573	777080	6735897	40	28	0	20	32	38	32	0	42	0	35
NNS_Rx1574	776347	6735898	45	35	0	19	40	39	42	0	49	0	40
NNS_Rx1575	776409	6735899	42	34	0	19	40	39	41	0	49	0	37
NNS_Rx1576	776467	6735900	42	34	0	20	39	40	40	0	48	0	37
NNS_Rx1577	777056	6735901	40	28	0	20	33	38	33	0	43	0	35
NNS_Rx1578	776267	6735902	54	35	0	19	40	39	42	0	49	0	49
NNS_Rx1579	776901	6735904	40	30	0	21	34	38	34	0	45	0	35
NNS_Rx1580	776878	6735905	41	30	0	21	34	39	35	0	45	0	36
NNS_Rx1581	776530	6735906	42	34	0	20	38	40	39	0	48	0	37
NNS_Rx1582	776012	6735906	44	35	0	18	39	38	41	0	48	0	39
NNS_Rx1583	775944	6735907	41	34	0	18	38	38	40	0	48	0	36
NNS_Rx1584	776510	6735908	42	34	0	20	39	40	40	0	48	0	37
NNS_Rx1585	775859	6735908	41	33	0	17	37	38	39	0	47	0	36
NNS_Rx1586	776848	6735908	41	30	0	21	35	39	35	0	45	0	36
NNS_Rx1587	777032	6735909	40	29	0	21	33	38	33	0	43	0	35
NNS_Rx1588	777298	6735911	39	26	0	20	30	37	30	0	40	0	34

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NNS_Rx1589	775804	6735915	40	33	0	17	36	37	38	0	46	0	35
NNS_Rx1590	776410	6735918	42	35	0	20	39	40	41	0	48	0	37
NNS_Rx1591	776269	6735919	54	35	0	19	40	39	42	0	48	0	49
NNS_Rx1592	776345	6735920	45	35	0	19	40	40	42	0	48	0	40
NNS_Rx1593	777083	6735921	40	28	0	21	32	38	32	0	42	0	35
NNS_Rx1594	775446	6735921	38	30	0	15	32	35	33	0	42	0	33
NNS_Rx1595	775528	6735922	39	30	0	15	33	36	34	0	43	0	34
NNS_Rx1596	776014	6735921	44	35	0	18	38	39	41	0	48	0	39
NNS_Rx1597	777019	6735922	40	29	0	21	33	38	33	0	43	0	35
NNS_Rx1598	777058	6735925	40	28	0	21	32	38	33	0	43	0	35
NNS_Rx1599	775365	6735925	38	29	0	15	31	35	32	0	41	0	33
NNS_Rx1600	776998	6735927	40	29	0	21	33	38	33	0	43	0	35
NNS_Rx1601	776623	6735928	42	33	0	20	37	40	38	0	47	0	37
NNS_Rx1602	775389	6735929	38	29	0	15	32	35	33	0	41	0	33
NNS_Rx1604	775310	6735929	37	28	0	14	31	34	32	0	40	0	32
NNS_Rx1605	777224	6735930	39	27	0	20	31	37	31	0	41	0	34
NNS_Rx1606	775861	6735931	41	34	0	17	37	38	39	0	47	0	36
NNS_Rx1607	776984	6735931	40	29	0	21	33	38	33	0	43	0	35
NNS_Rx1608	775246	6735935	37	28	0	0	30	34	31	0	40	0	32
NNS_Rx1609	776960	6735935	41	29	0	21	33	39	34	0	44	0	36
NNS_Rx1610	776262	6735936	55	36	0	19	39	40	43	0	48	0	50
NNS_Rx1611	775801	6735936	41	33	0	17	36	37	38	0	46	0	36
NNS_Rx1612	777187	6735936	40	27	0	21	31	38	31	0	41	0	35
NNS_Rx1613	776335	6735936	46	35	0	19	39	40	42	0	48	0	41
NNS_Rx1614	776561	6735937	42	34	0	20	38	40	39	0	47	0	37
NNS_Rx1615	775451	6735937	38	30	0	15	32	35	33	0	42	0	33
NNS_Rx1616	776008	6735937	44	35	0	18	38	39	41	0	48	0	39
NNS_Rx1617	776514	6735938	42	34	0	20	38	40	40	0	48	0	37
NNS_Rx1618	776087	6735938	51	36	0	18	39	39	42	0	48	0	46
NNS_Rx1619	775529	6735939	39	30	0	16	33	36	34	0	43	0	34

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NNS_Rx1620	776445	6735940	43	35	0	20	39	40	41	0	48	0	38
NNS_Rx1621	776942	6735945	41	30	0	21	33	39	34	0	44	0	36
NNS_Rx1622	776884	6735945	41	30	0	21	34	39	34	0	44	0	36
NNS_Rx1623	776854	6735946	41	31	0	21	34	39	35	0	45	0	36
NNS_Rx1624	775800	6735949	41	33	0	17	36	38	38	0	46	0	36
NNS_Rx1625	775392	6735949	38	29	0	15	31	35	33	0	41	0	33
NNS_Rx1626	776901	6735950	41	30	0	21	34	39	34	0	44	0	36
NNS_Rx1627	775864	6735951	41	34	0	17	36	38	39	0	46	0	36
NNS_Rx1628	775314	6735951	37	28	0	14	31	34	32	0	40	0	32
NNS_Rx1629	776622	6735952	42	33	0	21	37	40	38	0	47	0	37
NNS_Rx1630	776266	6735953	54	36	0	19	39	40	43	0	47	0	49
NNS_Rx1631	776010	6735953	44	35	0	18	38	39	42	0	47	0	39
NNS_Rx1632	777074	6735954	40	28	0	21	32	38	32	0	42	0	35
NNS_Rx1633	775244	6735956	37	28	0	0	30	34	31	0	40	0	32
NNS_Rx1634	776345	6735956	46	36	0	20	39	40	43	0	47	0	41
NNS_Rx1635	776087	6735956	51	36	0	19	38	39	43	0	47	0	46
NNS_Rx1636	776560	6735957	42	34	0	20	37	40	39	0	47	0	37
NNS_Rx1637	776508	6735959	43	34	0	20	38	40	40	0	47	0	38
NNS_Rx1638	776850	6735960	41	31	0	21	34	39	35	0	44	0	36
NNS_Rx1639	775447	6735961	38	30	0	15	32	35	33	0	42	0	33
NNS_Rx1640	775803	6735962	41	34	0	17	36	38	38	0	46	0	36
NNS_Rx1641	776625	6735963	42	33	0	21	37	40	38	0	47	0	37
NNS_Rx1642	775524	6735964	39	31	0	16	33	36	34	0	42	0	34
NNS_Rx1643	775389	6735966	38	29	0	15	31	35	33	0	41	0	33
NNS_Rx1644	777017	6735967	41	29	0	21	33	39	33	0	43	0	36
NNS_Rx1645	776007	6735969	44	36	0	18	38	39	42	0	47	0	39
NNS_Rx1646	775865	6735970	41	34	0	17	36	38	40	0	46	0	36
NNS_Rx1647	775311	6735971	37	28	0	15	31	34	32	0	40	0	32
NNS_Rx1648	776263	6735969	55	36	0	19	39	40	44	0	47	0	50
NNS_Rx1649	776082	6735975	51	36	0	19	38	39	43	0	47	0	46

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NNS_Rx1650	776556	6735976	43	34	0	21	37	40	40	0	47	0	38
NNS_Rx1651	776409	6735977	43	36	0	20	38	40	42	0	47	0	38
NNS_Rx1652	776987	6735978	41	29	0	21	33	39	33	0	43	0	36
NNS_Rx1653	776504	6735978	43	35	0	20	38	40	41	0	47	0	38
NNS_Rx1654	775523	6735979	39	31	0	16	33	36	34	0	42	0	34
NNS_Rx1655	775802	6735979	41	34	0	17	35	38	39	0	45	0	36
NNS_Rx1656	776341	6735979	46	36	0	20	38	40	43	0	47	0	41
NNS_Rx1657	775452	6735981	39	30	0	15	32	35	34	0	42	0	34
NNS_Rx1658	776009	6735984	44	36	0	18	37	39	42	0	47	0	39
NNS_Rx1659	776622	6735987	43	34	0	21	36	40	39	0	46	0	38
NNS_Rx1661	775317	6735988	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1662	775860	6735989	42	35	0	18	36	38	40	0	46	0	37
NNS_Rx1663	775392	6735989	38	29	0	15	31	35	33	0	41	0	33
NNS_Rx1664	776083	6735991	51	37	0	19	38	40	44	0	47	0	46
NNS_Rx1665	775526	6735993	39	31	0	16	33	36	35	0	42	0	34
NNS_Rx1666	775244	6735997	37	28	0	0	30	34	31	0	39	0	32
NNS_Rx1667	776924	6735997	41	30	0	21	33	39	34	0	43	0	36
NNS_Rx1668	776564	6735998	43	34	0	21	37	41	40	0	46	0	38
NNS_Rx1669	776006	6735999	44	36	0	18	37	39	43	0	46	0	39
NNS_Rx1670	776411	6735998	43	36	0	20	38	41	43	0	46	0	38
NNS_Rx1671	776341	6735999	46	37	0	20	38	41	44	0	46	0	41
NNS_Rx1672	776888	6735999	42	31	0	21	34	39	35	0	44	0	37
NNS_Rx1673	776907	6736000	41	30	0	21	33	39	34	0	43	0	36
NNS_Rx1674	775799	6736001	41	34	0	17	35	38	39	0	45	0	36
NNS_Rx1675	775454	6736001	39	30	0	15	32	36	34	0	41	0	34
NNS_Rx1676	775392	6736002	38	29	0	15	31	35	33	0	41	0	33
NNS_Rx1677	775860	6736002	42	35	0	18	36	38	40	0	45	0	37
NNS_Rx1678	775318	6736003	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1679	776258	6736005	57	37	0	20	38	40	45	0	46	0	52
NNS_Rx1680	776622	6736005	43	34	0	21	36	41	39	0	46	0	38

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1681	775861	6736013	42	35	0	18	36	38	40	0	45	0	37
NNS_Rx1682	775943	6736014	42	36	0	18	37	39	42	0	46	0	37
NNS_Rx1683	775528	6736015	39	31	0	16	33	36	35	0	42	0	34
NNS_Rx1684	776008	6736016	44	37	0	18	37	39	43	0	46	0	39
NNS_Rx1685	776085	6736015	51	37	0	19	37	40	44	0	46	0	46
NNS_Rx1686	776344	6736020	46	37	0	20	38	41	44	0	46	0	41
NNS_Rx1687	776409	6736018	44	36	0	20	37	41	43	0	46	0	39
NNS_Rx1688	776564	6736018	43	35	0	21	36	41	40	0	46	0	38
NNS_Rx1689	775588	6736019	40	32	0	16	33	37	36	0	43	0	35
NNS_Rx1690	775317	6736019	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1691	775454	6736020	39	30	0	15	32	36	34	0	41	0	34
NNS_Rx1692	775364	6736020	38	29	0	15	31	35	33	0	40	0	33
NNS_Rx1693	775394	6736021	38	30	0	15	32	35	33	0	41	0	33
NNS_Rx1694	776622	6736022	43	34	0	21	36	41	39	0	45	0	38
NNS_Rx1695	775806	6736030	42	35	0	17	36	38	39	0	45	0	37
NNS_Rx1696	775944	6736030	43	36	0	18	37	39	42	0	46	0	38
NNS_Rx1698	776010	6736031	44	37	0	19	37	40	43	0	46	0	39
NNS_Rx1699	776087	6736032	51	38	0	19	38	40	45	0	46	0	46
NNS_Rx1700	775365	6736032	38	29	0	15	31	35	33	0	40	0	33
NNS_Rx1701	775319	6736034	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1702	776565	6736034	43	35	0	21	36	41	40	0	45	0	38
NNS_Rx1703	775248	6736035	37	28	0	14	30	34	32	0	39	0	32
NNS_Rx1704	775397	6736035	38	30	0	15	32	35	33	0	41	0	33
NNS_Rx1705	776263	6736038	55	38	0	20	38	41	46	0	46	0	50
NNS_Rx1706	775597	6736038	40	32	0	16	34	37	36	0	43	0	35
NNS_Rx1708	776415	6736039	44	37	0	21	37	41	43	0	46	0	39
NNS_Rx1709	776343	6736039	46	38	0	20	38	41	45	0	46	0	41
NNS_Rx1710	776621	6736040	43	34	0	21	36	41	39	0	45	0	38
NNS_Rx1711	775943	6736042	43	36	0	18	37	39	42	0	45	0	38
NNS_Rx1712	775805	6736043	42	35	0	18	36	38	39	0	44	0	37

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1713	775864	6736043	42	35	0	18	36	39	40	0	45	0	37
NNS_Rx1714	775453	6736044	39	30	0	16	32	36	34	0	41	0	34
NNS_Rx1715	776261	6736047	55	38	0	20	38	41	47	0	46	0	50
NNS_Rx1716	775392	6736049	38	30	0	15	32	35	33	0	40	0	33
NNS_Rx1717	775320	6736051	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1718	775594	6736055	40	32	0	16	34	37	36	0	42	0	35
NNS_Rx1719	775870	6736056	42	36	0	18	37	39	41	0	45	0	37
NNS_Rx1720	776628	6736057	43	34	0	22	36	41	39	0	45	0	38
NNS_Rx1721	776262	6736057	55	38	0	20	38	41	47	0	45	0	50
NNS_Rx1722	776412	6736058	44	37	0	21	38	42	44	0	45	0	39
NNS_Rx1723	775806	6736058	42	35	0	18	36	38	39	0	44	0	37
NNS_Rx1724	775528	6736059	40	31	0	16	33	36	35	0	42	0	35
NNS_Rx1725	776341	6736059	45	38	0	20	38	41	46	0	45	0	40
NNS_Rx1726	776565	6736061	44	35	0	21	37	41	40	0	45	0	39
NNS_Rx1727	775456	6736062	39	30	0	16	32	36	34	0	41	0	34
NNS_Rx1728	775945	6736063	43	37	0	18	37	39	43	0	45	0	38
NNS_Rx1729	775389	6736066	39	30	0	15	32	35	33	0	40	0	34
NNS_Rx1730	777715	6736066	38	23	0	20	26	36	27	0	36	0	33
NNS_Rx1731	775317	6736066	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1732	775246	6736066	37	28	0	15	30	34	32	0	39	0	32
NNS_Rx1733	776263	6736068	55	39	0	20	39	41	48	0	45	0	50
NNS_Rx1734	775864	6736070	42	36	0	18	37	39	41	0	44	0	37
NNS_Rx1735	775801	6736072	42	35	0	18	36	39	39	0	44	0	37
NNS_Rx1736	776564	6736078	44	35	0	22	37	42	41	0	45	0	39
NNS_Rx1738	775315	6736079	38	29	0	15	31	35	32	0	40	0	33
NNS_Rx1739	775527	6736080	40	31	0	16	33	36	35	0	41	0	35
NNS_Rx1740	775456	6736081	39	31	0	16	33	36	34	0	41	0	34
NNS_Rx1741	776267	6736082	54	39	0	20	39	42	49	0	45	0	49
NNS_Rx1742	775866	6736083	43	36	0	18	37	39	41	0	44	0	38
NNS_Rx1743	776345	6736083	45	39	0	21	39	42	47	0	45	0	40

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1744	775810	6736084	42	35	0	18	36	39	40	0	44	0	37
NNS_Rx1745	775389	6736084	39	30	0	15	32	35	33	0	40	0	34
NNS_Rx1746	777677	6736084	38	24	0	20	27	36	27	0	36	0	33
NNS_Rx1747	775585	6736086	40	32	0	16	34	37	36	0	42	0	35
NNS_Rx1748	776622	6736089	44	35	0	22	36	42	40	0	44	0	39
NNS_Rx1749	776640	6736091	44	35	0	22	36	42	39	0	44	0	39
NNS_Rx1750	775867	6736096	43	36	0	18	37	39	41	0	44	0	38
NNS_Rx1751	775394	6736098	39	30	0	15	32	36	33	0	40	0	34
NNS_Rx1752	775806	6736098	42	35	0	18	36	39	40	0	44	0	37
NNS_Rx1753	776411	6736099	45	38	0	21	39	42	45	0	45	0	40
NNS_Rx1754	775590	6736099	40	32	0	17	34	37	36	0	42	0	35
NNS_Rx1755	775531	6736100	40	32	0	16	33	37	35	0	41	0	35
NNS_Rx1757	775246	6736100	38	28	0	15	31	35	32	0	39	0	33
NNS_Rx1758	776570	6736101	44	36	0	22	37	42	41	0	44	0	39
NNS_Rx1759	775451	6736102	39	31	0	16	33	36	34	0	41	0	34
NNS_Rx1760	775809	6736112	42	36	0	18	37	39	40	0	43	0	37
NNS_Rx1761	775799	6736113	42	35	0	18	37	39	40	0	43	0	37
NNS_Rx1762	775787	6736113	42	35	0	18	36	39	40	0	43	0	37
NNS_Rx1763	776455	6736115	45	38	0	21	38	42	44	0	44	0	40
NNS_Rx1764	776479	6736117	45	37	0	22	38	42	43	0	44	0	40
NNS_Rx1765	776522	6736117	45	37	0	22	38	42	42	0	44	0	40
NNS_Rx1766	776320	6736118	47	40	0	21	40	42	49	0	44	0	42
NNS_Rx1767	776414	6736118	45	38	0	21	39	42	45	0	44	0	40
NNS_Rx1768	775318	6736119	38	29	0	15	31	35	33	0	39	0	33
NNS_Rx1769	775395	6736119	39	30	0	16	32	36	33	0	40	0	34
NNS_Rx1770	776350	6736119	45	39	0	21	39	42	48	0	44	0	40
NNS_Rx1771	775532	6736120	40	32	0	16	34	37	35	0	41	0	35
NNS_Rx1772	776338	6736122	45	40	0	21	39	42	48	0	44	0	40
NNS_Rx1773	775451	6736125	39	31	0	16	33	36	34	0	40	0	34
NNS_Rx1774	776263	6736128	55	41	0	21	40	42	52	0	44	0	50

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			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1775	775878	6736127	43	37	0	18	38	40	42	0	44	0	38
NNS_Rx1776	775890	6736128	43	37	0	18	38	40	42	0	44	0	38
NNS_Rx1777	775861	6736128	43	37	0	18	37	39	41	0	44	0	38
NNS_Rx1778	775751	6736131	42	35	0	18	36	39	39	0	43	0	37
NNS_Rx1779	775483	6736140	40	31	0	16	33	36	35	0	41	0	35
NNS_Rx1781	775588	6736141	41	33	0	17	34	37	36	0	41	0	36
NNS_Rx1782	775616	6736141	41	33	0	17	35	38	37	0	42	0	36
NNS_Rx1783	775510	6736142	40	32	0	16	33	37	35	0	41	0	35
NNS_Rx1786	775455	6736143	40	31	0	16	33	36	34	0	40	0	35
NNS_Rx1787	775252	6736143	38	29	0	15	31	35	32	0	39	0	33
NNS_Rx1788	775367	6736146	39	30	0	15	32	36	33	0	40	0	34
NNS_Rx1789	776506	6736170	46	38	0	22	39	43	43	0	43	0	41
NNS_Rx1790	776339	6736172	46	41	0	21	41	43	50	0	43	0	41
NNS_Rx1791	776476	6736171	46	38	0	22	39	43	44	0	43	0	41
NNS_Rx1792	776415	6736172	46	40	0	22	40	43	46	0	43	0	41
NNS_Rx1793	776266	6736174	55	42	0	21	41	43	56	0	43	0	50
NNS_Rx1794	775866	6736182	44	37	0	19	38	40	42	0	43	0	39
NNS_Rx1795	775802	6736183	43	36	0	18	37	39	40	0	42	0	38
NNS_Rx1796	775942	6736184	44	39	0	19	39	41	44	0	43	0	39
NNS_Rx1797	776345	6736189	47	41	0	22	41	43	50	0	43	0	42
NNS_Rx1798	775776	6736190	43	36	0	18	37	39	40	0	42	0	38
NNS_Rx1799	775894	6736191	44	38	0	19	39	40	43	0	43	0	39
NNS_Rx1800	776490	6736192	46	38	0	22	39	44	44	0	43	0	41
NNS_Rx1801	776265	6736193	55	43	0	21	42	43	59	0	43	0	50
NNS_Rx1802	776414	6736193	47	40	0	22	40	44	47	0	43	0	42
NNS_Rx1803	775531	6736195	41	32	0	17	34	37	35	0	40	0	36
NNS_Rx1805	775480	6736198	40	31	0	16	33	37	35	0	40	0	35
NNS_Rx1806	775360	6736199	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1807	775379	6736199	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1809	775945	6736202	45	39	0	19	40	41	44	0	43	0	40

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1810	775863	6736203	44	38	0	19	38	40	42	0	43	0	39
NNS_Rx1811	775724	6736203	42	35	0	18	37	39	39	0	42	0	37
NNS_Rx1812	775812	6736205	43	37	0	18	38	40	41	0	42	0	38
NNS_Rx1813	775299	6736205	38	29	0	15	32	35	32	0	39	0	33
NNS_Rx1814	775312	6736206	39	29	0	15	32	35	33	0	39	0	34
NNS_Rx1815	775233	6736208	38	29	0	15	31	35	32	0	38	0	33
NNS_Rx1816	775401	6736209	39	30	0	16	33	36	34	0	39	0	34
NNS_Rx1817	776413	6736209	47	40	0	22	41	44	47	0	43	0	42
NNS_Rx1819	775536	6736211	41	32	0	17	34	37	36	0	40	0	36
NNS_Rx1820	776275	6736216	53	44	0	21	42	43	59	0	43	0	48
NNS_Rx1821	775943	6736217	45	40	0	19	40	41	44	0	43	0	40
NNS_Rx1822	775357	6736218	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1823	775869	6736219	44	38	0	19	39	40	42	0	42	0	39
NNS_Rx1824	775377	6736220	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1825	776009	6736222	45	41	0	20	41	42	47	0	43	0	40
NNS_Rx1826	775811	6736224	43	37	0	18	38	40	41	0	42	0	38
NNS_Rx1827	775590	6736227	41	33	0	17	35	38	36	0	41	0	36
NNS_Rx1828	776415	6736228	47	41	0	22	41	44	47	0	43	0	42
NNS_Rx1829	775950	6736230	45	40	0	19	40	41	45	0	42	0	40
NNS_Rx1830	775536	6736231	41	32	0	17	34	37	36	0	40	0	36
NNS_Rx1831	775457	6736232	40	31	0	16	33	37	34	0	40	0	35
NNS_Rx1832	775868	6736233	44	38	0	19	39	40	42	0	42	0	39
NNS_Rx1833	776343	6736235	47	43	0	22	42	44	51	0	43	0	42
NNS_Rx1834	776267	6736235	55	45	0	21	43	44	62	0	43	0	50
NNS_Rx1835	775379	6736236	39	30	0	16	33	36	33	0	39	0	34
NNS_Rx1836	775592	6736237	41	33	0	17	35	38	36	0	41	0	36
NNS_Rx1837	775801	6736244	44	37	0	18	38	40	41	0	42	0	39
NNS_Rx1838	775871	6736245	44	38	0	19	39	41	42	0	42	0	39
NNS_Rx1839	775950	6736246	45	40	0	19	40	41	45	0	42	0	40
NNS_Rx1840	775273	6736251	38	29	0	15	31	35	32	0	38	0	33

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx1842	775532	6736251	41	32	0	17	34	37	36	0	40	0	36
NNS_Rx1843	775358	6736252	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1844	775301	6736252	39	29	0	15	32	36	32	0	38	0	34
NNS_Rx1845	775594	6736253	41	33	0	17	35	38	36	0	40	0	36
NNS_Rx1847	775457	6736254	40	31	0	16	33	37	34	0	39	0	35
NNS_Rx1848	776269	6736255	55	46	0	22	43	44	62	0	42	0	50
NNS_Rx1849	775337	6736256	39	30	0	16	32	36	33	0	39	0	34
NNS_Rx1850	776455	6736256	48	40	0	23	41	45	45	0	42	0	43
NNS_Rx1851	775320	6736256	39	30	0	16	32	36	33	0	38	0	34
NNS_Rx1852	775378	6736257	39	30	0	16	33	36	33	0	39	0	34
NNS_Rx1853	776345	6736255	48	44	0	22	43	44	51	0	42	0	43
NNS_Rx1854	775946	6736259	45	40	0	20	41	41	45	0	42	0	40
NNS_Rx1855	776415	6736261	48	41	0	23	42	45	47	0	42	0	43
NNS_Rx1856	775810	6736265	44	37	0	19	38	40	41	0	41	0	39
NNS_Rx1857	775867	6736265	44	39	0	19	39	41	42	0	42	0	39
NNS_Rx1858	775596	6736268	42	33	0	17	35	38	37	0	40	0	37
NNS_Rx1859	775940	6736270	45	41	0	20	41	41	45	0	42	0	40
NNS_Rx1860	775538	6736271	41	32	0	17	35	38	36	0	40	0	36
NNS_Rx1861	776348	6736273	48	44	0	22	43	45	51	0	42	0	43
NNS_Rx1862	776267	6736274	55	47	0	22	44	44	62	0	42	0	50
NNS_Rx1863	775457	6736277	40	31	0	16	34	37	34	0	39	0	35
NNS_Rx1864	776416	6736281	48	42	0	23	42	45	47	0	42	0	43
NNS_Rx1865	775948	6736286	46	41	0	20	41	42	45	0	42	0	41
NNS_Rx1866	775866	6736287	45	39	0	19	40	41	42	0	41	0	40
NNS_Rx1867	775813	6736288	44	37	0	19	39	40	41	0	41	0	39
NNS_Rx1868	775780	6736290	44	37	0	19	38	40	40	0	41	0	39
NNS_Rx1869	775595	6736291	42	33	0	17	35	38	37	0	40	0	37
NNS_Rx1870	775530	6736291	41	32	0	17	35	38	36	0	40	0	36
NNS_Rx1871	775457	6736293	40	31	0	16	34	37	34	0	39	0	35
NNS_Rx1872	776347	6736296	49	45	0	22	44	45	51	0	42	0	44

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1873	775390	6736297	40	30	0	16	33	36	34	0	39	0	35
NNS_Rx1874	775354	6736300	39	30	0	16	32	36	33	0	38	0	34
NNS_Rx1875	775950	6736301	46	41	0	20	41	42	45	0	42	0	41
NNS_Rx1876	776268	6736299	55	49	0	22	45	45	62	0	42	0	50
NNS_Rx1877	775337	6736301	39	30	0	16	32	36	33	0	38	0	34
NNS_Rx1878	775864	6736303	45	39	0	19	40	41	42	0	41	0	40
NNS_Rx1879	775237	6736306	38	29	0	15	31	35	32	0	38	0	33
NNS_Rx1880	775810	6736306	44	37	0	19	39	40	41	0	41	0	39
NNS_Rx1881	775593	6736306	42	33	0	17	35	38	36	0	40	0	37
NNS_Rx1882	775728	6736308	43	36	0	18	38	40	39	0	41	0	38
NNS_Rx1883	775539	6736309	41	33	0	17	35	38	36	0	40	0	36
NNS_Rx1884	776346	6736315	49	46	0	23	44	46	51	0	41	0	44
NNS_Rx1885	775952	6736312	46	42	0	20	42	42	45	0	41	0	41
NNS_Rx1886	776269	6736313	55	50	0	22	45	45	60	0	42	0	50
NNS_Rx1887	775398	6736313	40	31	0	16	33	37	34	0	39	0	35
NNS_Rx1888	775457	6736316	40	31	0	17	34	37	34	0	39	0	35
NNS_Rx1889	775809	6736327	44	38	0	19	39	41	41	0	41	0	39
NNS_Rx1890	775947	6736327	46	42	0	20	42	42	45	0	41	0	41
NNS_Rx1891	775886	6736329	45	40	0	19	41	41	43	0	41	0	40
NNS_Rx1892	776352	6736330	50	46	0	23	45	46	50	0	41	0	45
NNS_Rx1893	775592	6736331	42	33	0	17	36	38	36	0	40	0	37
NNS_Rx1894	775455	6736336	40	31	0	17	34	37	34	0	39	0	35
NNS_Rx1895	775395	6736337	40	31	0	16	33	37	34	0	38	0	35
NNS_Rx1896	775537	6736338	41	33	0	17	35	38	36	0	39	0	36
NNS_Rx1897	776269	6736339	55	52	0	22	46	46	59	0	41	0	50
NNS_Rx1898	775808	6736342	45	38	0	19	39	41	41	0	41	0	40
NNS_Rx1899	775893	6736343	46	40	0	20	41	42	43	0	41	0	41
NNS_Rx1900	775948	6736344	46	42	0	20	42	42	45	0	41	0	41
NNS_Rx1901	775865	6736345	45	39	0	19	40	41	42	0	41	0	40
NNS_Rx1902	775308	6736345	39	30	0	16	32	36	33	0	38	0	34

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx1903	776354	6736346	50	46	0	23	45	46	50	0	41	0	45
NNS_Rx1904	775244	6736348	39	29	0	15	31	35	32	0	37	0	34
NNS_Rx1905	775342	6736348	39	30	0	16	32	36	33	0	38	0	34
NNS_Rx1906	775678	6736350	43	35	0	18	37	39	38	0	40	0	38
NNS_Rx1907	775592	6736351	42	33	0	18	36	38	36	0	39	0	37
NNS_Rx1908	776269	6736351	55	53	0	22	47	46	59	0	41	0	50
NNS_Rx1909	775455	6736353	41	31	0	17	34	37	34	0	39	0	36
NNS_Rx1910	775542	6736354	41	33	0	17	35	38	36	0	39	0	36
NNS_Rx1911	775891	6736354	46	40	0	20	41	42	43	0	41	0	41
NNS_Rx1912	775868	6736356	45	39	0	19	41	41	42	0	41	0	40
NNS_Rx1913	775397	6736356	40	31	0	16	33	37	34	0	38	0	35
NNS_Rx1914	776327	6736356	50	48	0	23	46	46	52	0	41	0	45
NNS_Rx1915	776353	6736360	50	46	0	23	46	47	50	0	41	0	45
NNS_Rx1916	775947	6736364	47	42	0	20	42	42	45	0	41	0	42
NNS_Rx1917	775879	6736369	46	40	0	20	41	42	43	0	41	0	41
NNS_Rx1918	776269	6736370	55	55	0	23	48	46	59	0	41	0	50
NNS_Rx1919	775598	6736370	42	34	0	18	36	39	37	0	39	0	37
NNS_Rx1920	776353	6736370	51	47	0	23	46	47	50	0	41	0	46
NNS_Rx1921	775541	6736372	42	33	0	17	35	38	36	0	39	0	37
NNS_Rx1922	775400	6736373	40	31	0	16	33	37	34	0	38	0	35
NNS_Rx1923	775456	6736377	41	31	0	17	34	37	34	0	38	0	36
NNS_Rx1924	775862	6736392	46	39	0	20	41	42	42	0	40	0	41
NNS_Rx1925	776268	6736397	55	57	0	23	49	47	59	0	40	0	50
NNS_Rx1926	776307	6736399	51	51	0	23	49	47	54	0	40	0	46
NNS_Rx1927	775958	6736399	47	42	0	20	43	43	45	0	40	0	42
NNS_Rx1928	776295	6736406	52	53	0	23	49	47	55	0	40	0	47
NNS_Rx1929	775900	6736400	46	40	0	20	42	42	43	0	40	0	41
NNS_Rx1930	775943	6736401	47	42	0	20	43	43	45	0	40	0	42
NNS_Rx1931	775932	6736402	47	41	0	20	43	43	44	0	40	0	42
NNS_Rx1932	775916	6736403	47	41	0	20	42	42	44	0	40	0	42

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NNS_Rx1933	775337	6736403	40	30	0	16	33	36	33	0	37	0	35
NNS_Rx1934	775231	6736405	39	29	0	15	31	35	32	0	37	0	34
NNS_Rx1935	775870	6736407	46	39	0	20	41	42	42	0	40	0	41
NNS_Rx1936	775539	6736407	42	33	0	17	35	38	36	0	39	0	37
NNS_Rx1937	775892	6736408	46	40	0	20	42	42	43	0	40	0	41
NNS_Rx1938	775597	6736409	42	34	0	18	36	39	37	0	39	0	37
NNS_Rx1939	775523	6736409	42	32	0	17	35	38	35	0	39	0	37
NNS_Rx1940	775462	6736410	41	32	0	17	34	37	34	0	38	0	36
NNS_Rx1941	775509	6736412	41	32	0	17	35	38	35	0	38	0	36
NNS_Rx1942	775482	6736413	41	32	0	17	34	38	35	0	38	0	36
NNS_Rx1943	776920	6736429	47	32	0	27	35	45	35	0	39	0	42
NNS_Rx1944	775229	6736437	39	29	0	15	31	35	32	0	37	0	34
NNS_Rx1945	776445	6736438	52	42	0	24	45	49	45	0	40	0	47
NNS_Rx1946	776412	6736462	53	44	0	24	46	49	46	0	40	0	48
NNS_Rx1947	777031	6736464	47	30	0	27	33	45	33	0	38	0	42
NNS_Rx1948	777569	6736464	41	25	0	24	29	39	28	0	35	0	36
NNS_Rx1949	777274	6736470	44	28	0	26	31	42	30	0	37	0	39
NNS_Rx1950	777123	6736473	46	29	0	27	32	44	32	0	37	0	41
NNS_Rx1951	776414	6736482	54	43	0	25	47	50	45	0	39	0	49
NNS_Rx1952	777863	6736501	39	23	0	21	29	37	26	0	33	0	34
NNS_Rx1953	776330	6736504	55	47	0	24	52	50	48	0	39	0	50
NNS_Rx1954	776097	6736503	54	50	0	22	52	46	50	0	39	0	49
NNS_Rx1955	776273	6736510	60	51	0	24	60	49	50	0	39	0	55
NNS_Rx1956	776412	6736502	55	43	0	25	47	51	45	0	39	0	50
NNS_Rx1957	776223	6736511	77	54	0	23	69	48	51	0	39	0	72
NNS_Rx1958	776275	6736523	60	50	0	24	61	49	49	0	39	0	55
NNS_Rx1959	776225	6736523	78	52	0	23	74	49	50	0	39	0	73
NNS_Rx1960	776330	6736529	56	46	0	24	53	51	47	0	39	0	51
NNS_Rx1961	776412	6736525	56	43	0	25	47	51	45	0	39	0	51
NNS_Rx1962	776097	6736528	54	48	0	22	53	46	48	0	39	0	49

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NNS_Rx1963	776864	6736536	50	32	0	28	36	48	35	0	38	0	45
NNS_Rx1964	776020	6736539	50	44	0	22	47	45	45	0	39	0	45
NNS_Rx1965	776338	6736545	57	45	0	25	52	51	46	0	39	0	52
NNS_Rx1966	776412	6736545	56	42	0	25	47	52	44	0	39	0	51
NNS_Rx1967	776276	6736546	63	48	0	24	61	50	48	0	39	0	58
NNS_Rx1968	776307	6736555	59	46	0	24	56	51	47	0	39	0	54
NNS_Rx1969	776096	6736547	53	47	0	22	53	47	47	0	39	0	48
NNS_Rx1970	776355	6736560	58	44	0	25	51	52	45	0	39	0	53
NNS_Rx1971	776415	6736565	57	42	0	25	47	53	44	0	39	0	52
NNS_Rx1972	776279	6736568	65	47	0	24	60	51	47	0	39	0	60
NNS_Rx1973	776099	6736568	53	46	0	22	53	47	47	0	39	0	48
NNS_Rx1974	776067	6736573	52	45	0	22	50	46	46	0	39	0	47
NNS_Rx1975	776353	6736575	59	44	0	25	51	52	45	0	39	0	54
NNS_Rx1976	776007	6736580	50	42	0	22	47	45	44	0	38	0	45
NNS_Rx1977	776413	6736586	58	41	0	26	47	54	43	0	38	0	53
NNS_Rx1978	776355	6736589	60	43	0	25	50	53	44	0	38	0	55
NNS_Rx1979	776275	6736590	69	45	0	24	59	51	46	0	38	0	64
NNS_Rx1980	776099	6736592	53	45	0	23	52	47	46	0	38	0	48
NNS_Rx1981	776012	6736594	51	42	0	22	47	45	44	0	38	0	46
NNS_Rx1982	776356	6736603	61	43	0	25	50	54	44	0	38	0	56
NNS_Rx1983	776277	6736604	70	45	0	24	57	52	45	0	38	0	65
NNS_Rx1984	776413	6736611	60	41	0	26	47	55	43	0	38	0	55
NNS_Rx1985	776084	6736620	53	43	0	23	50	47	44	0	38	0	48
NNS_Rx1986	776414	6736625	61	41	0	26	46	56	42	0	38	0	56
NNS_Rx1987	776361	6736623	63	42	0	25	49	55	43	0	38	0	58
NNS_Rx1988	776039	6736622	52	42	0	22	48	46	44	0	38	0	47
NNS_Rx1989	776276	6736628	77	44	0	25	55	52	45	0	38	0	72
NNS_Rx1990	776415	6736636	62	40	0	26	46	57	42	0	38	0	57
NNS_Rx1991	776087	6736633	53	43	0	23	50	47	44	0	38	0	48
NNS_Rx1992	776008	6736642	51	41	0	22	46	46	42	0	38	0	46

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NNS_Rx1993	776362	6736648	66	41	0	26	48	56	43	0	38	0	61
NNS_Rx1994	776417	6736653	63	40	0	26	46	58	42	0	38	0	58
NNS_Rx1995	776105	6736651	54	42	0	23	50	48	44	0	38	0	49
NNS_Rx1996	776016	6736657	51	41	0	22	46	46	42	0	38	0	46
NNS_Rx1997	776420	6736672	65	39	0	27	45	59	41	0	38	0	60
NNS_Rx1998	776343	6736678	73	41	0	26	48	56	42	0	38	0	68
NNS_Rx1999	776371	6736675	69	40	0	26	47	57	42	0	38	0	64
NNS_Rx2000	776103	6736671	54	42	0	23	49	48	43	0	38	0	49
NNS_Rx2001	776190	6736667	60	43	0	24	52	50	44	0	38	0	55
NNS_Rx2002	776172	6736655	58	43	0	24	53	50	44	0	38	0	53
NNS_Rx2003	776010	6736676	51	40	0	22	45	46	42	0	38	0	46
NNS_Rx2004	776010	6736729	51	39	0	22	44	46	41	0	37	0	46
NNS_Rx2005	776865	6736746	56	32	0	33	35	54	34	0	36	0	51
NNS_Rx2006	778072	6736749	39	21	0	21	29	37	24	0	28	0	34
NNS_Rx2007	777980	6736753	40	22	0	21	30	38	25	0	31	0	35
NNS_Rx2008	777815	6736785	41	23	0	23	31	39	26	0	32	0	36
NNS_Rx2009	777554	6736796	44	25	0	26	32	42	27	0	33	0	39
NNS_Rx2010	777504	6736796	44	25	0	27	32	42	28	0	34	0	39
NNS_Rx2011	777975	6736899	40	21	0	22	31	39	24	0	23	0	35
NNS_Rx2012	776676	6737051	57	31	0	35	35	55	33	0	34	0	52
NNS_Rx2013	778194	6737063	39	0	0	20	31	37	0	0	0	0	34
NNS_Rx2014	775359	6737121	39	27	0	17	31	37	30	0	33	0	34
NNS_Rx2015	775341	6737169	39	27	0	17	31	36	30	0	32	0	34
NNS_Rx2016	775341	6737182	39	27	0	17	30	36	30	0	32	0	34
NNS_Rx2017	775426	6737191	40	27	0	18	31	37	30	0	32	0	35
NNS_Rx2018	775341	6737194	39	27	0	17	30	36	30	0	32	0	34
NNS_Rx2019	775422	6737205	40	27	0	18	31	37	30	0	32	0	35
NNS_Rx2020	775340	6737213	39	27	0	17	30	36	29	0	32	0	34
NNS_Rx2021	775423	6737219	40	27	0	18	31	37	30	0	32	0	35
NNS_Rx2022	775338	6737221	39	27	0	17	30	36	29	0	32	0	34

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NNS_Rx2023	775424	6737228	40	27	0	18	31	37	30	0	32	0	35
NNS_Rx2024	775332	6737233	39	27	0	17	30	36	29	0	32	0	34
NNS_Rx2025	776232	6737243	47	30	0	26	35	45	33	0	33	0	42
NNS_Rx2026	775345	6737244	39	27	0	17	30	36	29	0	32	0	34
NNS_Rx2027	775340	6737262	39	26	0	17	30	36	29	0	32	0	34
NNS_Rx2028	776227	6737264	46	30	0	25	35	45	33	0	33	0	41
NNS_Rx2029	775340	6737273	39	26	0	17	30	36	29	0	32	0	34
NNS_Rx2030	776228	6737278	46	30	0	25	35	44	32	0	33	0	41
NNS_Rx2031	776229	6737300	46	30	0	25	34	44	32	0	33	0	41
NNS_Rx2032	778259	6737314	40	0	0	19	31	38	0	0	0	0	35
NNS_Rx2033	776167	6737314	45	30	0	25	34	43	32	0	33	0	40
NNS_Rx2034	776221	6737315	46	30	0	25	34	44	32	0	33	0	41
NNS_Rx2035	776204	6737315	45	30	0	25	34	44	32	0	33	0	40
NNS_Rx2036	776182	6737318	45	30	0	25	34	43	32	0	33	0	40
NNS_Rx2037	778400	6737397	40	0	0	18	30	38	0	0	0	0	35
NNS_Rx2038	775349	6737436	38	25	0	17	29	35	28	0	0	0	33
NNS_Rx2039	775695	6737437	40	27	0	19	31	38	30	0	31	0	35
NNS_Rx2040	778580	6737447	38	0	0	16	29	36	0	0	0	0	33
NNS_Rx2041	775350	6737449	38	25	0	17	29	35	28	0	0	0	33
NNS_Rx2042	775702	6737452	40	27	0	20	31	38	30	0	31	0	35
NNS_Rx2043	776930	6737468	55	26	0	32	39	53	28	0	22	0	50
NNS_Rx2044	775351	6737468	38	25	0	17	29	35	28	0	0	0	33
NNS_Rx2045	776811	6737484	51	26	0	31	37	49	29	0	29	0	46
NNS_Rx2046	775350	6737485	38	25	0	17	29	35	28	0	0	0	33
NNS_Rx2047	775698	6737485	40	27	0	19	31	38	29	0	29	0	35
NNS_Rx2048	775697	6737502	40	27	0	19	30	38	29	0	22	0	35
NNS_Rx2049	775422	6737504	38	25	0	17	29	36	28	0	0	0	33
NNS_Rx2050	775352	6737505	37	25	0	17	29	35	28	0	0	0	32
NNS_Rx2051	775767	6737515	40	27	0	20	31	38	29	0	22	0	35
NNS_Rx2053	775352	6737526	37	25	0	17	28	35	27	0	0	0	32

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NNS_Rx2054	775703	6737535	40	26	0	19	30	37	29	0	0	0	35
NNS_Rx2055	775762	6737537	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2056	775349	6737547	37	25	0	17	28	35	27	0	0	0	32
NNS_Rx2057	775761	6737559	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2058	775348	6737567	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2059	775763	6737577	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2060	775983	6737582	41	27	0	21	31	39	29	0	0	0	36
NNS_Rx2061	775703	6737583	39	26	0	19	30	37	28	0	0	0	34
NNS_Rx2062	775950	6737590	41	26	0	21	31	39	29	0	0	0	36
NNS_Rx2063	775919	6737591	40	26	0	21	30	38	29	0	0	0	35
NNS_Rx2065	775800	6737593	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2066	775873	6737595	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2068	775763	6737595	40	26	0	20	30	37	29	0	0	0	35
NNS_Rx2069	775840	6737597	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2070	775892	6737598	40	26	0	21	30	38	29	0	0	0	35
NNS_Rx2071	775703	6737603	39	26	0	19	30	37	28	0	0	0	34
NNS_Rx2072	775380	6737604	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2073	775888	6737656	40	26	0	20	30	38	28	0	0	0	35
NNS_Rx2075	775505	6737659	38	25	0	17	28	35	27	0	0	0	33
NNS_Rx2076	775476	6737659	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2077	775406	6737661	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2078	775825	6737661	39	26	0	20	30	37	28	0	0	0	34
NNS_Rx2079	775868	6737663	40	26	0	20	30	38	28	0	0	0	35
NNS_Rx2080	775433	6737663	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2081	775748	6737669	39	25	0	19	29	37	28	0	0	0	34
NNS_Rx2082	775353	6737672	37	24	0	16	27	34	27	0	0	0	32
NNS_Rx2083	775773	6737685	39	25	0	19	29	37	28	0	0	0	34
NNS_Rx2084	775433	6737686	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2085	775482	6737687	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2086	775354	6737690	36	24	0	16	27	34	26	0	0	0	31

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_Rx2087	775483	6737701	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2088	775830	6737702	39	25	0	20	29	37	28	0	0	0	34
NNS_Rx2089	775434	6737703	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2090	775801	6737707	39	25	0	19	29	37	28	0	0	0	34
NNS_Rx2092	775482	6737718	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2093	775433	6737719	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2094	775542	6737720	37	24	0	18	28	35	27	0	0	0	32
NNS_Rx2095	777139	6737718	53	23	0	27	48	51	26	0	0	0	48
NNS_Rx2096	775978	6737727	39	25	0	21	29	38	28	0	0	0	34
NNS_Rx2097	775482	6737737	37	24	0	17	28	35	27	0	0	0	32
NNS_Rx2098	775434	6737738	37	24	0	17	27	34	26	0	0	0	32
NNS_Rx2099	775351	6737739	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2100	775482	6737754	37	24	0	17	28	35	26	0	0	0	32
NNS_Rx2101	775972	6737759	39	25	0	21	29	37	28	0	0	0	34
NNS_Rx2102	775440	6737762	37	24	0	17	27	34	26	0	0	0	32
NNS_Rx2103	775428	6737762	36	24	0	17	27	34	26	0	0	0	31
NNS_Rx2104	775409	6737766	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2105	775385	6737768	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2108	779132	6737769	35	0	15	0	26	33	0	0	0	0	30
NNS_Rx2109	775483	6737770	37	24	0	17	27	35	26	0	0	0	32
NNS_Rx2110	775980	6737783	39	25	0	20	29	37	27	0	0	0	34
NNS_Rx2111	775969	6737804	39	25	0	20	29	37	27	0	0	0	34
NNS_Rx2112	775495	6737810	37	23	0	17	27	34	26	0	0	0	32
NNS_Rx2113	775542	6737812	37	24	0	17	27	35	26	0	0	0	32
NNS_Rx2114	775351	6737813	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2115	775420	6737813	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2117	775388	6737814	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2118	775468	6737814	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2119	775364	6737817	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2120	775433	6737818	36	23	0	17	27	34	26	0	0	0	31

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx2121	775449	6737818	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2122	775968	6737824	39	25	0	20	28	37	27	0	0	0	34
NNS_Rx2123	775516	6737834	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2124	778913	6737839	36	0	16	0	28	34	0	0	0	0	31
NNS_Rx2125	775974	6737844	38	24	0	20	28	37	27	0	0	0	33
NNS_Rx2126	775463	6737856	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2127	775514	6737858	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2129	775976	6737865	38	24	0	20	28	36	27	0	0	0	33
NNS_Rx2130	775356	6737872	35	23	0	16	26	33	25	0	0	0	30
NNS_Rx2131	775520	6737882	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2132	775721	6737884	37	24	0	18	27	35	26	0	0	0	32
NNS_Rx2133	775974	6737887	38	24	0	20	28	36	27	0	0	0	33
NNS_Rx2134	775465	6737888	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2135	775354	6737891	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2136	775751	6737894	37	24	0	18	27	35	26	0	0	0	32
NNS_Rx2137	775519	6737898	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2138	779114	6737899	35	0	16	0	27	33	0	0	0	0	30
NNS_Rx2139	775775	6737901	37	24	0	18	27	35	26	0	0	0	32
NNS_Rx2140	775356	6737903	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2141	775802	6737906	37	24	0	19	27	35	26	0	0	0	32
NNS_Rx2142	775851	6737907	37	24	0	19	28	35	26	0	0	0	32
NNS_Rx2143	775443	6737910	36	23	0	16	26	34	25	0	0	0	31
NNS_Rx2144	777254	6737902	54	22	0	24	45	52	24	0	0	0	49
NNS_Rx2145	775520	6737912	36	23	0	17	27	34	26	0	0	0	31
NNS_Rx2146	775479	6737914	36	23	0	16	26	34	25	0	0	0	31
NNS_Rx2147	775424	6737917	36	23	0	16	26	33	25	0	0	0	31
NNS_Rx2148	775400	6737918	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2149	775465	6737924	36	23	0	16	26	34	25	0	0	0	31
NNS_Rx2150	775982	6737926	38	24	0	20	28	36	26	0	0	0	33
NNS_Rx2151	775963	6737928	38	24	0	20	28	36	26	0	0	0	33

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NNS_Rx2152	775357	6737929	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2153	775890	6737930	37	24	0	19	27	35	26	0	0	0	32
NNS_Rx2154	775940	6737930	38	24	0	19	28	36	26	0	0	0	33
NNS_Rx2156	775518	6737930	36	23	0	17	26	34	25	0	0	0	31
NNS_Rx2157	775386	6737930	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2158	775860	6737932	37	24	0	19	27	35	26	0	0	0	32
NNS_Rx2159	775518	6737966	36	23	0	17	26	34	25	0	0	0	31
NNS_Rx2160	775350	6737969	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2161	775408	6737969	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2162	775710	6737971	36	23	0	18	27	34	26	0	0	0	31
NNS_Rx2163	775481	6737973	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2164	775392	6737974	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2165	775448	6737976	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2166	775462	6737976	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2167	775727	6737986	36	23	0	18	27	34	26	0	0	0	31
NNS_Rx2168	775504	6737987	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2169	778786	6737988	38	0	17	0	30	36	0	0	0	0	33
NNS_Rx2170	775354	6737997	35	22	0	15	25	33	25	0	0	0	30
NNS_Rx2171	775744	6738002	36	23	0	18	27	34	25	0	0	0	31
NNS_Rx2172	775484	6738005	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2173	775358	6738013	35	22	0	15	25	33	24	0	0	0	30
NNS_Rx2174	775758	6738014	36	23	0	18	27	34	25	0	0	0	31
NNS_Rx2175	775478	6738024	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2176	775772	6738024	36	23	0	18	26	34	25	0	0	0	31
NNS_Rx2177	775359	6738030	35	22	0	15	25	32	24	0	0	0	30
NNS_Rx2178	775787	6738038	36	23	0	18	26	34	25	0	0	0	31
NNS_Rx2179	779185	6738046	34	0	17	0	28	33	0	0	0	0	29
NNS_Rx2180	775470	6738047	35	22	0	16	26	33	25	0	0	0	30
NNS_Rx2181	775362	6738047	34	22	0	15	25	32	24	0	0	0	29
NNS_Rx2182	775810	6738056	36	23	0	18	26	34	25	0	0	0	31

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NNS_Rx2183	775362	6738072	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2184	779173	6738075	34	0	17	0	28	33	0	0	0	0	29
NNS_Rx2185	775831	6738076	36	22	0	18	26	34	25	0	0	0	31
NNS_Rx2186	775473	6738080	35	22	0	16	25	33	24	0	0	0	30
NNS_Rx2187	778779	6738089	38	0	18	0	30	36	0	0	0	0	33
NNS_Rx2188	775359	6738089	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2189	778824	6738090	37	0	18	0	30	36	0	0	0	0	32
NNS_Rx2190	775845	6738095	36	22	0	18	27	34	25	0	0	0	31
NNS_Rx2191	775466	6738095	35	22	0	16	25	33	24	0	0	0	30
NNS_Rx2192	775859	6738105	36	22	0	18	27	34	25	0	0	0	31
NNS_Rx2193	775435	6738109	34	21	0	16	25	32	24	0	0	0	29
NNS_Rx2194	775369	6738112	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2195	775427	6738128	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2196	775430	6738151	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2197	775365	6738156	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2198	775355	6738170	34	21	0	15	24	32	24	0	0	0	29
NNS_Rx2199	775425	6738172	34	21	0	15	25	32	24	0	0	0	29
NNS_Rx2200	775365	6738184	34	21	0	15	24	32	23	0	0	0	29
NNS_Rx2201	775422	6738199	34	21	0	15	24	32	24	0	0	0	29
NNS_Rx2202	775367	6738202	34	21	0	15	24	32	0	0	0	0	29
NNS_Rx2203	776082	6738209	37	22	0	18	28	35	24	0	0	0	32
NNS_Rx2204	775363	6738216	34	21	0	15	24	31	0	0	0	0	29
NNS_Rx2205	775410	6738225	34	21	0	15	24	32	0	0	0	0	29
NNS_Rx2206	775363	6738233	33	20	0	15	24	31	0	0	0	0	28
NNS_Rx2207	775398	6738245	34	20	0	15	24	31	0	0	0	0	29
NNS_Rx2208	775360	6738247	33	20	0	15	24	31	0	0	0	0	28
NNS_Rx2209	779040	6738253	36	0	19	0	30	35	0	0	0	0	31
NNS_Rx2210	775984	6738271	36	21	0	18	27	34	24	0	0	0	31
NNS_Rx2211	775984	6738318	36	21	0	17	27	34	24	0	0	0	31
NNS_Rx2212	775986	6738345	36	21	0	17	27	34	24	0	0	0	31

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NNS_Rx2213	775985	6738364	36	21	0	17	27	34	23	0	0	0	31
NNS_Rx2214	779187	6738373	35	0	19	0	30	34	0	0	0	0	30
NNS_Rx2215	775990	6738384	36	21	0	17	27	34	0	0	0	0	31
NNS_Rx2216	775939	6738430	35	0	0	17	26	33	0	0	0	0	30
NNS_Rx2217	775865	6738432	35	0	0	16	26	33	0	0	0	0	30
NNS_Rx2218	775973	6738474	35	0	0	16	26	33	0	0	0	0	30
NNS_Rx2219	776296	6738477	37	0	0	18	28	35	0	0	0	0	32
NNS_Rx2220	776386	6738522	38	0	0	18	29	36	0	0	0	0	33
NNS_Rx2221	775984	6738540	35	0	0	16	26	33	0	0	0	0	30
NNS_Rx2222	775969	6738563	35	0	0	16	26	33	0	0	0	0	30
NNS_Rx2223	776133	6738572	36	0	0	16	27	34	0	0	0	0	31
NNS_Rx2224	776892	6738600	41	0	15	18	31	39	0	0	0	0	36
NNS_Rx2225	775993	6738732	34	0	0	15	25	32	0	0	0	0	29
NNS_Rx2226	776792	6738755	39	0	15	17	29	37	0	0	0	0	34
NNS_Rx2227	776524	6738757	38	0	0	16	28	36	0	0	0	0	33
NNS_Rx2228	776084	6738868	34	0	0	14	25	32	0	0	0	0	29
NNS_Rx2229	775956	6738875	33	0	0	0	25	31	0	0	0	0	28
NNS_Rx2230	776078	6738902	34	0	0	0	25	32	0	0	0	0	29
NNS_Rx2231	776066	6738956	34	0	0	0	25	32	0	0	0	0	29
NNS_Rx2232	777193	6739014	39	0	18	15	31	38	0	0	0	0	34
NNS_Rx2233	777642	6739117	43	0	22	0	37	42	0	0	0	0	38
NNS_Rx2234	777333	6739162	39	0	20	0	33	38	0	0	0	0	34
NNS_Rx2235	777120	6739169	38	0	18	0	30	36	0	0	0	0	33
NNS_Rx2236	777393	6739195	40	0	20	0	33	39	0	0	0	0	35
NNS_Rx2237	777957	6739202	45	0	26	0	43	42	0	0	0	0	40
NNS_Rx2238	779396	6739293	34	0	24	0	31	31	0	0	0	0	29
NNS_Rx2239	777524	6739337	39	0	22	0	34	38	0	0	0	0	34
NNS_Rx2240	776178	6739362	33	0	0	0	0	31	0	0	0	0	28
NNS_Rx2241	778113	6739367	42	0	30	0	41	39	0	0	0	0	37
NNS_Rx2242	777010	6739437	35	0	18	0	29	34	0	0	0	0	30

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NNS_Rx2243	778275	6739500	45	0	35	0	38	37	0	0	0	0	40
NNS_Rx2244	777758	6739570	38	0	25	0	35	37	0	0	0	0	33
NNS_Rx2245	777868	6739621	37	0	26	0	35	36	0	0	0	0	32
NNS_Rx2246	779151	6739875	40	0	27	0	41	30	0	0	0	0	35
NNS_Rx2247	776442	6739890	30	0	0	0	24	29	0	0	0	0	25
NNS_Rx2248	776801	6739911	31	0	16	0	26	30	0	0	0	0	26
NNS_Rx2249	776685	6739958	30	0	15	0	25	29	0	0	0	0	25
NNS_Rx2250	776597	6740000	30	0	14	0	24	29	0	0	0	0	25
NNS_Rx2251	779279	6740688	50	0	38	0	44	0	0	0	0	0	45
NNS_Rx2252	779069	6742077	35	0	17	0	27	0	0	0	0	0	30
NNS_Rx2253	778694	6742190	33	0	16	0	25	0	0	0	0	0	28
NNS_Rx2254	778589	6742322	24	0	15	0	24	0	0	0	0	0	19
NNS_Rx2255	785690	6742327	30	0	0	0	24	0	0	0	0	0	25
NNS_Rx2256	**782347**	**6742363**	42	23	32	0	36	35	0	0	0	25	37
NNS_Rx2257	778375	6742373	18	0	0	0	0	0	0	0	0	0	13
NNS_Rx2258	782429	6742408	43	23	30	0	38	35	0	0	0	26	38
NNS_Rx2259	785497	6742505	31	0	0	0	25	0	0	0	0	0	26
NNS_Rx2260	786976	6742591	33	0	0	18	0	0	0	0	0	0	28
NNS_Rx2261	783876	6743079	50	33	28	0	34	48	0	0	0	34	45
NNS_Rx2262	783121	6744940	42	24	0	0	39	32	0	0	0	45	37
NNS_Rx2263	783268	6745079	39	24	0	0	39	31	0	0	0	40	34
NNS_Rx2264	783377	6745138	37	23	0	0	38	31	0	0	0	39	32
NNS_Rx2265	806847	6745886	30	0	0	16	25	0	0	0	0	0	25
NNS_Rx2266	805728	6747216	50	0	31	27	30	0	0	0	0	0	45
NNS_Rx2267	805767	6747404	64	0	31	29	31	0	0	0	0	0	59
NNS_Rx2268	808843	6747426	38	0	24	20	32	0	0	0	0	0	33
NNS_Rx2269	806194	6748926	33	0	16	19	28	0	0	0	0	0	28
NNS_Rx2270	810881	6749026	50	0	35	18	47	45	48	0	0	0	45
NNS_Rx2271	806215	6749044	32	0	15	18	27	0	0	0	0	0	27
NNS_Rx2272	810892	6749090	48	0	33	18	44	44	45	0	0	0	43

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
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NNS_Rx2273	809947	6749574	34	0	21	20	30	38	30	0	0	0	29
NNS_Rx2274	810183	6750444	31	0	16	0	26	31	26	0	0	0	26
NNS_Rx2275	811476	6750790	41	0	28	0	36	36	32	0	0	0	36
NNS_Rx2276	817316	6756382	33	21	16	0	0	31	0	0	0	0	28
NNS_Rx2277	817282	6756388	33	21	16	0	0	31	0	0	0	0	28
NNS_Rx2278	817242	6756398	34	22	16	0	0	32	0	0	0	0	29
NNS_Rx2279	817266	6756501	34	22	16	0	0	32	0	0	0	0	29
NNS_Rx2280	817284	6756606	34	22	17	15	0	32	24	0	0	0	29
NNS_Rx2281	817305	6757144	36	25	18	18	25	34	27	0	0	0	31
NNS_Rx2282	817190	6757290	38	26	19	19	27	36	28	0	0	0	33
NNS_Rx2283	817140	6757343	38	27	20	20	27	36	29	0	0	0	33
NNS_Rx2284	817267	6757363	37	26	19	19	27	35	28	0	0	0	32
NNS_Rx2285	817198	6757379	38	26	20	20	27	36	29	0	0	0	33
NNS_Rx2286	814930	6757564	40	27	24	17	24	38	26	0	0	0	35
NNS_Rx2287	816238	6758238	58	35	44	44	38	42	52	0	0	0	53
NNS_Rx2288	815921	6760086	36	0	21	15	30	0	29	0	0	0	31
NNS_Rx2289	815698	6760159	34	0	19	15	28	0	28	0	0	0	29
NNS_Rx2290	815637	6760170	33	0	18	0	27	0	27	0	0	0	28
NNS_Rx2291	815580	6760181	33	0	18	0	27	0	27	0	0	0	28
NNS_Rx2292	816493	6762332	38	0	0	0	31	36	0	0	0	0	33
NNS_Rx2293	819917	6764654	31	0	17	0	25	29	0	0	0	0	26
NNS_Rx2294	819309	6765247	37	0	23	0	32	34	0	0	0	0	32
NNS_Rx2295	820924	6767907	32	0	18	0	28	0	0	0	0	0	27
NNS_Rx2296	820881	6768179	34	0	19	0	29	0	0	0	0	0	29
NNS_Rx2297	820156	6768814	47	0	33	0	43	0	0	0	0	0	42
NNS_Rx2298	820098	6768936	51	0	37	0	46	0	0	0	0	0	46
NNS_Rx2299	820349	6769982	62	0	34	0	57	0	0	0	0	0	57
NNS_Rx2300	821596	6772924	59	0	27	0	29	32	42	0	0	0	54
NNS_Rx2301	821460	6773248	52	0	29	0	27	34	45	0	0	0	47
NNS_Rx2302	821559	6773293	60	0	31	0	27	35	51	0	0	0	55

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NNS_Rx2303	821406	6773299	49	0	29	0	27	34	44	0	0	0	44
NNS_Rx2304	821484	6773308	53	0	31	0	27	35	47	0	0	0	48
NNS_Rx2305	821493	6773327	53	0	31	0	27	35	48	0	0	0	48
NNS_Rx2306	821570	6773346	59	0	33	0	26	35	54	0	0	0	54
NNS_Rx2307	821435	6773385	50	0	31	0	26	35	45	0	0	0	45
NNS_Rx2308	821524	6773406	53	0	33	0	26	36	49	0	0	0	48
NNS_Rx2309	821450	6773415	50	0	31	0	26	35	46	0	0	0	45
NNS_Rx2310	821458	6773440	49	0	32	0	26	36	46	0	0	0	44
NNS_Rx2311	821641	6773452	61	0	37	0	25	36	59	0	0	0	56
NNS_Rx2312	821478	6773497	49	0	33	0	25	36	45	0	0	0	44
NNS_Rx2313	821569	6773500	53	0	36	0	25	37	50	0	0	0	48
NNS_Rx2314	822047	6773531	46	0	35	0	24	38	41	0	0	0	41
NNS_Rx2315	821579	6773539	53	0	37	0	25	37	49	0	0	0	48
NNS_Rx2316	821508	6773546	50	0	35	0	25	37	46	0	0	0	45
NNS_Rx2317	821521	6773581	49	0	35	0	25	37	45	0	0	0	44
NNS_Rx2318	821630	6773616	51	0	41	0	24	38	47	0	0	0	46
NNS_Rx2319	822057	6773631	48	0	35	0	0	39	40	0	0	0	43
NNS_Rx2320	822002	6773892	59	0	33	0	0	43	37	0	0	0	54
NNS_Rx2321	823807	6774968	35	0	15	0	24	33	0	0	0	0	30
NNS_Rx2322	823585	6775026	36	0	16	0	26	34	0	0	0	0	31
NNS_Rx2323	824182	6776289	25	0	14	0	23	0	0	0	0	0	20
NNS_Rx2324	821992	6776886	53	0	24	0	31	50	0	0	0	0	48
NNS_Rx2325	820636	6779564	34	0	18	0	24	32	0	0	0	0	29
NNS_Rx2326	822997	6779751	42	0	19	0	32	40	0	0	0	0	37
NNS_Rx2327	824720	6782098	33	0	17	0	24	31	0	0	0	0	28
NNS_Rx2328	822331	6782168	36	0	24	0	33	32	0	0	0	0	31
NNS_Rx2329	822509	6782461	36	0	26	0	32	33	0	0	0	0	31
NNS_Rx2330	822736	6783015	36	0	23	0	27	34	0	0	0	0	31
NNS_Rx2331	825461	6783676	35	0	0	0	29	33	0	0	0	0	30
NNS_Rx2332	823225	6785436	33	0	18	18	26	31	0	0	0	0	28

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NNS_Rx2333	822991	6785628	29	0	16	16	24	0	0	0	0	0	24
NNS_Rx2334	825442	6788534	42	0	31	0	35	38	0	0	0	0	37
NNS_Rx2335	827464	6789634	32	0	18	0	28	30	0	0	0	0	27
NNS_Rx2336	827243	6790537	42	0	27	0	36	30	0	0	0	0	37
NNS_Rx2337	831494	6792689	28	0	0	0	0	0	0	0	0	0	23
NNS_Rx2338	828242	6792780	47	35	20	0	42	0	0	0	0	0	42
NNS_Rx2339	828320	6792879	46	36	21	0	41	0	0	0	0	0	41
NNS_Rx2340	830874	6794733	44	40	14	0	43	0	43	0	0	0	39
NNS_Rx2341	830881	6794768	45	39	0	0	43	0	43	0	0	0	40
NNS_Rx2342	830647	6794779	54	53	15	0	57	0	57	0	0	0	49
NNS_Rx2343	830803	6794787	46	42	14	0	45	0	45	0	0	0	41
NNS_Rx2344	830729	6794793	48	45	15	0	49	0	49	0	0	0	43
NNS_Rx2345	830812	6794817	47	41	0	0	45	0	45	0	0	0	42
NNS_Rx2346	830661	6794852	55	48	15	0	52	0	56	0	0	0	50
NNS_Rx2347	830705	6794865	53	45	15	0	49	0	52	0	0	0	48
NNS_Rx2348	830751	6794895	50	42	0	0	46	0	49	0	0	0	45
NNS_Rx2349	830894	6794908	47	38	0	0	41	0	43	0	0	0	42
NNS_Rx2350	830673	6794913	58	44	14	0	48	0	56	0	0	0	53
NNS_Rx2351	830830	6794939	49	39	0	0	43	0	45	0	0	0	44
NNS_Rx2352	830674	6794961	59	42	0	0	46	0	55	0	0	0	54
NNS_Rx2353	830920	6794967	47	37	0	0	40	0	42	0	0	0	42
NNS_Rx2354	830928	6794989	47	37	0	0	40	0	42	0	0	0	42
NNS_Rx2355	830745	6795005	54	40	0	0	43	0	48	0	0	0	49
NNS_Rx2356	830688	6795036	60	40	0	0	43	0	49	0	0	0	55
NNS_Rx2357	830786	6795034	53	38	0	0	42	0	46	0	0	0	48
NNS_Rx2358	830704	6795051	59	39	0	0	43	0	48	0	0	0	54
NNS_Rx2359	830694	6795077	62	39	0	0	42	0	47	0	0	0	57
NNS_Rx2360	830927	6795093	48	35	0	0	39	0	41	0	0	0	43
NNS_Rx2361	830704	6795098	62	38	0	0	42	0	46	0	0	0	57
NNS_Rx2362	829783	6795099	38	30	16	0	33	0	33	0	0	0	33

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NNS_Rx2363	830858	6795107	51	36	0	0	39	0	42	0	0	0	46
NNS_Rx2364	830938	6795129	48	35	0	0	38	0	40	0	0	0	43
NNS_Rx2365	830867	6795143	50	35	0	0	39	0	41	0	0	0	45
NNS_Rx2366	830876	6795184	50	35	0	0	38	0	41	0	0	0	45
NNS_Rx2367	830805	6795204	53	35	0	0	38	0	41	0	0	0	48
NNS_Rx2368	830895	6795292	51	33	0	0	36	0	39	0	0	0	46
NNS_Rx2369	830741	6795303	62	34	0	0	37	0	40	0	0	0	57
NNS_Rx2370	830900	6795314	51	33	0	0	36	0	38	0	0	0	46
NNS_Rx2371	830908	6795345	51	32	0	0	35	0	38	0	0	0	46
NNS_Rx2372	830991	6795346	48	32	0	0	35	0	37	0	0	0	43
NNS_Rx2373	830852	6795389	53	32	0	0	35	0	37	0	0	0	48
NNS_Rx2374	832373	6795400	32	21	0	0	24	0	25	0	0	0	27
NNS_Rx2375	830854	6795407	53	32	0	0	35	0	37	0	0	0	48
NNS_Rx2376	830857	6795427	53	32	0	0	35	0	37	0	0	0	48
NNS_Rx2377	830847	6795448	53	31	0	0	35	0	37	0	0	0	48
NNS_Rx2378	779021	6735728	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx2379	779351	6736904	0	0	0	0	0	0	0	0	0	0	0
NNS_Rx2380	779606	6738326	31	0	17	0	26	30	0	0	0	0	26
NNS_Rx2381	779226	6739806	38	0	26	0	39	30	0	0	0	0	33
NNS_Rx2400	768374	6640762	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2401	768391	6640771	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2402	768142	6640771	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2403	768560	6640771	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx2404	768620	6640791	29	0	0	0	0	0	0	0	0	0	24
NNS_Rx2405	768449	6640799	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2406	768604	6640803	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2407	768501	6640824	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2408	768442	6640868	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2409	768736	6640887	30	0	0	0	0	0	0	0	0	0	25
NNS_Rx2410	768187	6641132	32	0	0	0	0	0	0	0	0	0	27

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NNS_Rx2411	768351	6641153	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx2412	768107	6641172	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx2413	768472	6641199	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx2414	768381	6641249	33	0	0	0	0	0	0	0	0	0	28
NNS_Rx2415	768213	6641281	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx2416	768178	6641351	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx2417	768173	6641369	34	0	0	0	0	0	0	0	0	0	29
NNS_Rx2418	768249	6641369	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx2419	768227	6641420	35	0	0	0	0	0	0	0	0	0	30
NNS_Rx2420	768203	6641474	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx2421	767947	6641569	36	0	0	0	0	0	0	0	0	0	31
NNS_Rx2422	768178	6641674	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx2423	768052	6641680	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx2424	768017	6641701	38	0	0	0	0	0	0	0	0	0	33
NNS_Rx2425	768094	6642024	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx2426	767774	6642217	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx2427	767759	6642248	42	0	0	0	0	0	0	0	0	0	37
NNS_Rx2428	767813	6642269	43	0	0	0	0	0	0	0	0	0	38
NNS_Rx2429	775679	6734301	33	28	0	0	32	0	33	0	36	0	28
NNS_Rx2430	775611	6734314	32	28	0	0	31	0	32	0	36	0	27
NNS_Rx2431	775524	6734328	31	27	0	0	30	0	31	0	36	0	26
NNS_Rx2432	775421	6734346	30	26	0	0	29	0	30	0	36	0	25
NNS_Rx2433	775624	6734360	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx2434	775630	6734407	32	28	0	0	31	0	32	0	37	0	27
NNS_Rx2435	775607	6734579	32	29	0	0	31	0	32	0	39	0	27
NNS_Rx2436	775493	6734592	31	28	0	0	30	0	31	0	38	0	26
NNS_Rx2437	775296	6734620	29	26	0	0	29	0	29	0	37	0	24
NNS_Rx2438	775004	6734624	27	24	0	0	27	0	27	0	35	0	22
NNS_Rx2439	775777	6734650	34	31	0	0	33	0	34	0	40	0	29
NNS_Rx2440	775169	6734711	28	25	0	0	28	0	28	0	37	0	23

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NNS_Rx2441	775044	6734730	27	24	0	0	27	0	27	0	36	0	22
NNS_Rx2442	775075	6734731	28	25	0	0	28	0	28	0	36	0	23
NNS_Rx2443	775283	6734767	29	26	0	0	29	0	29	0	38	0	24
NNS_Rx2444	775897	6734898	37	34	0	0	36	30	36	0	44	0	32
NNS_Rx2445	775332	6734899	30	27	0	0	30	0	30	0	39	0	25
NNS_Rx2446	775585	6734942	33	30	0	0	33	0	33	0	42	0	28
NNS_Rx2447	775715	6734942	34	31	0	0	35	30	34	0	43	0	29
NNS_Rx2448	775542	6734949	32	29	0	0	33	0	33	0	42	0	27
NNS_Rx2449	775313	6735370	34	26	0	0	32	31	32	0	42	0	29
NNS_Rx2450	769878	6647748	44	0	31	0	39	0	0	0	0	0	39
NNS_Rx2451	776866	6735554	37	32	0	18	37	35	37	0	48	0	32
NNS_Rx2452	776404	6735612	48	33	0	17	48	36	49	0	61	0	43
NNS_Rx2453	776467	6735658	44	32	0	18	44	37	45	0	58	0	39
NNS_Rx2454	777492	6735707	36	26	0	18	29	34	29	0	39	0	31
NNS_Rx2455	776336	6735841	47	34	0	19	42	39	44	0	50	0	42
NNS_Rx2456	775339	6735929	37	29	0	15	31	34	32	0	41	0	32
NNS_Rx2457	776267	6735987	55	37	0	20	38	40	44	0	47	0	50
NNS_Rx2458	775862	6736030	42	35	0	18	36	39	40	0	45	0	37
NNS_Rx2459	775530	6736038	40	31	0	16	33	36	35	0	42	0	35
NNS_Rx2460	776411	6736078	45	38	0	21	38	42	44	0	45	0	40
NNS_Rx2461	775318	6736100	38	29	0	15	31	35	32	0	39	0	33
NNS_Rx2462	775393	6736140	39	30	0	16	32	36	33	0	40	0	34
NNS_Rx2463	775317	6736142	38	29	0	15	31	35	33	0	39	0	33
NNS_Rx2464	775346	6736142	39	30	0	15	32	35	33	0	39	0	34
NNS_Rx2465	775454	6736195	40	31	0	16	33	37	34	0	40	0	35
NNS_Rx2466	775337	6736199	39	30	0	15	32	36	33	0	39	0	34
NNS_Rx2467	776347	6736209	47	42	0	22	41	44	51	0	43	0	42
NNS_Rx2468	775235	6736251	38	29	0	15	31	35	32	0	38	0	33
NNS_Rx2469	775397	6736253	40	30	0	16	33	36	34	0	39	0	35
NNS_Rx2471	775695	6737515	40	26	0	19	30	38	29	0	0	0	35

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NNS_Rx2472	775855	6737591	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2473	775825	6737595	40	26	0	20	30	38	29	0	0	0	35
NNS_Rx2474	775365	6737656	37	24	0	17	28	34	27	0	0	0	32
NNS_Rx2475	775355	6737707	36	24	0	16	27	34	26	0	0	0	31
NNS_Rx2476	775351	6737768	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2477	775363	6737768	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2478	775405	6737813	36	23	0	16	27	34	26	0	0	0	31
NNS_Rx2479	775355	6737858	36	23	0	16	26	33	25	0	0	0	31
NNS_Rx2480	775918	6737930	38	24	0	19	27	36	26	0	0	0	33
NNS_Rx2481	769655	6687484	51	0	36	0	43	0	45	0	0	0	46
NNS_Rx2482	776541	6736435	51	39	0	0	42	48	42	0	40	0	46
NNS_Rx2483	775780	6735383	38	31	0	0	38	33	38	0	50	0	33
NNS_Rx2484	776277	6734825	45	43	0	15	38	30	42	0	43	0	40
NNS_Rx2485	775221	6736602	39	28	0	15	31	36	31	0	36	0	34
NNS_WORx0001	776843	6735619	38	31	0	0	37	36	37	0	35	0	33
NNS_WORx0002	830725	6794752	47	46	15	25	49	0	49	0	0	0	42
NNS_WORx0003	776323	6735725	49	32	0	0	45	38	49	0	0	0	44
NNS_WORx0004	775591	6736207	41	33	0	0	35	38	36	0	41	0	36
NNS_WORx0005	775411	6737128	40	28	0	16	31	37	30	0	51	0	35
NNS_WORx0006	775695	6737405	41	27	0	18	31	38	30	0	55	0	36
NNS_WORx0007	769513	6686849	53	0	27	0	40	0	51	0	35	0	48
NNS_WORx0008	769861	6686930	41	0	26	18	36	0	39	0	37	0	36
NNS_HOSx0001	775372	6736505	40	30	0	17	33	37	33	0	0	0	35
NNS_EDUx0001	775377	6735267	34	27	0	18	32	31	32	0	0	0	29
NNS_EDUx0002	775575	6735297	35	29	0	20	35	32	35	0	0	0	30
NNS_EDUx0003	775756	6737387	41	28	0	16	32	39	30	0	0	0	36
NNS_EDUx0004	775661	6737053	43	30	0	15	34	40	33	0	53	0	38
NNS_EDUx0005	779222	6740668	49	0	39	17	42	0	0	0	0	0	44
NNS_EDUx0006	830764	6795354	60	33	0	0	36	0	39	0	42	0	55
NNS_EDUx0007	822057	6773631	48	0	35	0	0	39	40	0	60	0	43

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_EDUx0008	769937	6686968	41	0	25	20	35	0	38	0	45	0	36
NNS_EDUx0009	775486	6735780	38	29	0	20	33	34	34	0	39	0	33
NNS_REPx0001	775864	6737528	41	27	0	21	31	39	29	0	0	0	36
NNS_REPx0002	822065	6773866	54	0	32	0	0	43	37	0	0	0	49
NNS_REPx0003	821543	6773918	46	0	32	0	0	40	38	0	0	0	41
NNS_REPx0004	775297	6736308	39	29	0	16	32	36	32	0	42	0	34
NNS_REPx0005	776134	6736215	58	44	0	20	42	43	58	0	51	0	53
NNS_REPx0006	776905	6735665	38	30	0	18	36	36	36	0	47	0	33
NNS_REPx0007	775651	6736474	43	34	0	18	37	40	37	0	42	0	38
NNS_REPx0008	770277	6707461	40	32	27	0	33	0	37	0	0	0	35
NNS_REPx0009	775654	6736793	44	33	0	19	36	40	35	0	39	0	39
NNS_REPx0010	775846	6736582	47	38	0	20	41	43	40	0	42	0	42
NNS_REPx0011	831181	6794811	41	33	0	0	36	0	36	0	0	0	36
NNS_REPx0012	776418	6736305	49	42	0	23	43	46	47	0	43	0	44
NNS_REPx0013	776955	6735877	40	29	0	20	34	38	34	0	44	0	35
NNS_REPx0014	769447	6686954	66	0	28	16	38	0	67	0	0	0	61
NNS_REPx0015	769658	6686953	43	0	27	16	37	0	45	0	0	0	38
NNS_REPx0016	775551	6734454	31	28	0	0	30	0	32	0	46	0	26
NNS_REAx0001	776110	6735168	41	37	0	0	44	33	43	0	57	0	36
NNS_REAx0002	775318	6735605	36	26	0	0	32	33	32	0	51	0	31
NNS_REAx0003	770402	6686754	36	0	20	15	31	0	31	0	0	0	31
NNS_REAx0004	831369	6795126	40	29	0	0	33	0	33	0	0	0	35
NNS_REAx0005	776376	6738005	40	23	0	21	31	38	26	0	0	0	35
NNS_REAx0006	776122	6736842	54	37	0	24	43	49	39	0	39	0	49
NNS_REAx0007	775349	6736899	40	29	0	17	32	37	31	0	38	0	35
NNS_REAx0008	776150	6736311	63	51	0	21	45	44	66	0	50	0	58
NNS_REAx0009	775564	6735635	37	28	0	14	35	34	35	0	55	0	32
NNS_REAx0010	775524	6735236	34	29	0	0	34	31	34	0	53	0	29
NNS_REAx0011	777275	6731747	40	23	0	0	32	0	31	0	0	0	35
NNS_REAx0012	776102	6737289	45	30	0	24	34	43	32	0	36	0	40

Receiver ID	Coordinate X	Coortinate Y	Predicted construction noise level by scenario (dBA, $L_{Aeq\ 15\text{-}minute}$)										
			Full alignment works: S1, S2, S3, S4, S12	S5: Signalised Xing	S6: Give Way Xing	S7:Level Xing removal	S8: Culvert works	S9, S10: Bridge works	S11: Crossing loops	S13-Newell Highway Overbridge	S14- Jones Avenue Overbridge	S15- Camurra Bypass	S16: Post possession
NNS_REAx0013	775347	6735800	37	28	0	0	32	34	32	0	46	0	32
NNS_REAx0014	775817	6736981	46	32	0	21	37	42	35	0	38	0	41
NNS_REAx0015	775454	6737007	41	29	0	18	33	38	32	0	37	0	36
NNS_REAx0016	776037	6736096	45	39	0	19	39	40	46	0	53	0	40
NNS_REAx0017	769929	6686886	41	0	25	16	35	0	38	0	0	0	36
NNS_REAx0018	785069	6744063	43	23	0	0	43	32	0	0	0	33	38
NNS_REAx0019	822004	6773763	54	0	36	0	0	41	39	0	0	0	49

Appendix H – Road Traffic Noise Results

Receiver ID	Facade receiver location		Floor	2019 no build		2019 build		2029 no build		2029 build		Controlling criteria		Exceedance		Is controlling criteria exceeded?		Is cumulative limit exceeded?		Is acute criteria exceeded?		Change in noise level (2029)		Qualifies for noise mitigation?
	x	y		Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	
NNS_Rx0840	768446.582	6688286.399	GF	38.6	35.5	38.6	35.6	38.6	35.5	39	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0841	769246.15	6689282.048	GF	51.2	48.2	51.3	48.3	51.2	48.2	51.7	48.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0842	769119.763	6690461.818	GF	49	46	49.8	46.8	49	46	50.2	47.2	58	53	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0843	769622.086	6693047.646	GF	51	48	51	48	51	48	51.4	48.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0902	775744.371	6734158.105	GF	37.2	30.5	37.3	30.6	37.6	30.9	37.7	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0903	775643.019	6734241.593	GF	36.7	30	36.7	30	37.1	30.4	37.1	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0904	775601.093	6734253.624	GF	36.6	29.9	36.6	29.9	37	30.3	37	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0905	775651.404	6734257.269	GF	36.8	30.1	36.8	30.1	37.2	30.5	37.2	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0906	775488.804	6734257.634	GF	36.2	29.5	36.2	29.5	36.6	29.9	36.6	29.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0907	775624.79	6734258.363	GF	36.7	30	36.7	30	37.1	30.4	37.1	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0908	775527.084	6734266.384	GF	36.4	29.7	36.4	29.7	36.8	30	36.8	30.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0909	775590.885	6734268.936	GF	36.6	29.9	36.6	29.9	37	30.3	37.1	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0910	775793.612	6734278.13	GF	38	31.3	38	31.3	38.4	31.7	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0911	775762.391	6734290.83	GF	38.3	31.6	38.3	31.5	38.7	32	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0912	775743.341	6734291.889	GF	38.1	31.4	38.1	31.4	38.5	31.8	38.5	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0913	775730.641	6734292.418	GF	38	31.3	38	31.2	38.4	31.7	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0914	775710.532	6734294.005	GF	37.8	31.1	37.8	31.1	38.2	31.5	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0915	775690.953	6734300.885	GF	37.8	31.1	37.8	31.1	38.2	31.5	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0917	775800.491	6734301.943	GF	38.5	31.8	38.4	31.7	38.9	32.1	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0918	775645.974	6734306.705	GF	37.6	30.9	37.6	30.9	38	31.3	38	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0919	775660.261	6734308.293	GF	37.8	31.1	37.8	31	38.2	31.4	38.2	31.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0920	775622.69	6734313.585	GF	37.5	30.8	37.5	30.8	37.9	31.2	37.9	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0922	775593.586	6734316.23	GF	37.2	30.5	37.2	30.5	37.6	30.9	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0923	775573.478	6734320.464	GF	37	30.3	37	30.3	37.4	30.7	37.4	30.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0924	775555.486	6734323.11	GF	36.8	30.1	36.9	30.1	37.2	30.5	37.3	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0925	775809.487	6734327.872	GF	38.8	32.1	38.7	32	39.2	32.5	39.2	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0926	775539.082	6734328.401	GF	36.8	30.1	36.8	30.1	37.2	30.5	37.2	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0928	775487.699	6734335.608	GF	36.6	29.9	36.7	29.9	37	30.3	37.1	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0929	775736.885	6734336.233	GF	38.4	31.7	38.4	31.7	38.8	32.1	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0930	775474.999	6734336.962	GF	36.6	29.9	36.6	29.9	37	30.3	37	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0931	775455.695	6734340.011	GF	36.5	29.8	36.6	29.8	36.9	30.2	37	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0932	775727.36	6734340.678	GF	38.4	31.7	38.4	31.7	38.8	32.1	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0933	775815.837	6734341.101	GF	38.9	32.2	38.9	32.1	39.3	32.6	39.3	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0934	775764.19	6734341.313	GF	38.6	31.9	38.6	31.9	39	32.3	39	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0935	775435.714	6734346.445	GF	36.5	29.8	36.5	29.8	36.9	30.2	36.9	30.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0937	775677.83	6734350.203	GF	37.8	31.1	37.9	31.1	38.2	31.5	38.3	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0938	775664.495	6734353.378	GF	37.8	31.1	37.8	31.1	38.2	31.4	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0939	775398.629	6734353.896	GF	36.4	29.6	36.4	29.7	36.8	30	36.8	30.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0940	775638.46	6734354.013	GF	37.6	30.9	37.7	30.9	38	31.3	38.1	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0941	775821.128	6734355.389	GF	39	32.3	39	32.2	39.4	32.7	39.4	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0942	775383.051	6734355.928	GF	36.3	29.6	36.4	29.6	36.7	30	36.8	30	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0943	775368.319	6734359.315	GF	36.3	29.5	36.3	29.6	36.7	29.9	36.7	30	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0944	775704.5	6734360.363	GF	38.1	31.4	38.2	31.4	38.5	31.8	38.6	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0946	775346.136	6734361.177	GF	36.2	29.5	36.2	29.5	36.6	29.8	36.6	29.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0947	775330.049	6734361.347	GF	36.1	29.4	36.1	29.4	36.5	29.8	36.6	29.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0948	775574.324	6734363.538	GF	37.1	30.4	37.2	30.4	37.5	30.8	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0949	775773.715	6734364.808	GF	38.8	32.1	38.8	32.1	39.2	32.5	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0950	775554.639	6734365.443	GF	37.1	30.4	37.1	30.4	37.5	30.8	37.5	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0951	775603.534	6734367.348	GF	37.3	30.6	37.3	30.6	37.7	31	37.8	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0952	775826.949	6734368.618	GF	39.1	32.4	39.1	32.3	39.5	32.8	39.5	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0953	775534.849	6734371.793	GF	37.1	30.3	37.1	30.4	37.5	30.7	37.5	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0954	775492.271	6734376.925	GF	36.9	30.2	37	30.2	37.3	30.6	37.4	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0955	775766.73	6734381.318	GF	38.8	32.1	38.8	32.1	39.2	32.5	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0956	775830.489	6734385.91	GF	39.3	32.6	39.2	32.4	39.7	32.9	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0957	775473.475	6734387.763	GF	36.9	30.2	36.9	30.2	37.3	30.6	37.4	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0958	775412.684	6734388.948	GF	36.6	29.9	36.7	30	37	30.3	37.1	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0959	775372.213	6734389.625	GF	36.4	29.7	36.5	29.8	36.8	30.1	36.9	30.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0960	775452.478	6734391.319	GF	36.8	30.1	36.9	30.1	37.2	30.5	37.3	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0961	775342.749	6734394.57	GF	36.3	29.6	36.4	29.7	36.7	30	36.8	30.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0962	775738.155	6734394.653	GF	38.4	31.7	38.4	31.7	38.8	32.1	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0963	775434.359	6734397.245	GF	36.8	30.1	36.8	30.1	37.2	30.4	37.2	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0964	775673.385	6734399.733	GF	38.5	31.8	38.5	31.8	38.9	32.2	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0965	775305.835	6734400.124	GF	36.2	29.5	36.3	29.5	36.6	29.9	36.7	29.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0966	775839.542	6734401.752	GF	39.4	32.7	39.3	32.6	39.8	33.1	39.7	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0967	775691.8	6734404.813	GF	38.6	31.9	38.6	31.9	39	32.3	39	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0968	775653.7	6734406.718	GF	38.4	31.7	38.4	31.7	38.8	32.1	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0970	775745.14	6734417.513	GF	38.5	31.7	38.5	31.7	38.9	32.1	38.9	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0971	775369.431	6734417.915	GF	36.6	29.9	36.6	29.9	37	30.3	37.1	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0972	775243.001	6734418.158	GF	36	29.3	36.1	29.3	36.4	29.6	36.5	29.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0973	775842.258	6734420.31	GF	39.6	32.8	39.5	32.7	40	33.2	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0974	775767.365	6734420.688	GF	38.8	32	38.8	32	39.2	32.4	39.2	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0975	775795.94	6734421.958	GF	39.2	32.4	39.1	32.4	39.6	32.8	39.5	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0976	775691.8	6734425.768	GF	38.7	32	38.7	31.9	39.1	32.3	39.1	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0977	775848.595	6734434.342	GF	39.7	33	39.6	32.8	40.1	33.4	40	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0978	775802.925	6734437.833	GF	39.3	32.6	39.3	32.6	39.7	33	39.7	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0979	775354.191	6734438.659	GF	36.6	29.9	36.7	30	37	30.3	37.1	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0980	775625.76	6734439.738	GF	38.2	31.5	38.2	31.4	38.6	31.8	38.6	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0981	775306.501	6734444.193	GF	36.4	29.7	36.5	29.8	36.8	30.1	36.9	30.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0982	775687.99	6734447.358	GF	38.7	32	38.7	32	39.1	32.4	39.1	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx0983	775854.932	6734456.521	GF	39.9	33.2	39.8	33.1	40.3	33.6	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0984	775738.155	6734457.518	GF	39.2	32.5	39.1	32.4	39.6	32.9	39.6	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0985	775680.37	6734461.963	GF	38.6	31.9	38.6	31.8	39	32.3	39	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0986	775614.012	6734465.456	GF	38	31.3	38	31.3	38.4	31.7	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0987	775799.115	6734465.773	GF	39.6	32.9	39.6	32.8	40	33.3	40	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0988	775319.519	6734465.783	GF	36.6	29.9	36.7	29.9	37	30.3	37.1	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0989	775764.19	6734467.678	GF	39.4	32.7	39.4	32.7	39.8	33.1	39.8	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0990	775731.805	6734468.313	GF	39.3	32.6	39.2	32.5	39.7	32.9	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0991	775778.16	6734471.488	GF	39.5	32.8	39.5	32.8	39.9	33.2	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0992	775853.574	6734471.911	GF	40	33.3	39.9	33.2	40.4	33.7	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0993	775359.271	6734474.642	GF	36.8	30.1	36.9	30.2	37.2	30.5	37.3	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0994	775668.305	6734482.918	GF	38.4	31.7	38.4	31.6	38.8	32.1	38.8	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0995	775607.344	6734486.093	GF	38.1	31.4	38.1	31.4	38.5	31.8	38.5	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0996	775849.5	6734487.753	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0997	775315.709	6734491.183	GF	36.7	30	36.8	30	37.1	30.4	37.2	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0998	775715.295	6734500.698	GF	39.4	32.7	39.4	32.6	39.8	33.1	39.8	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx0999	775657.51	6734502.603	GF	38.5	31.8	38.5	31.7	38.9	32.2	38.9	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1000	775766.73	6734503.238	GF	39.7	33	39.7	32.9	40.1	33.4	40.1	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1001	775752.76	6734505.143	GF	39.7	32.9	39.6	32.9	40.1	33.3	40	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1002	775789.59	6734505.778	GF	39.9	33.2	39.8	33.1	40.3	33.6	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1003	775731.17	6734508.953	GF	39.6	32.9	39.5	32.8	40	33.2	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1004	775849.5	6734509.027	GF	40.3	33.6	40.2	33.4	40.7	33.9	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1005	775370.701	6734509.779	GF	37.1	30.3	37.1	30.4	37.5	30.7	37.6	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1006	775604.169	6734509.906	GF	38.3	31.6	38.2	31.5	38.7	31.9	38.7	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1007	775654.97	6734516.573	GF	38.6	31.9	38.5	31.8	39	32.3	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1008	775809.275	6734517.843	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1009	775850.858	6734520.342	GF	40.4	33.7	40.3	33.6	40.8	34	40.7	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1010	775320.471	6734520.393	GF	36.9	30.2	36.9	30.2	37.3	30.6	37.4	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1011	775421.924	6734524.828	GF	37.4	30.7	37.5	30.7	37.8	31.1	37.9	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1012	775497.489	6734534.353	GF	37.9	31.1	37.9	31.2	38.3	31.5	38.3	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1013	775477.487	6734534.671	GF	37.7	31	37.8	31	38.1	31.4	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1014	775370.277	6734537.719	GF	37.2	30.5	37.3	30.5	37.6	30.9	37.7	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1015	775324.916	6734539.761	GF	37	30.3	37.1	30.3	37.4	30.7	37.5	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1016	775909.248	6734539.806	GF	40.9	34.2	40.7	34	41.3	34.6	41.2	34.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1017	775649.255	6734540.703	GF	38.7	32	38.7	32	39.1	32.4	39.1	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1018	775850.405	6734542.974	GF	40.5	33.8	40.4	33.6	40.9	34.1	40.8	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1019	775429.544	6734546.418	GF	37.6	30.8	37.6	30.9	38	31.2	38	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1020	775517.809	6734546.736	GF	38	31.3	38.1	31.3	38.4	31.7	38.5	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1021	775540.352	6734547.371	GF	38.2	31.5	38.2	31.4	38.6	31.8	38.6	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1022	775557.814	6734548.006	GF	38.3	31.6	38.3	31.5	38.7	31.9	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1023	775701.96	6734548.958	GF	39.1	32.4	39	32.3	39.5	32.8	39.4	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1024	775808.64	6734549.593	GF	40.2	33.5	40.1	33.4	40.6	33.9	40.5	33.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1025	775764.825	6734550.863	GF	39.9	33.2	39.9	33.1	40.3	33.6	40.3	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1026	775744.505	6734552.133	GF	39.7	33	39.7	33	40.1	33.4	40.1	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1027	775726.09	6734554.673	GF	39.3	32.6	39.2	32.5	39.7	32.9	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1028	775849.047	6734558.364	GF	40.5	33.8	40.4	33.7	40.9	34.2	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1029	775787.685	6734558.483	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1030	775370.701	6734560.579	GF	37.4	30.7	37.4	30.7	37.8	31.1	37.8	31.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1031	775637.19	6734564.198	GF	38.8	32.1	38.8	32.1	39.2	32.5	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1032	775318.249	6734568.971	GF	37.1	30.4	37.2	30.5	37.5	30.8	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1033	775693.705	6734570.548	GF	39.2	32.5	39.1	32.4	39.6	32.9	39.6	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1034	774665.012	6734572.9	GF	33.1	26.4	33.4	26.6	33.5	26.8	33.8	27.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1035	775457.484	6734574.358	GF	37.9	31.2	37.9	31.2	38.3	31.6	38.3	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1036	775380.861	6734576.666	GF	37.5	30.8	37.5	30.8	37.9	31.2	37.9	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1037	775285.864	6734577.543	GF	37	30.3	37.1	30.4	37.4	30.7	37.5	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1038	775620.045	6734579.438	GF	38.8	32.1	38.8	32.1	39.2	32.5	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1040	775587.024	6734580.073	GF	38.6	31.9	38.6	31.9	39	32.3	39.1	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1041	775472.089	6734581.978	GF	38	31.3	38	31.3	38.4	31.7	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1042	775569.244	6734583.883	GF	38.5	31.8	38.6	31.8	38.9	32.2	39	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1043	775528.604	6734588.963	GF	38.4	31.6	38.4	31.6	38.8	32	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1044	775547.654	6734591.503	GF	38.5	31.8	38.5	31.8	38.9	32.2	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1046	775512.729	6734592.773	GF	38.3	31.6	38.3	31.6	38.7	32	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1047	775392.291	6734594.022	GF	37.6	30.9	37.7	31	38	31.3	38.1	31.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1048	775814.99	6734595.948	GF	40.4	33.7	40.3	33.6	40.8	34.1	40.7	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1049	775773.715	6734599.758	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1050	775227.242	6734605.567	GF	37	30.3	37	30.3	37.4	30.7	37.5	30.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1051	775399.064	6734613.496	GF	37.8	31.1	37.8	31.1	38.2	31.5	38.3	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1052	775375.357	6734614.766	GF	37.7	31	37.7	31	38.1	31.4	38.2	31.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1053	775334.294	6734617.306	GF	37.5	30.8	37.6	30.8	37.9	31.2	38	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1054	775655.146	6734617.389	GF	39.3	32.6	39.3	32.6	39.7	33	39.7	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1055	775274.604	6734619.422	GF	37.3	30.6	37.3	30.6	37.7	31	37.7	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1056	775351.227	6734620.269	GF	37.6	30.9	37.7	30.9	38	31.3	38.1	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1058	775317.361	6734623.656	GF	37.5	30.8	37.5	30.8	37.9	31.2	37.9	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1059	775025.312	6734623.665	GF	36	29.3	36.1	29.4	36.4	29.7	36.6	29.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1061	775664.671	6734624.691	GF	39.4	32.7	39.4	32.6	39.8	33.1	39.8	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1062	775117.069	6734624.935	GF	36.5	29.8	36.6	29.9	36.9	30.2	37	30.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1063	775634.826	6734625.961	GF	39.2	32.5	39.2	32.5	39.6	32.9	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1064	775092.304	6734626.205	GF	36.2	29.5	36.3	29.6	36.6	29.8	36.7	30	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1065	775221.209	6734628.11	GF	37.1	30.4	37.2	30.4	37.5	30.8	37.6	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1066	775075.794	6734628.427	GF	36	29.3	36.2	29.5	36.4	29.7	36.6	29.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1067	775456.708	6734628.819	GF	38.2	31.5	38.2	31.5	38.6	31.9	38.7	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1068	775050.077	6734630.332	GF	36	29.3	36.2	29.4	36.4	29.7	36.6	29.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1069	775159.932	6734630.65	GF	36.7	30	36.9	30.1	37.1	30.4	37.3	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1070	775612.283	6734632.311	GF	39.2	32.4	39.1	32.4	39.6	32.8	39.6	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1071	775591.645	6734636.439	GF	39.1	32.3	39	32.3	39.5	32.7	39.5	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1072	775473.535	6734637.074	GF	38.4	31.7	38.4	31.7	38.8	32	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1073	775138.659	6734637.635	GF	36.7	30	36.8	30.1	37.1	30.3	37.2	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1074	775494.808	6734638.344	GF	38.5	31.8	38.5	31.8	38.9	32.2	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1075	775571.325	6734638.661	GF	38.9	32.2	38.9	32.2	39.3	32.6	39.4	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1076	775675.148	6734640.249	GF	39.6	32.9	39.5	32.8	40	33.3	40	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1077	775513.223	6734646.599	GF	38.7	31.9	38.7	31.9	39.1	32.3	39.1	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1078	775834.375	6734647.551	GF	40.7	34	40.7	33.9	41.1	34.4	41.1	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1079	775529.733	6734648.821	GF	38.8	32	38.8	32	39.2	32.4	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1080	775817.547	6734649.456	GF	40.6	33.9	40.6	33.8	41	34.3	41	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1081	775799.45	6734650.409	GF	40.5	33.8	40.4	33.7	40.9	34.2	40.9	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1083	775730.552	6734651.996	GF	40	33.3	40	33.2	40.4	33.7	40.4	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1084	775439.372	6734656.124	GF	38.3	31.6	38.3	31.6	38.7	32	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1085	775416.83	6734660.886	GF	38.2	31.5	38.3	31.5	38.6	31.9	38.7	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1086	775232.957	6734661.13	GF	37.1	30.4	37.2	30.5	37.5	30.8	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1087	775176.124	6734663.035	GF	37	30.3	37.1	30.4	37.4	30.7	37.6	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1088	775399.367	6734666.601	GF	38.2	31.5	38.2	31.5	38.6	31.9	38.6	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1089	775344.122	6734667.554	GF	37.9	31.2	37.9	31.2	38.3	31.6	38.3	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1090	775198.667	6734668.115	GF	37.2	30.5	37.3	30.6	37.6	30.9	37.7	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1091	775212.954	6734668.432	GF	37.1	30.4	37.2	30.5	37.5	30.8	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1092	775325.389	6734669.141	GF	37.8	31.1	37.8	31.1	38.2	31.5	38.3	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1093	775356.822	6734669.776	GF	38	31.3	38	31.3	38.4	31.7	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1094	775383.492	6734670.094	GF	38.1	31.4	38.2	31.4	38.5	31.8	38.6	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1095	775734.679	6734670.411	GF	40.2	33.5	40.2	33.4	40.6	33.9	40.6	33.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1096	775306.974	6734674.856	GF	37.8	31.1	37.8	31.1	38.2	31.5	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1097	775277.764	6734675.809	GF	37.2	30.5	37.2	30.5	37.6	30.9	37.7	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1098	775675.466	6734676.126	GF	39.8	33.1	39.8	33.1	40.2	33.5	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1099	775680.228	6734694.224	GF	40	33.3	40	33.3	40.4	33.7	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1100	775795.005	6734695.811	GF	40.8	34.1	40.8	34.1	41.2	34.5	41.2	34.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1101	775819.135	6734707.876	GF	41.1	34.4	41.1	34.3	41.5	34.8	41.5	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1102	775215.177	6734710.977	GF	37	30.3	37.1	30.3	37.4	30.7	37.5	30.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1104	775757.539	6734713.274	GF	40.7	33.9	40.7	33.9	41.1	34.3	41.1	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1105	775738.807	6734714.544	GF	40.5	33.8	40.5	33.8	40.9	34.2	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1106	775893.641	6734717.557	GF	41.8	35.1	41.7	35	42.2	35.5	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1107	775686.578	6734718.036	GF	40.2	33.5	40.2	33.5	40.6	33.9	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1108	775280.939	6734718.989	GF	38	31.2	37.9	31.2	38.4	31.6	38.4	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1109	775318.087	6734720.259	GF	38.2	31.4	38.2	31.5	38.6	31.8	38.6	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1110	775308.879	6734720.894	GF	38.1	31.4	38.1	31.4	38.5	31.8	38.5	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1111	775346.344	6734722.799	GF	38.3	31.6	38.4	31.6	38.7	32	38.8	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1112	775965.608	6734727.611	GF	42.5	35.8	42.3	35.6	42.9	36.2	42.7	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1113	775168.822	6734728.44	GF	37.4	30.7	37.5	30.7	37.8	31.1	37.9	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1114	775091.352	6734729.71	GF	36.5	29.8	36.7	30	36.9	30.1	37.2	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1116	775831.835	6734730.101	GF	41.4	34.7	41.4	34.6	41.8	35.1	41.8	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1117	775918.777	6734730.257	GF	42.1	35.4	42	35.2	42.5	35.8	42.4	35.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1118	775118.339	6734730.98	GF	36.7	30	36.9	30.2	37.1	30.4	37.3	30.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1120	775008.484	6734732.25	GF	36.1	29.3	36.3	29.6	36.5	29.7	36.7	30	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1121	775366.982	6734735.181	GF	38.5	31.8	38.5	31.8	38.9	32.2	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1122	775870.358	6734737.665	GF	41.8	35.1	41.7	35	42.2	35.5	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1123	775683.403	6734738.356	GF	40.4	33.6	40.4	33.6	40.8	34	40.8	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1124	775218.669	6734742.41	GF	37.6	30.9	37.7	31	38	31.3	38.1	31.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1125	775366.029	6734755.184	GF	38.7	31.9	38.7	31.9	39.1	32.3	39.1	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1126	775934.917	6734760.419	GF	42.6	35.9	42.4	35.7	43	36.3	42.8	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1127	775170.727	6734760.825	GF	37.6	30.9	37.8	31.1	38	31.3	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1128	775689.118	6734760.899	GF	40.6	33.9	40.6	33.9	41	34.2	41	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1129	775783.575	6734764.074	GF	41.3	34.6	41.3	34.5	41.7	35	41.7	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1130	775743.252	6734765.979	GF	41	34.3	41	34.3	41.4	34.7	41.4	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1131	775870.887	6734766.875	GF	42	35.3	42	35.2	42.4	35.7	42.4	35.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1132	775326.408	6734767.196	GF	38.6	31.8	38.6	31.9	39	32.2	39	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1134	775300.902	6734768.995	GF	38.4	31.7	38.5	31.8	38.8	32.1	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1135	775234.227	6734769.08	GF	38.1	31.3	38.2	31.5	38.5	31.7	38.6	31.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1136	775112.307	6734770.032	GF	36.9	30.2	37.2	30.4	37.3	30.5	37.6	30.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1137	775977.25	6734771.267	GF	43.1	36.4	42.8	36.1	43.5	36.8	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1138	775197.079	6734771.302	GF	37.9	31.1	38	31.3	38.3	31.5	38.5	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1139	775218.352	6734772.89	GF	38	31.3	38.2	31.4	38.4	31.7	38.6	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1140	775809.292	6734774.869	GF	41.6	34.9	41.6	34.8	42	35.3	42	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1141	775170.409	6734775.747	GF	37.7	31	38	31.2	38.1	31.4	38.4	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1142	774996.102	6734777.017	GF	36.1	29.4	36.4	29.7	36.5	29.8	36.8	30.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1143	775043.727	6734778.605	GF	36.4	29.7	36.7	30	36.8	30.1	37.2	30.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1144	775374.284	6734779.949	GF	38.9	32.2	38.9	32.2	39.3	32.6	39.4	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1145	775933.329	6734783.173	GF	42.8	36	42.6	35.9	43.2	36.4	43	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1146	775880.677	6734784.337	GF	42.3	35.6	42.2	35.5	42.7	36	42.6	35.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1147	775697.691	6734787.251	GF	40.8	34.1	40.8	34.1	41.2	34.5	41.2	34.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1148	775764.207	6734789.474	GF	41.4	34.6	41.3	34.6	41.8	35	41.7	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1149	775116.752	6734790.352	GF	37.4	30.7	37.8	31	37.9	31.1	38.2	31.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1150	774991.974	6734798.925	GF	36.2	29.5	36.6	29.8	36.6	29.9	37	30.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1151	775325.389	6734799.634	GF	38.8	32.1	38.9	32.2	39.2	32.5	39.4	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1152	775703.088	6734800.904	GF	41	34.3	41	34.3	41.4	34.7	41.4	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1153	775929.889	6734802.488	GF	42.9	36.2	42.8	36.1	43.3	36.6	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1154	775284.604	6734802.883	GF	38.6	31.9	38.8	32.1	39	32.3	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1155	775875.914	6734804.71	GF	42.4	35.7	42.4	35.6	42.8	36.1	42.8	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1156	775377.459	6734805.349	GF	39.1	32.4	39.2	32.5	39.5	32.8	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1157	775768.97	6734806.301	GF	41.6	34.8	41.6	34.8	42	35.2	42	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1158	775358.727	6734818.049	GF	39.1	32.4	39.3	32.6	39.5	32.8	39.7	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1159	775045.949	6734818.292	GF	36.9	30.1	37.2	30.5	37.3	30.5	37.6	30.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1160	775334.914	6734818.366	GF	39	32.3	39.2	32.5	39.4	32.7	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1161	775109.132	6734818.927	GF	37.6	30.9	37.9	31.2	38	31.3	38.4	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1162	775784.845	6734823.129	GF	41.8	35.1	41.8	35.1	42.2	35.5	42.2	35.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1163	775925.921	6734824.978	GF	43.1	36.4	43	36.3	43.5	36.8	43.4	36.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1164	775282.381	6734825.108	GF	38.8	32	39	32.3	39.2	32.4	39.4	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1165	775717.058	6734825.669	GF	41.3	34.6	41.3	34.6	41.7	35	41.7	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1166	775974.604	6734825.771	GF	43.7	37	43.4	36.7	44.1	37.4	43.8	37.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1167	775218.034	6734825.912	GF	38.4	31.7	38.7	31.9	38.8	32.1	39.1	32.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1168	775172.314	6734826.865	GF	38.1	31.4	38.4	31.6	38.5	31.8	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1169	775815.96	6734833.924	GF	42.2	35.5	42.1	35.4	42.6	35.8	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1170	775887.027	6734839.635	GF	42.9	36.2	42.8	36.1	43.3	36.6	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1171	775724.361	6734839.639	GF	41.5	34.8	41.5	34.8	41.9	35.2	41.9	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1172	775949.204	6734841.911	GF	43.6	36.8	43.4	36.7	44	37.2	43.8	37.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1173	774991.974	6734842.422	GF	36.6	29.9	36.5	29.8	37	30.2	36.9	30.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1174	775971.694	6734842.705	GF	43.8	37.1	43.6	36.9	44.2	37.5	44	37.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1175	775927.244	6734843.234	GF	43.3	36.6	43.2	36.5	43.7	37	43.6	36.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1176	775866.125	6734843.604	GF	42.7	36	42.7	36	43.1	36.4	43.1	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1177	775173.267	6734848.137	GF	38.3	31.6	38.6	31.8	38.7	32	39	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1178	775369.694	6734849.556	GF	39.2	32.5	39.5	32.8	39.6	32.9	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1179	775352.231	6734852.096	GF	39.2	32.5	39.5	32.8	39.6	32.9	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1180	775226.289	6734852.9	GF	38.7	32	38.9	32.2	39.1	32.4	39.3	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1181	775045.949	6734853.217	GF	37.1	30.4	37.4	30.7	37.5	30.8	37.8	31.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1182	775328.736	6734854.001	GF	39.2	32.5	39.5	32.7	39.6	32.9	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1183	775090.399	6734855.44	GF	37.8	31.1	38.1	31.3	38.2	31.4	38.5	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1184	775306.511	6734855.588	GF	39.2	32.5	39.4	32.7	39.6	32.9	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1185	775283.334	6734855.906	GF	39	32.3	39.3	32.6	39.4	32.7	39.7	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1186	775067.857	6734857.345	GF	37.5	30.8	37.8	31	37.9	31.1	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1187	775109.132	6734858.615	GF	38	31.2	38.3	31.5	38.4	31.6	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1188	775765.054	6734866.623	GF	42.1	35.4	42.1	35.4	42.5	35.8	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1189	774995.784	6734871.95	GF	36.8	30.1	36.9	30.1	37.2	30.5	37.3	30.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1190	775704.993	6734872.179	GF	41.7	35	41.8	35	42.1	35.4	42.2	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1191	776012.996	6734872.591	GF	44.7	38	44.4	37.7	45.1	38.4	44.9	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1192	775392.342	6734874.215	GF	39.6	32.9	39.8	33.1	40	33.3	40.3	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1193	775870.093	6734887.525	GF	43.2	36.5	43.3	36.5	43.6	36.9	43.7	36.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1194	775806.064	6734888.848	GF	42.7	35.9	42.7	36	43.1	36.3	43.1	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1195	775937.562	6734890.965	GF	44	37.3	43.9	37.2	44.4	37.7	44.3	37.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1196	775767.7	6734891.229	GF	42.4	35.6	42.4	35.7	42.8	36	42.9	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1197	775846.546	6734893.081	GF	43.1	36.4	43.1	36.4	43.5	36.8	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1198	775912.162	6734893.346	GF	43.8	37	43.7	37	44.2	37.4	44.1	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1199	775820.352	6734894.404	GF	42.9	36.1	42.9	36.2	43.3	36.5	43.3	36.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1200	775714.783	6734895.463	GF	42	35.3	42.1	35.4	42.4	35.7	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1201	774993.879	6734897.35	GF	37	30.3	37	30.3	37.4	30.7	37.5	30.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1202	775965.079	6734897.844	GF	44.5	37.8	44.3	37.6	44.9	38.1	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1204	775391.919	6734899.403	GF	39.7	33	40	33.2	40.1	33.4	40.4	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1206	776018.023	6734901.959	GF	45.2	38.5	44.9	38.2	45.6	38.9	45.3	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1207	775126.912	6734903.065	GF	38.1	31.4	38.4	31.7	38.5	31.8	38.8	32.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1208	775286.826	6734903.213	GF	38.9	32.2	39.1	32.4	39.3	32.6	39.5	32.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1209	775308.734	6734903.531	GF	39	32.3	39.2	32.5	39.4	32.7	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1210	775749.972	6734904.723	GF	42.4	35.6	42.5	35.8	42.8	36	42.9	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1211	775070.714	6734904.97	GF	37.5	30.8	37.8	31.1	37.9	31.2	38.2	31.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1212	775348.104	6734905.118	GF	39.3	32.5	39.4	32.7	39.7	32.9	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1213	775083.414	6734905.923	GF	37.7	30.9	37.9	31.2	38.1	31.3	38.3	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1214	775730.658	6734906.84	GF	42.2	35.5	42.4	35.6	42.6	35.9	42.8	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1215	775106.909	6734906.875	GF	37.9	31.2	38.2	31.4	38.3	31.5	38.6	31.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1216	775373.504	6734907.023	GF	39.5	32.8	39.8	33.1	39.9	33.2	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1217	775047.537	6734908.78	GF	37.4	30.6	37.6	30.9	37.8	31	38	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1218	774994.832	6734918.623	GF	37.1	30.4	37.3	30.6	37.5	30.8	37.7	31	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1219	776016.171	6734922.332	GF	45.5	38.8	45.2	38.5	45.9	39.2	45.6	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1220	775966.137	6734933.563	GF	45.1	38.4	45	38.2	45.5	38.8	45.4	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1221	775938.356	6734935.15	GF	44.8	38	44.7	38	45.2	38.4	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1222	775893.641	6734935.679	GF	43.8	37.1	43.9	37.1	44.2	37.5	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1223	775829.083	6734938.061	GF	43.2	36.5	43.3	36.6	43.6	36.9	43.7	37	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1224	775847.339	6734940.177	GF	43.4	36.7	43.5	36.8	43.8	37.1	43.9	37.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1225	776019.082	6734941.118	GF	45.5	38.8	45.6	38.8	45.9	39.2	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1226	775690.441	6734941.236	GF	42.1	35.4	42.3	35.6	42.5	35.8	42.7	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1227	775648.901	6734941.765	GF	41.8	35.1	42.1	35.4	42.2	35.5	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1228	775757.116	6734942.029	GF	42.6	35.9	42.8	36.1	43	36.3	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1230	775872.739	6734942.294	GF	43.7	37	43.8	37	44.1	37.3	44.2	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1232	775608.685	6734942.559	GF	41.6	34.9	41.9	35.2	42	35.3	42.3	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1233	775001.182	6734942.753	GF	37.3	30.6	37.5	30.8	37.7	31	38	31.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1234	775735.42	6734942.823	GF	42.4	35.7	42.6	35.9	42.8	36.1	43	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1235	775626.941	6734944.411	GF	41.7	35	42	35.3	42.1	35.4	42.4	35.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1236	775463.005	6734944.859	GF	40.4	33.7	40.7	33.9	40.8	34.1	41.1	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1237	775431.678	6734946.129	GF	40.3	33.6	40.6	33.9	40.7	34	41	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1238	775174.854	6734947.515	GF	38.8	32.1	39	32.3	39.2	32.5	39.5	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1239	775503.38	6734948.115	GF	40.9	34.2	41.1	34.4	41.3	34.6	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1240	775568.732	6734949.173	GF	41.5	34.7	41.8	35	41.9	35.1	42.2	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1242	775526.928	6734949.702	GF	41.2	34.5	41.5	34.8	41.6	34.9	41.9	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1243	775370.646	6734949.886	GF	40	33.2	40.2	33.4	40.4	33.6	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1244	775071.349	6734950.055	GF	37.9	31.1	38	31.3	38.3	31.5	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1245	775289.366	6734950.838	GF	39.2	32.5	39.4	32.7	39.6	32.9	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1246	775409.064	6734951.473	GF	40.2	33.5	40.4	33.7	40.6	33.9	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1247	775311.274	6734951.791	GF	39.4	32.7	39.6	32.9	39.8	33.1	40	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1248	775387.474	6734952.743	GF	40.1	33.4	40.3	33.6	40.5	33.8	40.7	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1249	775049.442	6734953.548	GF	37.7	31	37.9	31.2	38.1	31.3	38.4	31.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1250	775348.104	6734953.696	GF	39.7	32.9	39.9	33.1	40.1	33.3	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1251	775140.882	6734953.865	GF	38.5	31.8	38.8	32.1	38.9	32.2	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1252	775326.831	6734954.013	GF	39.5	32.8	39.7	33	39.9	33.2	40.1	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1253	775093.892	6734954.818	GF	38.1	31.4	38.3	31.5	38.5	31.8	38.7	32	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1254	775116.117	6734955.453	GF	38.3	31.6	38.5	31.8	38.7	32	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1255	774993.562	6734961.168	GF	37.4	30.6	37.6	30.9	37.8	31	38.1	31.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1256	776878.96	6735080.184	GF	47.3	40.6	47.6	40.9	47.7	41	48.1	41.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1257	776542.358	6735106.525	GF	58.1	51.4	58.3	51.6	58.5	51.8	58.7	52	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1259	776543.946	6735127.956	GF	58.3	51.6	58.5	51.7	58.7	51.9	58.9	52.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1260	775782.611	6735158.562	GF	44	37.2	44.2	37.5	44.4	37.6	44.6	37.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1261	775696.724	6735170.932	GF	43.7	36.9	43.9	37.2	44.1	37.3	44.3	37.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1262	775646.078	6735176.3	GF	43.5	36.8	43.8	37.1	43.9	37.2	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1263	775719.362	6735180.968	GF	43.9	37.2	44.1	37.3	44.3	37.5	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1264	775739.2	6735190.07	GF	44.1	37.4	44.3	37.6	44.5	37.8	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1265	775761.839	6735191.47	GF	44.2	37.5	44.4	37.7	44.6	37.9	44.8	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1266	775643.044	6735192.637	GF	43.8	37	44	37.3	44.2	37.4	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1267	775781.911	6735198.705	GF	44.4	37.7	44.6	37.8	44.8	38.1	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1268	775653.313	6735221.811	GF	44.3	37.6	44.5	37.8	44.7	38	44.9	38.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1269	775711.66	6735229.746	GF	44.5	37.8	44.7	37.9	44.9	38.2	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1270	775742.701	6735241.883	GF	44.8	38.1	44.9	38.2	45.2	38.5	45.4	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1271	775655.647	6735243.516	GF	44.7	37.9	44.9	38.2	45.1	38.3	45.3	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1272	775705.826	6735245.85	GF	44.8	38.1	45	38.3	45.2	38.4	45.5	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1273	775761.139	6735246.55	GF	44.9	38.2	45.1	38.3	45.3	38.6	45.5	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1274	775781.444	6735256.586	GF	45.1	38.4	45.3	38.5	45.5	38.8	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1275	775649.812	6735259.62	GF	45	38.2	45.1	38.4	45.4	38.6	45.5	38.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1276	775706.059	6735264.288	GF	45.1	38.4	45.3	38.5	45.5	38.8	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1277	775783.311	6735277.591	GF	45.4	38.7	45.6	38.9	45.8	39.1	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1278	775763.94	6735279.925	GF	45.4	38.7	45.6	38.9	45.8	39.1	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1279	775708.16	6735280.625	GF	45.4	38.7	45.5	38.8	45.8	39.1	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1280	775654.013	6735281.792	GF	45.4	38.7	45.6	38.8	45.8	39.1	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1281	775702.792	6735301.63	GF	45.8	39.1	46	39.3	46.2	39.5	46.4	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1282	775653.08	6735302.33	GF	45.9	39.2	46.1	39.3	46.3	39.6	46.5	39.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1283	775785.412	6735309.099	GF	45.9	39.2	46.2	39.5	46.3	39.6	46.6	39.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1284	775745.035	6735312.133	GF	46	39.3	46.2	39.5	46.4	39.7	46.7	39.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1285	775709.56	6735317.501	GF	46.2	39.5	46.4	39.6	46.6	39.9	46.8	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1286	775648.645	6735319.134	GF	46.4	39.7	46.5	39.8	46.8	40.1	47	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1287	776843.836	6735340.17	GF	46.3	39.6	46.6	39.9	46.7	40	47	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1288	775692.405	6735360.441	GF	47.5	40.8	47.8	41	47.9	41.2	48.2	41.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1289	775554.557	6735362.664	GF	47.9	41.2	48.1	41.4	48.3	41.6	48.5	41.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1290	775637.795	6735363.193	GF	47.8	41.1	48.1	41.3	48.3	41.5	48.5	41.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1291	775655.151	6735363.616	GF	47.8	41.1	48	41.3	48.2	41.5	48.5	41.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1292	775575.459	6735364.251	GF	48	41.3	48.2	41.5	48.4	41.7	48.6	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1293	775672.085	6735365.945	GF	47.8	41.1	48.1	41.3	48.2	41.5	48.5	41.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1294	775487.881	6735367.426	GF	48	41.3	48.1	41.4	48.4	41.7	48.6	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1295	775533.125	6735369.543	GF	48.2	41.5	48.4	41.6	48.6	41.9	48.8	42.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1297	775465.392	6735371.924	GF	48	41.3	48.2	41.4	48.4	41.7	48.6	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1298	775311.933	6735388.593	GF	47.5	40.8	47.6	40.9	47.9	41.2	48.1	41.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1299	775536.3	6735393.62	GF	49.4	42.7	49.6	42.8	49.8	43.1	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1300	775649.436	6735397.695	GF	49.3	42.6	49.6	42.8	49.7	43	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1301	775487.617	6735397.854	GF	49.4	42.7	49.5	42.8	49.8	43.1	50	43.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1302	776847.011	6735407.903	GF	46.1	39.4	46.4	39.7	46.5	39.7	46.9	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1303	775298.969	6735408.966	GF	48.3	41.6	48.4	41.6	48.7	42	48.8	42.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1304	775704.681	6735410.395	GF	49.4	42.7	49.7	43	49.8	43.1	50.2	43.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1305	775533.654	6735417.697	GF	50.7	44	50.8	44.1	51.1	44.4	51.3	44.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1306	775636.525	6735419.497	GF	50.6	43.9	50.8	44.1	51	44.3	51.2	44.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1307	775487.088	6735420.343	GF	50.6	43.9	50.7	44	51	44.3	51.2	44.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1308	775689.441	6735422.672	GF	50.3	43.6	50.6	43.8	50.7	44	51	44.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1309	775303.202	6735425.899	GF	49.3	42.6	49.4	42.7	49.7	43	49.9	43.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1310	775537.094	6735434.102	GF	51.8	45.1	51.9	45.2	52.2	45.5	52.4	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1311	775484.706	6735434.631	GF	51.5	44.8	51.7	44.9	51.9	45.2	52.1	45.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1312	776839.338	6735439.388	GF	46.2	39.5	46.5	39.8	46.6	39.9	46.9	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1313	775931.012	6735442.742	GF	48.4	41.7	49.2	42.5	48.8	42.1	49.7	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1314	775237.257	6735458.939	GF	49.2	42.5	49.3	42.6	49.6	42.9	49.8	43.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1315	775484.971	6735458.972	GF	53.6	46.9	53.7	47	54	47.3	54.2	47.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1316	775932.599	6735461.157	GF	48.9	42.2	49.9	43.2	49.3	42.6	50.4	43.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1317	775536.565	6735476.435	GF	55.6	48.9	55.7	49	56	49.3	56.2	49.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1318	776844.101	6735478.018	GF	46	39.3	46.2	39.5	46.4	39.6	46.6	39.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1319	775484.442	6735479.61	GF	55.9	49.1	56	49.3	56.3	49.5	56.5	49.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1320	775893.441	6735491.118	GF	50.2	43.5	52	45.3	50.6	43.9	52.5	45.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1321	775239.373	6735494.922	GF	51.8	45	51.9	45.1	52.2	45.4	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1322	775938.663	6735499.691	GF	51.1	44.4	53.5	46.8	51.5	44.8	53.9	47.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1323	775924.693	6735501.067	GF	51.2	44.5	53.6	46.9	51.6	44.9	54.1	47.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1324	775833.645	6735502.443	GF	51.8	45.1	53.7	47	52.2	45.5	54.1	47.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1325	775535.771	6735502.629	GF	59.7	53	59.8	53.1	60.1	53.4	60.3	53.5	60	55	0.3	n/a	Yes	No	No	No	No	No	0.2	n/a	No
NNS_Rx1326	775557.467	6735506.068	GF	60.6	53.9	60.7	53.9	61	54.3	61.1	54.4	60	55	1.1	n/a	Yes	No	No	No	No	No	0.1	n/a	No
NNS_Rx1327	775468.567	6735507.656	GF	60.2	53.5	60.4	53.7	60.6	53.9	60.9	54.2	60	55	0.9	n/a	Yes	No	No	No	No	No	0.3	n/a	No
NNS_Rx1328	775492.379	6735508.714	GF	60.7	54	61	54.2	61.1	54.4	61.4	54.7	60	55	1.4	n/a	Yes	No	No	No	No	No	0.3	n/a	No
NNS_Rx1329	775237.257	6735524.555	GF	54.4	47.6	54.5	47.7	54.8	48	54.9	48.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1330	775992.114	6735540.695	GF	52.7	46	54.5	47.8	53.1	46.3	54.9	48.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1331	775898.558	6735548.931	GF	51.5	44.9	54	47.3	51.9	45.2	54.5	47.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1332	775931.366	6735549.46	GF	51.4	44.7	53.6	46.9	51.8	45	54.1	47.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1333	776842.513	6735551.043	GF	45.8	39.1	46.2	39.5	46.2	39.5	46.6	39.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1334	775795.899	6735551.048	GF	53	46.3	54.9	48.2	53.4	46.6	55.4	48.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1335	775868.395	6735552.106	GF	51.4	44.8	53.8	47.1	51.8	45.1	54.2	47.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1336	775849.345	6735552.371	GF	51.6	45	54	47.3	52	45.3	54.4	47.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1337	777001.528	6735554.218	GF	43.1	36.4	43.3	36.6	43.5	36.8	43.7	37	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1338	776981.155	6735554.482	GF	43.4	36.7	43.6	36.9	43.8	37.1	44	37.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1340	777020.843	6735554.747	GF	42.9	36.2	43.1	36.3	43.3	36.5	43.5	36.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1341	776880.349	6735557.393	GF	45.1	38.3	45.3	38.6	45.5	38.7	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1342	776962.899	6735557.657	GF	43.7	37	43.9	37.1	44.1	37.3	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1343	776910.776	6735558.451	GF	44.5	37.8	44.7	38	44.9	38.1	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1344	775988.939	6735560.01	GF	50.9	44.2	52.1	45.4	51.3	44.6	52.5	45.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1345	776919.243	6735560.568	GF	44.3	37.6	44.6	37.9	44.7	38	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1348	775235.14	6735566.889	GF	54	47.2	54	47.3	54.4	47.6	54.5	47.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1350	775940.891	6735567.981	GF	50	43.4	51.4	44.7	50.4	43.7	51.9	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1351	775791.666	6735569.833	GF	51.4	44.7	52.6	45.9	51.8	45.1	53	46.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1352	775849.345	6735573.802	GF	50	43.3	51.4	44.7	50.4	43.6	51.8	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1353	775985.871	6735574.596	GF	50.4	43.7	51.1	44.4	50.8	44.1	51.6	44.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1355	775790.872	6735583.591	GF	50.6	43.9	51.5	44.8	51	44.3	52	45.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1356	775943.008	6735587.296	GF	49.6	42.9	50.3	43.6	50	43.2	50.8	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1357	775850.404	6735587.825	GF	49.4	42.7	50.4	43.7	49.8	43.1	50.9	44.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1358	775989.204	6735588.32	GF	50.3	43.6	50.8	44.1	50.7	44	51.2	44.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1359	775237.257	6735590.172	GF	51.8	45.1	51.9	45.2	52.2	45.5	52.4	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1361	776551.869	6735592.433	GF	57.7	51	58.2	51.4	58.2	51.4	58.6	51.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1362	776996.501	6735604.489	GF	43.1	36.3	43.5	36.8	43.5	36.7	43.9	37.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1363	775789.814	6735607.139	GF	49.7	43	50.3	43.5	50.1	43.3	50.7	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1364	775726.314	6735607.933	GF	51.3	44.6	51.6	44.9	51.7	45	52.1	45.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1365	776391.576	6735608.391	GF	50.4	43.7	49.7	43	50.8	44	50.1	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1366	775939.568	6735608.991	GF	49.3	42.6	49.7	43	49.7	42.9	50.1	43.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1367	776963.428	6735609.251	GF	43.6	36.8	43.9	37.2	44	37.2	44.4	37.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1368	776552.578	6735609.455	GF	57.9	51.1	58.3	51.5	58.3	51.5	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1370	776499.384	6735610.164	GF	52.4	45.7	52.8	46	52.8	46.1	53.2	46.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1371	775852.785	6735610.579	GF	48.8	42.1	49.5	42.7	49.2	42.5	49.9	43.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1372	776464.275	6735610.873	GF	51	44.3	51.1	44.4	51.4	44.7	51.5	44.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1373	776521.016	6735611.583	GF	53.9	47.2	54.3	47.5	54.3	47.5	54.7	47.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1374	776482.716	6735611.937	GF	51.6	44.9	51.9	45.2	52	45.3	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1376	775991.956	6735612.96	GF	50.3	43.6	50.3	43.6	50.7	43.9	50.7	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1377	776845.688	6735613.22	GF	45.6	38.9	46	39.3	46	39.3	46.4	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1378	776900.457	6735613.485	GF	44.6	37.9	45	38.2	45	38.3	45.4	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1379	776917.92	6735613.749	GF	44.3	37.6	44.6	37.9	44.7	37.9	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1380	776446.898	6735614.065	GF	50.7	44	50.5	43.8	51.1	44.3	50.9	44.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1381	776611.093	6735614.774	GF	58.5	51.8	58.9	52.2	58.9	52.2	59.3	52.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1382	776428.812	6735615.129	GF	50.4	43.7	50.1	43.3	50.8	44.1	50.5	43.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1383	775241.49	6735615.572	GF	50.1	43.4	50.2	43.5	50.5	43.8	50.7	43.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1384	776880.614	6735616.395	GF	44.9	38.2	45.3	38.6	45.3	38.6	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1387	776364.979	6735623.995	GF	50.4	43.7	49.6	42.9	50.8	44.1	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1388	775848.816	6735625.396	GF	48.5	41.8	49.1	42.4	48.9	42.2	49.5	42.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1389	775793.317	6735627.036	GF	49	42.3	49.5	42.7	49.4	42.6	49.9	43.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1391	775734.516	6735627.777	GF	50	43.3	50.3	43.6	50.4	43.7	50.8	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1392	775990.898	6735629.364	GF	50.3	43.5	50.2	43.4	50.7	43.9	50.6	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1393	776918.714	6735635.445	GF	44.2	37.5	44.6	37.9	44.6	37.9	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1394	776613.93	6735636.052	GF	57.8	51.1	58.3	51.5	58.2	51.5	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1395	776968.455	6735636.239	GF	43.4	36.7	43.8	37.1	43.8	37.1	44.2	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1396	775933.483	6735636.244	GF	49	42.3	49.3	42.5	49.4	42.7	49.7	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1397	775239.373	6735638.856	GF	48.6	41.9	48.7	42	49	42.3	49.2	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1398	775990.791	6735640.972	GF	50.3	43.5	50.1	43.4	50.7	43.9	50.5	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1400	776845.953	6735641.001	GF	45.6	38.9	46	39.3	46	39.3	46.4	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1401	776556.125	6735644.563	GF	58.6	51.9	59	52.3	59	52.3	59.4	52.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1402	775851.991	6735647.621	GF	48.2	41.5	48.6	41.8	48.6	41.9	49	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1403	776521.016	6735653.429	GF	53.8	47.1	54.1	47.4	54.2	47.5	54.6	47.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1404	776614.993	6735654.848	GF	57.6	50.9	58	51.3	58	51.3	58.5	51.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1405	776970.043	6735656.876	GF	43.3	36.6	43.8	37	43.7	37	44.2	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1406	776501.512	6735656.975	GF	52.4	45.7	52.7	46	52.8	46.1	53.1	46.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1407	776482.007	6735658.039	GF	51.5	44.8	51.7	45	51.9	45.2	52.1	45.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1409	775936.923	6735658.733	GF	49	42.3	49	42.3	49.4	42.7	49.4	42.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1411	776434.841	6735659.458	GF	50.3	43.6	50.2	43.4	50.7	44	50.6	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1412	776411.081	6735661.94	GF	50.1	43.4	49.8	43	50.5	43.8	50.2	43.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1413	775992.908	6735662.139	GF	50.4	43.7	50.1	43.4	50.8	44	50.5	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1414	776555.77	6735663.713	GF	58.5	51.8	58.9	52.2	58.9	52.1	59.3	52.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1415	775853.314	6735666.142	GF	48	41.3	48.2	41.5	48.4	41.7	48.7	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1416	775241.49	6735666.372	GF	47.4	40.7	47.5	40.7	47.8	41.1	47.9	41.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1417	775794.534	6735666.406	GF	48	41.3	48.3	41.6	48.4	41.7	48.8	42	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1419	776392.995	6735667.614	GF	50.1	43.4	49.6	42.9	50.5	43.7	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1420	776377.036	6735668.323	GF	50.1	43.4	49.6	42.9	50.5	43.8	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1421	776849.922	6735672.751	GF	45.5	38.8	45.9	39.2	45.9	39.2	46.3	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1422	776614.284	6735675.061	GF	57.8	51.1	58.3	51.5	58.2	51.5	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1423	777014.493	6735678.043	GF	42.6	35.9	43.1	36.4	43.1	36.3	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1424	776965.545	6735679.101	GF	43.4	36.7	43.7	37	43.8	37.1	44.2	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1425	775851.25	6735685.319	GF	47.8	41.1	48	41.3	48.2	41.5	48.5	41.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1426	775995.025	6735685.422	GF	50.5	43.8	50.2	43.5	50.9	44.2	50.6	43.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1427	775793.211	6735687.044	GF	47.6	40.9	47.8	41.1	48	41.3	48.3	41.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1428	775729.976	6735688.367	GF	47.8	41.1	48	41.3	48.2	41.5	48.5	41.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1429	776543.358	6735688.537	GF	56.2	49.5	56.5	49.8	56.6	49.8	56.9	50.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1430	776617.831	6735691.374	GF	57.3	50.5	57.6	50.9	57.7	50.9	58	51.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1431	775239.373	6735693.889	GF	46.2	39.5	46.3	39.6	46.6	39.9	46.8	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1432	776964.222	6735694.447	GF	43.4	36.7	43.7	37	43.8	37.1	44.1	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1433	776847.805	6735701.326	GF	45.6	38.9	46	39.2	46	39.3	46.4	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1436	776615.348	6735708.397	GF	57.8	51.1	58.2	51.5	58.2	51.5	58.6	51.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1437	776543.358	6735711.943	GF	56.1	49.4	56.4	49.7	56.5	49.7	56.8	50.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1438	777018.726	6735712.174	GF	42.6	35.9	42.9	36.2	43	36.2	43.3	36.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1439	776907.337	6735713.497	GF	44.4	37.7	44.7	38	44.8	38	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1440	776923.212	6735713.762	GF	44.1	37.4	44.4	37.7	44.5	37.7	44.8	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1441	776863.416	6735714.556	GF	45.3	38.6	45.6	38.9	45.7	38.9	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1442	776880.878	6735715.085	GF	44.9	38.2	45.2	38.5	45.3	38.6	45.6	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1443	776966.868	6735716.672	GF	43.4	36.6	43.7	36.9	43.8	37	44.1	37.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1444	775245.723	6735717.172	GF	45.5	38.8	45.6	38.9	45.9	39.2	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1445	776086.723	6735718.879	GF	55.8	49	55.6	48.9	56.2	49.4	56	49.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1446	775988.827	6735721.26	GF	50.4	43.7	50.1	43.3	50.8	44.1	50.5	43.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1447	775943.319	6735723.642	GF	49	42.3	48.8	42.1	49.4	42.7	49.2	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1449	775781.182	6735728.828	GF	46.9	40.2	47.1	40.3	47.3	40.6	47.5	40.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1450	776555.061	6735728.965	GF	57.9	51.2	58.3	51.6	58.3	51.6	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1451	776614.639	6735729.675	GF	58.1	51.3	58.4	51.7	58.5	51.7	58.8	52.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1452	777081.168	6735729.69	GF	41.6	34.9	42	35.2	42	35.3	42.4	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1453	775867.119	6735730.521	GF	47.5	40.8	47.5	40.8	47.9	41.2	47.9	41.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1454	775844.47	6735731.579	GF	47.3	40.6	47.3	40.6	47.7	40.9	47.7	41	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1455	775802.56	6735732.849	GF	46.9	40.2	47	40.3	47.3	40.6	47.4	40.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1456	775740.754	6735734.119	GF	46.7	40	46.9	40.2	47.1	40.4	47.3	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1457	775758.534	6735735.178	GF	46.7	40	46.9	40.2	47.1	40.4	47.3	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1458	775647.197	6735737.929	GF	46.7	40	46.8	40.1	47.1	40.4	47.3	40.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1459	775994.648	6735738.194	GF	50.6	43.9	50.3	43.6	51	44.3	50.7	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1460	775942.261	6735740.311	GF	49	42.3	48.7	42	49.4	42.6	49.1	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1461	775245.723	6735744.689	GF	44.6	37.9	44.7	37.9	45	38.3	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1463	776617.831	6735746.342	GF	57.5	50.8	57.9	51.2	57.9	51.2	58.3	51.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1464	776558.253	6735749.889	GF	58.5	51.8	58.8	52.1	58.9	52.1	59.2	52.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1465	777082.226	6735752.18	GF	41.7	35	41.9	35.2	42.1	35.3	42.3	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1466	775991.473	6735754.333	GF	50.5	43.8	50.2	43.4	50.9	44.2	50.6	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1468	776980.861	6735758.318	GF	43.1	36.3	43.4	36.7	43.5	36.7	43.8	37.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1469	776943.396	6735758.826	GF	43.7	37	44	37.3	44.1	37.3	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1470	775723.185	6735759.308	GF	46.2	39.5	46.3	39.6	46.6	39.9	46.7	40	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1471	777020.896	6735759.694	GF	42.5	35.8	42.8	36.1	42.9	36.1	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1472	776999.657	6735759.715	GF	42.8	36.1	43.1	36.4	43.2	36.4	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1473	775926.386	6735760.154	GF	48.5	41.8	48.3	41.6	48.9	42.2	48.7	42	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1474	776963.208	6735761.112	GF	43.3	36.6	43.7	37	43.7	37	44.1	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1475	776846.906	6735761.81	GF	45.6	38.9	45.9	39.2	46	39.3	46.3	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1476	777040.369	6735762.657	GF	42.2	35.5	42.5	35.8	42.6	35.9	42.9	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1477	776887.969	6735763.08	GF	44.7	38	45.1	38.3	45.1	38.4	45.5	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1478	776432.713	6735764.428	GF	50	43.3	50	43.3	50.4	43.7	50.4	43.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1479	775847.645	6735764.599	GF	47	40.3	47.1	40.4	47.4	40.7	47.5	40.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1480	776862.992	6735764.774	GF	45.2	38.5	45.6	38.8	45.6	38.9	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1481	776618.894	6735765.492	GF	57.4	50.7	57.8	51.1	57.8	51.1	58.3	51.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1482	776408.244	6735769.039	GF	49.8	43.1	49.7	43	50.2	43.5	50.1	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1483	775944.642	6735769.944	GF	49	42.2	48.7	42	49.4	42.6	49.1	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1484	775801.502	6735770.526	GF	46.5	39.8	46.5	39.8	46.9	40.2	46.9	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1485	776559.671	6735771.521	GF	58.6	51.9	59	52.3	59	52.3	59.4	52.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1487	776539.812	6735771.876	GF	55.3	48.6	55.7	49	55.7	49	56.1	49.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1488	777083.549	6735771.917	GF	41.6	34.9	41.8	35.1	42	35.3	42.2	35.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1489	776521.726	6735772.23	GF	53.5	46.8	53.8	47.1	53.9	47.2	54.2	47.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1490	775725.725	6735776.241	GF	46	39.3	46	39.3	46.4	39.7	46.5	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1491	776929.68	6735778.13	GF	43.9	37.2	44.3	37.5	44.3	37.6	44.7	37.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1492	775249.957	6735778.556	GF	43.7	37	43.8	37.1	44.1	37.4	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1493	776075.346	6735779.998	GF	55.2	48.5	55.2	48.5	55.6	48.9	55.6	48.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1494	775991.738	6735781.85	GF	50.6	43.8	50.3	43.6	51	44.2	50.7	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1497	775851.032	6735784.284	GF	47	40.3	46.9	40.2	47.4	40.6	47.3	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1498	776617.831	6735787.479	GF	57.7	51	58.3	51.6	58.2	51.4	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1500	775942.79	6735789.788	GF	48.9	42.2	48.6	41.9	49.3	42.6	49	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1501	776559.316	6735790.671	GF	58.4	51.7	58.8	52.1	58.8	52.1	59.2	52.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1502	775941.996	6735793.756	GF	48.9	42.2	48.6	41.8	49.3	42.6	49	42.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1503	777082.226	6735793.878	GF	41.6	34.9	41.8	35	42	35.3	42.2	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1504	775995.971	6735796.402	GF	50.7	44	50.5	43.7	51.1	44.4	50.9	44.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1505	776851.986	6735796.524	GF	45.5	38.7	45.8	39.1	45.9	39.1	46.2	39.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1508	776074.817	6735800.106	GF	55.2	48.5	55.2	48.5	55.6	48.9	55.6	48.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1509	776619.604	6735802.374	GF	57.5	50.8	58.1	51.3	57.9	51.1	58.5	51.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1510	775849.762	6735803.546	GF	46.8	40.1	46.7	40	47.2	40.5	47.1	40.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1511	776911.57	6735804.197	GF	44.2	37.5	44.5	37.8	44.6	37.9	44.9	38.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1512	776971.895	6735804.461	GF	43.1	36.4	43.4	36.7	43.5	36.8	43.8	37.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1513	776933.266	6735804.726	GF	43.8	37.1	44.1	37.4	44.2	37.5	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1514	776991.21	6735805.255	GF	42.8	36.1	43.1	36.4	43.2	36.5	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1515	776952.845	6735805.52	GF	43.4	36.7	43.8	37	43.8	37.1	44.2	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1516	777007.349	6735810.282	GF	42.5	35.8	42.9	36.2	42.9	36.2	43.3	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1517	775245.723	6735810.306	GF	42.9	36.2	43.1	36.3	43.3	36.6	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1518	775944.113	6735810.425	GF	49	42.2	48.7	41.9	49.4	42.6	49.1	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1519	775996.5	6735811.484	GF	50.7	44	50.5	43.8	51.1	44.4	50.9	44.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1520	777084.608	6735813.457	GF	41.5	34.8	41.7	35	41.9	35.2	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1521	776853.256	6735815.15	GF	45.4	38.7	45.7	39	45.8	39.1	46.1	39.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1523	776901.78	6735817.426	GF	44.4	37.6	44.6	37.9	44.8	38	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1525	776618.894	6735819.396	GF	57.7	51	58.3	51.6	58.1	51.4	58.7	52	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1526	776271.711	6735820.105	GF	51.8	45.1	51.7	45	52.2	45.5	52.1	45.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1527	775894.212	6735820.691	GF	47.6	40.9	47.4	40.6	48	41.3	47.8	41	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1528	777040.793	6735822.77	GF	42	35.3	42.4	35.6	42.4	35.7	42.8	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1529	775944.642	6735823.125	GF	49	42.2	48.7	42	49.4	42.6	49.1	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1530	775855.477	6735826.406	GF	46.8	40.1	46.6	39.9	47.2	40.5	47.1	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1531	776850.292	6735829.544	GF	45.4	38.7	45.7	39	45.8	39.1	46.1	39.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1532	777025.341	6735831.184	GF	42.2	35.5	42.5	35.8	42.6	35.9	42.9	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1533	776891.461	6735831.713	GF	44.5	37.8	44.8	38.1	44.9	38.2	45.2	38.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1534	775803.195	6735834.026	GF	46.1	39.4	46	39.3	46.5	39.8	46.4	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1535	775945.7	6735834.502	GF	49	42.3	48.8	42	49.4	42.6	49.2	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1536	777083.549	6735834.624	GF	41.5	34.7	41.8	35	41.9	35.1	42.2	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1537	776526.69	6735838.901	GF	53.7	47	53.9	47.1	54.1	47.4	54.3	47.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1538	775252.073	6735839.939	GF	42.4	35.7	42.5	35.8	42.8	36.1	42.9	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1539	776540.521	6735839.965	GF	55.1	48.4	55.4	48.7	55.5	48.8	55.8	49	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1540	776564.636	6735840.319	GF	59.3	52.6	59.7	53	59.7	53	60.1	53.4	60	55	0.1	n/a	Yes	No	No	No	No	No	0.4	n/a	No
NNS_Rx1542	776421.01	6735841.383	GF	49.7	43	49.7	42.9	50.1	43.3	50.1	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1543	776500.802	6735841.738	GF	51.9	45.2	51.9	45.2	52.3	45.5	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1544	776320.65	6735842.447	GF	50.5	43.8	50.3	43.6	50.9	44.1	50.7	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1545	776437.323	6735843.156	GF	49.9	43.2	49.9	43.2	50.3	43.5	50.3	43.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1546	776482.716	6735843.511	GF	51	44.3	51.1	44.4	51.4	44.7	51.5	44.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1547	776460.729	6735843.866	GF	50.3	43.6	50.4	43.6	50.7	44	50.8	44	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1548	776270.647	6735845.994	GF	52.1	45.3	51.9	45.2	52.5	45.7	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1549	776889.874	6735846.266	GF	44.5	37.8	44.8	38.1	44.9	38.2	45.2	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1550	776986.976	6735846.53	GF	42.8	36.1	43.1	36.3	43.2	36.4	43.5	36.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1551	776854.526	6735851.134	GF	45.3	38.6	45.6	38.8	45.7	38.9	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1552	776251.142	6735852.731	GF	53	46.3	53	46.2	53.4	46.7	53.4	46.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1553	775740.965	6735854.77	GF	45.4	38.7	45.3	38.6	45.8	39.1	45.8	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1554	777029.839	6735856.849	GF	42.1	35.4	42.4	35.7	42.5	35.8	42.8	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1555	775809.334	6735856.886	GF	46.1	39.4	45.9	39.2	46.5	39.8	46.3	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1556	775897.599	6735858.791	GF	47.7	40.9	47.5	40.8	48.1	41.3	47.9	41.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1557	775880.665	6735859.003	GF	47.3	40.6	47	40.3	47.7	41	47.4	40.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1558	775844.682	6735859.638	GF	46.6	39.9	46.4	39.7	47	40.3	46.8	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1559	775780.547	6735860.485	GF	45.7	39	45.6	38.9	46.1	39.4	46.1	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1560	775763.825	6735861.543	GF	45.6	38.8	45.5	38.8	46	39.2	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1561	775946.229	6735862.548	GF	49	42.3	48.7	41.9	49.4	42.6	49.1	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1562	776890.139	6735864.522	GF	44.5	37.7	44.7	38	44.9	38.1	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1563	775531.626	6735865.141	GF	44	37.3	44.1	37.3	44.4	37.7	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1564	776852.832	6735865.527	GF	45.3	38.6	45.6	38.9	45.7	38.9	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1565	775503.686	6735865.565	GF	43.8	37.1	43.8	37.1	44.2	37.5	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1566	775207.623	6735873.806	GF	41.5	34.7	41.6	34.9	41.9	35.1	42.1	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1567	776850.716	6735885.001	GF	45.3	38.6	45.5	38.8	45.7	38.9	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1568	776892.52	6735886.218	GF	44.3	37.6	44.6	37.9	44.8	38	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1569	777034.048	6735890.814	GF	42	35.3	42.2	35.5	42.4	35.7	42.6	35.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1570	776560.446	6735893.807	GF	58.1	51.4	58.4	51.7	58.5	51.8	58.8	52.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1571	776619.274	6735894.151	GF	57.8	51.1	58.3	51.6	58.2	51.5	58.7	52	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1573	777080.388	6735897.475	GF	41.3	34.6	41.6	34.9	41.7	35	42	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1574	776351.969	6735898.279	GF	49.7	43	49.6	42.9	50.1	43.4	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1575	776408.732	6735898.623	GF	49.3	42.6	49.3	42.6	49.7	42.9	49.7	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1576	776466.528	6735900.343	GF	50.4	43.7	50.4	43.7	50.8	44.1	50.8	44.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1577	777056.089	6735901.116	GF	41.7	34.9	41.9	35.2	42.1	35.3	42.3	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1578	776273.532	6735902.751	GF	51.9	45.2	51.9	45.1	52.3	45.6	52.3	45.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1579	776900.669	6735903.627	GF	44.1	37.4	44.4	37.6	44.5	37.8	44.8	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1580	776877.809	6735905.321	GF	44.6	37.8	44.8	38.1	45	38.2	45.3	38.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1581	776530.172	6735906.191	GF	53.9	47.2	54.1	47.4	54.3	47.6	54.5	47.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1582	776001.317	6735906.996	GF	50.8	44.1	50.6	43.9	51.2	44.4	51	44.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1583	775944.167	6735907.313	GF	48.8	42.1	48.6	41.9	49.2	42.5	49	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1584	776509.531	6735907.567	GF	52.3	45.6	52.4	45.7	52.7	45.9	52.8	46.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1585	775858.759	6735908.266	GF	46.8	40	46.5	39.8	47.1	40.4	46.9	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1586	776848.176	6735908.284	GF	45.2	38.5	45.5	38.8	45.6	38.9	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1587	777032.142	6735908.806	GF	41.9	35.2	42.2	35.5	42.3	35.6	42.6	35.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1588	777298.342	6735911.071	GF	38.2	31.5	38.6	31.9	38.6	31.9	39	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1589	775803.62	6735914.616	GF	45.8	39.1	45.6	38.9	46.2	39.5	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1590	776410.109	6735918.232	GF	49.2	42.5	49.2	42.5	49.6	42.9	49.6	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1591	776274.22	6735918.576	GF	51.9	45.2	51.8	45.1	52.3	45.6	52.2	45.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1592	776351.281	6735920.296	GF	49.6	42.9	49.6	42.8	50	43.3	50	43.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1593	777083.267	6735920.928	GF	41.2	34.5	41.4	34.7	41.6	34.9	41.8	35.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1594	775445.844	6735921.368	GF	42.5	35.8	42.6	35.8	42.9	36.2	43	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1595	775527.885	6735921.68	GF	43.2	36.5	43.3	36.5	43.6	36.9	43.7	37	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1596	776001.634	6735921.918	GF	50.8	44.1	50.7	44	51.2	44.5	51.1	44.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1597	777019.231	6735922.141	GF	42.1	35.4	42.4	35.6	42.5	35.7	42.8	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1598	777057.782	6735925.415	GF	41.5	34.8	41.8	35.1	41.9	35.2	42.2	35.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1599	775365.05	6735925.423	GF	41.9	35.2	42	35.3	42.3	35.6	42.4	35.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1600	776998.487	6735927.221	GF	42.4	35.7	42.6	35.9	42.8	36	43	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1601	776622.714	6735927.521	GF	57.1	50.4	57.8	51	57.5	50.8	58.2	51.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1602	775389.382	6735928.542	GF	42	35.3	42.1	35.3	42.4	35.7	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1604	775310.46	6735929.478	GF	41.5	34.8	41.6	34.9	41.9	35.2	42.1	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1605	777223.752	6735930.124	GF	39.1	32.4	39.5	32.7	39.5	32.8	39.9	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1606	775860.664	6735930.808	GF	46.8	40	46.6	39.8	47.2	40.4	47	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1607	776984.306	6735931.454	GF	42.6	35.9	42.8	36.1	43	36.2	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1608	775245.723	6735935.19	GF	41	34.3	41.2	34.5	41.4	34.7	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1609	776960.176	6735935.264	GF	42.9	36.2	43.2	36.5	43.3	36.6	43.6	36.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1610	776272.156	6735935.777	GF	52	45.3	51.9	45.2	52.4	45.7	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1611	775801.291	6735936.079	GF	45.7	39	45.5	38.8	46.1	39.4	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1612	777187.268	6735936.204	GF	39.7	33	40	33.3	40.1	33.4	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1613	776344.056	6735936.809	GF	49.7	43	49.6	42.9	50.1	43.4	50	43.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1614	776560.79	6735937.153	GF	58	51.3	58	51.3	58.4	51.6	58.4	51.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1615	775451.459	6735937.277	GF	42.4	35.7	42.4	35.7	42.8	36	42.9	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1616	775997.824	6735938.111	GF	50.7	44	50.6	43.9	51.1	44.3	51	44.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1617	776513.659	6735938.185	GF	52.5	45.8	52.7	45.9	52.9	46.2	53.1	46.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1618	776076.247	6735938.428	GF	55.2	48.5	55.3	48.5	55.6	48.9	55.7	48.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1619	775529.445	6735938.836	GF	43	36.3	43.1	36.4	43.4	36.7	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1620	776445.199	6735940.25	GF	49.5	42.8	49.6	42.9	49.9	43.2	50	43.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1621	776941.972	6735944.789	GF	43.2	36.5	43.5	36.8	43.6	36.9	43.9	37.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1622	776884.451	6735945.123	GF	44.3	37.6	44.6	37.9	44.7	37.9	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1623	776853.642	6735945.528	GF	44.9	38.2	45.3	38.6	45.3	38.6	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1624	775800.233	6735948.779	GF	45.6	38.9	45.5	38.8	46	39.3	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1625	775392.19	6735949.443	GF	41.8	35.1	41.9	35.1	42.2	35.5	42.3	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1626	776900.666	6735949.582	GF	43.9	37.2	44.3	37.6	44.3	37.6	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1627	775863.522	6735951.128	GF	46.8	40.1	46.6	39.9	47.2	40.4	47	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1628	775313.892	6735951.314	GF	41.3	34.6	41.4	34.7	41.7	35	41.8	35.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1629	776622.37	6735952.29	GF	57.2	50.5	57.9	51.2	57.6	50.9	58.3	51.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1630	776272.156	6735952.978	GF	52	45.3	51.9	45.2	52.4	45.7	52.3	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1631	776000.364	6735953.986	GF	50.8	44.1	50.7	44	51.2	44.5	51.1	44.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1632	777074.168	6735954.446	GF	41.1	34.4	41.5	34.8	41.5	34.8	41.9	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1633	775243.607	6735956.356	GF	40.8	34.1	41	34.2	41.2	34.5	41.4	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1634	776351.281	6735956.419	GF	49.5	42.8	49.4	42.7	49.9	43.2	49.8	43.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1635	776075.612	6735956.844	GF	55.2	48.5	55.2	48.5	55.6	48.8	55.6	48.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1636	776560.446	6735957.451	GF	57.8	51.1	57.8	51.1	58.3	51.5	58.2	51.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1637	776508.155	6735958.827	GF	52.1	45.4	52.3	45.5	52.6	45.8	52.7	45.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1638	776849.994	6735960.121	GF	44.9	38.2	45.3	38.6	45.3	38.6	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1639	775447.092	6735960.673	GF	42.1	35.4	42.1	35.4	42.5	35.8	42.6	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1640	775803.196	6735962.114	GF	45.5	38.8	45.4	38.7	45.9	39.2	45.8	39.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1641	776625.122	6735963.299	GF	56.7	50	57.4	50.7	57.1	50.4	57.8	51.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1642	775524.142	6735963.792	GF	42.8	36.1	42.8	36	43.2	36.4	43.2	36.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1643	775388.758	6735966.287	GF	41.6	34.9	41.7	34.9	42	35.3	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1644	777017.01	6735967.418	GF	42	35.3	42.3	35.6	42.4	35.6	42.7	36	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1645	775997.507	6735968.274	GF	50.7	44	50.6	43.9	51.1	44.3	51	44.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1646	775865.427	6735969.861	GF	46.7	40	46.5	39.8	47.1	40.4	46.9	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1647	775311.396	6735970.655	GF	41.1	34.4	41.2	34.5	41.5	34.8	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1648	776271.124	6735973.964	GF	52	45.3	52	45.2	52.4	45.7	52.4	45.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1649	776072.12	6735975.894	GF	54.7	48	54.8	48.1	55.1	48.4	55.2	48.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1650	776555.974	6735976.372	GF	56.9	50.2	56.7	50	57.3	50.6	57.1	50.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1651	776409.421	6735977.404	GF	49	42.3	49	42.3	49.4	42.7	49.4	42.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1652	776986.606	6735977.553	GF	42.4	35.7	42.7	35.9	42.8	36	43.1	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1653	776504.027	6735978.436	GF	51.8	45.1	51.9	45.2	52.2	45.5	52.3	45.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1654	775523.206	6735979.077	GF	42.6	35.9	42.7	35.9	43	36.3	43.1	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1655	775802.35	6735979.259	GF	45.4	38.7	45.3	38.6	45.8	39.1	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1656	776351.625	6735980.156	GF	49.5	42.8	49.4	42.7	49.9	43.1	49.8	43.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1657	775452.395	6735980.637	GF	41.9	35.2	42	35.3	42.3	35.6	42.4	35.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1658	776000.047	6735983.831	GF	50.8	44.1	50.8	44	51.2	44.4	51.2	44.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1659	776621.682	6735986.693	GF	57.5	50.8	58.1	51.3	57.9	51.1	58.5	51.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1661	775317.323	6735987.5	GF	41	34.3	41.1	34.4	41.4	34.7	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1662	775860.029	6735988.594	GF	46.4	39.7	46.2	39.5	46.8	40.1	46.6	39.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1663	775391.878	6735989.059	GF	41.4	34.7	41.5	34.8	41.8	35.1	42	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1664	776075.93	6735992.404	GF	54.9	48.2	54.9	48.2	55.3	48.6	55.3	48.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1665	775526.013	6735993.115	GF	42.5	35.8	42.6	35.9	42.9	36.2	43	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1666	775243.607	6735996.573	GF	40.4	33.7	40.5	33.8	40.9	34.1	41	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1667	776923.773	6735996.606	GF	43.3	36.6	43.7	36.9	43.7	37	44.1	37.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1668	776564.23	6735997.701	GF	58.5	51.8	58.3	51.6	58.9	52.2	58.7	52	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1669	775996.872	6735998.119	GF	50.6	43.9	50.6	43.9	51	44.3	51	44.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1670	776411.485	6735998.389	GF	48.9	42.2	48.9	42.2	49.3	42.6	49.3	42.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1671	776352.313	6735999.421	GF	49.5	42.7	49.4	42.7	49.8	43.1	49.8	43	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1672	776887.694	6735999.443	GF	44	37.3	44.4	37.6	44.4	37.7	44.8	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1673	776906.747	6736000.254	GF	43.6	36.9	44	37.3	44	37.3	44.4	37.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1674	775798.963	6736000.849	GF	45.2	38.5	45.1	38.3	45.6	38.9	45.5	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1675	775453.642	6736001.225	GF	41.8	35.1	41.9	35.1	42.2	35.4	42.3	35.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1676	775391.878	6736001.537	GF	41.3	34.6	41.5	34.7	41.7	35	41.9	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1677	775859.712	6736001.611	GF	46.3	39.6	46.1	39.4	46.7	40	46.5	39.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1678	775318.259	6736003.409	GF	40.9	34.2	41	34.3	41.3	34.6	41.5	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1679	776279.036	6736004.238	GF	51.6	44.9	51.6	44.8	52	45.3	52	45.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1680	776621.682	6736005.27	GF	57.6	50.9	57.9	51.2	58	51.3	58.3	51.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1681	775860.982	6736013.359	GF	46.3	39.6	46	39.3	46.7	40	46.5	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1682	775942.897	6736013.676	GF	48.6	41.9	48.5	41.8	49	42.3	48.9	42.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1683	775527.573	6736015.263	GF	42.3	35.6	42.4	35.7	42.7	36	42.8	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1684	775999.094	6736015.899	GF	50.7	44	50.7	44	51.1	44.4	51.1	44.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1685	776074.66	6736016.216	GF	54.8	48.1	54.8	48.1	55.2	48.5	55.2	48.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1686	776351.969	6736017.31	GF	49.4	42.7	49.4	42.6	49.8	43.1	49.8	43	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1687	776409.076	6736017.655	GF	48.9	42.1	48.9	42.1	49.2	42.5	49.3	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1688	776563.542	6736018.343	GF	58.3	51.5	58.3	51.6	58.7	51.9	58.7	51.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1689	775588.09	6736019.006	GF	42.9	36.2	43	36.2	43.3	36.6	43.4	36.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1690	775317.323	6736019.318	GF	40.8	34	40.9	34.2	41.2	34.4	41.3	34.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1691	775454.266	6736019.942	GF	41.6	34.9	41.7	35	42	35.3	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1692	775363.803	6736020.254	GF	41	34.3	41.2	34.4	41.4	34.7	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1693	775393.749	6736021.19	GF	41.2	34.5	41.3	34.6	41.6	34.9	41.7	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1694	776622.026	6736022.127	GF	57.5	50.8	57.9	51.1	57.9	51.2	58.3	51.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1695	775805.525	6736029.847	GF	45.2	38.5	45	38.3	45.6	38.9	45.4	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1696	775943.849	6736029.869	GF	48.6	41.9	48.5	41.8	49	42.3	48.9	42.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1698	776000.999	6736031.139	GF	50.8	44.1	50.8	44.1	51.2	44.4	51.2	44.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1699	776079.105	6736031.774	GF	55.1	48.4	55.1	48.4	55.5	48.8	55.5	48.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1700	775365.05	6736032.108	GF	40.9	34.2	41.1	34.3	41.3	34.6	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1701	775319.195	6736033.979	GF	40.6	33.9	40.8	34	41	34.3	41.2	34.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1702	776564.919	6736034.168	GF	58.5	51.8	58.8	52.1	58.9	52.2	59.2	52.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1703	775247.84	6736034.673	GF	40.2	33.5	40.3	33.6	40.6	33.8	40.7	34	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1704	775396.557	6736034.915	GF	41.1	34.4	41.2	34.5	41.5	34.8	41.7	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1705	776270.873	6736037.274	GF	51.5	44.8	51.5	44.8	51.9	45.2	51.9	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1706	775596.513	6736038.035	GF	42.7	36	42.8	36	43.1	36.4	43.2	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1708	776415.269	6736038.984	GF	48.8	42.1	48.8	42.1	49.2	42.4	49.2	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1709	776354.377	6736039.328	GF	49.3	42.6	49.3	42.6	49.7	43	49.7	43	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1710	776620.994	6736040.016	GF	57.6	50.9	58	51.3	58	51.3	58.4	51.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1711	775942.637	6736042.081	GF	48.5	41.8	48.3	41.6	48.9	42.2	48.7	42	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1712	775805.101	6736042.548	GF	45.1	38.4	44.9	38.2	45.5	38.8	45.3	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1713	775863.839	6736042.569	GF	46.2	39.5	45.9	39.2	46.6	39.9	46.3	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1714	775452.707	6736043.961	GF	41.4	34.7	41.4	34.7	41.8	35	41.9	35.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1715	776271.084	6736047.434	GF	51.4	44.7	51.4	44.7	51.8	45.1	51.8	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1716	775391.566	6736048.641	GF	41	34.3	41.1	34.4	41.4	34.7	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1717	775319.819	6736050.512	GF	40.5	33.8	40.7	33.9	40.9	34.2	41.1	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1718	775594.329	6736054.568	GF	42.5	35.8	42.5	35.8	42.9	36.2	42.9	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1719	775869.872	6736055.904	GF	46.3	39.5	46	39.3	46.7	39.9	46.4	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1720	776627.531	6736057.217	GF	56.3	49.6	56.8	50	56.8	50	57.2	50.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1721	776270.238	6736057.594	GF	51.4	44.7	51.4	44.6	51.8	45.1	51.8	45	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1722	776412.173	6736058.249	GF	48.7	42	48.7	42	49.1	42.3	49.1	42.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1723	775806.16	6736058.423	GF	45	38.3	44.8	38.1	45.4	38.7	45.2	38.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1724	775527.573	6736059.247	GF	41.8	35.1	41.8	35.1	42.2	35.5	42.3	35.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1725	776355.753	6736059.625	GF	49.2	42.5	49.2	42.5	49.6	42.9	49.6	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1726	776564.575	6736061.345	GF	58.2	51.5	58.6	51.9	58.6	51.9	59	52.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1727	775456.45	6736061.742	GF	41.3	34.6	41.4	34.6	41.7	34.9	41.8	35	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1728	775945.495	6736062.507	GF	48.4	41.7	48.3	41.6	48.8	42.1	48.7	42	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1729	775388.758	6736065.798	GF	40.8	34.1	41	34.3	41.2	34.5	41.4	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1731	775316.699	6736066.109	GF	40.4	33.7	40.5	33.8	40.8	34	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1732	775245.723	6736066.423	GF	39.9	33.2	40.1	33.3	40.3	33.6	40.5	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1733	776270.238	6736067.754	GF	51.3	44.6	51.3	44.6	51.7	45	51.7	44.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1734	775863.839	6736069.874	GF	46	39.3	45.8	39.1	46.4	39.7	46.2	39.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1735	775800.656	6736072.181	GF	44.9	38.2	44.7	37.9	45.3	38.5	45.1	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1736	776564.23	6736077.858	GF	58	51.3	58.4	51.7	58.4	51.6	58.8	52	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1738	775315.139	6736079.211	GF	40.3	33.6	40.4	33.7	40.7	33.9	40.9	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1739	775526.949	6736080.459	GF	41.7	34.9	41.7	35	42.1	35.3	42.1	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1740	775456.138	6736081.395	GF	41.2	34.4	41.2	34.5	41.6	34.8	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1741	776274.683	6736082.148	GF	51.2	44.5	51.2	44.5	51.6	44.9	51.6	44.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1742	775866.379	6736082.574	GF	46.1	39.4	45.8	39.1	46.5	39.7	46.2	39.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1743	776355.065	6736083.707	GF	49.1	42.4	49.1	42.4	49.5	42.8	49.5	42.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1744	775810.393	6736083.823	GF	45	38.3	44.7	38	45.4	38.7	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1745	775389.07	6736083.89	GF	40.7	34	40.8	34.1	41.1	34.4	41.2	34.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1747	775585.283	6736085.762	GF	42.2	35.4	42.1	35.4	42.6	35.8	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1748	776621.682	6736088.867	GF	57.3	50.6	57.7	51	57.7	51	58.2	51.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1749	776640.259	6736090.931	GF	54	47.3	54.4	47.7	54.4	47.7	54.8	48.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1750	775867.014	6736095.909	GF	46.1	39.4	45.9	39.2	46.5	39.8	46.3	39.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1751	775394.061	6736097.616	GF	40.7	34	40.7	34	41.1	34.3	41.2	34.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1752	775805.948	6736097.793	GF	44.9	38.2	44.6	37.9	45.3	38.6	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1753	776411.485	6736098.5	GF	48.5	41.8	48.5	41.8	48.9	42.1	48.9	42.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1754	775590.274	6736099.487	GF	42.2	35.4	42.1	35.4	42.6	35.8	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1755	775531.004	6736099.799	GF	41.6	34.9	41.7	34.9	42	35.3	42.1	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1757	775245.723	6736100.29	GF	39.7	33	39.8	33.1	40.1	33.4	40.3	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1758	776570.423	6736100.908	GF	59.3	52.6	59.7	53	59.7	53	60.1	53.4	60	55	0.1	n/a	Yes	No	No	No	No	No	0.4	n/a	No
NNS_Rx1759	775450.523	6736101.983	GF	41	34.3	41.1	34.4	41.4	34.7	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1760	775808.911	6736111.763	GF	44.9	38.2	44.6	37.9	45.3	38.6	45	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1761	775799.386	6736112.609	GF	44.7	38	44.5	37.8	45.1	38.4	44.9	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1762	775786.686	6736112.821	GF	44.5	37.8	44.3	37.6	44.9	38.2	44.7	37.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1763	776454.831	6736115.013	GF	48.6	41.9	48.8	42.1	49	42.3	49.2	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1764	776479.257	6736116.733	GF	49.2	42.5	49.4	42.7	49.6	42.8	49.8	43.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1765	776522.26	6736117.077	GF	51.4	44.7	51.7	45	51.8	45.1	52.1	45.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1766	776325.479	6736117.765	GF	49.7	43	49.7	43	50.1	43.4	50.1	43.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1767	776413.893	6736118.453	GF	48.3	41.6	48.4	41.7	48.7	42	48.8	42.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1768	775317.947	6736118.516	GF	40	33.3	40.2	33.5	40.4	33.7	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1769	775395.309	6736119.14	GF	40.6	33.8	40.6	33.9	41	34.2	41	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1770	776360.913	6736119.485	GF	48.9	42.2	48.9	42.2	49.3	42.6	49.3	42.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1771	775531.628	6736120.076	GF	41.5	34.8	41.5	34.8	41.9	35.2	42	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1772	776344.056	6736120.173	GF	49.3	42.5	49.3	42.5	49.7	42.9	49.7	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1773	775450.835	6736125.379	GF	40.9	34.2	40.9	34.2	41.3	34.6	41.4	34.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1774	776271.812	6736126.366	GF	51.7	44.9	51.6	44.9	52.1	45.3	52	45.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1775	775877.809	6736126.706	GF	46.2	39.5	46.1	39.4	46.6	39.9	46.5	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1776	775889.874	6736127.659	GF	46.6	39.9	46.4	39.7	47	40.2	46.8	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1777	775860.664	6736127.976	GF	45.8	39.1	45.6	38.9	46.2	39.5	46.1	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1778	775751.126	6736131.236	GF	44	37.2	43.7	37	44.4	37.6	44.1	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1779	775482.653	6736139.728	GF	41.1	34.4	41.1	34.3	41.5	34.7	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1781	775587.778	6736140.664	GF	41.9	35.2	41.8	35.1	42.3	35.6	42.2	35.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1782	775615.541	6736140.976	GF	42.3	35.5	42.1	35.4	42.7	35.9	42.5	35.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1783	775510.416	6736142.224	GF	41.3	34.6	41.2	34.5	41.7	35	41.7	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1786	775454.578	6736142.536	GF	40.9	34.1	40.9	34.1	41.3	34.5	41.3	34.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1787	775252.073	6736142.623	GF	39.5	32.8	39.6	32.9	39.9	33.1	40.1	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1788	775366.922	6736145.967	GF	40.2	33.5	40.2	33.5	40.6	33.9	40.7	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1789	776506.154	6736170.232	GF	49	42.3	49.2	42.5	49.4	42.7	49.6	42.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1790	776356.8	6736170.573	GF	48.9	42.1	48.9	42.1	49.3	42.5	49.3	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1791	776476.488	6736170.914	GF	48.3	41.5	48.4	41.7	48.7	41.9	48.8	42.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1792	776415.11	6736171.596	GF	48	41.3	48	41.3	48.4	41.6	48.4	41.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1793	776273.939	6736173.642	GF	51.8	45.1	51.8	45.1	52.2	45.5	52.2	45.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1794	775866.355	6736182.038	GF	45.8	39.1	45.6	38.9	46.2	39.5	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1795	775802.002	6736183.084	GF	44.6	37.9	44.4	37.7	45	38.3	44.9	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1796	775941.762	6736184.154	GF	47.7	41	47.7	41	48.1	41.3	48.1	41.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1797	776355.095	6736188.305	GF	48.8	42.1	48.8	42.1	49.2	42.5	49.2	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1798	775776.348	6736190.45	GF	44.1	37.4	44	37.3	44.5	37.8	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1799	775894.401	6736191.034	GF	46.4	39.7	46.4	39.7	46.8	40.1	46.8	40	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1800	776490.469	6736191.715	GF	48.1	41.4	48.3	41.6	48.5	41.8	48.7	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1801	776270.871	6736192.397	GF	52	45.3	52	45.3	52.4	45.7	52.4	45.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1802	776414.087	6736193.079	GF	47.8	41.1	47.9	41.2	48.2	41.5	48.3	41.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1803	775531.435	6736195.316	GF	40.6	33.9	40.5	33.8	41	34.3	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1805	775480.44	6736197.533	GF	40.3	33.6	40.2	33.5	40.7	34	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1806	775360.077	6736198.8	GF	39.9	33.2	39.9	33.2	40.3	33.6	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1807	775379.399	6736199.434	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1809	775944.672	6736202.411	GF	47.4	40.7	47.6	40.8	47.8	41.1	48	41.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1810	775862.916	6736203.204	GF	45.7	39	45.5	38.8	46.1	39.4	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1811	775724.151	6736203.277	GF	43.3	36.6	43.2	36.5	43.7	37	43.6	36.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1812	775811.527	6736204.674	GF	44.7	38	44.5	37.8	45.1	38.4	44.9	38.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1813	775298.946	6736205.135	GF	39.5	32.8	39.4	32.7	39.9	33.2	39.8	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1814	775312.249	6736206.085	GF	39.6	32.9	39.5	32.8	40	33.2	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1815	775233.023	6736208.24	GF	39	32.3	39	32.3	39.4	32.7	39.5	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1816	775400.621	6736209.253	GF	40.2	33.5	40.1	33.4	40.6	33.9	40.6	33.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1817	776413.064	6736209.446	GF	47.7	41	47.7	41	48.1	41.4	48.1	41.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1819	775535.87	6736211.153	GF	40.6	33.9	40.4	33.7	41	34.2	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1820	776286.897	6736216.948	GF	51.2	44.5	51.2	44.5	51.6	44.9	51.6	44.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1821	775942.556	6736217.227	GF	47.3	40.6	47.5	40.8	47.7	41	47.9	41.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1822	775356.91	6736218.438	GF	39.6	32.9	39.6	32.8	40	33.3	40	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1823	775869.001	6736219.238	GF	45.8	39	45.7	38.9	46.2	39.4	46.1	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1824	775376.865	6736220.339	GF	40	33.3	39.9	33.2	40.4	33.6	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1825	776002.352	6736223.313	GF	49.7	43	49.8	43	50.1	43.4	50.2	43.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1826	775811.4	6736224.105	GF	44.6	37.9	44.4	37.7	45	38.3	44.8	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1827	775590.017	6736226.745	GF	41.3	34.6	41.1	34.4	41.7	34.9	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1828	776415.451	6736227.519	GF	47.5	40.8	47.6	40.8	47.9	41.2	48	41.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1829	775949.964	6736230.192	GF	47.7	41	47.7	41	48.1	41.4	48.1	41.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1830	775535.87	6736231.425	GF	40.5	33.8	40.4	33.7	40.9	34.2	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1831	775457.001	6736231.741	GF	40	33.3	39.9	33.2	40.4	33.7	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1832	775867.678	6736232.732	GF	45.7	39	45.6	38.9	46.1	39.3	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1833	776357.823	6736235.02	GF	48.5	41.8	48.5	41.8	48.9	42.2	48.9	42.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1834	776276.667	6736235.361	GF	51.7	45	51.7	45	52.1	45.4	52.1	45.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1835	775378.765	6736235.542	GF	39.9	33.2	39.9	33.1	40.3	33.6	40.3	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1836	775591.616	6736237.126	GF	41.2	34.5	41.2	34.4	41.6	34.9	41.6	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1837	775801.367	6736244.044	GF	44.3	37.6	44.1	37.4	44.7	38	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1838	775870.589	6736245.115	GF	45.7	39	45.6	38.9	46.1	39.3	46	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1839	775949.699	6736246.332	GF	47.7	41	47.7	41	48.1	41.3	48.1	41.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1840	775273.24	6736250.574	GF	39.1	32.4	39	32.3	39.5	32.8	39.5	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1842	775531.752	6736250.746	GF	40.5	33.8	40.4	33.7	40.9	34.2	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1843	775358.494	6736251.696	GF	39.7	33	39.6	32.9	40.1	33.4	40.1	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1844	775300.847	6736252.33	GF	39.3	32.6	39.3	32.5	39.7	33	39.7	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1845	775593.517	6736252.963	GF	41.2	34.5	41.2	34.5	41.6	34.9	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1847	775457.001	6736253.913	GF	40.1	33.4	40	33.3	40.5	33.8	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1848	776276.667	6736255.139	GF	51.7	45	51.7	44.9	52.1	45.3	52.1	45.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1849	775336.638	6736255.814	GF	39.4	32.7	39.4	32.6	39.8	33.1	39.8	33	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1850	776455.347	6736255.821	GF	46.7	40	46.8	40.1	47.1	40.4	47.2	40.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1851	775319.851	6736256.13	GF	39.4	32.7	39.4	32.6	39.8	33.1	39.8	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1852	775377.815	6736256.764	GF	39.8	33.1	39.8	33	40.2	33.5	40.2	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1853	776359.528	6736256.844	GF	48.4	41.7	48.4	41.7	48.8	42	48.8	42	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1854	775945.731	6736259.032	GF	47.5	40.8	47.6	40.9	47.9	41.2	48	41.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1855	776415.451	6736260.595	GF	47.2	40.5	47.3	40.5	47.6	40.9	47.7	40.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1856	775809.569	6736264.618	GF	44.4	37.7	44.2	37.4	44.8	38.1	44.6	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1857	775866.673	6736264.905	GF	45.5	38.8	45.4	38.7	45.9	39.2	45.8	39.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1858	775595.734	6736267.533	GF	41.2	34.5	41.2	34.5	41.6	34.9	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1859	775940.439	6736270.409	GF	47.2	40.5	47.3	40.6	47.6	40.8	47.7	40.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1860	775538.087	6736271.017	GF	40.5	33.8	40.6	33.8	40.9	34.2	41	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1861	776360.21	6736271.847	GF	48.3	41.6	48.3	41.5	48.7	41.9	48.7	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1862	776278.031	6736274.575	GF	51.5	44.8	51.5	44.8	51.9	45.2	51.9	45.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1863	775457.318	6736276.719	GF	40.2	33.5	40.1	33.4	40.6	33.8	40.5	33.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1864	776416.474	6736280.713	GF	47	40.3	47	40.3	47.4	40.6	47.4	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1865	775947.847	6736286.284	GF	47.1	40.4	47.2	40.4	47.5	40.8	47.5	40.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1866	775866.25	6736287.236	GF	45.4	38.7	45.4	38.6	45.8	39	45.8	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1867	775812.585	6736287.796	GF	44.3	37.6	44.1	37.4	44.7	38	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1868	775779.777	6736290.018	GF	43.8	37.1	43.5	36.8	44.2	37.4	43.9	37.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1869	775595.101	6736290.655	GF	41.2	34.5	41.2	34.5	41.6	34.9	41.6	34.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1870	775530.168	6736290.972	GF	40.5	33.8	40.5	33.8	40.9	34.2	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1871	775457.001	6736293.189	GF	40.2	33.5	40.2	33.5	40.6	33.9	40.7	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1872	776357.823	6736296.058	GF	48.2	41.4	48.1	41.4	48.6	41.8	48.5	41.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1873	775389.851	6736297.307	GF	39.7	33	39.8	33	40.1	33.4	40.2	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1874	775353.743	6736299.841	GF	39.3	32.6	39.4	32.7	39.7	33	39.8	33.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1875	775950.229	6736301.101	GF	47.2	40.5	47.2	40.5	47.6	40.9	47.6	40.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1876	776277.008	6736301.173	GF	51.5	44.7	51.4	44.7	51.9	45.1	51.8	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1877	775337.272	6736301.425	GF	39	32.3	39	32.3	39.4	32.7	39.5	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1878	775864.345	6736302.582	GF	45.3	38.5	45.2	38.5	45.7	38.9	45.6	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1879	775237.257	6736305.607	GF	38.6	31.9	38.5	31.8	39	32.3	38.9	32.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1880	775809.569	6736305.682	GF	44.2	37.5	44	37.3	44.6	37.9	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1881	775592.883	6736306.176	GF	41.2	34.5	41.1	34.4	41.6	34.8	41.5	34.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1882	775728.342	6736307.544	GF	42.9	36.2	42.7	35.9	43.3	36.6	43.1	36.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1883	775539.354	6736309.027	GF	40.5	33.8	40.5	33.8	40.9	34.2	41	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1884	776357.823	6736311.061	GF	48	41.3	48	41.3	48.4	41.7	48.4	41.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1885	775952.081	6736312.478	GF	47.3	40.6	47.3	40.6	47.7	40.9	47.7	41	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1886	776275.303	6736313.107	GF	51.5	44.8	51.5	44.7	51.9	45.1	51.9	45.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1887	775398.403	6736313.144	GF	39.6	32.9	39.6	32.9	40	33.3	40	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1888	775457.318	6736315.678	GF	40.2	33.5	40.2	33.5	40.6	33.9	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1889	775808.934	6736327.06	GF	44.1	37.4	44	37.3	44.5	37.8	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1890	775947.318	6736327.294	GF	46.9	40.2	47	40.2	47.3	40.6	47.4	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1891	775886.04	6736329.146	GF	45.5	38.8	45.6	38.9	45.9	39.2	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1892	776363.279	6736330.839	GF	47.7	40.9	47.6	40.9	48.1	41.3	48	41.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1893	775591.616	6736331.199	GF	41.1	34.4	41	34.3	41.5	34.8	41.4	34.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1894	775455.1	6736335.633	GF	40	33.3	40.1	33.3	40.4	33.7	40.5	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1895	775394.919	6736337.217	GF	39.1	32.4	39.2	32.5	39.5	32.8	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1896	775537.137	6736337.533	GF	40.5	33.8	40.5	33.8	40.9	34.2	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1897	776272.916	6736340.387	GF	51.4	44.7	51.4	44.6	51.8	45	51.8	45	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1898	775808.299	6736342.089	GF	44.2	37.5	44	37.3	44.6	37.9	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1899	775893.449	6736343.159	GF	45.2	38.5	45.3	38.5	45.6	38.9	45.7	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1900	775947.583	6736343.963	GF	46.7	40	46.7	40	47.1	40.4	47.1	40.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1901	775864.662	6736344.852	GF	45	38.3	45	38.3	45.4	38.7	45.4	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1902	775308.448	6736345.452	GF	38.9	32.2	39	32.3	39.3	32.6	39.4	32.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1903	776363.279	6736347.548	GF	47.4	40.7	47.4	40.7	47.8	41.1	47.8	41.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1904	775243.607	6736347.94	GF	38.5	31.8	38.6	31.8	38.9	32.1	39	32.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1905	775342.023	6736348.303	GF	39.1	32.4	39.2	32.5	39.5	32.8	39.6	32.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1906	775678.05	6736349.734	GF	42	35.3	41.8	35.1	42.4	35.7	42.2	35.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1907	775592.25	6736351.47	GF	41.1	34.4	41	34.2	41.5	34.8	41.4	34.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1908	776275.644	6736351.639	GF	51	44.3	51	44.3	51.4	44.7	51.4	44.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1909	775454.784	6736353.054	GF	39.8	33.1	39.8	33.1	40.2	33.4	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1910	775541.888	6736354.004	GF	40.6	33.8	40.5	33.8	41	34.2	40.9	34.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1911	775890.909	6736354.377	GF	45.1	38.4	45.1	38.4	45.5	38.8	45.5	38.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1912	775868.26	6736355.647	GF	45	38.3	45	38.3	45.4	38.7	45.4	38.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1913	775397.453	6736355.904	GF	38.9	32.2	38.9	32.2	39.3	32.5	39.3	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1914	776336.682	6736356.072	GF	48.1	41.4	48.1	41.4	48.5	41.8	48.5	41.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1915	776363.961	6736360.505	GF	47.2	40.5	47.2	40.5	47.6	40.9	47.6	40.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1916	775946.789	6736363.542	GF	46.4	39.7	46.5	39.8	46.8	40.1	46.9	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1917	775879.479	6736368.559	GF	44.9	38.2	44.8	38	45.3	38.5	45.2	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1918	776277.008	6736370.053	GF	50.6	43.9	50.6	43.9	51	44.3	51	44.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1919	775597.635	6736370.158	GF	41.1	34.4	40.9	34.2	41.5	34.7	41.3	34.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1920	776363.279	6736371.076	GF	47.1	40.4	47.1	40.3	47.5	40.7	47.5	40.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1921	775540.938	6736372.375	GF	40.5	33.8	40.4	33.7	40.9	34.2	40.8	34.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1922	775399.987	6736372.692	GF	38.8	32.1	38.8	32.1	39.2	32.5	39.2	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1923	775455.734	6736377.126	GF	39.5	32.8	39.5	32.8	39.9	33.2	39.9	33.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1924	775862.122	6736392.16	GF	44.6	37.9	44.7	37.9	45	38.3	45.1	38.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1925	776276.667	6736396.991	GF	50.1	43.4	50.1	43.4	50.5	43.7	50.5	43.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1926	776314.858	6736397.332	GF	48.2	41.5	48.3	41.5	48.6	41.9	48.7	41.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1927	775958.051	6736398.79	GF	46.4	39.7	46.4	39.7	46.8	40.1	46.8	40.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1928	776301.56	6736399.719	GF	48.8	42.1	48.8	42.1	49.2	42.4	49.2	42.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1929	775899.564	6736400.313	GF	44.9	38.2	44.9	38.2	45.3	38.6	45.3	38.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1930	775942.515	6736400.923	GF	45.8	39.1	45.8	39.1	46.2	39.4	46.2	39.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1931	775932.463	6736402.446	GF	45.5	38.8	45.5	38.8	45.9	39.1	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1932	775916.318	6736402.75	GF	45.2	38.5	45.2	38.5	45.6	38.9	45.6	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1933	775336.955	6736403.416	GF	38.9	32.2	38.9	32.2	39.3	32.6	39.3	32.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1934	775230.907	6736405.09	GF	38	31.3	38.1	31.3	38.4	31.7	38.5	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1935	775869.848	6736406.976	GF	44.4	37.6	44.3	37.6	44.8	38	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

NNS_Rx1936	775539.354	6736407.217	GF	40.3	33.6	40.2	33.5	40.7	34	40.6	33.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1937	775891.755	6736408.035	GF	44.7	38	44.7	38	45.1	38.3	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1938	775597.318	6736408.801	GF	40.8	34.1	40.6	33.9	41.2	34.5	41	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1939	775522.567	6736409.117	GF	40.2	33.5	40	33.3	40.6	33.9	40.4	33.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1940	775462.385	6736409.751	GF	39.7	33	39.7	33	40.1	33.4	40.1	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1941	775508.947	6736411.968	GF	40.1	33.4	39.9	33.2	40.5	33.7	40.3	33.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1942	775482.34	6736412.601	GF	39.9	33.1	39.8	33.1	40.3	33.5	40.2	33.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1943	776919.844	6736428.977	GF	41.5	34.7	41.7	34.9	41.9	35.1	42.1	35.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1944	775228.79	6736436.841	GF	38	31.3	38	31.3	38.4	31.6	38.4	31.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1945	776445.288	6736438.347	GF	44.7	38	44.7	38	45.1	38.4	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1946	776423.438	6736462.625	GF	44.7	38	44.7	38	45.1	38.4	45.1	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1947	777031.111	6736463.498	GF	40.5	33.8	40.7	34	40.9	34.2	41.1	34.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1949	777274.069	6736469.782	GF	38.7	32	38.9	32.1	39.1	32.3	39.3	32.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1950	777122.946	6736472.558	GF	39.7	32.9	39.8	33.1	40.1	33.3	40.2	33.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1951	776421.819	6736484.476	GF	44.5	37.8	44.5	37.8	44.9	38.2	44.9	38.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1953	776353.839	6736501.471	GF	45.4	38.7	45.4	38.7	45.8	39	45.8	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1954	776086.825	6736504.257	GF	48.6	41.9	48.6	41.9	49	42.3	49	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1955	776295.57	6736504.708	GF	46.7	40	46.7	39.9	47.1	40.3	47.1	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1956	776419.796	6736505.517	GF	44.3	37.6	44.3	37.6	44.7	38	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1957	776230.423	6736507.541	GF	48.6	41.9	48.6	41.9	49	42.3	49	42.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1958	776280.194	6736520.894	GF	46.7	40	46.7	40	47.1	40.4	47.1	40.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1959	776232.851	6736524.94	GF	48	41.3	48	41.3	48.4	41.6	48.4	41.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1960	776341.295	6736525.749	GF	45.3	38.6	45.3	38.5	45.7	38.9	45.7	38.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1961	776421.414	6736527.368	GF	44	37.3	44	37.3	44.4	37.7	44.4	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1962	776087.159	6736532.264	GF	47.5	40.7	47.4	40.7	47.9	41.1	47.8	41.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1963	776863.529	6736536.106	GF	41.3	34.6	41.5	34.8	41.7	35	41.9	35.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1964	776020.143	6736538.932	GF	45.5	38.8	45.5	38.8	45.9	39.2	45.9	39.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1965	776352.22	6736543.149	GF	44.8	38.1	44.8	38.1	45.2	38.4	45.2	38.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1966	776422.224	6736543.958	GF	43.8	37.1	43.8	37.1	44.2	37.5	44.2	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1967	776283.026	6736545.172	GF	46.1	39.4	46.1	39.4	46.5	39.7	46.5	39.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1968	776314.184	6736550.433	GF	45.3	38.6	45.3	38.6	45.7	39	45.7	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1969	776087.492	6736552.936	GF	46.9	40.2	46.9	40.2	47.3	40.6	47.3	40.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1970	776365.978	6736560.549	GF	44.3	37.6	44.3	37.6	44.7	38	44.7	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1971	776423.842	6736563.381	GF	43.6	36.9	43.6	36.9	44	37.3	44	37.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1972	776289.905	6736569.046	GF	45.4	38.7	45.4	38.7	45.8	39.1	45.8	39.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1973	776092.827	6736572.941	GF	46.6	39.9	46.6	39.9	47	40.3	47	40.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1974	776067.154	6736573.274	GF	45.7	38.9	45.6	38.9	46.1	39.3	46	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1975	776365.978	6736576.734	GF	44.1	37.4	44.1	37.4	44.5	37.7	44.5	37.7	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1976	776007.14	6736579.609	GF	44.2	37.5	44.2	37.5	44.6	37.8	44.6	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1977	776423.033	6736585.637	GF	43.4	36.6	43.3	36.6	43.8	37	43.7	37	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1978	776365.978	6736587.66	GF	43.9	37.2	43.9	37.2	44.3	37.6	44.3	37.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1979	776283.836	6736590.492	GF	45.1	38.4	45.1	38.4	45.5	38.8	45.5	38.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1980	776092.16	6736591.612	GF	45.7	39	45.7	39	46.1	39.4	46.1	39.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1981	776011.807	6736593.946	GF	43.8	37.1	43.8	37.1	44.2	37.4	44.2	37.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1982	776368.406	6736603.036	GF	43.7	37	43.7	37	44.1	37.3	44.1	37.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1983	776284.24	6736604.25	GF	44.9	38.2	44.9	38.2	45.3	38.5	45.3	38.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1984	776421.819	6736605.869	GF	43.1	36.4	43.1	36.4	43.5	36.8	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1985	776073.822	6736620.285	GF	44.4	37.7	44.4	37.7	44.8	38.1	44.8	38	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1986	776422.628	6736621.245	GF	42.9	36.2	42.9	36.2	43.3	36.6	43.3	36.6	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1987	776368.406	6736621.65	GF	43.4	36.7	43.4	36.7	43.8	37.1	43.8	37.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1988	776039.481	6736621.952	GF	43.9	37.2	43.9	37.1	44.3	37.5	44.3	37.5	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1989	776282.622	6736628.529	GF	44.5	37.8	44.5	37.7	44.9	38.1	44.9	38.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1990	776422.628	6736634.598	GF	42.8	36.1	42.8	36	43.2	36.4	43.2	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1991	776076.49	6736634.956	GF	44.2	37.5	44.2	37.5	44.6	37.9	44.6	37.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1992	776008.14	6736641.624	GF	43.1	36.4	43.1	36.4	43.5	36.8	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1993	776368.001	6736647.952	GF	43.1	36.4	43.1	36.4	43.5	36.8	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1994	776425.461	6736648.356	GF	42.6	35.9	42.6	35.9	43	36.3	43	36.2	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1995	776092.493	6736650.959	GF	44.3	37.5	44.2	37.5	44.6	37.9	44.6	37.9	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1996	776016.142	6736656.961	GF	43	36.3	43.1	36.4	43.4	36.7	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1997	776423.438	6736665.351	GF	42.4	35.7	42.4	35.7	42.8	36.1	42.8	36.1	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1998	776344.532	6736665.756	GF	43.1	36.4	43.1	36.4	43.5	36.8	43.5	36.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx1999	776372.453	6736669.398	GF	42.8	36.1	42.8	36.1	43.2	36.4	43.2	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2000	776093.827	6736669.631	GF	44.1	37.4	44.1	37.4	44.5	37.8	44.5	37.8	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2001	776183.511	6736671.557	GF	46.3	39.6	46.3	39.6	46.7	40	46.7	40	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2002	776166.239	6736673.335	GF	45.4	38.7	45.4	38.7	45.8	39.1	45.8	39	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2003	776009.807	6736675.632	GF	42.7	36	42.8	36.1	43.1	36.4	43.2	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2004	776010.372	6736729.361	GF	42.8	36.1	42.8	36.1	43.2	36.4	43.2	36.4	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No
NNS_Rx2005	776865.308	6736746.218	GF	39.5	32.8	39.7	33	39.9	33.2	40.1	33.3	60	55	n/a	n/a	No	No	No	No	No	No	n/a	n/a	No

GHD

Level 3 GHD Tower 24 Honeysuckle Drive Newcastle NSW 2300
PO Box 5403 Hunter Region Mail Centre NSW 2310
T: (02) 4979 9999 F: (02) 4979 9988 E: ntlmail@ghd.com

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