

Appendix B

Detailed Measurement Results

Table A1 – Results of Noise Logging 2 Redlands Street, Bayswater

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
1 September 2014	40.1	37.6	38.8	33.3
2 September 2014	43.3	40.7	42.0	35.3
3 September 2014	41.0	39.4	40.2	37.2
4 September 2014	38.7	36.2	37.3	32.4
5 September 2014	38.3	36.3	37.6	31.0
Weekday Average	40.3	38.1	39.2	33.8

**Photograph A1 – Noise Logger at 2 Redlands Street, Bayswater**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 2 Redlands St.
Locality	Bayswater
Occupier	Kathleen Johnson
Dates	1/9/2014 to 5/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	75m to road
Height of the road in relation to the ground	+1m
Road surface type	OGA
Speed zone	90 km/hr
Absorbing ground	60%
Angle of view	100
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads tp provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West
Carriageways & lanes.	2,5
<i>COMMENT</i>	
Comment	Solid noise wall between microphone and road Logger placed at front of house, near bedroom window.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	2 Redlands St MRWA Logger Sheet.xlsx
Raw data file	2 Redlands.csv
<i>EQUIPMENT</i>	
Analyser number	15-203-505
Microphone number	15-203-505
Calibrator number	34883971
Calibrator values	94.1, 93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 1/09/14 - Neg Winds 11-17 km/h from 10am 5pm 2/09/14 - Calm conditions Variable winds under 9km/h 3/09/14 - Variable winds up to 11km/h 4/09/14 - Neg winds 9-15km/h for 13 hours of day 5/09/14 - Variable winds up to 15km/h

Hourly Noise Level Data
2 Redlands St, Bayswater

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
1/09/2014	1/09/2014	39.9	35.1	32.4	26.9	0	0	0
1/09/2014	2:00	38.5	34.2	31.4	25.8	0	0	0
1/09/2014	3:00	38.3	32.5	30	24.6	0	170	5
1/09/2014	4:00	40.4	33.5	31.4	25	0	0	0
1/09/2014	5:00	40.6	36.8	33.6	27.9	0	170	5
1/09/2014	6:00	42.9	39.5	36.7	31.7	0	80	5
1/09/2014	7:00	45.7	42.1	39.9	33.9	0	60	8
1/09/2014	8:00	48.8	42.5	40.9	34	0	90	8
1/09/2014	9:00	48.1	40.7	39.4	32.2	0	80	5
1/09/2014	10:00	46.3	40.7	38.1	30.7	0	80	11
1/09/2014	11:00	45.6	40.3	37.9	30.8	0	50	17
1/09/2014	12:00	44.6	39.6	37	30.9	0	70	13
1/09/2014	13:00	48.4	40.6	37.5	30.8	0	50	15
1/09/2014	14:00	46.6	40	38	30.9	0	60	15
1/09/2014	15:00	48.8	40.7	39.2	32.2	0	60	15
1/09/2014	16:00	47.7	41.5	39.5	33.1	0	30	13
1/09/2014	17:00	48.4	40.8	40.4	33.1	0	70	13
1/09/2014	18:00	49.1	40.9	40	33.4	0	70	9
1/09/2014	19:00	45.8	42	39.7	33.2	0	100	8
1/09/2014	20:00	43.4	40.9	38.3	32.2	0	100	4
1/09/2014	21:00	41.4	38.6	35.9	30.7	0	90	2
1/09/2014	22:00	41.8	38.1	35.4	30.5	0	0	0
1/09/2014	23:00	40.8	37.1	34.5	29.8	0	90	4
1/09/2014	0:00	38.7	35.1	32.7	28	0	80	5
2/09/2014	2/09/2014	40.3	35.3	32.7	27.3	0	80	5
2/09/2014	2:00	39.6	34.7	31.6	25.6	0	80	4
2/09/2014	3:00	37.6	32.6	29.9	24.5	0	150	5
2/09/2014	4:00	40.4	34.6	31.6	25.4	0	100	8
2/09/2014	5:00	43.6	38.3	35.3	28.9	0	100	8
2/09/2014	6:00	44.6	41.2	38.3	32.3	0	90	5
2/09/2014	7:00	46.5	43.3	40.5	35.2	0	90	2
2/09/2014	8:00	47	41.9	40.4	34.4	0	360	4
2/09/2014	9:00	51	42.8	42	34.9	0	90	8
2/09/2014	10:00	48.9	43.9	41.8	33.4	0	90	5
2/09/2014	11:00	55.4	44.1	41.7	34.4	0	90	5
2/09/2014	12:00	48.9	43	41.6	33.4	0	90	2
2/09/2014	13:00	49.2	43.7	42.7	34.9	0	90	4
2/09/2014	14:00	53.4	44.8	43.8	35.4	0	40	9
2/09/2014	15:00	50	46.6	44	38.7	0	340	8
2/09/2014	16:00	51	47.3	45.2	39.8	0	280	8
2/09/2014	17:00	51.9	44.8	43.4	37.3	0	260	8
2/09/2014	18:00	48.8	43.5	41.4	35.7	0	260	5
2/09/2014	19:00	47.1	43.3	40.7	34.5	0	250	8
2/09/2014	20:00	45.4	42.2	39.1	33	0	250	5
2/09/2014	21:00	44.2	41.2	38.2	32.2	0	240	5
2/09/2014	22:00	45	42.1	39.4	33.8	0	0	0
2/09/2014	23:00	43.7	41	38	32.6	0	0	0
2/09/2014	0:00	42.9	39.4	36.9	31.9	0	0	0
3/09/2014	3/09/2014	44.1	39.7	37.1	32.2	0	0	0
3/09/2014	2:00	44.4	38.4	35.7	29.3	0	0	0
3/09/2014	3:00	43.1	37.6	34.4	27.2	0	0	0
3/09/2014	4:00	44.2	38.7	35.8	29.2	0	230	5
3/09/2014	5:00	45.2	41.7	38.5	32.7	0	180	9
3/09/2014	6:00	47.2	44.2	41.6	36.3	0	180	9
3/09/2014	7:00	49.5	46.4	43.9	38.6	0	170	11
3/09/2014	8:00	49.6	45.9	43.3	37.3	0	170	8
3/09/2014	9:00	51	45.4	43.4	36.3	0	150	9
3/09/2014	10:00	49.6	44	41.5	33.8	0	170	11
3/09/2014	11:00	47.8	42.9	40.2	33.6	0	120	8
3/09/2014	12:00	48	42.8	40	32.7	0	90	8
3/09/2014	13:00	48.8	41.9	39.6	31.3	0	140	5
3/09/2014	14:00	46.8	41	39.6	31.1	0	130	5
3/09/2014	15:00	49.5	40.4	39.6	31	0	120	8
3/09/2014	16:00	47.6	40.3	38.5	30.5	0	60	9
3/09/2014	17:00	45.4	39.2	37.3	30.1	0	60	11
3/09/2014	18:00	43.9	39.3	37.3	29.2	0	70	11
3/09/2014	19:00	43.6	39.4	37.2	30.9	0	70	8
3/09/2014	20:00	43.3	39.2	37.4	30.4	0	0	0
3/09/2014	21:00	42	38.9	36.1	30	0	0	0
3/09/2014	22:00	41.4	38.3	35.4	29.3	0	0	0
3/09/2014	23:00	41.5	38.1	35.3	29.7	0	60	4
3/09/2014	0:00	37.4	34.8	32.1	27.7	0	60	5

Hourly Noise Level Data
2 Redlands St, Bayswater

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
4/09/2014	4/09/2014	36.8	33.5	31.3	27.5	0	0	0
4/09/2014	2:00	36.4	32.6	30.2	26.3	0	70	5
4/09/2014	3:00	37.1	31.9	29.2	24.4	0	90	8
4/09/2014	4:00	39	34.2	31.8	27.3	0	90	11
4/09/2014	5:00	39.8	36.2	33.4	28.2	0	90	13
4/09/2014	6:00	42.2	39.2	36.4	31.4	0	90	9
4/09/2014	7:00	45.1	41.3	38.9	34.7	0	90	11
4/09/2014	8:00	46.2	40.8	38.6	33.6	0	100	13
4/09/2014	9:00	45.6	40.5	38.1	32.7	0	90	11
4/09/2014	10:00	46.2	39.8	37.6	31.6	0	90	13
4/09/2014	11:00	43.6	39.6	37.1	32.1	0	100	13
4/09/2014	12:00	44.1	39.5	37.2	32.1	0	100	15
4/09/2014	13:00	45.2	39.6	37.7	31.6	0	110	15
4/09/2014	14:00	43.7	39.3	37.6	31.5	0	110	11
4/09/2014	15:00	44	40	37.5	32.5	0	100	11
4/09/2014	16:00	45.7	40.7	38.4	31.8	0	130	13
4/09/2014	17:00	46.3	40.8	38.7	30.8	0	110	9
4/09/2014	18:00	45.5	39.6	37	30.4	0	110	8
4/09/2014	19:00	44.4	39.2	37	30.6	0	90	5
4/09/2014	20:00	41	37.8	35.2	29.3	0	100	5
4/09/2014	21:00	40.8	36.7	33.9	27.3	0	0	0
4/09/2014	22:00	39.6	35.3	32.8	26.7	0	100	5
4/09/2014	23:00	38.1	34.3	31.8	26.9	0	130	5
4/09/2014	0:00	36.5	32.5	30.1	25.4	0	70	9
5/09/2014	5/09/2014	36.4	31.6	29.3	25	0	110	8
5/09/2014	2:00	33.8	29.4	27.3	23.8	0	60	13
5/09/2014	3:00	37	30	27.9	23.1	0	80	8
5/09/2014	4:00	38.7	31.8	29.7	24.2	0	90	8
5/09/2014	5:00	38.7	34.4	31.6	26.5	0	70	9
5/09/2014	6:00	41.6	38.8	35.7	30.4	0	60	4
5/09/2014	7:00	45.3	41.5	38.7	33	0	60	5
5/09/2014	8:00	45.4	40.2	37.9	32.4	0	60	2
5/09/2014	9:00	44.7	39.4	37.4	31.1	0	50	8
5/09/2014	10:00	45	38.4	36.9	29.5	0	40	13
5/09/2014	11:00	44.7	38.5	36.3	29.8	0	60	15
5/09/2014	12:00	44.8	39.7	37.2	30	0	50	13
5/09/2014	13:00	44.7	37.9	36.8	28.7	0	50	15
5/09/2014	14:00	44.9	38.3	36.4	29.3	0	30	13
5/09/2014	15:00	45.2	39.5	37.5	29.7	0	30	11
5/09/2014	16:00	48.3	42.8	39.5	32.6	0	270	11
5/09/2014	17:00	48.8	43.2	41.5	34	0	290	11
5/09/2014	18:00	48.4	42.6	40.8	31.6	0	280	11
5/09/2014	19:00	43	38	35.6	29.7	0	290	8
5/09/2014	20:00	40.3	35.7	33.4	27.9	0	0	0
5/09/2014	21:00	39	34.1	32	26.2	0	290	5
5/09/2014	22:00	38.5	34.2	31.9	26.7	0	290	8
5/09/2014	23:00	36.2	33	30.5	26.1	0	290	5
5/09/2014	0:00	35.4	31.5	29.2	25.6	0	290	5

Noise Logging - 2 Redlands Street, Bayswater

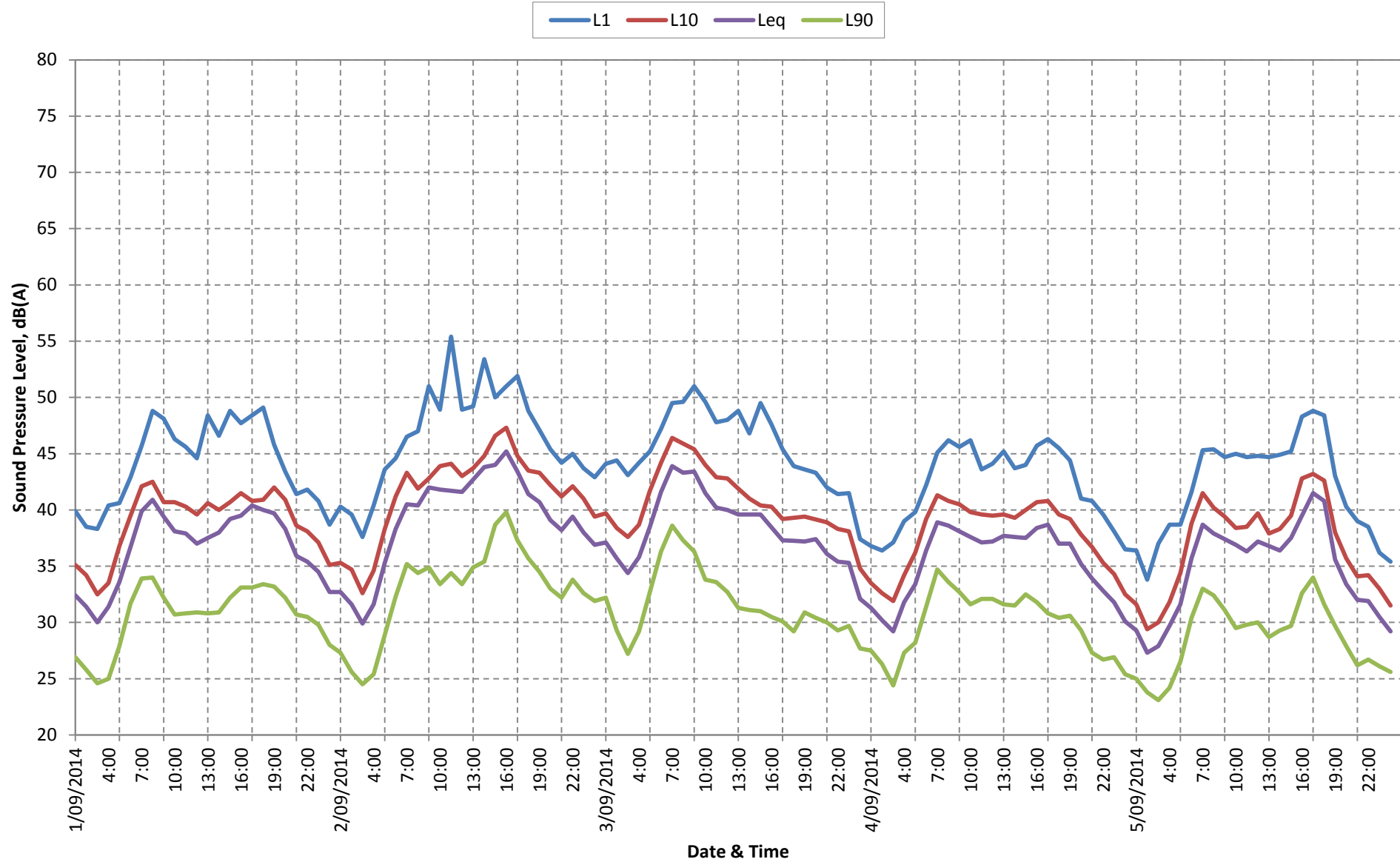


Table A2 – Results of Noise Logging 16 Harvest Road, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
1 September 2014	59.9	56.9	57.8	54.1
2 September 2014	61.6	58.5	59.7	54.6
3 September 2014	61.3	58.3	59.2	55.4
4 September 2014	60.4	57.7	58.8	54.1
5 September 2014	60.5	57.6	58.7	53.9
Weekday Average	60.8	57.8	58.8	54.4

**Photograph A2 – Noise Logger at 16 Harvest Road, Morley**

Traffic Noise Measurement Data

Item	Details
LOCATION	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 16 Harvest St.
Locality	Morley
Occupier	Debra Hallen
Dates	1/9/2014 to 5/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
SITE	
Distance from the microphone to the kerb	45m to road
Height of the road in relation to the ground	+2m
Road surface type	OGA
Speed zone	90 km/hr
Absorbing ground	60%
Angle of view	170
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads tp provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West
Carriageways & lanes.	2,4
COMMENT	
Comment	Solid noise wall (Fibre Cement) between microphone and road Logger placed at front of house, near bedroom window.
REFERENCES	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	16 Harvest Rd MRWA Logger Sheet.xlsx
Raw data file	16 Harvest_sta.csv
EQUIPMENT	
Analyser number	16-004-041
Microphone number	16-004-041
Calibrator number	34883971
Calibrator values	93.9, 93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
WEATHER	
Wind	Wind acceptability based on Mt Lawley Data 1/09/14 - Neg Winds 11-17 km/h from 10am 5pm 2/09/14 - Calm conditions Variable winds under 9km/h 3/09/14 - Variable winds up to 11km/h 4/09/14 - Neg winds 9-15km/h for 13 hours of day 5/09/14 - Variable winds up to 15km/h

Hourly Noise Level Data
16 Harvest Road, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
1/09/2014	1/09/2014	60.2	56.3	52.6	38.1	0	0	0
1/09/2014	2:00	59.2	55.5	51.5	35.9	0	0	0
1/09/2014	3:00	58.7	54	49.9	32.9	0	170	5
1/09/2014	4:00	60.1	55.4	51.7	37.3	0	0	0
1/09/2014	5:00	62	58.8	55	45.2	0	170	5
1/09/2014	6:00	63.9	61.9	59.1	52.4	0	80	5
1/09/2014	7:00	65.05	62.8	60	53.8	0	60	8
1/09/2014	8:00	66.2	63.7	60.9	55.2	0	90	8
1/09/2014	9:00	65.1	61.6	59	52.5	0	80	5
1/09/2014	10:00	63.4	60.6	57.9	51.1	0	80	11
1/09/2014	11:00	63.1	60.3	57.6	51	0	50	17
1/09/2014	12:00	63.7	60.4	57.7	50.2	0	70	13
1/09/2014	13:00	64.3	60.5	57.8	49.4	0	50	15
1/09/2014	14:00	62.4	59.3	56.4	48.2	0	60	15
1/09/2014	15:00	63.2	59.7	56.8	47.5	0	60	15
1/09/2014	16:00	65.9	60.3	56.9	46.7	0	30	13
1/09/2014	17:00	62.6	59.5	56.9	49.6	0	70	13
1/09/2014	18:00	63.6	59.8	57.6	51.3	0	70	9
1/09/2014	19:00	62.9	61.2	58	48.8	0	100	8
1/09/2014	20:00	62.1	59.9	56.7	46.9	0	100	4
1/09/2014	21:00	61.1	58.8	55.5	46.3	0	90	2
1/09/2014	22:00	61.1	58.5	54.9	44.5	0	0	0
1/09/2014	23:00	59.8	57.1	53.7	43.7	0	90	4
1/09/2014	0:00	57.1	54.2	50.7	39.8	0	80	5
2/09/2014	2/09/2014	58.1	54.3	51	36.6	0	80	5
2/09/2014	2:00	58.5	53.8	49.9	32.5	0	80	4
2/09/2014	3:00	59.4	53.7	49.8	31.4	0	150	5
2/09/2014	4:00	60.5	55.9	51.7	36.1	0	100	8
2/09/2014	5:00	62.7	59.4	55.8	45.2	0	100	8
2/09/2014	6:00	64.5	61.8	59.2	52.5	0	90	5
2/09/2014	7:00	65	62.2	59.8	56.5	0	90	2
2/09/2014	8:00	66	62.5	60.3	55.9	0	360	4
2/09/2014	9:00	65.9	62.6	59.9	54.2	0	90	8
2/09/2014	10:00	65.2	62.7	59.8	53.3	0	90	5
2/09/2014	11:00	65.4	62.6	59.7	52	0	90	5
2/09/2014	12:00	64.4	61.2	58.6	50.7	0	90	2
2/09/2014	13:00	67.4	61.3	59.3	51.4	0	90	4
2/09/2014	14:00	67.8	61.6	60.4	52.2	0	40	9
2/09/2014	15:00	66.6	64.2	61.2	53.2	0	340	8
2/09/2014	16:00	67.4	64.5	61.7	54.1	0	280	8
2/09/2014	17:00	65.8	62.5	60.2	54.5	0	260	8
2/09/2014	18:00	64.5	61.9	59.6	54.9	0	260	5
2/09/2014	19:00	64.3	62.2	59.5	52.8	0	250	8
2/09/2014	20:00	63.7	60.9	57.8	47.7	0	250	5
2/09/2014	21:00	62.5	60	57	47.1	0	240	5
2/09/2014	22:00	62.7	59.8	56.7	48.3	0	0	0
2/09/2014	23:00	61.4	59	55.5	46.1	0	0	0
2/09/2014	0:00	60.3	57.3	54.1	43.4	0	0	0
3/09/2014	3/09/2014	59.4	56.3	52.8	41.1	0	0	0
3/09/2014	2:00	60	55.3	51.3	36.1	0	0	0
3/09/2014	3:00	60.1	54.8	50.9	34.3	0	0	0
3/09/2014	4:00	61.5	57.1	52.9	36.8	0	230	5
3/09/2014	5:00	64	60.8	57.1	48.1	0	180	9
3/09/2014	6:00	65	62.8	60.1	53.6	0	180	9
3/09/2014	7:00	67.1	64.9	62.3	57.5	0	170	11
3/09/2014	8:00	67.1	64.6	62.3	56.7	0	170	8
3/09/2014	9:00	67	64.6	61.7	55.2	0	150	9
3/09/2014	10:00	65.6	61.9	59.1	50.7	0	170	11
3/09/2014	11:00	64.8	61.9	58.7	49.6	0	120	8
3/09/2014	12:00	65.1	62.4	59.2	50.3	0	90	8
3/09/2014	13:00	69.8	62	59.1	50	0	140	5
3/09/2014	14:00	65.2	61.8	58.9	50.2	0	130	5
3/09/2014	15:00	63.9	60.9	57.7	48.5	0	120	8
3/09/2014	16:00	62.8	59.8	56.9	48.8	0	60	9
3/09/2014	17:00	64.1	59.3	57.5	50.2	0	60	11
3/09/2014	18:00	61.8	59.3	56.9	51.1	0	70	11
3/09/2014	19:00	62.7	61	58.2	51.1	0	70	8
3/09/2014	20:00	64.3	62.2	58.9	48.2	0	0	0
3/09/2014	21:00	63.5	60.6	57.5	48.3	0	0	0
3/09/2014	22:00	62.5	59.8	56.6	46.6	0	0	0
3/09/2014	23:00	61.8	59.4	56.1	45.9	0	60	4
3/09/2014	0:00	60	57.1	53.3	41	0	60	5

Hourly Noise Level Data
16 Harvest Road, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
4/09/2014	4/09/2014	59.3	55.4	51.5	39.4	0	0	0
4/09/2014	2:00	58.2	53.4	49.4	35.3	0	70	5
4/09/2014	3:00	59.4	53.3	49.2	32.9	0	90	8
4/09/2014	4:00	60	55.4	51.4	37.5	0	90	11
4/09/2014	5:00	62	59.4	55.7	45.7	0	90	13
4/09/2014	6:00	64.8	62.3	59.4	52.2	0	90	9
4/09/2014	7:00	66.3	64	61.3	56.5	0	90	11
4/09/2014	8:00	65.9	63.5	60.9	56.3	0	100	13
4/09/2014	9:00	64.2	62	59.3	54	0	90	11
4/09/2014	10:00	65.3	61	59.6	51.1	0	90	13
4/09/2014	11:00	63.7	61.2	58.3	50.5	0	100	13
4/09/2014	12:00	64.5	61.1	58.3	51.5	0	100	15
4/09/2014	13:00	63.9	60.9	57.9	50	0	110	15
4/09/2014	14:00	64.8	62.1	59.9	50.2	0	110	11
4/09/2014	15:00	66	62.1	60.6	50.9	0	100	11
4/09/2014	16:00	65.9	61.3	59.9	52	0	130	13
4/09/2014	17:00	63.1	60.4	57.9	52.4	0	110	9
4/09/2014	18:00	62	59.6	57	51.2	0	110	8
4/09/2014	19:00	63.5	60.5	57.0	50.1	0	90	5
4/09/2014	20:00	62.4	60.3	56.9	48	0	100	5
4/09/2014	21:00	61.9	58.4	55.9	45.8	0	0	0
4/09/2014	22:00	60.8	57.7	54.5	44	0	100	5
4/09/2014	23:00	59.4	56.8	53.4	43.4	0	130	5
4/09/2014	0:00	58.4	55	51.5	41.1	0	70	9
5/09/2014	5/09/2014	57.7	53.5	49.9	36.5	0	110	8
5/09/2014	2:00	56.8	52.6	48.6	33.5	0	60	13
5/09/2014	3:00	59.8	53	49.5	31.9	0	80	8
5/09/2014	4:00	59.5	54.9	51.6	38.9	0	90	8
5/09/2014	5:00	61.4	58.2	54.6	45.1	0	70	9
5/09/2014	6:00	63.8	61.5	58.9	52	0	60	4
5/09/2014	7:00	64.9	62.5	60.1	55.6	0	60	5
5/09/2014	8:00	64.3	62.2	59.6	54.6	0	60	2
5/09/2014	9:00	64.6	61.4	58.7	53.1	0	50	8
5/09/2014	10:00	62.7	59.8	57.2	50.4	0	40	13
5/09/2014	11:00	64.6	60	58.3	51.9	0	60	15
5/09/2014	12:00	63.5	60.1	57.9	51.9	0	50	13
5/09/2014	13:00	64	59.8	57.8	49.4	0	50	15
5/09/2014	14:00	65.8	60.1	58.1	48.7	0	30	13
5/09/2014	15:00	66.9	61	58.4	51.1	0	30	11
5/09/2014	16:00	66	62.5	59.9	53.8	0	270	11
5/09/2014	17:00	66.3	63.4	60.9	54.8	0	290	11
5/09/2014	18:00	64.7	62	59.8	54.4	0	280	11
5/09/2014	19:00	63.7	61.7	59	52.4	0	290	8
5/09/2014	20:00	63.1	60.5	57.6	50	0	0	0
5/09/2014	21:00	63	59.8	56.6	47.5	0	290	5
5/09/2014	22:00	61.3	58.8	55.8	48.4	0	290	8
5/09/2014	23:00	60.7	58.5	55.3	47.5	0	290	5
5/09/2014	0:00	58.4	55	51.5	41.1	0	290	5

Noise Logging - 16 Harvest Road, Morley

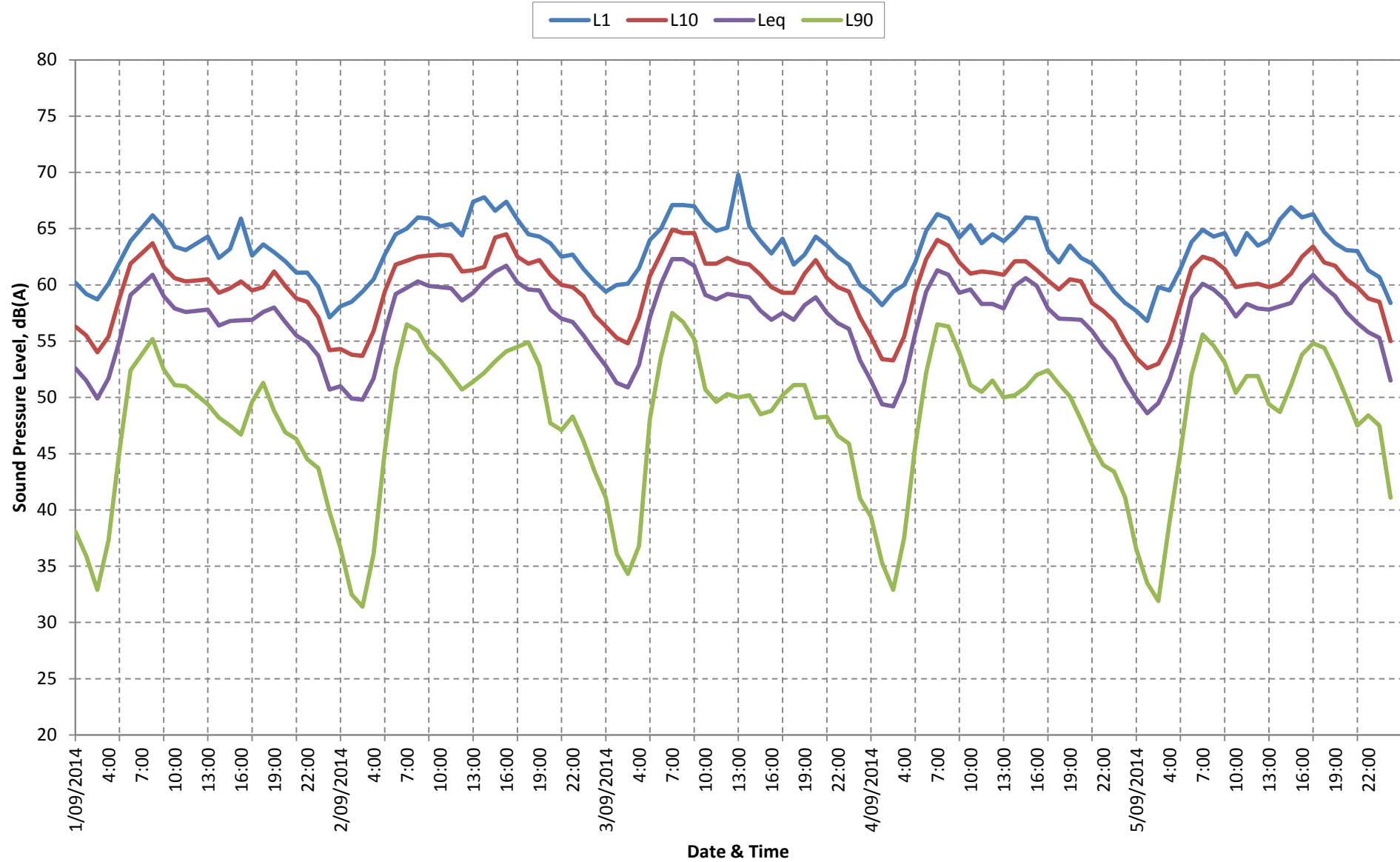


Table A3 – Results of Noise Logging 28A Bruce Road, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
1 September 2014	60.9	57.7	59.1	51.9
2 September 2014	59.9	56.8	57.9	53.2
3 September 2014	60.6	57.3	58.5	53.4
4 September 2014	60.9	58.0	59.0	54.5
5 September 2014	60.1	57.1	58.2	53.3
Weekday Average	60.5	57.4	58.5	53.3



Photograph A3 – Noise Logger at 28A Bruce Road, Morley

Traffic Noise Measurement Data

Item	Details
LOCATION	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 28A Bruce Rd.
Locality	Morley
Occupier	Kaye Bailey 0408082068
Dates	1/9/2014 to 5/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
SITE	
Distance from the microphone to the kerb	25m to Tonkin Hwy
Height of the road in relation to the ground	0m
Road surface type	DGA,
Speed zone	80 km/hr (Near Intersection)
Absorbing ground	70%
Angle of view	150
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	East to Tonkin Hwy
Carriageways & lanes.	2,6;
COMMENT	
Comment	Microphone placed on west façade. Logger placed at Side (South East) of house, away from pool. Rear Property fence between Microphone and Road.
REFERENCES	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	2A Abbey St MRWA Logger Sheet.xlsx
Raw data file	2A Abbey St_sta.csv
EQUIPMENT	
Analyser number	15-203-999
Microphone number	15-203-999
Calibrator number	34883971
Calibrator values	94.0, 93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
WEATHER	
Wind	Wind acceptability based on Mt Lawley Data 1/09/14 - Pos Winds 11-17 km/h from 10am 5pm 2/09/14 - Calm conditions Variable winds under 9km/h 3/09/14 - Variable winds up to 11km/h 4/09/14 - Pos winds 9-15km/h for 13 hours of day 5/09/14 - Variable winds up to 15km/h

Hourly Noise Level Data
28A Bruce Road, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
1/09/2014	1/09/2014	54.3	49.8	47.4	41	0	0	0
1/09/2014	2:00	52.4	48.1	45.6	38	0	0	0
1/09/2014	3:00	56.9	49	46.8	38	0	170	5
1/09/2014	4:00	62	50.9	50.4	40.4	0	0	0
1/09/2014	5:00	63.6	55.7	53.8	45	0	170	5
1/09/2014	6:00	66.3	59.2	56.5	48.9	0	80	5
1/09/2014	7:00	67.4	62.1	58.9	50.2	0	60	8
1/09/2014	8:00	68.1	62.7	59.4	51.1	0	90	8
1/09/2014	9:00	69.8	63	60.1	50.5	0	80	5
1/09/2014	10:00	68.1	63.8	60.5	51.7	0	80	11
1/09/2014	11:00	68.6	63.9	60.4	50.8	0	50	17
1/09/2014	12:00	67.1	63.4	59.5	50.5	0	70	13
1/09/2014	13:00	67.9	63.5	59.9	50.3	0	50	15
1/09/2014	14:00	67.5	63.2	59.5	50.3	0	60	15
1/09/2014	15:00	68	63.3	60.1	50.7	0	60	15
1/09/2014	16:00	69	63.5	60.6	51.7	0	30	13
1/09/2014	17:00	67.1	62.9	60	51.6	0	70	13
1/09/2014	18:00	67.1	61.2	58.6	51.2	0	70	9
1/09/2014	19:00	65.4	59.5	57	49.8	0	100	8
1/09/2014	20:00	63.9	57.6	55.6	48.4	0	100	4
1/09/2014	21:00	61.7	56.9	54.5	48.2	0	90	2
1/09/2014	22:00	61.9	56.6	54.1	47.7	0	0	0
1/09/2014	23:00	60.5	55.3	52.4	45.7	0	90	4
1/09/2014	0:00	59.1	54.1	51.1	43.6	0	80	5
2/09/2014	2/09/2014	58.9	52.6	49.9	41.6	0	80	5
2/09/2014	2:00	57.7	51.6	48.4	38.8	0	80	4
2/09/2014	3:00	60.6	52.4	49.6	37.2	0	150	5
2/09/2014	4:00	61.2	53.9	51.1	41.4	0	100	8
2/09/2014	5:00	64.7	58.4	55.5	47.4	0	100	8
2/09/2014	6:00	65.8	61.2	58.1	50.9	0	90	5
2/09/2014	7:00	67.6	62.9	60.2	54.1	0	90	2
2/09/2014	8:00	67.3	63	60.3	54.2	0	360	4
2/09/2014	9:00	68.1	62.1	59.2	51.3	0	90	8
2/09/2014	10:00	67.4	62	58.5	50.4	0	90	5
2/09/2014	11:00	66.2	62.2	58.4	49.6	0	90	5
2/09/2014	12:00	66.1	62.1	58.3	49.2	0	90	2
2/09/2014	13:00	67.2	62.1	58.7	49.3	0	90	4
2/09/2014	14:00	66.3	61.8	58.3	49	0	40	9
2/09/2014	15:00	67.4	61.3	58.2	49	0	340	8
2/09/2014	16:00	65.6	60.7	57.5	49.2	0	280	8
2/09/2014	17:00	66	60.8	57.7	49.7	0	260	8
2/09/2014	18:00	64.4	59.6	56.8	49	0	260	5
2/09/2014	19:00	63.9	58.6	56.1	48.6	0	250	8
2/09/2014	20:00	63.5	57.7	54.6	46.9	0	250	5
2/09/2014	21:00	61.8	56.6	53.5	46.9	0	240	5
2/09/2014	22:00	61.5	56.2	52.8	47.4	0	0	0
2/09/2014	23:00	59.3	55.2	52	46.2	0	0	0
2/09/2014	0:00	59.7	53.5	51	43.7	0	0	0
3/09/2014	3/09/2014	58.3	53.2	50.5	43.8	0	0	0
3/09/2014	2:00	59	52.4	49.3	39.7	0	0	0
3/09/2014	3:00	59.9	52.1	49.4	39.9	0	0	0
3/09/2014	4:00	60.8	53.7	50.9	41.2	0	230	5
3/09/2014	5:00	63.1	57.3	54.6	48.2	0	180	9
3/09/2014	6:00	65.4	60.6	57.7	51.6	0	180	9
3/09/2014	7:00	66.6	62.3	59.9	54.7	0	170	11
3/09/2014	8:00	67.3	62.2	59.6	53.7	0	170	8
3/09/2014	9:00	67.5	62.4	59.5	51.5	0	150	9
3/09/2014	10:00	67.2	62	58.7	49.8	0	170	11
3/09/2014	11:00	66.1	61.7	58.2	48.9	0	120	8
3/09/2014	12:00	66.3	61.7	58.7	49.2	0	90	8
3/09/2014	13:00	67.2	61.8	58.4	47.9	0	140	5
3/09/2014	14:00	67.3	61.9	58.7	48.9	0	130	5
3/09/2014	15:00	67.5	62.8	59.2	50.2	0	120	8
3/09/2014	16:00	66.9	62.3	59.2	51	0	60	9
3/09/2014	17:00	67.2	62.5	59.8	51.9	0	60	11
3/09/2014	18:00	65.9	61.5	58.7	51.7	0	70	11
3/09/2014	19:00	64.4	59.6	56.8	50.1	0	70	8
3/09/2014	20:00	64	58.6	56	49.8	0	0	0
3/09/2014	21:00	62.7	57.9	55.2	49.9	0	0	0
3/09/2014	22:00	61.2	57.4	54.4	49	0	0	0
3/09/2014	23:00	62.6	56.6	54.2	48.7	0	60	4
3/09/2014	0:00	60.7	56.4	53.4	47.2	0	60	5

Hourly Noise Level Data
28A Bruce Road, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
4/09/2014	4/09/2014	60.2	55.3	52.4	44.8	0	0	0
4/09/2014	2:00	60.6	53.7	50.8	41.7	0	70	5
4/09/2014	3:00	61.6	53.2	50.5	39.8	0	90	8
4/09/2014	4:00	63.2	55.3	52.9	44.8	0	90	11
4/09/2014	5:00	64.1	58.7	56.1	49.5	0	90	13
4/09/2014	6:00	65.9	62.3	59.3	52.9	0	90	9
4/09/2014	7:00	66.4	62.6	59.8	54.1	0	90	11
4/09/2014	8:00	66.8	62.9	60.2	55.2	0	100	13
4/09/2014	9:00	66.5	62.5	59.6	53.4	0	90	11
4/09/2014	10:00	66.4	62.6	59.4	52.3	0	90	13
4/09/2014	11:00	67.4	62.3	59.2	51.4	0	100	13
4/09/2014	12:00	67.3	63	59.8	51.8	0	100	15
4/09/2014	13:00	67.4	63.1	59.7	51.4	0	110	15
4/09/2014	14:00	66.3	62.6	59.3	51.5	0	110	11
4/09/2014	15:00	66.2	62.5	59.3	51.4	0	100	11
4/09/2014	16:00	67.5	62.7	59.8	52.1	0	130	13
4/09/2014	17:00	67.4	62.1	59.6	52.3	0	110	9
4/09/2014	18:00	65.7	61.2	58.4	51.1	0	110	8
4/09/2014	19:00	68.5	60.4	58.9	50	0	90	5
4/09/2014	20:00	63	58.4	55.7	48.4	0	100	5
4/09/2014	21:00	67.5	58.2	56.8	47.8	0	0	0
4/09/2014	22:00	63.6	57.5	55.7	47.6	0	100	5
4/09/2014	23:00	62.6	57.1	54.6	47.4	0	130	5
4/09/2014	0:00	59.8	54.2	51.2	44.1	0	70	9
5/09/2014	5/09/2014	60.2	54.1	51.1	42.8	0	110	8
5/09/2014	2:00	57.5	51.4	48.5	39.3	0	60	13
5/09/2014	3:00	61.7	52.1	50.1	38.2	0	80	8
5/09/2014	4:00	62.4	54.7	52.7	43.1	0	90	8
5/09/2014	5:00	62.6	56.6	53.9	46.8	0	70	9
5/09/2014	6:00	65.1	60.7	57.5	50.6	0	60	4
5/09/2014	7:00	66.7	61.9	58.9	52.1	0	60	5
5/09/2014	8:00	68.2	63	60.3	53.6	0	60	2
5/09/2014	9:00	67.3	62.3	59.3	51.9	0	50	8
5/09/2014	10:00	67.3	62.8	59.3	51.4	0	40	13
5/09/2014	11:00	69	62.7	59.9	50.7	0	60	15
5/09/2014	12:00	67.2	62.5	59.1	49.6	0	50	13
5/09/2014	13:00	67	62.4	59	50	0	50	15
5/09/2014	14:00	66.4	61.5	58.3	50	0	30	13
5/09/2014	15:00	66.2	60.8	57.8	49.9	0	30	11
5/09/2014	16:00	66	60	57.2	49.5	0	270	11
5/09/2014	17:00	65.5	59.7	56.8	50.1	0	290	11
5/09/2014	18:00	64.4	59	57	49.6	0	280	11
5/09/2014	19:00	65.1	59.3	56.5	48.7	0	290	8
5/09/2014	20:00	64.1	57.8	57	47.3	0	0	0
5/09/2014	21:00	65	58.4	56.1	47.6	0	290	5
5/09/2014	22:00	63	56.6	54	47.6	0	290	8
5/09/2014	23:00	61.3	55.6	53.3	46.4	0	290	5
5/09/2014	0:00	61.9	55.1	53.2	45.5	0	290	5

Noise Logging - 28A Bruce Road, Morley

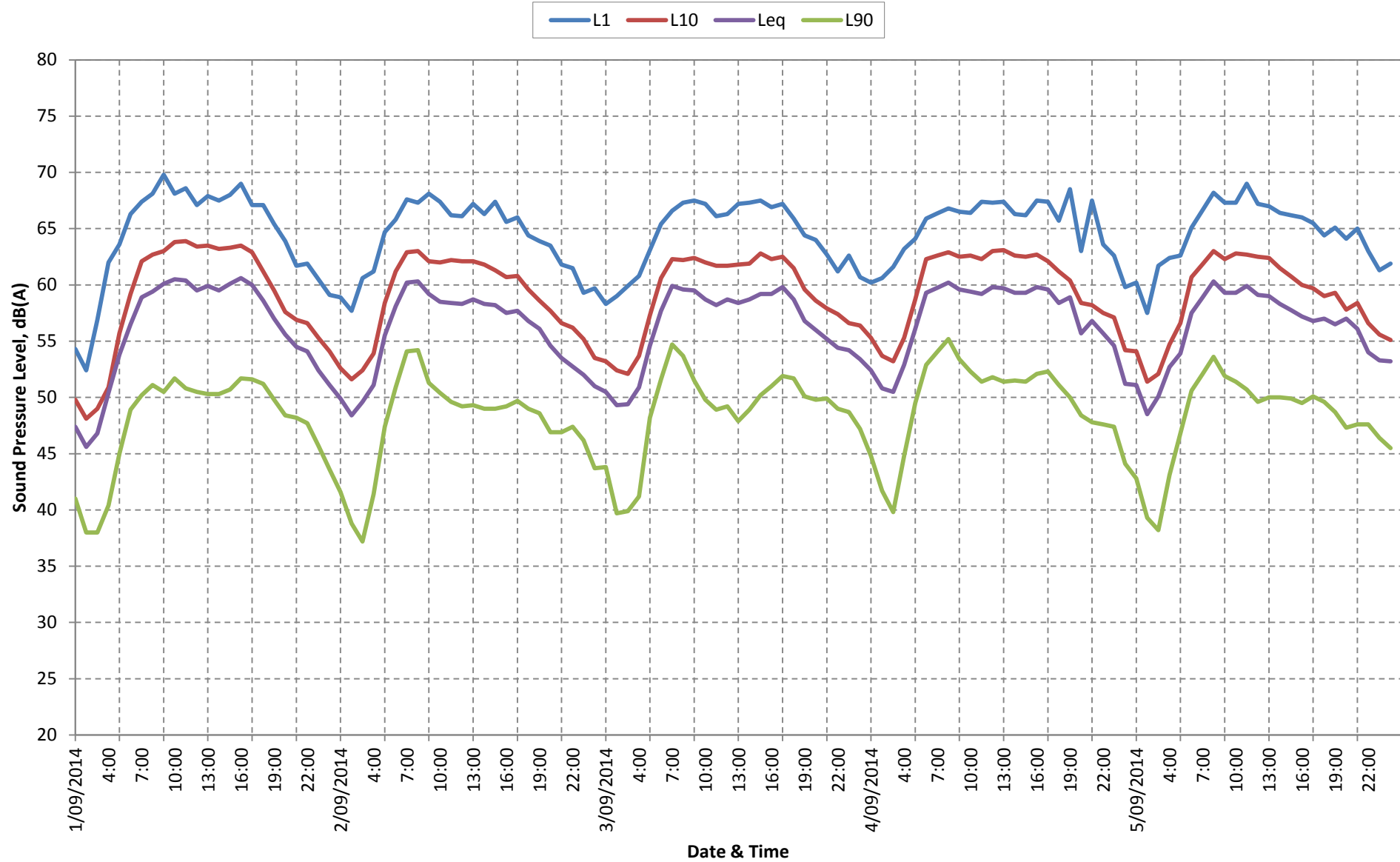


Table A4 – Results of Noise Logging 2A Abbey St, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
1 September 2014	61.0	57.2	58.5	52.1
2 September 2014	62.0	58.2	59.6	52.4
3 September 2014	61.8	57.8	59.0	53.5
4 September 2014	61.6	57.7	59.0	52.1
5 September 2014	61.8	57.9	59.2	52.6
Weekday Average	61.6	57.7	59.0	52.5

**Photograph A4 – Noise Logger at 2A Abbey St, Morley**

Traffic Noise Measurement Data

Item	Details
LOCATION	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 2A Abbey St.
Locality	Morley
Occupier	Warren Fayers (Tenant)
Dates	1/9/2014 to 5/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
SITE	
Distance from the microphone to the kerb	140m to Tonkin Hwy, 15m to Morley Dr
Height of the road in relation to the ground	+2m
Road surface type	OGA on Tonkin Hwy, DGA on Morley Dr
Speed zone	90 km/hr (Tonkin Hwy), 70 km/hr (Morley Hwy)
Absorbing ground	60%,30%
Angle of view	150 (Tonkin Hwy), 80 (Morley Dr)
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West to Tonkin Hwy, South to Morley Dr
Carriageways & lanes.	2,6 (Tonkin); 2,4 (Morley)
COMMENT	
Comment	Microphone placed on west façade. Logger placed at front of house, near bedroom window.
REFERENCES	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	2A Abbey St MRWA Logger Sheet.xlsx
Raw data file	2A Abbey St_sta.csv
EQUIPMENT	
Analyser number	87803E
Microphone number	87803E
Calibrator number	34883971
Calibrator values	94.0, 94
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
WEATHER	
Wind	Wind acceptability based on Mt Lawley Data 1/09/14 - Neg Winds 11-17 km/h from 10am 5pm 2/09/14 - Calm conditions Variable winds under 9km/h 3/09/14 - Variable winds up to 11km/h 4/09/14 - Variable winds 9-15km/h for 13 hours of day 5/09/14 - Variable winds up to 15km/h

Hourly Noise Level Data
2A Abbey Street, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
1/09/2014	1/09/2014	62.7	51.7	50.7	40.6	0	0	0
1/09/2014	2:00	60	49.7	48.7	37.7	0	0	0
1/09/2014	3:00	60.1	49.7	48.9	35.1	0	170	5
1/09/2014	4:00	62.8	51.4	50.3	37.2	0	0	0
1/09/2014	5:00	62.2	54.1	51.6	42.1	0	170	5
1/09/2014	6:00	65.8	59.2	56.3	47	0	80	5
1/09/2014	7:00	68.2	62.2	57.8	52.5	0	60	8
1/09/2014	8:00	67.3	62.5	59.2	52.1	0	90	8
1/09/2014	9:00	67.3	62.4	58.8	51.1	0	80	5
1/09/2014	10:00	67.3	61.7	58.2	49.5	0	80	11
1/09/2014	11:00	68.1	61.3	58.2	48.5	0	50	17
1/09/2014	12:00	68.6	61.9	58.5	49.4	0	70	13
1/09/2014	13:00	69.1	62.5	58.8	49.1	0	50	15
1/09/2014	14:00	66.8	61.9	58.4	48.8	0	60	15
1/09/2014	15:00	67	62.6	58.5	49.9	0	60	15
1/09/2014	16:00	67.2	63.1	60.3	51	0	30	13
1/09/2014	17:00	68.2	63.3	59.6	50.8	0	70	13
1/09/2014	18:00	68	63.7	60.6	51	0	70	9
1/09/2014	19:00	66.4	62.2	58	49.3	0	100	8
1/09/2014	20:00	65.9	60.9	56.6	46.8	0	100	4
1/09/2014	21:00	65.9	59.5	55.7	45.3	0	90	2
1/09/2014	22:00	65.5	58.2	55.3	43.7	0	0	0
1/09/2014	23:00	65.2	55.9	53.8	42.1	0	90	4
1/09/2014	0:00	62.9	52.6	50.5	38.3	0	80	5
2/09/2014	2/09/2014	62.3	50.6	49.6	36.9	0	80	5
2/09/2014	2:00	58.9	47.6	47	35.2	0	80	4
2/09/2014	3:00	60.2	49.1	47.9	34.6	0	150	5
2/09/2014	4:00	59.6	50.9	49.2	36.9	0	100	8
2/09/2014	5:00	61.6	54.3	51.6	43	0	100	8
2/09/2014	6:00	65.6	59.1	56.4	48.3	0	90	5
2/09/2014	7:00	67.8	61.8	58.8	51.9	0	90	2
2/09/2014	8:00	67.4	62.1	58.8	52.2	0	360	4
2/09/2014	9:00	67.2	62.5	59.1	52.1	0	90	8
2/09/2014	10:00	67.4	62.3	58.9	50.9	0	90	5
2/09/2014	11:00	67.6	62.4	59.2	50.9	0	90	5
2/09/2014	12:00	67.5	62.4	58.8	49.9	0	90	2
2/09/2014	13:00	67.2	62.4	58.6	50	0	90	4
2/09/2014	14:00	67.9	62.8	59.7	50.4	0	40	9
2/09/2014	15:00	68.2	64.2	61.3	54.2	0	340	8
2/09/2014	16:00	69	64.9	61.8	56.1	0	280	8
2/09/2014	17:00	69.5	64.7	61.8	55.1	0	260	8
2/09/2014	18:00	67.4	63.8	60.3	54.2	0	260	5
2/09/2014	19:00	67.7	63.4	60.1	52.1	0	250	8
2/09/2014	20:00	67.1	61.5	57.8	49.1	0	250	5
2/09/2014	21:00	66.8	60.8	57.4	48.6	0	240	5
2/09/2014	22:00	66.8	60.1	57.8	48.6	0	0	0
2/09/2014	23:00	65.1	57.5	54.8	46.3	0	0	0
2/09/2014	0:00	64.6	55.7	53.6	44.2	0	0	0
3/09/2014	3/09/2014	61.6	53.4	51.5	43.7	0	0	0
3/09/2014	2:00	60.9	51.8	50.1	39.6	0	0	0
3/09/2014	3:00	61.4	51.5	50	38.7	0	0	0
3/09/2014	4:00	61.2	52.8	50.9	40.4	0	230	5
3/09/2014	5:00	63.3	56.6	54.2	47.6	0	180	9
3/09/2014	6:00	65.4	59.8	57.3	51.9	0	180	9
3/09/2014	7:00	68.5	63.2	60.5	55.7	0	170	11
3/09/2014	8:00	68.5	63.9	60.9	55.3	0	170	8
3/09/2014	9:00	68.3	63.5	60.2	54.4	0	150	9
3/09/2014	10:00	67.9	62.4	59	50.5	0	170	11
3/09/2014	11:00	67	62	58.1	49.1	0	120	8
3/09/2014	12:00	67.6	62.2	58.7	49.2	0	90	8
3/09/2014	13:00	67.2	62.4	58.5	49	0	140	5
3/09/2014	14:00	67.5	62.7	59.1	49.4	0	130	5
3/09/2014	15:00	67.5	62.5	58.8	49.6	0	120	8
3/09/2014	16:00	67.2	62.9	59.3	50.7	0	60	9
3/09/2014	17:00	68.3	62.8	59.0	50.8	0	60	11
3/09/2014	18:00	66.7	62.7	58.6	50.1	0	70	11
3/09/2014	19:00	67.2	63.1	58.8	50	0	70	8
3/09/2014	20:00	67.5	61.5	58.5	49	0	0	0
3/09/2014	21:00	67.2	60.8	57.1	47.7	0	0	0
3/09/2014	22:00	66.4	60.5	56.6	46.7	0	0	0
3/09/2014	23:00	65.7	58.2	55	45.2	0	60	4
3/09/2014	0:00	64.9	54.8	52.8	42.4	0	60	5

Hourly Noise Level Data
2A Abbey Street, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
4/09/2014	4/09/2014	62.5	50.6	50.3	40.1	0	0	0
4/09/2014	2:00	60.4	49	47.8	36.1	0	70	5
4/09/2014	3:00	60.8	49.6	48.1	35	0	90	8
4/09/2014	4:00	61.3	51.1	50	38.4	0	90	11
4/09/2014	5:00	62.7	53.9	51.7	43.4	0	90	13
4/09/2014	6:00	65.6	58.5	55.9	48.4	0	90	9
4/09/2014	7:00	68.2	62.3	59.1	52.5	0	90	11
4/09/2014	8:00	67.9	62.3	58.9	52.1	0	100	13
4/09/2014	9:00	66.8	61.8	58.1	51.2	0	90	11
4/09/2014	10:00	67.7	61.8	58.5	49.4	0	90	13
4/09/2014	11:00	69.5	63	59.4	48.3	0	100	13
4/09/2014	12:00	67.1	62.5	59	50.8	0	100	15
4/09/2014	13:00	67.2	61.7	58.1	48.1	0	110	15
4/09/2014	14:00	67.9	61.6	59	48.7	0	110	11
4/09/2014	15:00	69.3	63.1	59.6	50.5	0	100	11
4/09/2014	16:00	68.8	63.3	60	51.5	0	130	13
4/09/2014	17:00	70.2	63.6	60.2	52.6	0	110	9
4/09/2014	18:00	71.5	63.8	60.4	50.1	0	110	8
4/09/2014	19:00	68.5	63.3	59.5	49.8	0	90	5
4/09/2014	20:00	68.8	61.6	58.3	46.9	0	100	5
4/09/2014	21:00	67.7	61.2	57.8	45.2	0	0	0
4/09/2014	22:00	66.4	60.3	56.7	43.8	0	100	5
4/09/2014	23:00	65.8	57.2	54.3	41.7	0	130	5
4/09/2014	0:00	64.1	54	51.8	38.8	0	70	9
5/09/2014	5/09/2014	63.5	52	50.5	36.5	0	110	8
5/09/2014	2:00	60.1	47.2	45.8	33.7	0	60	13
5/09/2014	3:00	60.9	49.5	47.0	33.1	0	80	8
5/09/2014	4:00	60	49.8	48.2	37.3	0	90	8
5/09/2014	5:00	61.6	53.6	51.1	41.2	0	70	9
5/09/2014	6:00	65.7	58.2	55.8	47	0	60	4
5/09/2014	7:00	67.2	61.2	58.2	50.7	0	60	5
5/09/2014	8:00	68.1	62.6	58.9	51.6	0	60	2
5/09/2014	9:00	67.8	63	58.5	51.6	0	50	8
5/09/2014	10:00	67.4	61	58.1	48.5	0	40	13
5/09/2014	11:00	67.1	61.2	58.2	49.7	0	60	15
5/09/2014	12:00	67	61.5	58.3	49.7	0	50	13
5/09/2014	13:00	68.4	62.4	58.8	49.7	0	50	15
5/09/2014	14:00	67.4	61.6	58.5	49.1	0	30	13
5/09/2014	15:00	67.2	62.3	58.9	51.3	0	30	11
5/09/2014	16:00	68.9	64.2	61	53.9	0	270	11
5/09/2014	17:00	70.7	64.2	61.9	54.9	0	290	11
5/09/2014	18:00	69.6	64.1	61.8	54.4	0	280	11
5/09/2014	19:00	67.4	62.7	59.2	51.6	0	290	8
5/09/2014	20:00	67.2	61.4	57.8	48.2	0	0	0
5/09/2014	21:00	67.6	61.2	57.6	47.6	0	290	5
5/09/2014	22:00	66.1	60.3	56.7	47.3	0	290	8
5/09/2014	23:00	66.1	58.9	56.1	45.5	0	290	5
5/09/2014	0:00	65.3	57.8	54.6	43.5	0	290	5

Noise Logging - 2A Abbey Street, Morley

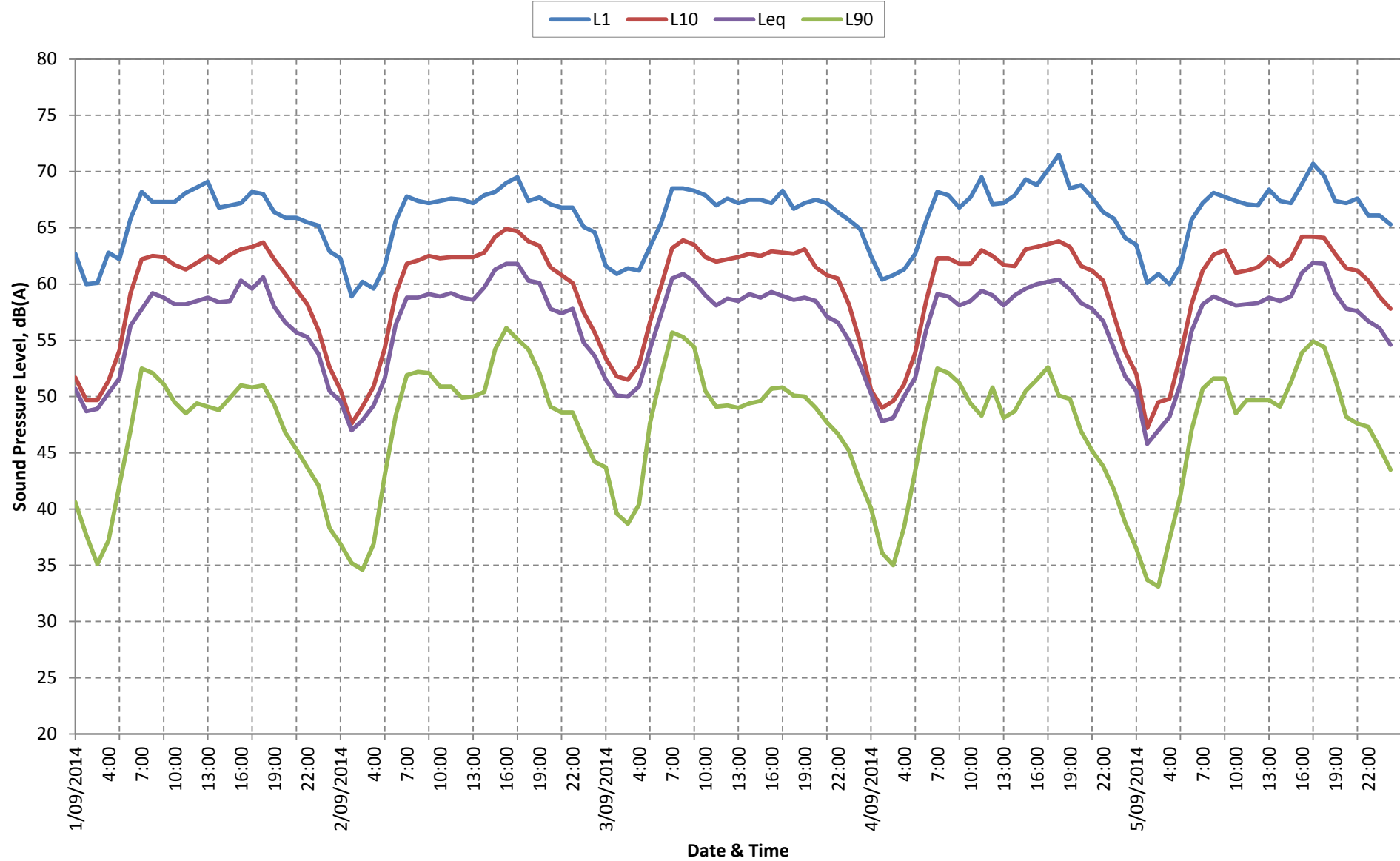


Table A5 – Results of Noise Logging 9 Clandon Way, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
1 September 2014	59.3	56.7	57.8	52.7
2 September 2014	59.1	56.3	57.5	52.1
3 September 2014	59.8	57.1	58.2	53.9
4 September 2014	59.8	57.2	58.3	53.7
5 September 2014	59.1	56.5	57.7	52.2
Weekday Average	59.4	56.8	57.9	52.9

**Photograph A5 – Noise Logger at 9 Clandon Way, Morley**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 9 Clandon Way.
Locality	Morley
Occupier	Mike Williamson 92767107
Dates	1/9/2014 to 5/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	35m to Morley Dr
Height of the road in relation to the ground	0m
Road surface type	DGA
Speed zone	70 km/hr (Near Intersection)
Absorbing ground	50%
Angle of view	170
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	South to Morley Dr
Carriageways & lanes.	2,4;
<i>COMMENT</i>	
Comment	Microphone placed on South façade at front of house Clear line of sight to Road.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	9 Clandon Way MRWA Logger Sheet.xlsx
Raw data file	9 Clandon 16-707-043_sta.csv
<i>EQUIPMENT</i>	
Analyser number	16-707-043
Microphone number	16-707-043
Calibrator number	34883971
Calibrator values	93.9, 93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 1/09/14 - Negative Winds 11-17 km/h from 10am 5pm 2/09/14 - Calm conditions Variable winds under 9km/h 3/09/14 - Variable winds up to 11km/h 4/09/14 - Variable winds 9-15km/h for 13 hours of day 5/09/14 - Negative winds up to 15km/h

Hourly Noise Level Data
9 Clandon Way, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
1/09/2014	1/09/2014	59.1	53.8	51	45.1	0	0	0
1/09/2014	2:00	56.8	52.1	49.2	42.3	0	0	0
1/09/2014	3:00	58.2	51.3	48.9	41.4	0	170	5
1/09/2014	4:00	59.4	53.5	50.6	43	0	0	0
1/09/2014	5:00	62.5	56.7	54.1	47.7	0	170	5
1/09/2014	6:00	64.4	60.4	57.6	52.2	0	80	5
1/09/2014	7:00	66.5	61.3	59	54.3	0	60	8
1/09/2014	8:00	66.8	61.6	59.3	54.9	0	90	8
1/09/2014	9:00	67.4	61.6	59.4	54.8	0	80	5
1/09/2014	10:00	66.4	60.7	58.8	52.4	0	80	11
1/09/2014	11:00	64.8	60	57.6	52	0	50	17
1/09/2014	12:00	65.1	60.2	57.5	51.7	0	70	13
1/09/2014	13:00	66.2	61.1	58.4	52.4	0	50	15
1/09/2014	14:00	65.7	60.8	58.0	51.6	0	60	15
1/09/2014	15:00	65.1	60.4	57.6	51.9	0	60	15
1/09/2014	16:00	67.3	60.7	58.6	53	0	30	13
1/09/2014	17:00	65	60.2	57.8	52.9	0	70	13
1/09/2014	18:00	68.1	60.1	57.7	52.5	0	70	9
1/09/2014	19:00	65.3	59.1	57.6	52	0	100	8
1/09/2014	20:00	63.5	58.2	55.7	50.2	0	100	4
1/09/2014	21:00	61	56.7	54.4	49.3	0	90	2
1/09/2014	22:00	61.9	56.9	54.3	48.2	0	0	0
1/09/2014	23:00	60.5	55.2	52.1	44.5	0	90	4
1/09/2014	0:00	58.5	52.4	49.6	42.3	0	80	5
2/09/2014	2/09/2014	58.6	51.5	49.6	41.1	0	80	5
2/09/2014	2:00	57	50.2	47.3	39.6	0	80	4
2/09/2014	3:00	56.4	51	47.6	38.7	0	150	5
2/09/2014	4:00	58.2	52.2	49	41	0	100	8
2/09/2014	5:00	61.4	56.1	53.1	46.6	0	100	8
2/09/2014	6:00	63.2	59.7	56.8	51	0	90	5
2/09/2014	7:00	66.6	61.3	58.8	53.9	0	90	2
2/09/2014	8:00	67.2	61.3	59.2	54.3	0	360	4
2/09/2014	9:00	66.4	60.5	58.4	52.7	0	90	8
2/09/2014	10:00	65.1	60	57.1	50.7	0	90	5
2/09/2014	11:00	65	59.9	57.4	51	0	90	5
2/09/2014	12:00	65.7	60.1	57.6	50.2	0	90	2
2/09/2014	13:00	65.7	59.7	57.1	49.8	0	90	4
2/09/2014	14:00	64.1	59.1	56.3	49.5	0	40	9
2/09/2014	15:00	65.7	59.7	57.4	51.1	0	340	8
2/09/2014	16:00	66.4	60.2	57.9	52.7	0	280	8
2/09/2014	17:00	66.1	60.1	58.3	52.4	0	260	8
2/09/2014	18:00	66.3	60.1	58.2	52.4	0	260	5
2/09/2014	19:00	65.3	59.3	57.1	52.2	0	250	8
2/09/2014	20:00	63.7	58.4	56	50.2	0	250	5
2/09/2014	21:00	63	57.6	55.4	50.2	0	240	5
2/09/2014	22:00	61.8	57.1	55	50.4	0	0	0
2/09/2014	23:00	60.5	55.7	53.3	48.1	0	0	0
2/09/2014	0:00	59.7	53.9	51	44.7	0	0	0
3/09/2014	3/09/2014	59.3	54.1	51.7	45.3	0	0	0
3/09/2014	2:00	59.6	53.3	50.4	42.1	0	0	0
3/09/2014	3:00	58.4	52.9	49.8	42	0	0	0
3/09/2014	4:00	59	54.1	50.9	43.4	0	230	5
3/09/2014	5:00	61.3	57.1	54.6	50.1	0	180	9
3/09/2014	6:00	64.1	60.9	58.3	53.6	0	180	9
3/09/2014	7:00	67	61.8	60	56.9	0	170	11
3/09/2014	8:00	67.5	61.9	60.1	56.1	0	170	8
3/09/2014	9:00	68.5	62.1	59.9	55.3	0	150	9
3/09/2014	10:00	66.9	60.9	58.6	51.7	0	170	11
3/09/2014	11:00	67.4	60.6	58.1	51.5	0	120	8
3/09/2014	12:00	65.9	60.3	57.9	51.3	0	90	8
3/09/2014	13:00	66	59.8	57.4	49.6	0	140	5
3/09/2014	14:00	67	60.5	58	50.7	0	130	5
3/09/2014	15:00	66.2	60.4	58.2	52	0	120	8
3/09/2014	16:00	68.4	60.3	58.3	53	0	60	9
3/09/2014	17:00	67.1	60.2	58.4	52.8	0	60	11
3/09/2014	18:00	65.2	60	57.6	52.7	0	70	11
3/09/2014	19:00	64.7	59.2	56.8	51.3	0	70	8
3/09/2014	20:00	64	59	56.5	51.1	0	0	0
3/09/2014	21:00	63.6	58.5	56.7	51.6	0	0	0
3/09/2014	22:00	62.2	57.6	55.2	50.2	0	0	0
3/09/2014	23:00	61.8	57	54.6	49.8	0	60	4
3/09/2014	0:00	60.7	55.5	53.4	47.4	0	60	5

Hourly Noise Level Data
9 Clandon Way, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
4/09/2014	4/09/2014	59.3	54.4	52	45.7	0	0	0
4/09/2014	2:00	58	52.2	49.2	41.5	0	70	5
4/09/2014	3:00	58.7	51.7	48.8	39.8	0	90	8
4/09/2014	4:00	60.8	53.8	51.5	44.3	0	90	11
4/09/2014	5:00	63.3	57.2	54.7	48.4	0	90	13
4/09/2014	6:00	64.8	61.4	58.8	53.6	0	90	9
4/09/2014	7:00	67.3	61.4	59.0	57.3	0	90	11
4/09/2014	8:00	65.5	61.3	59.1	55.3	0	100	13
4/09/2014	9:00	66.1	60.7	58.5	54.2	0	90	11
4/09/2014	10:00	70.7	62.4	59.5	54.1	0	90	13
4/09/2014	11:00	68.3	62	59.1	53.2	0	100	13
4/09/2014	12:00	65.9	61	58.6	53.5	0	100	15
4/09/2014	13:00	65.6	60.6	58.2	52.9	0	110	15
4/09/2014	14:00	68.6	61.0	59.7	53	0	110	11
4/09/2014	15:00	68.6	61.3	59.6	53.4	0	100	11
4/09/2014	16:00	67.8	61	58.9	53.6	0	130	13
4/09/2014	17:00	66.5	60.2	58.1	53	0	110	9
4/09/2014	18:00	66.2	60.9	58.1	51.9	0	110	8
4/09/2014	19:00	64.8	59.7	56.9	51.3	0	90	5
4/09/2014	20:00	63.4	58.4	55.6	49.1	0	100	5
4/09/2014	21:00	65.9	58.1	56	48	0	0	0
4/09/2014	22:00	62.9	57.3	55.0	47.8	0	100	5
4/09/2014	23:00	62.3	56.2	53.9	47.6	0	130	5
4/09/2014	0:00	59.4	53.4	50.6	43.2	0	70	9
5/09/2014	5/09/2014	59.6	52.3	50.6	40.8	0	110	8
5/09/2014	2:00	55.5	49.3	46	37.1	0	60	13
5/09/2014	3:00	58.2	49.4	46.8	37	0	80	8
5/09/2014	4:00	58.4	51.7	48.3	38.5	0	90	8
5/09/2014	5:00	60.6	54.9	51.7	43.4	0	70	9
5/09/2014	6:00	63.7	60.3	57.1	49.4	0	60	4
5/09/2014	7:00	65.2	60.6	58.1	53	0	60	5
5/09/2014	8:00	67.1	60.9	58.4	52.8	0	60	2
5/09/2014	9:00	66	60.1	58.3	52	0	50	8
5/09/2014	10:00	65.6	60.4	57.8	51.6	0	40	13
5/09/2014	11:00	67.9	60.3	58.1	50.6	0	60	15
5/09/2014	12:00	66.5	59.6	57.7	50.4	0	50	13
5/09/2014	13:00	66.6	59.5	57.6	50.4	0	50	15
5/09/2014	14:00	65.3	59.3	57.4	50.4	0	30	13
5/09/2014	15:00	67.7	59.8	58	50.7	0	30	11
5/09/2014	16:00	68.5	61.1	58.5	51.6	0	270	11
5/09/2014	17:00	68.9	60.7	58.8	51.2	0	290	11
5/09/2014	18:00	66.2	59.6	58.2	50.2	0	280	11
5/09/2014	19:00	66.9	58.9	57.4	52.1	0	290	8
5/09/2014	20:00	65.2	58.2	56.6	47.7	0	0	0
5/09/2014	21:00	65.9	57.9	55.3	46.4	0	290	5
5/09/2014	22:00	65.6	57.3	54.4	46.1	0	290	8
5/09/2014	23:00	61.3	55.7	53.5	43.9	0	290	5
5/09/2014	0:00	62.4	54.7	52.2	42.4	0	290	5

Noise Logging - 9 Clandon Way, Morley

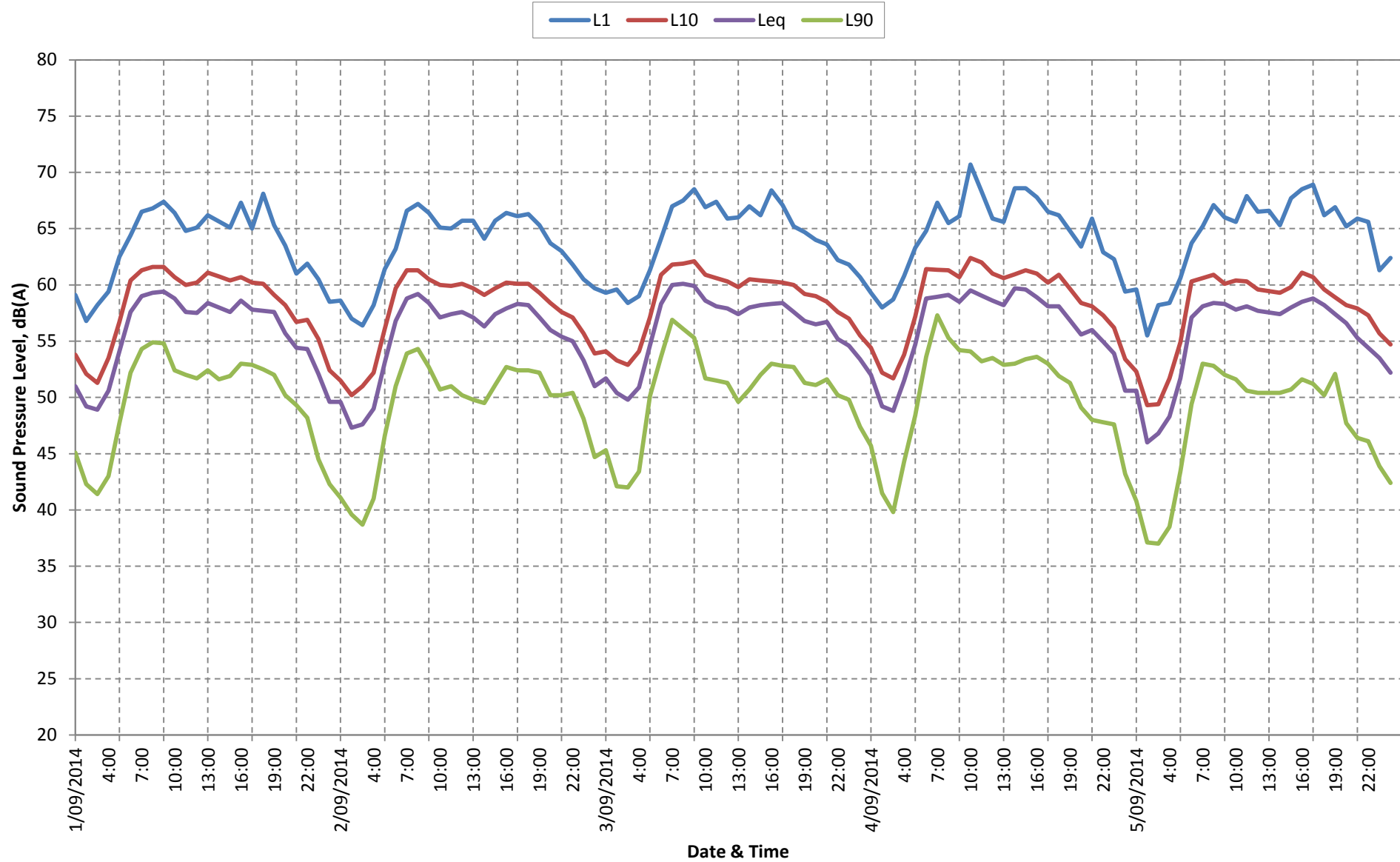


Table A6 – Results of Noise Logging 48 Alfreda Avenue, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
8 September 2014*	60.6	58.3	58.5	57.9
9 September 2014	58.5	55.7	56.7	52.3
10 September 2014	58.6	55.1	56.1	52.2
11 September 2014	60.0	56.6	57.6	53.9
12 September 2014	60.2	57.1	57.9	55.2
Weekday Average	59.3	56.1	57.1	53.4

*Day excluded from the Average due to unacceptable weather conditions.

**Photograph A6 – Noise Logger at 48 Alfreda Avenue, Morley**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	48 Alfreda Way.
Locality	Morley
Occupier	Marco Comito 0438990059
Dates	8/9/2014 to 12/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	70m to Tonkin Hwy
Height of the road in relation to the ground	0m
Road surface type	DGA
Speed zone	90 km/hr
Absorbing ground	80%
Angle of view	180
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	East
Carriageways & lanes.	2,4;
<i>COMMENT</i>	
Comment	Microphone placed on East façade at front of house Vegetation buffer between Alfreda Ave and Tonkin Hwy.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	48 Alfreda Ave MRWA Logger Sheet.xlsx
Raw data file	48 Alfreda 15-301-468_sta.csv
<i>EQUIPMENT</i>	
Analyser number	15-301-468
Microphone number	15-301-468
Calibrator number	34883971
Calibrator values	94.0, 93.6
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 8/09/14 - High Neg Winds up to 30 km/h All day, some showers, excluded 9/09/14 - Negs winds up to 18km/h in morning, Avg 13 km/h Neg wind during 10/09/14 - Neg winds up to 13km/h, one hour at 15km/h 11/09/14 - Variable winds up to 13km/h 12/09/14 - Negative winds up to 18km/h

Hourly Noise Level Data
48 Alfreda Ave, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
8/09/2014	8/09/2014	67.2	62.7	59.5	53.2	0.4	260	30
8/09/2014	2:00	65.9	61.1	57.6	50.8	0.2	270	26
8/09/2014	3:00	69.8	61.8	59.3	50.6	0	270	21
8/09/2014	4:00	66.5	62	58.8	52.2	0.6	260	31
8/09/2014	5:00	65.7	61.2	58.3	52.6	0	260	22
8/09/2014	6:00	65	61.5	58.7	53	0.2	260	24
8/09/2014	7:00	64.1	61.8	58.8	52.9	0	260	22
8/09/2014	8:00	63.9	60.8	57.8	50.5	0	260	22
8/09/2014	9:00	65.1	60.6	57.6	48.8	0	270	13
8/09/2014	10:00	64.4	60.9	57.9	50.7	0	270	18
8/09/2014	11:00	65.9	61.5	58.6	52.5	0	290	22
8/09/2014	12:00	64	61.1	58.4	52.4	0.2	300	18
8/09/2014	13:00	65.4	61.6	58.7	51.7	0	280	21
8/09/2014	14:00	65	62	59.2	54	0	290	21
8/09/2014	15:00	66.2	62.5	59.8	53.8	0	280	18
8/09/2014	16:00	65.6	62	59.5	53.2	0	290	28
8/09/2014	17:00	66.3	61.8	59.3	53	0	300	21
8/09/2014	18:00	66.4	61.6	59	52.9	0.4	290	22
8/09/2014	19:00	67.5	62.4	59.7	52.7	0	290	24
8/09/2014	20:00	63.5	59.9	57.1	51.3	0	290	21
8/09/2014	21:00	63.9	59.9	56.8	51.2	0	280	22
8/09/2014	22:00	63.7	58.3	55.8	49	0	290	24
8/09/2014	23:00	60.8	56.8	54.3	48.1	0	270	22
8/09/2014	0:00	58.2	55.1	52.2	46.3	0.2	250	22
9/09/2014	9/09/2014	58.5	54.5	51.5	44.5	0	260	21
9/09/2014	2:00	59	52.9	50.1	41.8	0	240	18
9/09/2014	3:00	57.2	51.9	48.5	38.5	0	250	17
9/09/2014	4:00	58.4	53.1	50	40.4	0	250	17
9/09/2014	5:00	61.1	57.2	54.1	46.2	0	230	15
9/09/2014	6:00	63	60.1	57	50.2	0	240	15
9/09/2014	7:00	64	61.4	58.3	50.6	0	250	17
9/09/2014	8:00	64.9	61.9	58.8	51.7	0	250	9
9/09/2014	9:00	66.3	62.5	59.6	51.1	0	250	5
9/09/2014	10:00	64.7	61.5	58	47.3	0	230	2
9/09/2014	11:00	62.6	59.3	56.5	50.4	0	260	13
9/09/2014	12:00	65.2	60.6	58.5	50.7	0	240	15
9/09/2014	13:00	63.3	58.9	56.1	47.3	0	260	15
9/09/2014	14:00	63.9	59.3	56.4	45.5	0	240	13
9/09/2014	15:00	62.3	59.2	55.9	44.9	0	270	13
9/09/2014	16:00	63.1	58.9	56	45.4	0	260	13
9/09/2014	17:00	62.2	58.3	56.4	46.3	0	270	11
9/09/2014	18:00	61.7	58.2	55.5	46	0	250	13
9/09/2014	19:00	62.3	58.4	55.7	43.1	0	270	9
9/09/2014	20:00	60.7	56.6	53.9	43.3	0	240	5
9/09/2014	21:00	59.8	56.2	53	42.5	0	260	5
9/09/2014	22:00	59.3	55.6	52.6	42.9	0	270	4
9/09/2014	23:00	57.4	53.7	50	39.6	0	270	11
9/09/2014	0:00	56.9	52.9	49.1	36.2	0	310	8
10/09/2014	10/09/2014	55.5	50.8	47.4	34.5	0	280	11
10/09/2014	2:00	58.8	52.3	48.6	31.2	0	0	0
10/09/2014	3:00	56.7	50.5	46.8	30.6	0	280	4
10/09/2014	4:00	58.9	52.4	49.1	34.6	0	270	8
10/09/2014	5:00	60.2	56.6	53.4	43.9	0	310	5
10/09/2014	6:00	63.1	59.5	56.3	47.1	0	260	11
10/09/2014	7:00	64.2	60.6	57.2	49.4	0	250	9
10/09/2014	8:00	64.1	60.3	57.5	48.5	0	260	9
10/09/2014	9:00	64.1	59.7	56.8	45.6	0	260	9
10/09/2014	10:00	63.4	59.6	56.2	45.4	0	280	9
10/09/2014	11:00	62.9	58.6	55.7	46.5	0	290	11
10/09/2014	12:00	62.3	58.8	55.2	42.5	0	280	11
10/09/2014	13:00	61.8	58.7	55.1	42.2	0	310	11
10/09/2014	14:00	62.5	58.6	55.3	43.6	0	270	13
10/09/2014	15:00	62.3	58.8	55.6	44.6	0	270	13
10/09/2014	16:00	62.7	58.7	55.9	46	0	280	15
10/09/2014	17:00	63.3	58.3	57.3	46.7	0	270	11
10/09/2014	18:00	62	58.3	56.5	47.5	0	240	9
10/09/2014	19:00	61.7	58	55	43.1	0	230	9
10/09/2014	20:00	61.9	58.4	56.3	45.7	0	210	11
10/09/2014	21:00	61.6	58	54.7	45	0	170	9
10/09/2014	22:00	61.8	58.5	55.4	46.2	0	190	5
10/09/2014	23:00	61.1	57.5	54	44.6	0	190	4
10/09/2014	0:00	57.9	54.6	52.1	42.1	0	0	0

Hourly Noise Level Data
48 Alfreda Ave, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
11/09/2014	11/09/2014	58.2	54.2	50.8	40.3	0	0	0
11/09/2014	2:00	58.2	53.1	49.3	34.5	0	0	0
11/09/2014	3:00	60.7	53.4	49.9	34	0	0	0
11/09/2014	4:00	59.1	54.5	50.8	37.5	0	20	8
11/09/2014	5:00	62.2	58	54.7	45	0	20	4
11/09/2014	6:00	64.3	62	58.5	49.4	0	10	4
11/09/2014	7:00	65.2	62.7	59.7	51.7	0	30	2
11/09/2014	8:00	65	62.6	59.5	51.4	0	30	2
11/09/2014	9:00	65.8	62.9	59.3	48.2	0	30	8
11/09/2014	10:00	64.6	61.9	58.3	46.5	0	40	8
11/09/2014	11:00	64.8	61.4	58.3	49.9	0	20	9
11/09/2014	12:00	63.4	59.6	56.6	48.7	0	360	8
11/09/2014	13:00	67.5	59.2	57.1	47	0	290	11
11/09/2014	14:00	65.6	59.5	56.8	42.1	0	290	9
11/09/2014	15:00	62.1	58.5	55.3	44.1	0	290	13
11/09/2014	16:00	62	58.2	55.2	45.9	0	270	11
11/09/2014	17:00	62.5	58.8	55.9	44.5	0	260	13
11/09/2014	18:00	62.7	59.1	56.6	47.2	0	250	11
11/09/2014	19:00	62.1	59.5	56.2	45.6	0	240	11
11/09/2014	20:00	63.7	60.2	57.4	48	0	220	9
11/09/2014	21:00	64	61.3	58.1	49.6	0	0	0
11/09/2014	22:00	62.6	60	57	49.6	0	0	0
11/09/2014	23:00	61.8	58.3	55.3	46.6	0	0	0
11/09/2014	0:00	60.7	56.4	53.2	43.4	0	0	0
12/09/2014	12/09/2014	58.9	55.2	51.6	41	0	0	0
12/09/2014	2:00	59.7	54.2	50.8	38.6	0	0	0
12/09/2014	3:00	61.1	54.3	50.8	37.1	0	0	0
12/09/2014	4:00	60.8	55.9	52.5	41.3	0	0	0
12/09/2014	5:00	62.7	59.1	55.8	46.4	0	0	0
12/09/2014	6:00	66.1	63	59.8	51.9	0	0	0
12/09/2014	7:00	66.1	63.8	61.1	54.1	0	220	2
12/09/2014	8:00	66.9	63.7	60.7	52.2	0	210	9
12/09/2014	9:00	65.5	62.6	59.4	49.5	0	30	8
12/09/2014	10:00	65.9	62.6	59.5	47	0	30	9
12/09/2014	11:00	64.9	61.3	58.1	46.3	0	20	9
12/09/2014	12:00	68.1	60.8	58.4	46.8	0	340	8
12/09/2014	13:00	65.0	59.3	56.6	45.1	0	300	5
12/09/2014	14:00	61.9	57.8	54.7	43.4	0	310	11
12/09/2014	15:00	61.7	58.5	55.5	46.3	0	240	15
12/09/2014	16:00	62.2	58.8	55.8	47.3	0	260	17
12/09/2014	17:00	61.4	57.8	55.2	50.1	0	250	17
12/09/2014	18:00	63	59.3	56.7	49.7	0	240	18
12/09/2014	19:00	62.9	60	56.9	47.5	0	230	13
12/09/2014	20:00	62.9	59	55.7	45.5	0	220	13
12/09/2014	21:00	64.3	59.9	56.8	46.6	0	220	9
12/09/2014	22:00	63.9	61.2	57.9	49.5	0	0	0
12/09/2014	23:00	63.5	59.1	56.2	48.4	0	0	0
12/09/2014	0:00	62.3	57.8	54.9	46.4	0	0	0

Noise Logging - 48 Alfreda Ave, Morley

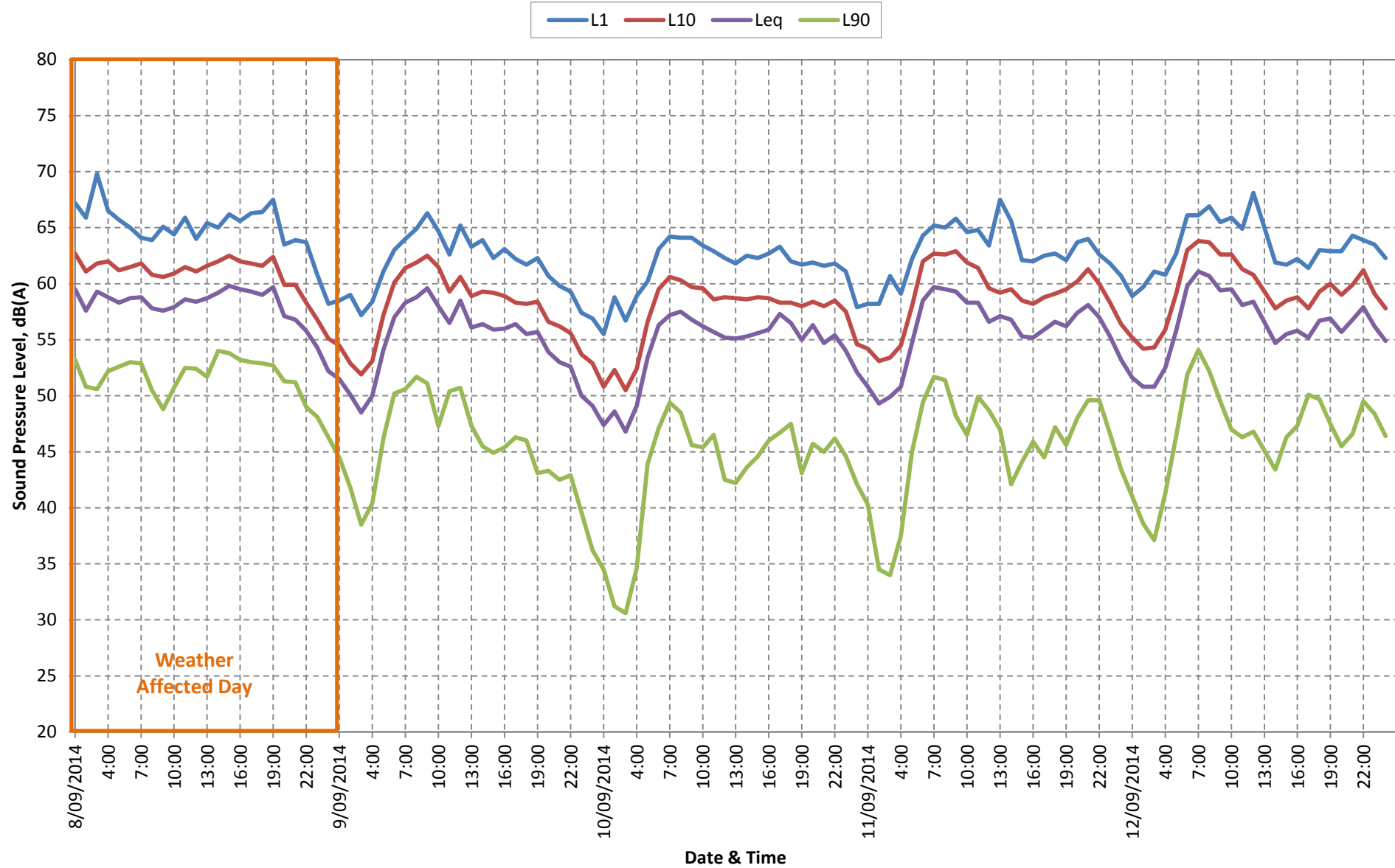


Table A7 – Results of Noise Logging 100 Alfreda Avenue, Morley

Date	L _{A10,18hour} , dB	L _{Aeq,24hour} , dB	L _{Aeq(Day)} , dB	L _{Aeq(Night)} , dB
8 September 2014*	60.0	57.9	58.3	57.1
9 September 2014	58.4	55.3	56.3	52.3
10 September 2014	58.7	55.4	56.0	54.0
11 September 2014	60.2	57.1	57.6	55.6
12 September 2014	59.9	57.3	57.6	56.6
Weekday Average	59.3	56.3	56.9	54.6

*Day excluded from the Average due to unacceptable weather conditions.



Photograph A7 – Noise Logger at 100 Alfreda Avenue, Morley

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 100 Alfreda Way.
Locality	Morley
Occupier	Vivian De Cruz 92762744
Dates	8/9/2014 to 12/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	85m to Tonkin Hwy
Height of the road in relation to the ground	+1m
Road surface type	DGA
Speed zone	80 km/hr (Near Intersection)
Absorbing ground	80%
Angle of view	180
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	East
Carriageways & lanes.	2,4;
<i>COMMENT</i>	
Comment	Microphone placed on East façade at front of house Vegetation buffer between Alfreda Ave and Tonkin Hwy.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	100 Alfreda Ave MRWA Logger Sheet.xlsx
Raw data file	100 Alfreda 16-707-041_sta.csv
<i>EQUIPMENT</i>	
Analyser number	16-707-041
Microphone number	16-707-041
Calibrator number	34883971
Calibrator values	94.2, 93.9
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 8/09/14 - High Neg Winds up to 30 km/h All day, some showers, excluded 9/09/14 - Negs winds up to 18km/h in morning, Avg 13 km/h Neg wind during 10/09/14 - Neg winds up to 13km/h, one hour at 15km/h 11/09/14 - Variable winds up to 13km/h 12/09/14 - Negative winds up to 18km/h

Hourly Noise Level Data
100 Alfreda Ave, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
8/09/2014	8/09/2014	67.1	62.7	59.6	53.7	0.4	260	30
8/09/2014	2:00	63.5	60.1	57.1	51	0.2	270	26
8/09/2014	3:00	67.6	61.7	58.4	50.6	0	270	21
8/09/2014	4:00	65.1	60.6	57.6	52.1	0.6	260	31
8/09/2014	5:00	62.5	59.4	56.7	52.3	0	260	22
8/09/2014	6:00	63.1	60	57.6	53.3	0.2	260	24
8/09/2014	7:00	64.9	60.6	58.3	53.1	0	260	22
8/09/2014	8:00	63.6	60.1	57.4	51	0	260	22
8/09/2014	9:00	64.8	60.4	57.6	51.1	0	270	13
8/09/2014	10:00	63.8	60.1	58.3	53	0	270	18
8/09/2014	11:00	63.9	60.4	57.8	53	0	290	22
8/09/2014	12:00	63.7	61	58.3	53.4	0.2	300	18
8/09/2014	13:00	62.2	60	57.5	52.3	0	280	21
8/09/2014	14:00	65.1	61.3	58.9	53.9	0	290	21
8/09/2014	15:00	65.5	62.1	60.5	54.9	0	280	18
8/09/2014	16:00	65.4	62.4	60	55.7	0	290	28
8/09/2014	17:00	65.4	61.6	59.5	54.8	0	300	21
8/09/2014	18:00	63.9	60.4	58.5	53.7	0.4	290	22
8/09/2014	19:00	63.3	60.6	58.1	53.8	0	290	24
8/09/2014	20:00	62.4	59.3	56.9	52.7	0	290	21
8/09/2014	21:00	62.7	59.1	56.7	52.4	0	280	22
8/09/2014	22:00	61	58.2	55.4	50.5	0	290	24
8/09/2014	23:00	60.2	56.6	53.9	47.9	0	270	22
8/09/2014	0:00	58.3	55.3	52.1	46	0.2	250	22
9/09/2014	9/09/2014	57.2	53.7	50.5	44.6	0	260	21
9/09/2014	2:00	56.1	52.7	49.4	41.7	0	240	18
9/09/2014	3:00	56.2	51.5	47.7	38.2	0	250	17
9/09/2014	4:00	58	53.8	50.2	40.9	0	250	17
9/09/2014	5:00	60.5	56.8	54	47.3	0	230	15
9/09/2014	6:00	63.2	59.5	56.6	51.2	0	240	15
9/09/2014	7:00	65.3	62.2	59.2	53	0	250	17
9/09/2014	8:00	64.9	61.6	58.7	52	0	250	9
9/09/2014	9:00	64.5	61.2	58.6	50.8	0	250	5
9/09/2014	10:00	63.3	59.6	56.8	50.3	0	230	2
9/09/2014	11:00	62.2	58.7	55.3	46.5	0	260	13
9/09/2014	12:00	63.3	58.1	55.4	48.7	0	240	15
9/09/2014	13:00	62	57.3	54.4	46.1	0	260	15
9/09/2014	14:00	65.3	58.7	56	46.8	0	240	13
9/09/2014	15:00	62.6	58.1	55.8	46.8	0	270	13
9/09/2014	16:00	63	58.3	55.9	47.5	0	260	13
9/09/2014	17:00	64.1	58.4	56.1	47.7	0	270	11
9/09/2014	18:00	61.5	58.3	55.7	47.3	0	250	13
9/09/2014	19:00	61.7	58.0	55.3	46.6	0	270	9
9/09/2014	20:00	61.8	57.6	54.8	45.9	0	240	5
9/09/2014	21:00	59.6	57	53.9	47	0	260	5
9/09/2014	22:00	60.7	57.3	54.2	46	0	270	4
9/09/2014	23:00	59	55.4	51.8	42.7	0	270	11
9/09/2014	0:00	58.1	55.4	51.5	42.7	0	310	8
10/09/2014	10/09/2014	58	54	50.1	39.1	0	280	11
10/09/2014	2:00	58.0	53.5	49.6	36.8	0	0	0
10/09/2014	3:00	58	53	49	33.7	0	280	4
10/09/2014	4:00	59.4	54.1	50.4	38.6	0	270	8
10/09/2014	5:00	62.3	58.1	55.1	47.3	0	310	5
10/09/2014	6:00	64.8	61.3	58	50.1	0	260	11
10/09/2014	7:00	65.1	61.4	58.3	51.1	0	250	9
10/09/2014	8:00	65	61.5	58.6	50.6	0	260	9
10/09/2014	9:00	63.2	59	56	48.6	0	260	9
10/09/2014	10:00	62.3	58.9	55.7	48	0	280	9
10/09/2014	11:00	61.4	58.7	55.4	48.6	0	290	11
10/09/2014	12:00	61.4	57.7	54.9	47.7	0	280	11
10/09/2014	13:00	61.2	57.9	55	47	0	310	11
10/09/2014	14:00	61.5	57.3	54.5	47.1	0	270	13
10/09/2014	15:00	62.3	58.1	55.8	47.4	0	270	13
10/09/2014	16:00	63.7	58.3	55.8	48.3	0	280	15
10/09/2014	17:00	62.1	57.9	55.7	47.6	0	270	11
10/09/2014	18:00	60.7	57.8	55.2	47.1	0	240	9
10/09/2014	19:00	60.7	58.3	55.5	49.2	0	230	9
10/09/2014	20:00	62.5	58.6	55.7	47.9	0	210	11
10/09/2014	21:00	62.2	59.1	55.9	48.6	0	170	9
10/09/2014	22:00	62.6	59.2	55.9	48	0	190	5
10/09/2014	23:00	63	59.3	55.8	48.9	0	190	4
10/09/2014	0:00	61.7	58.2	55	45.1	0	0	0

Hourly Noise Level Data
100 Alfreda Ave, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
11/09/2014	11/09/2014	61	57.8	54	44.8	0	0	0
11/09/2014	2:00	61.5	56.7	52.6	39.8	0	0	0
11/09/2014	3:00	61.3	55.4	51.4	38	0	0	0
11/09/2014	4:00	59.3	55	51.5	43.5	0	20	8
11/09/2014	5:00	62	58.3	55	47	0	20	4
11/09/2014	6:00	66.2	62.5	59.2	51.4	0	10	4
11/09/2014	7:00	67.3	62.6	59.5	54.3	0	30	2
11/09/2014	8:00	65	62.6	59.8	52.8	0	30	2
11/09/2014	9:00	66	62.2	59.3	52.3	0	30	8
11/09/2014	10:00	65.3	61.6	58.5	51	0	40	8
11/09/2014	11:00	64.6	60.7	57.8	50.2	0	20	9
11/09/2014	12:00	63.9	59.7	57.1	49.3	0	360	8
11/09/2014	13:00	62.5	58.3	55.1	47.7	0	290	11
11/09/2014	14:00	63.7	58.2	55.5	47.8	0	290	9
11/09/2014	15:00	64.8	58.5	55.9	47.8	0	290	13
11/09/2014	16:00	63.1	57.9	55.4	47.1	0	270	11
11/09/2014	17:00	64.7	58.2	55.8	48.1	0	260	13
11/09/2014	18:00	62.7	58.5	56.1	48.2	0	250	11
11/09/2014	19:00	63	59.7	56.7	49.1	0	240	11
11/09/2014	20:00	64.2	61.0	57.8	50.7	0	220	9
11/09/2014	21:00	65.3	62.3	58.9	52.3	0	0	0
11/09/2014	22:00	63.9	61.6	58.6	52.5	0	0	0
11/09/2014	23:00	63.9	60.9	57.6	50	0	0	0
11/09/2014	0:00	63.6	59.8	56.9	47.1	0	0	0
12/09/2014	12/09/2014	62.2	58.8	55	45.2	0	0	0
12/09/2014	2:00	61.4	57.7	53.7	42.6	0	0	0
12/09/2014	3:00	62.9	57.3	53.4	41.3	0	0	0
12/09/2014	4:00	62.6	57.4	53.9	44.5	0	0	0
12/09/2014	5:00	63.1	59.1	55.8	48.1	0	0	0
12/09/2014	6:00	68	63.5	60.6	52.5	0	0	0
12/09/2014	7:00	67.8	63.6	60.8	55.6	0	220	2
12/09/2014	8:00	67.3	63.6	60.9	53.9	0	210	9
12/09/2014	9:00	66.3	62.8	60	53.4	0	30	8
12/09/2014	10:00	66	61.9	59	51.6	0	30	9
12/09/2014	11:00	64.5	61	57.9	50.4	0	20	9
12/09/2014	12:00	63.9	59.6	56.5	48.7	0	340	8
12/09/2014	13:00	60.4	57.4	54.2	47.8	0	300	5
12/09/2014	14:00	61.5	57.4	54.4	47.7	0	310	11
12/09/2014	15:00	60.3	57.1	54.5	47.8	0	240	15
12/09/2014	16:00	61.3	57.8	54.9	48.1	0	260	17
12/09/2014	17:00	60.8	57.3	54.5	48.1	0	250	17
12/09/2014	18:00	62.3	58.5	56.2	48.9	0	240	18
12/09/2014	19:00	62.7	59.0	56.4	49.8	0	230	13
12/09/2014	20:00	64.3	59.4	56.5	48	0	220	13
12/09/2014	21:00	65.3	60.8	58.1	49.9	0	220	9
12/09/2014	22:00	65	60.7	57.9	52.3	0	0	0
12/09/2014	23:00	64.3	60.6	57.7	50.9	0	0	0
12/09/2014	0:00	65	60.6	57	49.8	0	0	0

Noise Logging - 100 Alfreda Ave, Morley

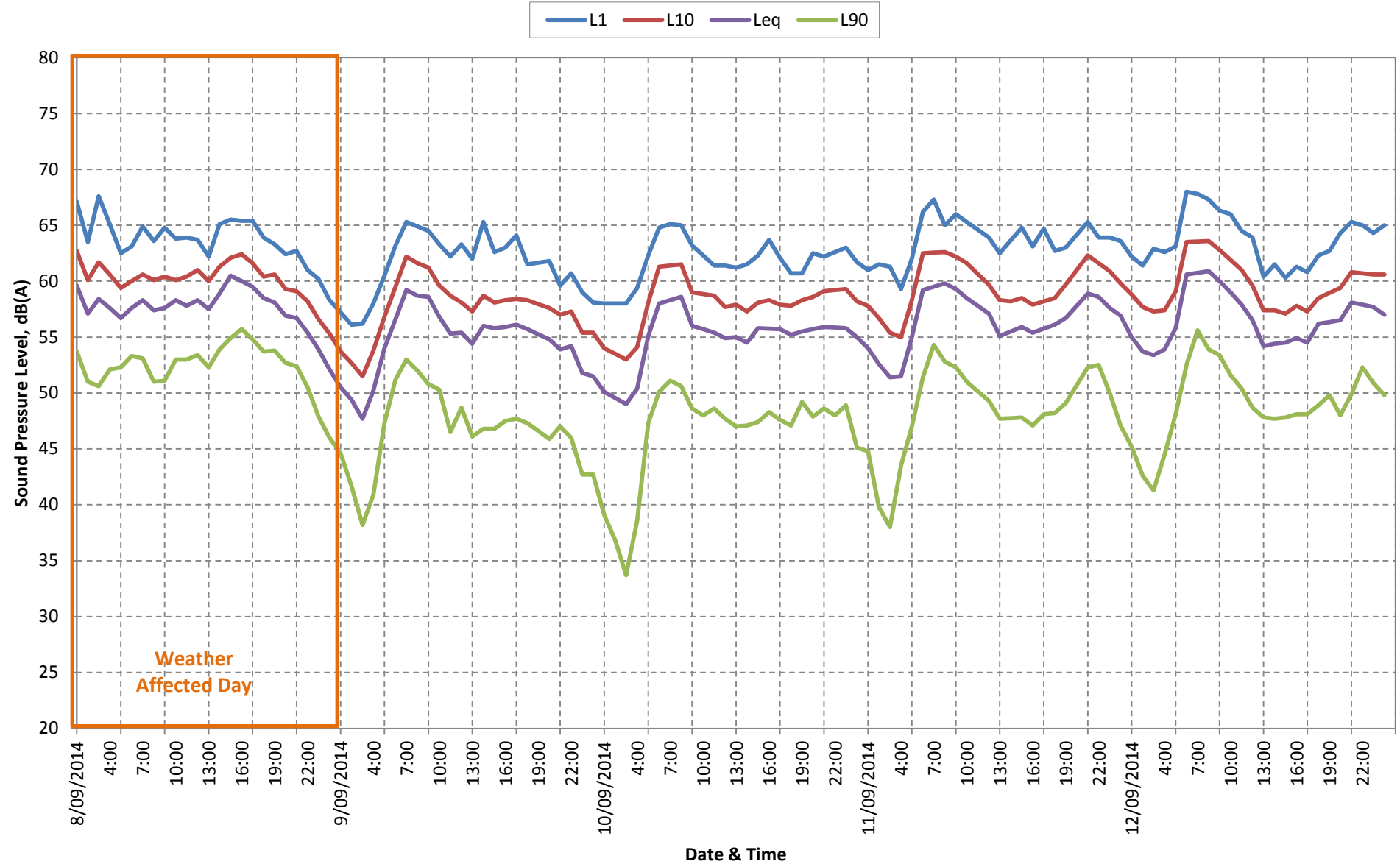


Table A8 – Results of Noise Logging 8 Wells Court, Noranda

Date	L _{A10,18hour} , dB	L _{Aeq,24hour} , dB	L _{Aeq(Day)} , dB	L _{Aeq(Night)} , dB
8 September 2014*	57.7	55.8	55.6	56.2
9 September 2014	50.8	48.9	49.9	45.7
10 September 2014	51.5	48.3	49.6	43.2
11 September 2014	51.9	48.9	49.9	45.6
12 September 2014	51.7	49.4	50.0	47.6
Weekday Average	51.5	48.9	49.9	45.5

*Day excluded from the Average due to unacceptable weather conditions.



Photograph A8 – Noise Logger at 8 Wells Court, Noranda

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 8 Wells Court.
Locality	Noranda
Occupier	Jose Berard 0401546000
Dates	8/9/2014 to 12/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	35m to Benara Rd
Height of the road in relation to the ground	0m
Road surface type	DGA
Speed zone	70 km/hr
Absorbing ground	80%
Angle of view	160
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	South
Carriageways & lanes.	2,4;
<i>COMMENT</i>	
Comment	Microphone placed on South façade at Rear of house Rear Property fence between Microphone and Benara Road.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Benara Road
EXCEL file	8 Wells Court MRWA Logger Sheet.xlsx
Raw data file	8 wells ct 15-203-505_ Sta.csv
<i>EQUIPMENT</i>	
Analyser number	15-203-505
Microphone number	15-203-505
Calibrator number	34883971
Calibrator values	93.9, 93.6
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 8/09/14 - High Variable Winds up to 30 km/h All day, some showers, excluded 9/09/14 - Pos winds up to 18km/h in morning, Avg 13 km/h Pos wind during day 10/09/14 - Var winds up to 13km/h, one hour at 15km/h 11/09/14 - Neg Morning winds up to 11km/h, Pos winds to 13km/h afternoon 12/09/14 - Positive Evening winds up to 18km/h

Hourly Noise Level Data
8 Wells Court, Noranda

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
8/09/2014	8/09/2014	66.3	62.7	59.4	52.3	0.4	260	30
8/09/2014	2:00	65.9	60.6	57.4	48.2	0.2	270	26
8/09/2014	3:00	64.7	60.6	56.8	48.7	0	270	21
8/09/2014	4:00	63.6	59.7	56.4	49.2	0.6	260	31
8/09/2014	5:00	64.2	59.3	55.9	49.3	0	260	22
8/09/2014	6:00	63.3	59.4	56.2	50.4	0.2	260	24
8/09/2014	7:00	60.8	57	53.9	47.7	0	260	22
8/09/2014	8:00	58.8	55.8	52.9	47.4	0	260	22
8/09/2014	9:00	62.4	56.8	55.2	48.1	0	270	13
8/09/2014	10:00	84.2	58.8	55.8	49.5	0	270	18
8/09/2014	11:00	82.3	58	55	49.1	0	290	22
8/09/2014	12:00	80.6	56.1	53.1	47.6	0.2	300	18
8/09/2014	13:00	61.6	57.6	54.4	48.7	0	280	21
8/09/2014	14:00	63.8	59.3	56.2	50.4	0	290	21
8/09/2014	15:00	64.4	60.2	56.9	50.8	0	280	18
8/09/2014	16:00	64.8	59.7	57.1	51.5	0	290	28
8/09/2014	17:00	65.2	59.1	57.3	51.4	0	300	21
8/09/2014	18:00	64.4	59.6	57.3	50.8	0.4	290	22
8/09/2014	19:00	63.4	59.5	56.5	50.4	0	290	24
8/09/2014	20:00	62.2	58.5	55.6	50	0	290	21
8/09/2014	21:00	63.5	58.6	55.4	48.6	0	280	22
8/09/2014	22:00	63	57.5	54.2	47	0	290	24
8/09/2014	23:00	58.1	54.9	51.6	44.6	0	270	22
8/09/2014	0:00	56.4	52.5	49.1	42.9	0.2	250	22
9/09/2014	9/09/2014	55.5	50.6	47.7	42.6	0	260	21
9/09/2014	2:00	52.9	49	45.5	39.2	0	240	18
9/09/2014	3:00	52.6	46.6	43.5	36.8	0	250	17
9/09/2014	4:00	51.2	46	42.9	37.1	0	250	17
9/09/2014	5:00	53.6	49.6	46.9	42.6	0	230	15
9/09/2014	6:00	55.7	52	49.4	45.6	0	240	15
9/09/2014	7:00	57.1	52.8	50	45.4	0	250	17
9/09/2014	8:00	59.8	55	53.3	45.5	0	250	9
9/09/2014	9:00	60.3	54.7	52.8	45.4	0	250	5
9/09/2014	10:00	58.6	54.3	52.2	45.3	0	230	2
9/09/2014	11:00	56.7	52.5	49.7	44.6	0	260	13
9/09/2014	12:00	56.8	52.2	50.5	43.7	0	240	15
9/09/2014	13:00	55.6	51.6	48.6	43.2	0	260	15
9/09/2014	14:00	57.3	51.7	49.3	43.4	0	240	13
9/09/2014	15:00	57.2	51.3	48.8	43.2	0	270	13
9/09/2014	16:00	58.5	52	49.4	44.4	0	260	13
9/09/2014	17:00	57.8	52.6	50	44.3	0	270	11
9/09/2014	18:00	55.2	51.6	48.6	43.5	0	250	13
9/09/2014	19:00	55.7	50.8	48.3	41.7	0	270	9
9/09/2014	20:00	57	49.6	47.4	39.9	0	240	5
9/09/2014	21:00	53.8	47.7	45.3	38	0	260	5
9/09/2014	22:00	52.3	46.5	43.8	36.9	0	270	4
9/09/2014	23:00	51.1	44.6	42	33.9	0	270	11
9/09/2014	0:00	49.1	43	39.9	33.6	0	310	8
10/09/2014	10/09/2014	46.3	39.6	37.1	31.8	0	280	11
10/09/2014	2:00	45.4	38.7	36	30.4	0	0	0
10/09/2014	3:00	45.9	37.5	35.4	30	0	280	4
10/09/2014	4:00	47.8	39.7	37.6	30.6	0	270	8
10/09/2014	5:00	49.1	44.8	42.5	35.8	0	310	5
10/09/2014	6:00	53.2	48.3	45.8	40.3	0	260	11
10/09/2014	7:00	59.1	51	49	42.2	0	250	9
10/09/2014	8:00	56.5	52.8	50.1	44.4	0	260	9
10/09/2014	9:00	59.5	52.9	50.2	43.8	0	260	9
10/09/2014	10:00	57.6	51.8	50.2	42.5	0	280	9
10/09/2014	11:00	55.7	50.7	47.8	41.5	0	290	11
10/09/2014	12:00	57	50	47.8	41.4	0	280	11
10/09/2014	13:00	55.1	49.5	47.6	40.8	0	310	11
10/09/2014	14:00	59	51.1	48.3	42.3	0	270	13
10/09/2014	15:00	58.4	51	48.9	43.1	0	270	13
10/09/2014	16:00	60.6	51.9	50.2	44.3	0	280	15
10/09/2014	17:00	61.1	52.3	50.5	46.1	0	270	11
10/09/2014	18:00	58.3	53.1	50.7	45.1	0	240	9
10/09/2014	19:00	55.5	53.4	50.8	45.2	0	230	9
10/09/2014	20:00	56.9	52.8	51.3	45.6	0	210	11
10/09/2014	21:00	55.4	52.1	49.5	45.1	0	170	9
10/09/2014	22:00	57.4	52.3	48.5	45.5	0	190	5
10/09/2014	23:00	54.5	49.9	47.4	42.4	0	190	4
10/09/2014	0:00	52.7	48.1	45.8	38.8	0	0	0

Hourly Noise Level Data
8 Wells Court, Noranda

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
11/09/2014	11/09/2014	52.7	49	45.8	38.8	0	0	0
11/09/2014	2:00	52.7	48.2	44.5	35.7	0	0	0
11/09/2014	3:00	51.3	45.3	41.7	33.5	0	0	0
11/09/2014	4:00	48.8	43.4	40.6	35.2	0	20	8
11/09/2014	5:00	51.3	46.9	44	38.5	0	20	4
11/09/2014	6:00	54.8	50.5	47.9	41.7	0	10	4
11/09/2014	7:00	57.2	52.7	50.5	46.4	0	30	2
11/09/2014	8:00	56.6	52.1	49.8	45.5	0	30	2
11/09/2014	9:00	57.1	52.4	49.9	45.5	0	30	8
11/09/2014	10:00	56.4	51.6	50.2	43.9	0	40	8
11/09/2014	11:00	55.7	50.7	47.8	43.2	0	20	9
11/09/2014	12:00	57	50	47.8	40.2	0	360	8
11/09/2014	13:00	59.7	50.3	48.2	40.5	0	290	11
11/09/2014	14:00	58.8	50.6	48.5	40.7	0	290	9
11/09/2014	15:00	57.7	50.6	48.4	41.1	0	290	13
11/09/2014	16:00	55.4	51.3	49.1	41.8	0	270	11
11/09/2014	17:00	58.3	52.9	50.2	44.6	0	260	13
11/09/2014	18:00	58.3	53.1	51.5	46.8	0	250	11
11/09/2014	19:00	60	54.2	51.2	44.9	0	240	11
11/09/2014	20:00	61.2	53.9	50.9	44.4	0	220	9
11/09/2014	21:00	57.1	53.6	51.2	47.4	0	0	0
11/09/2014	22:00	55.7	52.8	50.8	46.8	0	0	0
11/09/2014	23:00	55	50.6	48	43.4	0	0	0
11/09/2014	0:00	56.6	50.3	46.9	42.4	0	0	0
12/09/2014	12/09/2014	52.4	48.7	45.7	40.1	0	0	0
12/09/2014	2:00	52.1	48.9	45.7	39.6	0	0	0
12/09/2014	3:00	53.4	48.3	45.2	38.3	0	0	0
12/09/2014	4:00	53.1	49.4	46.7	41.6	0	0	0
12/09/2014	5:00	53.9	50.8	48.4	44.3	0	0	0
12/09/2014	6:00	57.1	53.6	51.1	46.5	0	0	0
12/09/2014	7:00	59.2	54.8	51.4	47.4	0	220	2
12/09/2014	8:00	58.7	53.5	51.7	48.2	0	210	9
12/09/2014	9:00	55.4	51.9	50.6	45.5	0	30	8
12/09/2014	10:00	56.6	51.3	49.5	43.8	0	30	9
12/09/2014	11:00	55.6	49.9	47.4	41.5	0	20	9
12/09/2014	12:00	56.1	49.2	46.8	39.6	0	340	8
12/09/2014	13:00	56.8	49.4	47.1	40.3	0	300	5
12/09/2014	14:00	56	50.3	47.3	41.1	0	310	11
12/09/2014	15:00	57.7	51.9	49.1	43.3	0	240	15
12/09/2014	16:00	57.7	53.4	50.8	45.9	0	260	17
12/09/2014	17:00	57.8	54.1	51.4	47.1	0	250	17
12/09/2014	18:00	57.9	52.9	51.3	46.9	0	240	18
12/09/2014	19:00	57.1	53.2	51.1	47	0	230	13
12/09/2014	20:00	61.5	52.6	50.8	45.4	0	220	13
12/09/2014	21:00	59.9	52.5	50.5	46.3	0	220	9
12/09/2014	22:00	56.9	51.4	49.2	45.1	0	0	0
12/09/2014	23:00	55.7	50.2	47.8	43.9	0	0	0
12/09/2014	0:00	55.9	48.9	46.9	42.5	0	0	0

Noise Logging - 8 Wells Court, Noranda

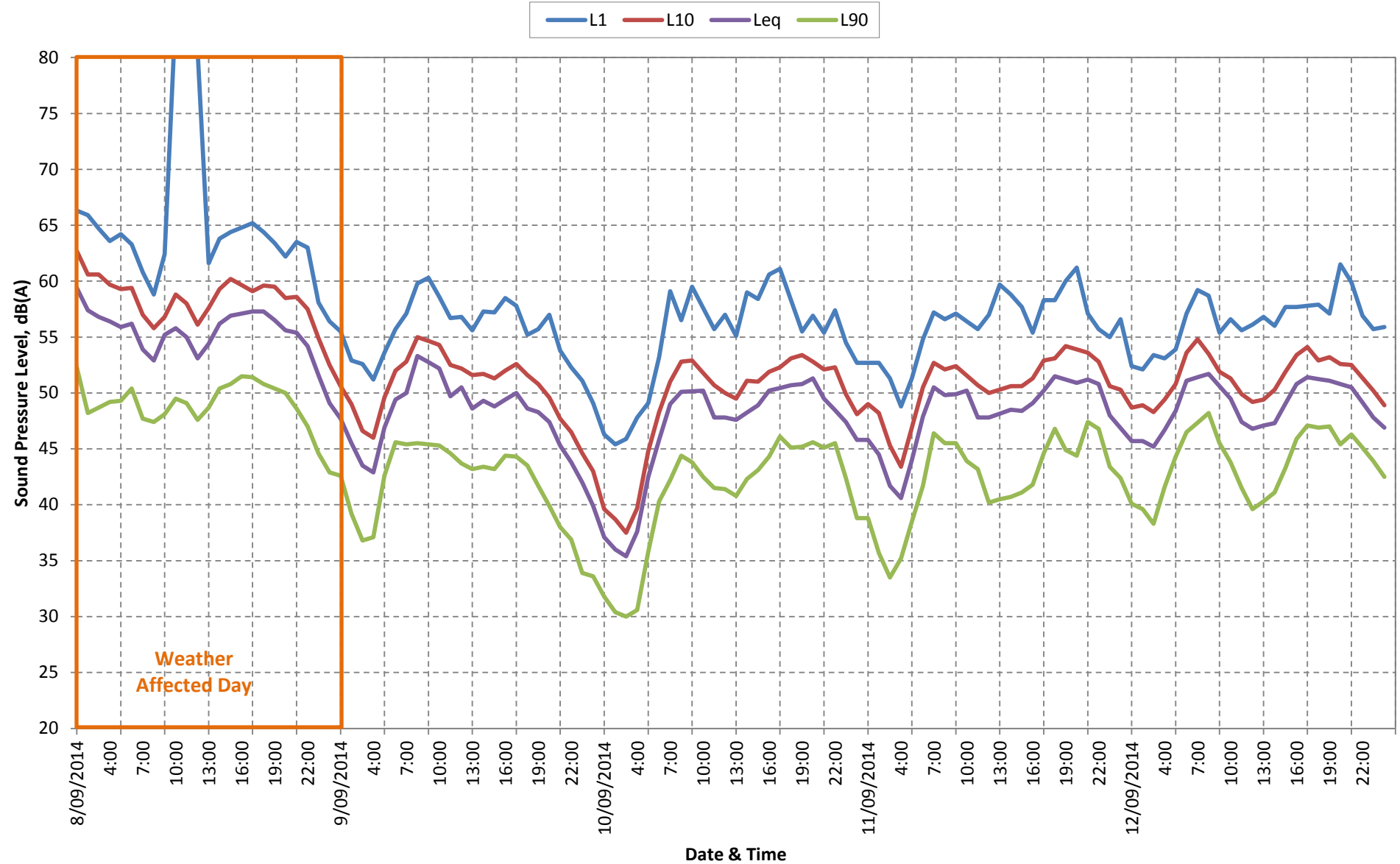


Table A9 – Results of Noise Logging 15 Davis Court, Morley

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
15 September 2014	50.7	50.5	51.3	48.3
16 September 2014	47.8	48.3	49.5	44.1
17 September 2014	46.8	47.9	49.3	41.4
18 September 2014	48.3	49.4	50.8	42.5
19 September 2014	47.9	48.2	49.3	45.0
Weekday Average	48.3	48.9	50.1	44.3

**Photograph A9 – Noise Logger at 15 Davis Court, Morley**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 15 Davis Court.
Locality	Morley
Occupier	Mark Murphy 0417188008
Dates	15/9/2014 to 19/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	120m to Tonkin Hwy; 60m to Benara Rd
Height of the road in relation to the ground	+1m
Road surface type	DGA
Speed zone	80 km/hr (Tonkin Near Intersection); 70km/h on Benara Rd
Absorbing ground	80%
Angle of view	70; 170
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West to Tonkin; North to Benara
Carriageways & lanes.	2,5; 2,4
<i>COMMENT</i>	
Comment	Microphone placed on North façade at Side of house Reserve Land to North and West of house between Benara Rd and Tonkin Property fence between roads and microphone.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	15 Davis Ct MRWA Logger Sheet.xlsx
Raw data file	15 Davis Ct_sta.csv
<i>EQUIPMENT</i>	
Analyser number	15-203-999
Microphone number	15-203-999
Calibrator number	34883971
Calibrator values	93.8, 93.9
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 15/09/14 - Var Winds up to 17 km/h 16/09/14 - Neg winds, top of 17km/h at 10am for one hour 17/09/14 - Var winds up to 17km/h, one hour at 18km/h 18/09/14 - Positive winds up to 22km/h from 10am to 11pm. 19/09/14 - Var winds up to 13km/h, morning negative, afternoon positive dirn

Hourly Noise Level Data
15 Davis Court, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
15/09/2014	15/09/2014	50.7	46.2	43.3	37.6	0	170	8
15/09/2014	2:00	49.5	45.5	41.9	35.4	0	170	5
15/09/2014	3:00	50.1	45.8	42.2	35.2	0	0	0
15/09/2014	4:00	53.4	49.2	45.7	38.5	0	0	0
15/09/2014	5:00	54.6	51.5	48.2	41.5	0	0	0
15/09/2014	6:00	68.9	55	55.5	45.9	0	0	0
15/09/2014	7:00	65.4	56	55.1	48.8	0	170	5
15/09/2014	8:00	63	55.1	53.7	48.1	0	150	5
15/09/2014	9:00	61.7	55	53	47.3	0	80	4
15/09/2014	10:00	61.2	53.4	51.4	45.2	0	120	9
15/09/2014	11:00	60.5	51.7	50.7	43.5	0	90	8
15/09/2014	12:00	61.5	52.5	51	43.5	0	100	8
15/09/2014	13:00	61.5	52	51.3	42.6	0	140	5
15/09/2014	14:00	62.9	52.6	51.7	43.5	0	140	8
15/09/2014	15:00	63.4	50.5	49.5	42.6	0	210	15
15/09/2014	16:00	61.4	49.6	51.1	42.3	0	220	15
15/09/2014	17:00	63.9	53.6	52.6	45.6	0	230	17
15/09/2014	18:00	64.9	53.2	52.9	45.5	0	220	17
15/09/2014	19:00	53.5	48.6	47.1	42.8	0	210	13
15/09/2014	20:00	50.9	46.7	47.2	40	0	190	13
15/09/2014	21:00	51.2	46.1	44.1	39.1	0	170	15
15/09/2014	22:00	51.7	45.5	44	38.9	0	170	13
15/09/2014	23:00	48.6	45.1	42.3	37.7	0	170	9
15/09/2014	0:00	48.7	44.9	41.9	37.1	0	170	8
16/09/2014	16/09/2014	47.7	43.8	41.3	37.1	0	170	9
16/09/2014	2:00	49.3	43.8	40.9	35	0	130	8
16/09/2014	3:00	51	46.1	43	37.4	0	110	9
16/09/2014	4:00	47.7	44.5	41.4	36.6	0	110	11
16/09/2014	5:00	50.5	47.3	44.6	39.1	0	90	11
16/09/2014	6:00	58.5	50.2	49.6	43.8	0	100	9
16/09/2014	7:00	66.5	53.1	54.5	46.8	0	90	11
16/09/2014	8:00	63.9	52.7	52.6	46.8	0	90	11
16/09/2014	9:00	63.7	51.7	51.6	45.3	0	120	9
16/09/2014	10:00	62.6	50.6	50.7	43.9	0	90	17
16/09/2014	11:00	64.8	49	49.6	42.2	0	90	13
16/09/2014	12:00	61	48	48.5	41.2	0	90	13
16/09/2014	13:00	63.4	46.3	49.6	39.3	0	110	11
16/09/2014	14:00	69.2	50.6	49.2	40.2	0	100	11
16/09/2014	15:00	61.3	50.4	48.8	38.8	0	100	11
16/09/2014	16:00	63.7	46.1	45.7	39.6	0	80	9
16/09/2014	17:00	65	47.2	46.5	40.9	0	70	9
16/09/2014	18:00	63.2	47	47.4	41.5	0	110	5
16/09/2014	19:00	59	47.9	48.3	41.3	0	110	8
16/09/2014	20:00	50.4	45.6	46.5	39.3	0	110	5
16/09/2014	21:00	51.2	45.4	44.0	38.5	0	140	5
16/09/2014	22:00	50.6	44.6	42.2	37.8	0	150	8
16/09/2014	23:00	46.6	42.9	40.3	35.6	0	120	4
16/09/2014	0:00	47.7	41.8	42.2	33.8	0	120	5
17/09/2014	17/09/2014	46	41.3	38.5	33.4	0	0	0
17/09/2014	2:00	43.5	39.7	36.8	32.2	0	50	5
17/09/2014	3:00	43.8	39.1	36.4	31.6	0	50	9
17/09/2014	4:00	45.5	40.9	38.1	32.5	0	50	8
17/09/2014	5:00	47.3	43.8	41.7	36	0	80	5
17/09/2014	6:00	56.2	46.5	46.9	40	0	70	2
17/09/2014	7:00	65.1	49.2	52	43.7	0	80	8
17/09/2014	8:00	66.2	50	53.9	43.7	0	70	5
17/09/2014	9:00	63.2	48.3	50.2	41.7	0	90	8
17/09/2014	10:00	62.8	46.5	48.8	39.5	0	100	5
17/09/2014	11:00	60.6	45.5	47.7	38.2	0	180	11
17/09/2014	12:00	60.6	45.5	47.6	38.2	0	170	13
17/09/2014	13:00	59.7	45.5	48.2	38.8	0	170	13
17/09/2014	14:00	61.6	46.2	48.8	40.1	0	190	13
17/09/2014	15:00	61.4	46.9	49.3	40.9	0	220	18
17/09/2014	16:00	57.7	47.6	49	41.8	0	210	17
17/09/2014	17:00	63	47.7	49.8	41.6	0	210	11
17/09/2014	18:00	63.4	49	50.5	43.4	0	220	17
17/09/2014	19:00	59.4	48.6	48.5	42.8	0	220	11
17/09/2014	20:00	50.8	47	46.6	40.1	0	210	11
17/09/2014	21:00	49.6	45.4	43.2	38.7	0	190	13
17/09/2014	22:00	52.4	45.5	44	38.6	0	180	11
17/09/2014	23:00	47.9	43.9	41.2	36.5	0	170	11
17/09/2014	0:00	47.6	43.2	40.7	35.2	0	170	5

Hourly Noise Level Data
15 Davis Court, Morley

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
18/09/2014	18/09/2014	46.4	42.4	39.2	33.8	0	0	0
18/09/2014	2:00	44	39.9	37	31.9	0	0	0
18/09/2014	3:00	44.8	41	37.5	31.1	0	170	2
18/09/2014	4:00	45.2	41.6	38.3	32.1	0	190	4
18/09/2014	5:00	49	45.9	42.9	37.6	0	180	8
18/09/2014	6:00	57.6	49.0	48.4	41.7	0	180	5
18/09/2014	7:00	66.1	52.1	53.8	44.3	0	0	0
18/09/2014	8:00	64.8	51	52.6	44.1	0	170	2
18/09/2014	9:00	65.5	49.5	52.2	42.6	0	190	5
18/09/2014	10:00	63.6	48.8	50.1	41	0	180	11
18/09/2014	11:00	67	49.1	53	40.4	0	210	11
18/09/2014	12:00	65.5	50.1	51.8	41	0	190	11
18/09/2014	13:00	64.4	49	51.3	40.9	0	220	13
18/09/2014	14:00	61.2	48.6	51.4	41.9	0	240	17
18/09/2014	15:00	68.1	49.9	51.5	42.9	0	210	18
18/09/2014	16:00	62.6	50.1	50.7	43.7	0	210	21
18/09/2014	17:00	60.8	49	50.1	43.5	0	210	22
18/09/2014	18:00	63.9	50.4	51.5	43.6	0	220	17
18/09/2014	19:00	65	48.5	47.7	42.5	0	220	15
18/09/2014	20:00	49.2	46.1	43.9	39.4	0	220	17
18/09/2014	21:00	48.4	45	42.7	38.8	0	220	11
18/09/2014	22:00	47.9	44.8	42.9	38.3	0	200	9
18/09/2014	23:00	53.4	43.8	41.9	36.9	0	190	11
18/09/2014	0:00	47.5	43.2	40.9	34.9	0	150	5
19/09/2014	19/09/2014	47	42	40	33.2	0	150	2
19/09/2014	2:00	42.6	38.5	35.7	31.6	0	160	8
19/09/2014	3:00	46	40.4	37.9	31.9	0	0	0
19/09/2014	4:00	48.7	45.5	41.9	34.2	0	0	0
19/09/2014	5:00	53	49.8	46.9	39.4	0	0	0
19/09/2014	6:00	59.5	52.3	50.7	45.9	0	0	0
19/09/2014	7:00	65.9	54.7	54.4	46.9	0	0	0
19/09/2014	8:00	63.2	51	51.4	44.6	0	90	2
19/09/2014	9:00	64.8	51.1	52.1	42.5	0	90	5
19/09/2014	10:00	63.5	48.6	50.9	41.3	0	140	8
19/09/2014	11:00	63.5	48	49.6	39.8	0	150	5
19/09/2014	12:00	62.4	47.7	49	39.7	0	160	9
19/09/2014	13:00	64.3	47.5	47.5	39.1	0	110	8
19/09/2014	14:00	53.4	46.2	45.9	39.1	0	180	9
19/09/2014	15:00	55.9	46.6	46.9	39.8	0	190	13
19/09/2014	16:00	56.5	47.7	48.6	41.4	0	210	11
19/09/2014	17:00	65.2	49.1	48.3	42.8	0	230	13
19/09/2014	18:00	64.1	48.7	48	43.1	0	230	13
19/09/2014	19:00	53.7	48.2	47.5	42.6	0	230	9
19/09/2014	20:00	51.2	46.6	45.9	40	0	190	8
19/09/2014	21:00	50.3	45.5	43.7	38.7	0	170	9
19/09/2014	22:00	48.3	44.9	42.6	38.7	0	180	9
19/09/2014	23:00	49.2	44.9	43.9	37.9	0	160	9
19/09/2014	0:00	49.7	44.5	44.4	37.1	0	150	8

Noise Logging - 15 Davis Court, Morley

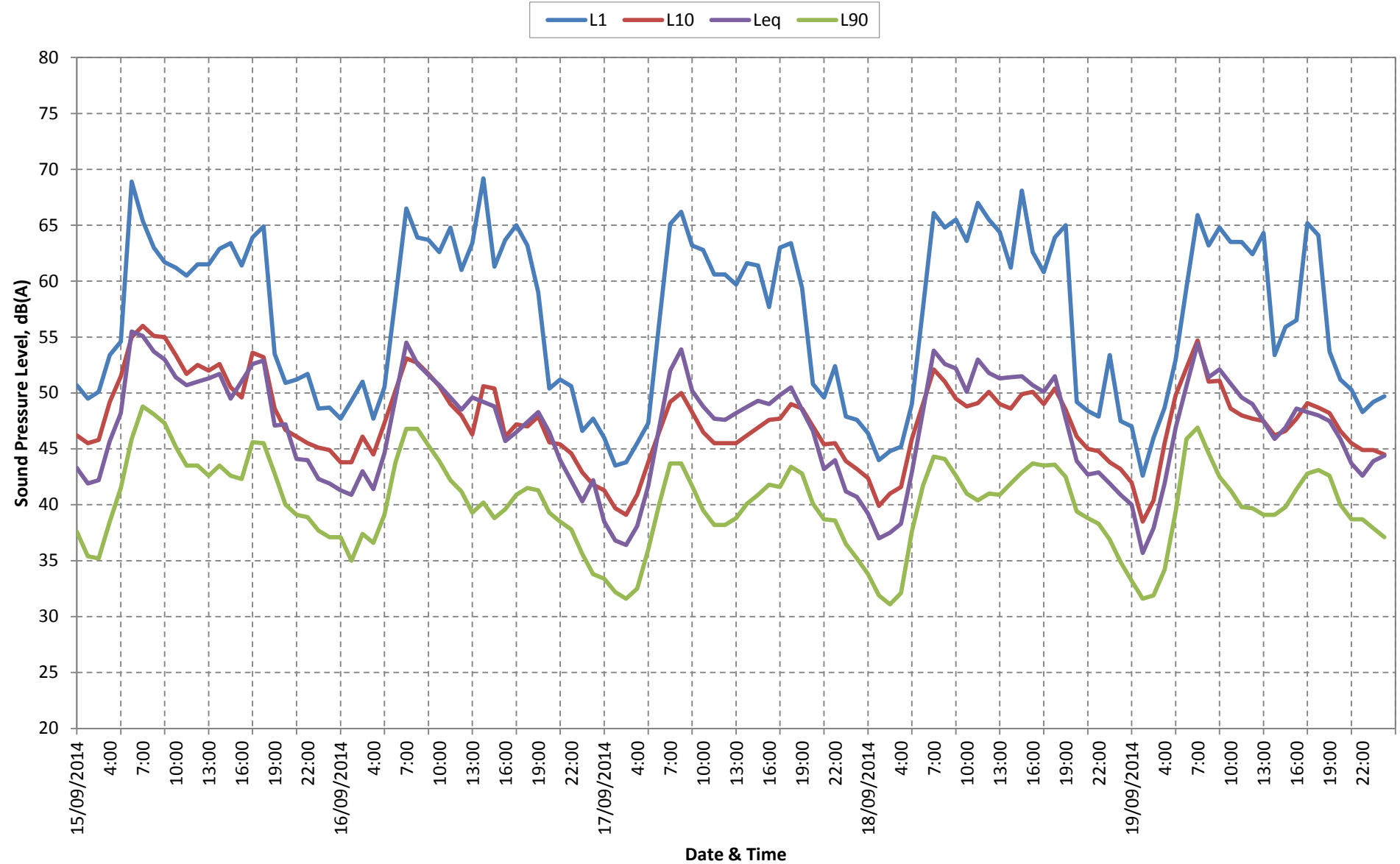


Table A10 – Results of Noise Logging 6 Acacia Court, Beechboro

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
15 September 2014	57.4	54.2	55.2	51.1
16 September 2014	56.1	52.9	53.9	49.9
17 September 2014	57.3	54.0	55.1	50.2
18 September 2014	58.0	54.7	55.8	51.3
19 September 2014	57.1	54.0	54.7	52.1
Weekday Average	57.1	54.0	54.9	50.9

**Photograph A10 – Noise Logger at 6 Acacia Court, Beechboro**

Traffic Noise Measurement Data

Item	Details
LOCATION	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 6 Acacia Court.
Locality	Beechboro
Occupier	Ronnie 0423255585
Dates	15/9/2014 to 19/9/2014.
Category	<i>Main Roads will provide this information if required.</i>
SITE	
Distance from the microphone to the kerb	65m
Height of the road in relation to the ground	+2m
Road surface type	DGA
Speed zone	90 km/hr
Absorbing ground	60%
Angle of view	150
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West
Carriageways & lanes.	2,4;
COMMENT	
Comment	Microphone placed on West façade at front of house House is near Pedestrian footbridge (over Tonkin) Earthen Bund/reserve between Tonkin and microphone.
REFERENCES	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	6 Acacia Ct MRWA Logger Sheet.xlsx
Raw data file	6 Acacia_sta.csv
EQUIPMENT	
Analyser number	15-203-505
Microphone number	15-203-505
Calibrator number	34883971
Calibrator values	93.6, 93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
WEATHER	
Wind	Wind acceptability based on Mt Lawley Data 15/09/14 - Neg Winds <9 km/h before 2pm, Pos in afternoon <17km/h 16/09/14 - Neg winds, top of 17km/h at 10am for one hour 17/09/14 - Neg Winds <13 km/h before 2pm, Pos in afternoon <18km/h 18/09/14 - Positive winds up to 22km/h from 10am to 11pm. 19/09/14 - Var winds up to 13km/h, morning negative, afternoon positive dirn

Hourly Noise Level Data
6 Acacia Court, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
15/09/2014	15/09/2014	55.7	50.9	47.5	36.7	0	170	8
15/09/2014	2:00	55.3	49.5	45.7	32.5	0	170	5
15/09/2014	3:00	55.4	50.4	46	32.1	0	0	0
15/09/2014	4:00	58.8	53.9	49.9	37.1	0	0	0
15/09/2014	5:00	59.9	57.3	53.1	42.1	0	0	0
15/09/2014	6:00	63.6	59.3	56.4	47.4	0	0	0
15/09/2014	7:00	63.7	60.2	57.7	50.6	0	170	5
15/09/2014	8:00	63.6	59.3	56.7	49.7	0	150	5
15/09/2014	9:00	63.5	58.3	55.6	48.1	0	80	4
15/09/2014	10:00	63.1	58.0	55.2	44.8	0	120	9
15/09/2014	11:00	62.7	57.7	54.7	43.4	0	90	8
15/09/2014	12:00	64.1	58.5	55.5	44	0	100	8
15/09/2014	13:00	63.6	58.5	55.4	42.8	0	140	5
15/09/2014	14:00	62.7	58.4	55.2	44.8	0	140	8
15/09/2014	15:00	62.7	58.9	55.8	47.3	0	210	15
15/09/2014	16:00	62.4	58.3	55.3	47.5	0	220	15
15/09/2014	17:00	62	57.7	54.8	47.9	0	230	17
15/09/2014	18:00	62.1	58.4	55.8	50.2	0	220	17
15/09/2014	19:00	61.6	57.9	55.3	48.4	0	210	13
15/09/2014	20:00	59.7	56	52.8	42.7	0	190	13
15/09/2014	21:00	59.2	55.5	51.6	40.7	0	170	15
15/09/2014	22:00	58.3	55.1	51.2	40.8	0	170	13
15/09/2014	23:00	56.6	53.2	49.4	39.3	0	170	9
15/09/2014	0:00	56.6	52.6	48.6	37.6	0	170	8
16/09/2014	16/09/2014	54.5	49.4	46	37.8	0	170	9
16/09/2014	2:00	54.2	47.9	44.6	36.3	0	130	8
16/09/2014	3:00	55.3	50	46.4	38.2	0	110	9
16/09/2014	4:00	56.4	51.6	47.4	36	0	110	11
16/09/2014	5:00	58.9	56	51.9	41.1	0	90	11
16/09/2014	6:00	61.5	58.1	55.1	47.2	0	100	9
16/09/2014	7:00	62.5	58.8	56	48.4	0	90	11
16/09/2014	8:00	62	58.3	55.4	46.9	0	90	11
16/09/2014	9:00	61.3	57.3	54.5	46.5	0	120	9
16/09/2014	10:00	61.7	57.8	54.7	46.1	0	90	17
16/09/2014	11:00	62.5	57.8	54.9	45.9	0	90	13
16/09/2014	12:00	66.4	57.2	54.3	45.8	0	90	13
16/09/2014	13:00	61.6	56.6	53.7	44.4	0	110	11
16/09/2014	14:00	61.4	56.6	53.6	44.5	0	100	11
16/09/2014	15:00	62.4	56.8	54	44.5	0	100	11
16/09/2014	16:00	59.5	56.3	53.4	45.7	0	80	9
16/09/2014	17:00	59.5	55.8	52.8	46.1	0	70	9
16/09/2014	18:00	59.1	55.9	53.2	45.5	0	110	5
16/09/2014	19:00	59.6	56.6	53.8	47.6	0	110	8
16/09/2014	20:00	59.3	55.7	52.6	42.5	0	110	5
16/09/2014	21:00	58.2	55.2	51.3	40.3	0	140	5
16/09/2014	22:00	57.1	53.4	49.8	39.9	0	150	8
16/09/2014	23:00	57	52.3	49.4	37.8	0	120	4
16/09/2014	0:00	55.3	50.8	47.2	38.1	0	120	5
17/09/2014	17/09/2014	53.7	48.7	45.1	36.3	0	0	0
17/09/2014	2:00	54.4	47.7	44	31.9	0	50	5
17/09/2014	3:00	55.8	48.9	45.1	32.1	0	50	9
17/09/2014	4:00	56.9	52.3	48.1	35	0	50	8
17/09/2014	5:00	59	55.7	51.6	40.3	0	80	5
17/09/2014	6:00	62.9	58.5	55.6	45.8	0	70	2
17/09/2014	7:00	65.4	61.6	57.7	50.9	0	80	8
17/09/2014	8:00	64.4	58.9	56.8	47.5	0	70	5
17/09/2014	9:00	61.7	57.9	55.3	45.8	0	90	8
17/09/2014	10:00	62.3	57.8	54.7	44.2	0	100	5
17/09/2014	11:00	62.1	57.8	54.9	45.3	0	180	11
17/09/2014	12:00	61.8	57.9	54.8	45.4	0	170	13
17/09/2014	13:00	61.4	57.9	54.8	46.5	0	170	13
17/09/2014	14:00	61.7	58.3	55.2	46.8	0	190	13
17/09/2014	15:00	62	58.6	55.6	47	0	220	18
17/09/2014	16:00	61.6	58.1	55.5	48.9	0	210	17
17/09/2014	17:00	60.5	58.1	55.3	49.1	0	210	11
17/09/2014	18:00	61.4	58.3	55.4	48.8	0	220	17
17/09/2014	19:00	59.9	57.3	54.7	48.1	0	220	11
17/09/2014	20:00	59.6	56.6	53.3	42.8	0	210	11
17/09/2014	21:00	59.3	55.7	52.3	41.5	0	190	13
17/09/2014	22:00	58.1	54.7	51.1	40.3	0	180	11
17/09/2014	23:00	56.8	53.7	49.8	39.2	0	170	11
17/09/2014	0:00	57.1	52.1	48.7	38.2	0	170	5

Hourly Noise Level Data
6 Acacia Court, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
18/09/2014	18/09/2014	56.4	50.8	47.2	36.2	0	0	0
18/09/2014	2:00	55.4	50.1	46	33.4	0	0	0
18/09/2014	3:00	55.9	49.3	45.5	33.1	0	170	2
18/09/2014	4:00	57.7	53.5	49.1	35.4	0	190	4
18/09/2014	5:00	60.5	57.3	53.4	43.9	0	180	8
18/09/2014	6:00	64.5	59.5	56.5	47.7	0	180	5
18/09/2014	7:00	64.1	59.8	56.8	51.7	0	0	0
18/09/2014	8:00	63.7	60	57	49.5	0	170	2
18/09/2014	9:00	62.1	58.9	56.5	47.8	0	190	5
18/09/2014	10:00	62.8	58.9	56.3	44.9	0	180	11
18/09/2014	11:00	63.4	58.9	56.1	45.1	0	210	11
18/09/2014	12:00	63	58.6	55.8	45.7	0	190	11
18/09/2014	13:00	62.6	58.8	55.8	45.8	0	220	13
18/09/2014	14:00	62.9	59.2	56.6	47.9	0	240	17
18/09/2014	15:00	62.6	59.5	56.6	48.5	0	210	18
18/09/2014	16:00	63.4	59.2	56.6	50.6	0	210	21
18/09/2014	17:00	62.2	58.8	56.2	49.6	0	210	22
18/09/2014	18:00	61.3	58.5	55.5	49.7	0	220	17
18/09/2014	19:00	61.5	58.1	55.2	47.9	0	220	15
18/09/2014	20:00	59.7	57.3	53.7	43.9	0	220	17
18/09/2014	21:00	58.7	56.3	52.6	42.9	0	220	11
18/09/2014	22:00	58.9	55.6	52	41.1	0	200	9
18/09/2014	23:00	58.6	54.4	51.3	40.3	0	190	11
18/09/2014	0:00	57.3	52.6	49.1	38.2	0	150	5
19/09/2014	19/09/2014	57.2	51.7	48.3	36	0	150	2
19/09/2014	2:00	56	49.4	45.6	33	0	160	8
19/09/2014	3:00	57.9	50.6	46.9	31.6	0	0	0
19/09/2014	4:00	58.7	54.2	50.1	37.8	0	0	0
19/09/2014	5:00	60.8	57.3	53.4	42.1	0	0	0
19/09/2014	6:00	64.9	60.8	57.8	49.6	0	0	0
19/09/2014	7:00	63.9	60.4	57.7	49.8	0	0	0
19/09/2014	8:00	63.1	59.1	56.5	48.8	0	90	2
19/09/2014	9:00	61.9	58.2	55.3	45.9	0	90	5
19/09/2014	10:00	62.2	58.3	55.3	42.8	0	140	8
19/09/2014	11:00	62.4	58.3	55.3	45.5	0	150	5
19/09/2014	12:00	62.0	57.9	54.9	47.3	0	160	9
19/09/2014	13:00	61.5	57.4	54.4	46.6	0	110	8
19/09/2014	14:00	60.4	57.3	54.3	47.5	0	180	9
19/09/2014	15:00	60.2	56.5	53.8	46.2	0	190	13
19/09/2014	16:00	60.8	57.1	54.2	47.2	0	210	11
19/09/2014	17:00	60.9	57.4	54.4	48.4	0	230	13
19/09/2014	18:00	61	57.4	55.1	47.9	0	230	13
19/09/2014	19:00	60.1	56.8	54.1	50.2	0	230	9
19/09/2014	20:00	59.2	56.2	53	43.9	0	190	8
19/09/2014	21:00	58.1	55.6	51.8	41.8	0	170	9
19/09/2014	22:00	58	55.1	51.4	41.9	0	180	9
19/09/2014	23:00	58.1	54.7	50.9	40	0	160	9
19/09/2014	0:00	56.5	53.5	49.6	39.4	0	150	8

Noise Logging - 6 Acacia Court, Beechboro

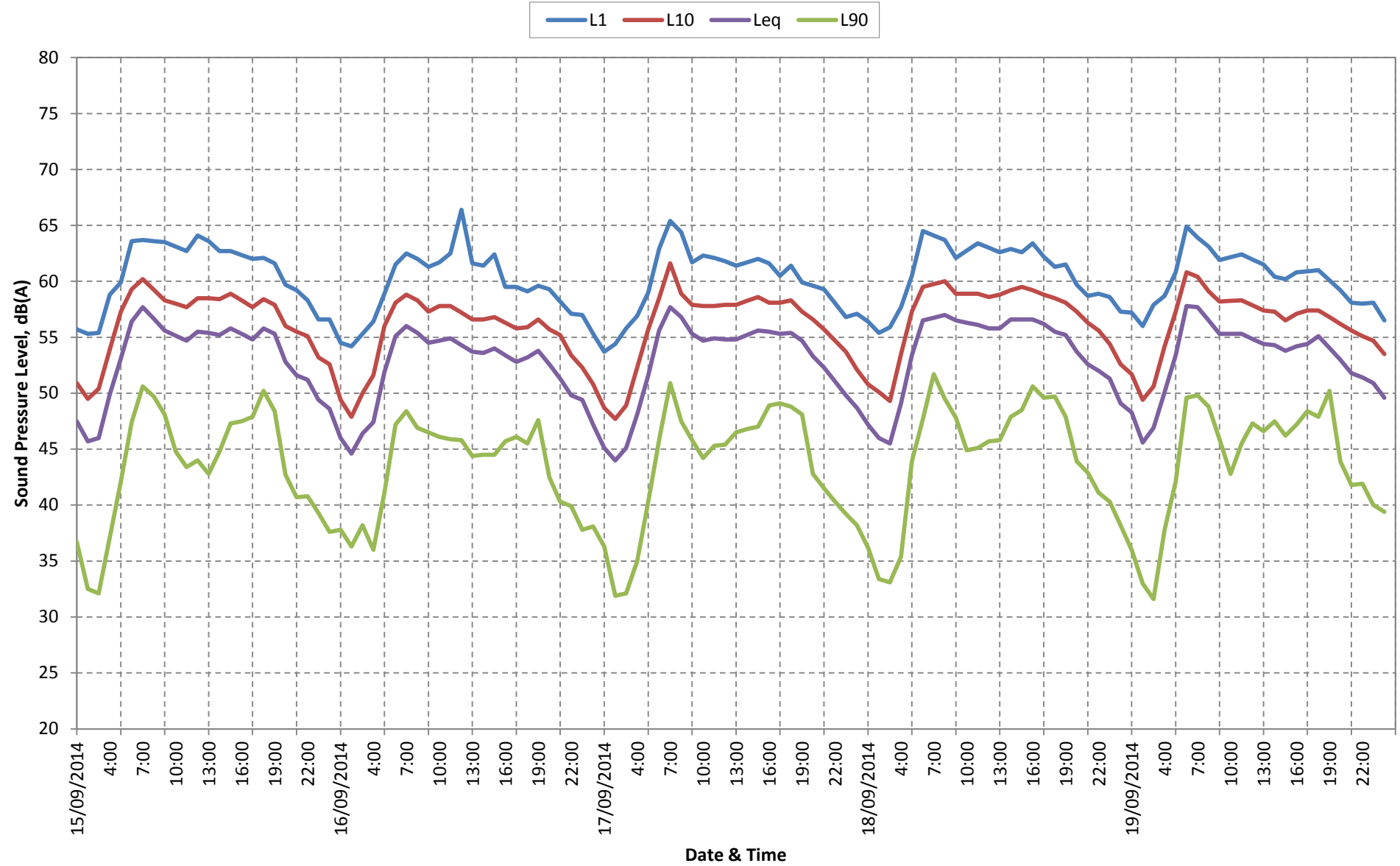


Table A11 – Results of Noise Logging 11 Willow Place, Beechboro

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
27 October 2014	54.7	51.9	52.8	48.9
28 October 2014	53.7	51.1	52.1	48.1
29 October 2014	53.1	50.7	51.6	47.7
30 October 2014	54.4	51.6	52.9	47.1
31 October 2014	53.6	50.8	51.7	48.3
Weekday Average	53.9	51.2	52.2	48.0



Photograph A11– Noise Logger at 11 Willow Place, Beechboro

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 11 Willow Place
Locality	Beechboro
Occupier	Andrew Calvert 0499088630
Dates	27/10/2014 to 31/10/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	60m to Tonkin Hwy
Height of the road in relation to the ground	+2m
Road surface type	DGA
Speed zone	90 km/hr
Absorbing ground	60%
Angle of view	150
Road gradient	flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West
Carriageways & lanes.	2,4;
<i>COMMENT</i>	
Comment	Microphone placed on West façade at Rear of house Rear property fence between microphone and road. Earthen Bund and reserve between Tonkin and microphone. Pool to south of microphone position and small pergola to north.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Tonkin Highway.
EXCEL file	11 Willow Place MRWA Logger Sheet.xlsx
Raw data file	11 Willow Place_Sta.csv
<i>EQUIPMENT</i>	
Analyser number	15-203-999
Microphone number	15-203-999
Calibrator number	34883971
Calibrator values	93.8, 94.0
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 27/10/14 - Neg morning Winds <13 km/h, Pos in afternoon <24km/h 28/10/14 - Neg winds < 17km/h, Pos Afternoon <15 km/h 29/10/14 - Pos Winds <18 km/h most of the day 30/10/14 - Pos Winds <18 km/h most of the day 31/10/14 - Var winds up to 18km/h, one hour at 21 km/h

Hourly Noise Level Data
11 Willow Place, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
27/10/2014	27/10/2014	52.2	48.2	45.1	36.4	0	180	13
27/10/2014	2:00	51.1	45.6	42	31.3	0	180	9
27/10/2014	3:00	51.8	47.3	43.5	33.2	0	170	8
27/10/2014	4:00	54.3	50.1	46.4	37.2	0	170	9
27/10/2014	5:00	56	53.7	50.3	43.4	0	160	5
27/10/2014	6:00	60.6	57.3	54.6	47.6	0	0	0
27/10/2014	7:00	58.6	56.6	54.0	48.3	0	70	8
27/10/2014	8:00	59.3	55.8	53.3	47.6	0	100	13
27/10/2014	9:00	58.2	55	53.3	46.1	0	100	8
27/10/2014	10:00	59.3	55.8	52.7	44.7	0	100	5
27/10/2014	11:00	60.5	55.1	52.6	44.5	0	130	8
27/10/2014	12:00	60.9	55.5	52.9	45.3	0	220	11
27/10/2014	13:00	57.7	55.1	52.2	46.3	0	200	15
27/10/2014	14:00	59.6	56.3	53.5	47	0	210	18
27/10/2014	15:00	60.1	56.8	54	49.1	0	220	24
27/10/2014	16:00	60.6	56.4	53.6	47.4	0	220	21
27/10/2014	17:00	58.8	56	53.1	47.3	0	210	21
27/10/2014	18:00	60.3	56	53.7	46.5	0	210	15
27/10/2014	19:00	58.3	55.3	52.6	46.7	0	210	13
27/10/2014	20:00	58.6	54.6	52.4	45.3	0	180	15
27/10/2014	21:00	56.1	52.4	49.6	42.8	0	170	17
27/10/2014	22:00	54.5	52	48.8	42.5	0	170	17
27/10/2014	23:00	53.2	50.6	47.6	42.9	0	170	11
27/10/2014	0:00	52.4	49.3	47	42.5	0	160	8
28/10/2014	28/10/2014	51	47.8	44.8	38.1	0	170	13
28/10/2014	2:00	53	48.6	45.4	39.2	0	150	8
28/10/2014	3:00	53.4	49.2	45.5	35.4	0	0	0
28/10/2014	4:00	53.7	49.7	45.6	34.9	0	80	8
28/10/2014	5:00	55.7	53.2	49.5	41.7	0	80	8
28/10/2014	6:00	59.8	55.6	52.8	45.9	0	60	11
28/10/2014	7:00	60	56.3	54	47.7	0	80	13
28/10/2014	8:00	59	55.2	52.9	47.9	0	80	17
28/10/2014	9:00	61.3	55.2	53.2	46.6	0	100	13
28/10/2014	10:00	57.3	54.1	51.6	44.6	0	90	9
28/10/2014	11:00	58.3	53.8	51.1	44.2	0	110	9
28/10/2014	12:00	57.4	53.4	50.7	43.9	0	140	9
28/10/2014	13:00	57.9	54.4	51.4	43.7	0	10	9
28/10/2014	14:00	58.9	54.6	51.9	44.6	0	100	8
28/10/2014	15:00	61.2	54.9	52.4	45	0	190	11
28/10/2014	16:00	60.6	55.1	52.8	45.5	0	210	15
28/10/2014	17:00	59.2	54.6	53.2	46.8	0	210	13
28/10/2014	18:00	58.2	54.3	52.8	46.8	0	210	13
28/10/2014	19:00	57.2	54	52.3	45.7	0	200	13
28/10/2014	20:00	58.4	53.4	51.2	44.4	0	190	8
28/10/2014	21:00	56.4	52.7	50	42.9	0	190	13
28/10/2014	22:00	54.2	52.2	49.5	45.2	0	180	11
28/10/2014	23:00	53.3	50.7	48	44.1	0	190	9
28/10/2014	0:00	52.6	48.6	46.2	41.9	0	180	5
29/10/2014	29/10/2014	50.9	47	43.6	34.9	0	190	5
29/10/2014	2:00	50.6	45.2	41.6	31.7	0	170	9
29/10/2014	3:00	53	46.2	43	32.9	0	190	8
29/10/2014	4:00	53.6	48.5	45.6	34.8	0	210	13
29/10/2014	5:00	56	53.3	49.6	42.3	0	180	9
29/10/2014	6:00	60	56	53.3	46	0	190	8
29/10/2014	7:00	59.3	56.6	53.9	48.3	0	200	5
29/10/2014	8:00	60.2	56.0	53.6	47.4	0	170	8
29/10/2014	9:00	61	55.3	53.2	45.6	0	190	11
29/10/2014	10:00	59.5	54.9	52.6	45.3	0	210	8
29/10/2014	11:00	58	54.4	51.9	43.5	0	220	11
29/10/2014	12:00	58.6	54.9	52.3	43.4	0	210	11
29/10/2014	13:00	57.8	53.7	51.2	45.5	0	210	17
29/10/2014	14:00	56.9	52.4	50	42.2	0	230	13
29/10/2014	15:00	59.9	53.3	51.0	42.8	0	230	13
29/10/2014	16:00	62.9	54.2	52	45.2	0	220	15
29/10/2014	17:00	64.3	54	51.9	44.5	0	230	18
29/10/2014	18:00	56.4	53.4	51.7	44.4	0	230	13
29/10/2014	19:00	56.9	52.5	50.6	45.2	0	220	11
29/10/2014	20:00	55.2	51.9	49.4	45.1	0	240	17
29/10/2014	21:00	53.4	51.3	48.2	41.3	0	220	17
29/10/2014	22:00	54.8	50.9	48.4	41.6	0	210	11
29/10/2014	23:00	52.2	49.4	46.3	40.7	0	210	9
29/10/2014	0:00	50.9	47.5	44.7	40	0	230	11

Hourly Noise Level Data
11 Willow Place, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
30/10/2014	30/10/2014	50.9	46.6	43.2	33.8	0	220	15
30/10/2014	2:00	50	44.8	41.4	30.5	0	210	13
30/10/2014	3:00	50.7	45.4	42	32	0	210	9
30/10/2014	4:00	51.6	47.8	44.1	32.9	0	190	9
30/10/2014	5:00	54	51.4	48	40.7	0	190	8
30/10/2014	6:00	59.6	54	51.6	43.9	0	180	2
30/10/2014	7:00	58.1	54.1	52.2	45.6	0	150	9
30/10/2014	8:00	59.1	54.1	53	45.5	0	170	8
30/10/2014	9:00	60.1	53.7	52.5	45.3	0	200	4
30/10/2014	10:00	62.3	54.9	52.7	42.9	0	200	15
30/10/2014	11:00	60.7	54.3	52	44.2	0	210	13
30/10/2014	12:00	59.2	54.5	51.9	46.7	0	230	17
30/10/2014	13:00	57.6	54.6	51.8	45.7	0	240	18
30/10/2014	14:00	63.8	56.3	54	46.2	0	250	17
30/10/2014	15:00	60.6	57.7	55.1	50.5	0	230	18
30/10/2014	16:00	63.5	58.3	55.5	49.6	0	240	17
30/10/2014	17:00	61.3	56.5	54	47.9	0	240	18
30/10/2014	18:00	61.4	55.9	53.5	47.5	0	230	17
30/10/2014	19:00	59.2	55.2	52.4	47.3	0	240	18
30/10/2014	20:00	57.9	54	51.3	44.4	0	230	17
30/10/2014	21:00	55.4	52.6	49.6	43.8	0	240	13
30/10/2014	22:00	55.1	51.9	49.6	43.6	0	240	15
30/10/2014	23:00	57.5	51.4	49.2	42.5	0	240	15
30/10/2014	0:00	53.9	48.7	46.3	40.6	0	230	11
31/10/2014	31/10/2014	50.6	47.5	44	34.6	0	240	13
31/10/2014	2:00	51.0	45.6	43.1	34	0	240	8
31/10/2014	3:00	51.3	45.5	42.2	33.6	0	240	9
31/10/2014	4:00	51.7	47.8	43.9	34	0	240	9
31/10/2014	5:00	57.4	53.5	50.5	44.3	0	190	18
31/10/2014	6:00	59	56	53.2	47.1	0	170	11
31/10/2014	7:00	60.4	56.5	54.2	48.6	0	170	17
31/10/2014	8:00	60.4	56.5	53.7	47.7	0	170	15
31/10/2014	9:00	60.5	55.5	53.1	46.5	0	180	17
31/10/2014	10:00	58.6	55.2	52	44	0	180	15
31/10/2014	11:00	57.7	54.1	51.2	44.2	0	190	15
31/10/2014	12:00	55.4	52.5	49.7	42.1	0	160	13
31/10/2014	13:00	55.7	52.4	49.6	42.9	0	160	11
31/10/2014	14:00	58.5	54.6	51.7	44.6	0	290	13
31/10/2014	15:00	57.8	54.7	52	45.5	0	220	21
31/10/2014	16:00	64.7	55.2	52.5	46.4	0	210	17
31/10/2014	17:00	56.7	53.5	51	45	0	200	17
31/10/2014	18:00	60	54.1	52.1	45.5	0	210	18
31/10/2014	19:00	62	53.5	51.8	45.3	0	230	13
31/10/2014	20:00	55	52.1	49.8	43.2	0	220	9
31/10/2014	21:00	54	51.5	49.5	41.7	0	220	8
31/10/2014	22:00	53.9	51.3	49.0	43.2	0	230	5
31/10/2014	23:00	53.7	51	48.4	43.6	0	220	8
31/10/2014	0:00	53	50	47.7	42.1	0	0	0

Noise Logging - 11 Willow Place, Beechboro

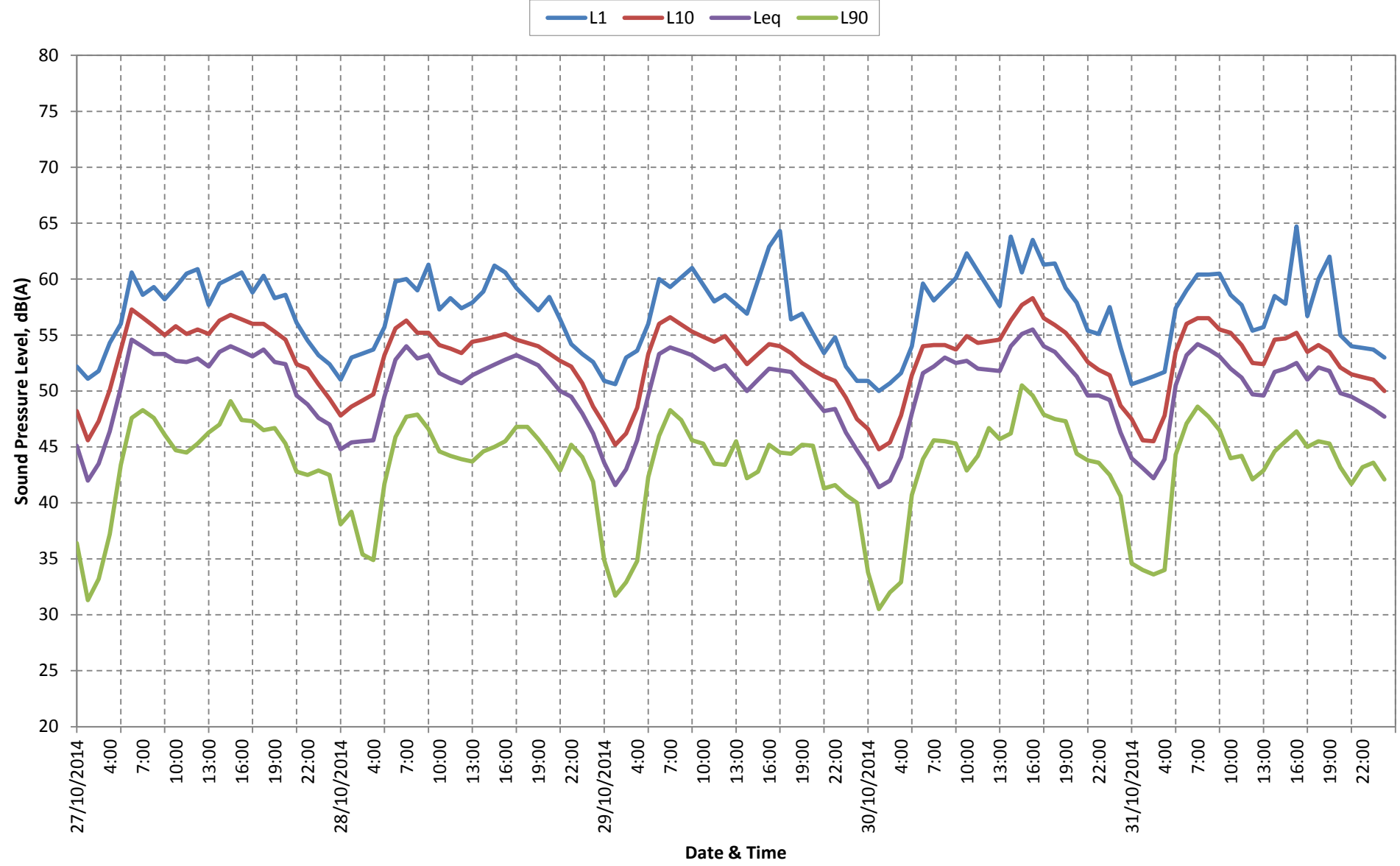


Table A12 – Results of Noise Logging 8 Jarrah Court, Beechboro

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
3 November 2014	52.0	49.8	50.7	46.8
4 November 2014	51.2	49.2	50.3	45.7
5 November 2014	51.7	49.3	50.7	44.0
6 November 2014*	57.5	55.2	56.7	48.1
7 November 2014*	55.8	54.1	55.1	50.9
Weekday Average	51.6	49.5	50.6	45.5

*Day excluded from the Average due to unacceptable weather conditions.

**Photograph A12 – Noise Logger at 8 Jarrah Court, Beechboro**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 8 Jarrah Court
Locality	Beechboro
Occupier	Christina D'Rozario 9377 7456
Dates	03/11/2014 to 07/11/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	100m to Reid Hwy
Height of the road in relation to the ground	+0m
Road surface type	DGA
Speed zone	70 km/h
Absorbing ground	70%
Angle of view	180
Road gradient	Flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	North West
Carriageways & lanes.	2,5
<i>COMMENT</i>	
Comment	Microphone placed on North West façade at Rear of house Rear property fence between microphone and road.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Reid Hwy
EXCEL file	8 Jarrah Ct MRWA Logger Sheet.xlsx
Raw data file	8 Jarrah_Sta.csv
<i>EQUIPMENT</i>	
Analyser number	87803a
Microphone number	87803a
Calibrator number	34883971
Calibrator values	94.0,94.1
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 3/11/14 - Var Winds <18 km/h, 3 hours of Neg at 21 km/h 4/11/14 - Pos Morning winds <11km/h, Afternoon <18 km/h 5/11/14 - Var Winds <18 km/h, 1 hour of Neg at 22 km/h 6/11/14 - Pos Winds 11 to 17 km/h, 2 hours at 21 km/h, night rain 7/11/14 - Continuous Pos winds up to 18km/h, one hour at 21 km/h

Hourly Noise Level Data
8 Jarrah Court, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
3/11/2014	3/11/2014	53	51.8	49.2	46.2	0	220	15
3/11/2014	2:00	52.4	48.3	46.6	40.5	0	230	13
3/11/2014	3:00	50.8	46.1	43	35.8	0	230	9
3/11/2014	4:00	50	46.3	43.4	37.6	0	190	8
3/11/2014	5:00	52.5	48.3	45.7	39.8	0	190	4
3/11/2014	6:00	59.9	53	50.2	47	0	190	2
3/11/2014	7:00	56.4	51.7	49.3	44.6	0	140	8
3/11/2014	8:00	55.4	49.8	47.6	43.4	0	160	11
3/11/2014	9:00	55.6	50.5	48.2	43.9	0	150	13
3/11/2014	10:00	55.1	50.5	48.3	43.8	0	190	11
3/11/2014	11:00	56.7	50.3	48	42.1	0	220	11
3/11/2014	12:00	55.9	52.5	49.7	44.7	0	210	15
3/11/2014	13:00	56.6	52.1	49.3	43.9	0	220	15
3/11/2014	14:00	55.2	52	49.6	44.5	0	210	21
3/11/2014	15:00	58	54.3	51.9	47.2	0	210	22
3/11/2014	16:00	59.2	55.4	52.9	47.8	0	210	18
3/11/2014	17:00	60.3	55.2	53.6	48.7	0	220	21
3/11/2014	18:00	57.8	55.1	52.9	48.7	0	220	17
3/11/2014	19:00	58.5	52.8	50.7	45.9	0	190	13
3/11/2014	20:00	54.9	53.3	52.2	49	0	200	13
3/11/2014	21:00	54.1	52.8	51.9	50.6	0	180	11
3/11/2014	22:00	53.5	51.4	48.9	45.2	0	170	13
3/11/2014	23:00	51.7	49.9	45.8	40.1	0	170	13
3/11/2014	0:00	49.3	46.7	44.5	42.9	0	170	9
4/11/2014	4/11/2014	48.7	44.8	42.3	38.7	0	190	9
4/11/2014	2:00	48.1	42.8	40.1	33.8	0	170	11
4/11/2014	3:00	48.6	42.8	40.5	33.6	0	160	9
4/11/2014	4:00	48.9	44.3	41.5	35.6	0	180	5
4/11/2014	5:00	56.9	52	48.9	41.2	0	0	0
4/11/2014	6:00	56.5	51.8	49.6	45.1	0	0	0
4/11/2014	7:00	56	50.4	48.6	44.7	0	80	9
4/11/2014	8:00	55.9	49.8	48.4	44	0	120	11
4/11/2014	9:00	53.9	48.8	46.5	41.8	0	130	9
4/11/2014	10:00	58.3	49.6	47.7	41.7	0	160	5
4/11/2014	11:00	53.6	49.7	47	41.8	0	40	9
4/11/2014	12:00	54	49.1	46.5	40.8	0	170	9
4/11/2014	13:00	55.1	50	47.5	41	0	250	17
4/11/2014	14:00	59.4	55.7	53	45.1	0	240	17
4/11/2014	15:00	58.3	54.7	52.3	48.5	0	200	18
4/11/2014	16:00	56.2	53.7	51.5	47.6	0	230	18
4/11/2014	17:00	58.1	53.7	52.1	48.3	0	220	15
4/11/2014	18:00	57.7	54.2	52.5	49.2	0	220	15
4/11/2014	19:00	57.1	54	52.1	48.2	0	210	15
4/11/2014	20:00	57.7	55	52.7	48.2	0	190	11
4/11/2014	21:00	52.7	50.5	48.7	44.7	0	180	15
4/11/2014	22:00	52.9	48.7	47	43.8	0	180	13
4/11/2014	23:00	50.6	47.2	46.1	43.7	0	190	13
4/11/2014	0:00	51	46.8	45.3	41.3	0	180	13
5/11/2014	5/11/2014	50.1	44.4	42.7	38.2	0	180	9
5/11/2014	2:00	48.9	41.9	40	35.1	0	160	8
5/11/2014	3:00	45.8	40.4	37.9	34.4	0	180	5
5/11/2014	4:00	49.1	46	43.4	38.5	0	190	2
5/11/2014	5:00	52.5	48.2	46.2	42.4	0	160	5
5/11/2014	6:00	55.2	49.7	47.8	46.2	0	150	5
5/11/2014	7:00	57.4	51.1	49.4	45.5	0	210	5
5/11/2014	8:00	58.4	51.6	49.6	45.8	0	190	8
5/11/2014	9:00	56.5	52.1	49.7	45.7	0	210	9
5/11/2014	10:00	60	52.1	49.6	45.5	0	210	13
5/11/2014	11:00	56	52	49.5	44.3	0	210	11
5/11/2014	12:00	57.4	52.1	49.7	43.6	0	230	9
5/11/2014	13:00	56.9	51.7	49.3	44.4	0	210	11
5/11/2014	14:00	55.8	52.9	50.5	46	0	240	13
5/11/2014	15:00	59	54.1	52.1	48.1	0	220	13
5/11/2014	16:00	57.3	54.2	52.1	48.3	0	230	15
5/11/2014	17:00	57.5	54.3	52.1	48.1	0	220	22
5/11/2014	18:00	59	56.1	54	50.2	0	220	18
5/11/2014	19:00	59.7	54.3	52.2	47.9	0	200	13
5/11/2014	20:00	57.7	52.0	50.2	47	0	210	13
5/11/2014	21:00	53.6	49.6	48.2	45.6	0	190	11
5/11/2014	22:00	59.9	48.9	46.3	44.3	0	180	13
5/11/2014	23:00	49.7	46.5	44.4	41.2	0	170	9
5/11/2014	0:00	48.3	44.3	42.2	39.1	0	170	2

Hourly Noise Level Data
8 Jarrah Court, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
6/11/2014	6/11/2014	48.1	44	41.8	37.6	0	170	5
6/11/2014	2:00	48.9	41.9	39.9	35.1	0	170	9
6/11/2014	3:00	45.8	40.4	37.9	32.8	0	150	8
6/11/2014	4:00	50.2	44.9	42.2	34.4	0	0	0
6/11/2014	5:00	59.7	48.7	46.7	41.4	0	170	2
6/11/2014	6:00	58.4	53.2	51.1	45.8	0	0	0
6/11/2014	7:00	55.7	51.8	49.6	45.4	0	0	0
6/11/2014	8:00	58.3	52.6	50.2	45.5	0	80	5
6/11/2014	9:00	57.3	54.1	51.8	47.7	0	260	9
6/11/2014	10:00	60.6	55.2	53.1	51.5	0	300	11
6/11/2014	11:00	59.2	56.3	54.4	51	0	320	11
6/11/2014	12:00	59.1	56.6	54.4	50.3	0	290	13
6/11/2014	13:00	62.2	59.2	56.7	52.1	0	280	13
6/11/2014	14:00	61.9	59.1	57.1	53.4	0	310	17
6/11/2014	15:00	62.9	60.3	58.4	55	0	310	17
6/11/2014	16:00	65.4	61.2	59.3	55.7	0	300	21
6/11/2014	17:00	63.3	60.9	59	56.3	0	300	17
6/11/2014	18:00	64.8	61.5	59.7	56.4	0	300	15
6/11/2014	19:00	63.2	60.7	58.3	53.9	0	300	13
6/11/2014	20:00	61.5	58.9	56.8	53.4	0	300	17
6/11/2014	21:00	62.9	59.1	57	52.8	0	310	21
6/11/2014	22:00	61.5	58.9	56.1	51.6	1.4	270	5
6/11/2014	23:00	56.2	54	51.8	48	0.2	240	15
6/11/2014	0:00	56.9	53.9	51.4	46.7	0.6	240	11
7/11/2014	7/11/2014	54	51.1	48.1	43.1	0	250	15
7/11/2014	2:00	54.4	51	47.9	41.8	0	250	15
7/11/2014	3:00	54.6	51.1	48.2	42.2	0	250	15
7/11/2014	4:00	57	53.3	50.4	44.2	0	240	17
7/11/2014	5:00	57.7	55	52.4	47.8	0	250	13
7/11/2014	6:00	60.8	58.7	56.4	51.9	0	250	9
7/11/2014	7:00	60.5	58.6	56.6	53.5	0	250	15
7/11/2014	8:00	61.5	59.3	57.1	53.6	0	250	15
7/11/2014	9:00	62.5	59.3	57.5	53.3	0	230	17
7/11/2014	10:00	62.6	59.9	57.6	53.8	0	250	17
7/11/2014	11:00	60.6	58.2	55.8	51.9	0	250	17
7/11/2014	12:00	62.2	58	56	50.4	0	230	18
7/11/2014	13:00	60.6	57	54.6	50.2	0	230	17
7/11/2014	14:00	61.2	57	54.8	50.3	0	210	15
7/11/2014	15:00	59.4	56.8	54.2	49.5	0	220	17
7/11/2014	16:00	58	55.7	53.1	48.2	0	250	17
7/11/2014	17:00	59.5	56.6	54.3	49.6	0	230	21
7/11/2014	18:00	59.2	55.9	53.3	48.7	0	210	17
7/11/2014	19:00	59.8	55	53	48.6	0	210	11
7/11/2014	20:00	60.2	56.5	53.5	46.7	0	200	9
7/11/2014	21:00	56.8	54	53.7	52.6	0	190	11
7/11/2014	22:00	56.2	52.9	49.1	43.4	0	170	9
7/11/2014	23:00	52.6	47.9	46.2	43	0	170	8
7/11/2014	0:00	51.8	46.4	44.9	41.1	0	160	8

Noise Logging - 8 Jarrah Court, Beechboro

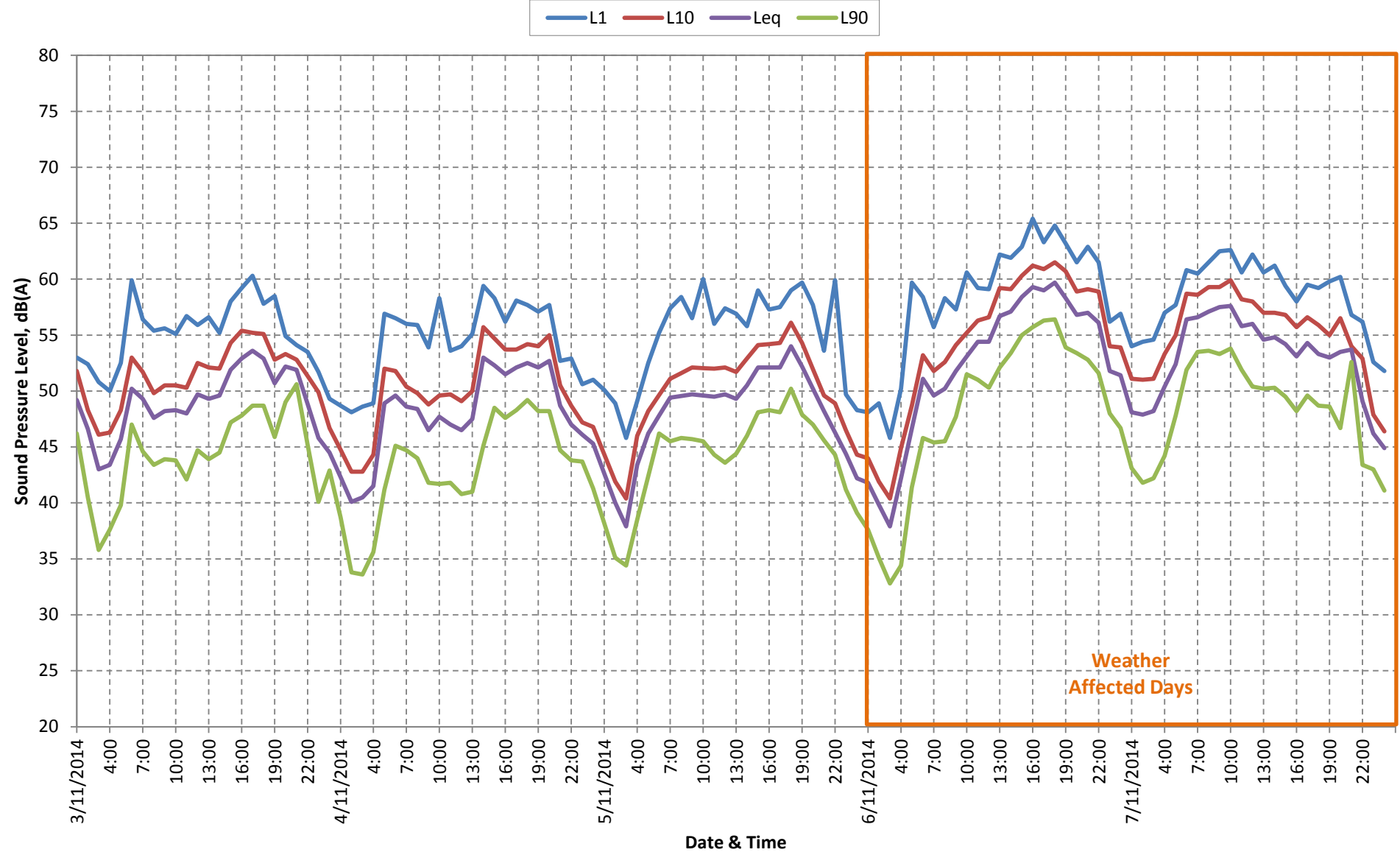


Table A13 – Results of Noise Logging 43 Mitra Loop, Beechboro

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
27 October 2014	50.5	51.1	49.2	53.4
28 October 2014	50.9	51.4	50.9	52.2
29 October 2014	51.9	52.9	50.9	55.4
30 October 2014	50.1	49.2	49.2	49.3
31 October 2014	50.9	51.8	50.2	53.9
Weekday Average	50.9	51.3	50.1	52.8



Photograph A13– Noise Logger at 43 Mitra Loop, Beechboro

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 43 Mitra Loop
Locality	Beechboro
Occupier	Paul Griffiths 0407980045
Dates	27/10/2014 to 31/10/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	road yet to be constructed
Height of the road in relation to the ground	road yet to be constructed
Road surface type	road yet to be constructed
Speed zone	road yet to be constructed
Absorbing ground	road yet to be constructed
Angle of view	road yet to be constructed
Road gradient	road yet to be constructed
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	West
Carriageways & lanes.	road yet to be constructed
<i>COMMENT</i>	
Comment	Microphone placed on West façade at Rear of house Rear property fence between microphone and future road.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Future Tonkin Highway.
EXCEL file	43 Mitra Lp MRWA Logger Sheet.xlsx
Raw data file	43 Mitra Loop 87802B_Sta.csv
<i>EQUIPMENT</i>	
Analyser number	15-203-999
Microphone number	15-203-999
Calibrator number	34883971
Calibrator values	94.0,93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 27/10/14 - Neg morning Winds <13 km/h, Pos in afternoon <24km/h 28/10/14 - Neg winds < 17km/h, Pos Afternoon <15 km/h 29/10/14 - Pos Winds <18 km/h most of the day 30/10/14 - Pos Winds <18 km/h most of the day 31/10/14 - Var winds up to 18km/h, one hour at 21 km/h

Hourly Noise Level Data
43 Mitra Loop, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
27/10/2014	27/10/2014	52.8	50.8	46.2	35.8	0	180	13
27/10/2014	2:00	42.4	39.8	36.5	30	0	180	9
27/10/2014	3:00	43.6	39.4	38.1	31.3	0	170	8
27/10/2014	4:00	42.9	39.9	38.1	33	0	170	9
27/10/2014	5:00	61.2	61.1	57.5	51.5	0	160	5
27/10/2014	6:00	51.9	44.7	43.6	38.7	0	0	0
27/10/2014	7:00	48.2	45.1	43.6	40.9	0	70	8
27/10/2014	8:00	47.7	43.8	42.2	38.9	0	100	13
27/10/2014	9:00	56	45.8	44.9	37.7	0	100	8
27/10/2014	10:00	58.3	47	46.6	38.4	0	100	5
27/10/2014	11:00	51.2	43.5	44	36.6	0	130	8
27/10/2014	12:00	54.8	47.6	45.9	38.6	0	220	11
27/10/2014	13:00	51.2	48.6	45.3	39.9	0	200	15
27/10/2014	14:00	54.5	51.7	49.5	46	0	210	18
27/10/2014	15:00	55.4	52.9	51.1	48.2	0	220	24
27/10/2014	16:00	55.6	52.9	51	48.1	0	220	21
27/10/2014	17:00	55.3	49.3	47.9	44.1	0	210	21
27/10/2014	18:00	52.5	48.4	46.8	43.9	0	210	15
27/10/2014	19:00	55.6	50.9	48.6	44.2	0	210	13
27/10/2014	20:00	55.9	53.4	52	49.5	0	180	15
27/10/2014	21:00	54.6	53.6	52	49.9	0	170	17
27/10/2014	22:00	58.1	57.3	54.6	50.1	0	170	17
27/10/2014	23:00	62.7	61.9	59.2	55.8	0	170	11
27/10/2014	0:00	56.7	55.3	54.5	53.5	0	160	8
28/10/2014	28/10/2014	55.8	55.4	54.8	53.9	0	170	13
28/10/2014	2:00	55.5	53.4	52.1	49.6	0	150	8
28/10/2014	3:00	53.3	52	50.8	49.2	0	0	0
28/10/2014	4:00	50.7	50.1	49.3	48.1	0	80	8
28/10/2014	5:00	53.8	50.8	45.6	32.9	0	80	8
28/10/2014	6:00	54.2	45.7	45.2	38.4	0	60	11
28/10/2014	7:00	56.2	46.9	46.4	41.1	0	80	13
28/10/2014	8:00	51.9	48.9	46.5	42.8	0	80	17
28/10/2014	9:00	65.3	50.3	51.4	39.8	0	100	13
28/10/2014	10:00	51.6	42.7	42.1	37.5	0	90	9
28/10/2014	11:00	60.3	47.1	47.5	38.3	0	110	9
28/10/2014	12:00	60.3	49	48.1	36.1	0	140	9
28/10/2014	13:00	60.1	53.6	48.9	35.5	0	10	9
28/10/2014	14:00	61.9	52.3	48.9	36.7	0	100	8
28/10/2014	15:00	51.3	46.7	43.4	37.3	0	190	11
28/10/2014	16:00	55	49.2	47.4	43	0	210	15
28/10/2014	17:00	53.2	47.8	46.2	43.2	0	210	13
28/10/2014	18:00	52.2	47.3	45.7	42.8	0	210	13
28/10/2014	19:00	67.1	56.4	56.9	43.3	0	200	13
28/10/2014	20:00	61.4	57.5	56.2	51.4	0	190	8
28/10/2014	21:00	56	55.2	53.6	50.6	0	190	13
28/10/2014	22:00	53.3	52.9	52.2	50.9	0	180	11
28/10/2014	23:00	54.7	54.3	53.2	51.4	0	190	9
28/10/2014	0:00	58.5	57.7	55.8	52.9	0	180	5
29/10/2014	29/10/2014	57.6	56.5	54.6	52.2	0	190	5
29/10/2014	2:00	57.3	56.6	55.9	54.8	0	170	9
29/10/2014	3:00	59.4	58.6	57.2	55.5	0	190	8
29/10/2014	4:00	57.1	56.4	54.4	48.1	0	210	13
29/10/2014	5:00	61.1	60.9	57.7	52.8	0	180	9
29/10/2014	6:00	54.3	49.5	47.1	42.7	0	190	8
29/10/2014	7:00	51.3	48.4	46.6	43.9	0	200	5
29/10/2014	8:00	55.3	47	47.1	42.2	0	170	8
29/10/2014	9:00	61.2	55.7	51.9	41.3	0	190	11
29/10/2014	10:00	58	49.4	47.3	40.5	0	210	8
29/10/2014	11:00	54.8	48.7	47	42.6	0	220	11
29/10/2014	12:00	50.8	48.4	46.3	43.3	0	210	11
29/10/2014	13:00	52.7	47.9	46.4	43.3	0	210	17
29/10/2014	14:00	55.4	51.2	49.1	45.7	0	230	13
29/10/2014	15:00	52.4	49.5	47.9	45.5	0	230	13
29/10/2014	16:00	67.4	59.3	56.4	47.8	0	220	15
29/10/2014	17:00	54.3	50.3	48.4	45.2	0	230	18
29/10/2014	18:00	56.1	49.1	48.2	44.2	0	230	13
29/10/2014	19:00	61.1	55.1	51.2	43.9	0	220	11
29/10/2014	20:00	58.9	57.5	56.3	54.8	0	240	17
29/10/2014	21:00	56.5	54.2	52.8	49.3	0	220	17
29/10/2014	22:00	52.9	49.4	47.9	44.4	0	210	11
29/10/2014	23:00	61.2	60.8	57.4	52.3	0	210	9
29/10/2014	0:00	54.5	52.1	49.3	44.6	0	230	11

Hourly Noise Level Data
43 Mitra Loop, Beechboro

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
30/10/2014	30/10/2014	55.2	53.3	51.4	47.3	0	220	15
30/10/2014	2:00	54.9	54.3	50.7	42.1	0	210	13
30/10/2014	3:00	56.1	55.2	52.4	44	0	210	9
30/10/2014	4:00	54.7	53.1	49.8	40.4	0	190	9
30/10/2014	5:00	55.6	52.5	48.4	39.7	0	190	8
30/10/2014	6:00	51.3	49.5	46.1	38.7	0	180	2
30/10/2014	7:00	50.1	46	43.7	39.8	0	150	9
30/10/2014	8:00	50.7	46.3	44.5	40.3	0	170	8
30/10/2014	9:00	57.1	49.3	48.2	41.7	0	200	4
30/10/2014	10:00	56.5	49.9	48	42.7	0	200	15
30/10/2014	11:00	54	49.4	47.3	42.9	0	210	13
30/10/2014	12:00	57.1	52.6	51.1	48	0	230	17
30/10/2014	13:00	54.1	50.7	48.7	45.5	0	240	18
30/10/2014	14:00	57.1	52.4	50.4	46.6	0	250	17
30/10/2014	15:00	58.9	54.6	52.4	48.9	0	230	18
30/10/2014	16:00	56.8	53.4	51.6	48.4	0	240	17
30/10/2014	17:00	54.1	51.4	49.9	47.5	0	240	18
30/10/2014	18:00	59.7	52.2	51	46.8	0	230	17
30/10/2014	19:00	54	50.8	48.8	45.2	0	240	18
30/10/2014	20:00	53.5	50.7	47.7	43.5	0	230	17
30/10/2014	21:00	53.5	51.2	47.8	44.7	0	240	13
30/10/2014	22:00	53.5	49.5	46.2	40.8	0	240	15
30/10/2014	23:00	54.3	47.7	45.7	40.7	0	240	15
30/10/2014	0:00	47.7	44.4	41.7	38.2	0	230	11
31/10/2014	31/10/2014	47.3	44.9	41.6	37.1	0	240	13
31/10/2014	2:00	64.2	45.4	49.8	36.2	0	240	8
31/10/2014	3:00	46.8	45.3	40.9	35.7	0	240	9
31/10/2014	4:00	51.2	49.3	45	36.7	0	240	9
31/10/2014	5:00	63.3	63.1	59.1	51.8	0	190	18
31/10/2014	6:00	55.4	49.7	47.7	43.2	0	170	11
31/10/2014	7:00	52.8	49.5	47.5	44.5	0	170	17
31/10/2014	8:00	54.8	50	48.5	45	0	170	15
31/10/2014	9:00	53.6	48.3	46.8	43.1	0	180	17
31/10/2014	10:00	53.9	47.7	46.1	41.9	0	180	15
31/10/2014	11:00	54.6	47.2	46	41.3	0	190	15
31/10/2014	12:00	48.5	43.7	41.4	37.1	0	160	13
31/10/2014	13:00	49.1	42.8	40.5	35.7	0	160	11
31/10/2014	14:00	54.9	52	49.4	40.2	0	290	13
31/10/2014	15:00	57.9	52.7	51.8	47.8	0	220	21
31/10/2014	16:00	56.7	49.8	48.8	45.2	0	210	17
31/10/2014	17:00	59	50.3	49.1	44.1	0	200	17
31/10/2014	18:00	54.7	48.9	48.1	43.5	0	210	18
31/10/2014	19:00	57.5	53.2	49.6	43.6	0	230	13
31/10/2014	20:00	60.3	58.8	57.5	55.4	0	220	9
31/10/2014	21:00	56.8	53.9	51.8	45.4	0	220	8
31/10/2014	22:00	52.6	51.9	50.8	48.9	0	230	5
31/10/2014	23:00	63.4	63.2	59.3	53.1	0	220	8
31/10/2014	0:00	53.7	51.5	48.6	44.2	0	0	0

Noise Logging - 43 Mitra Loop, Beechboro

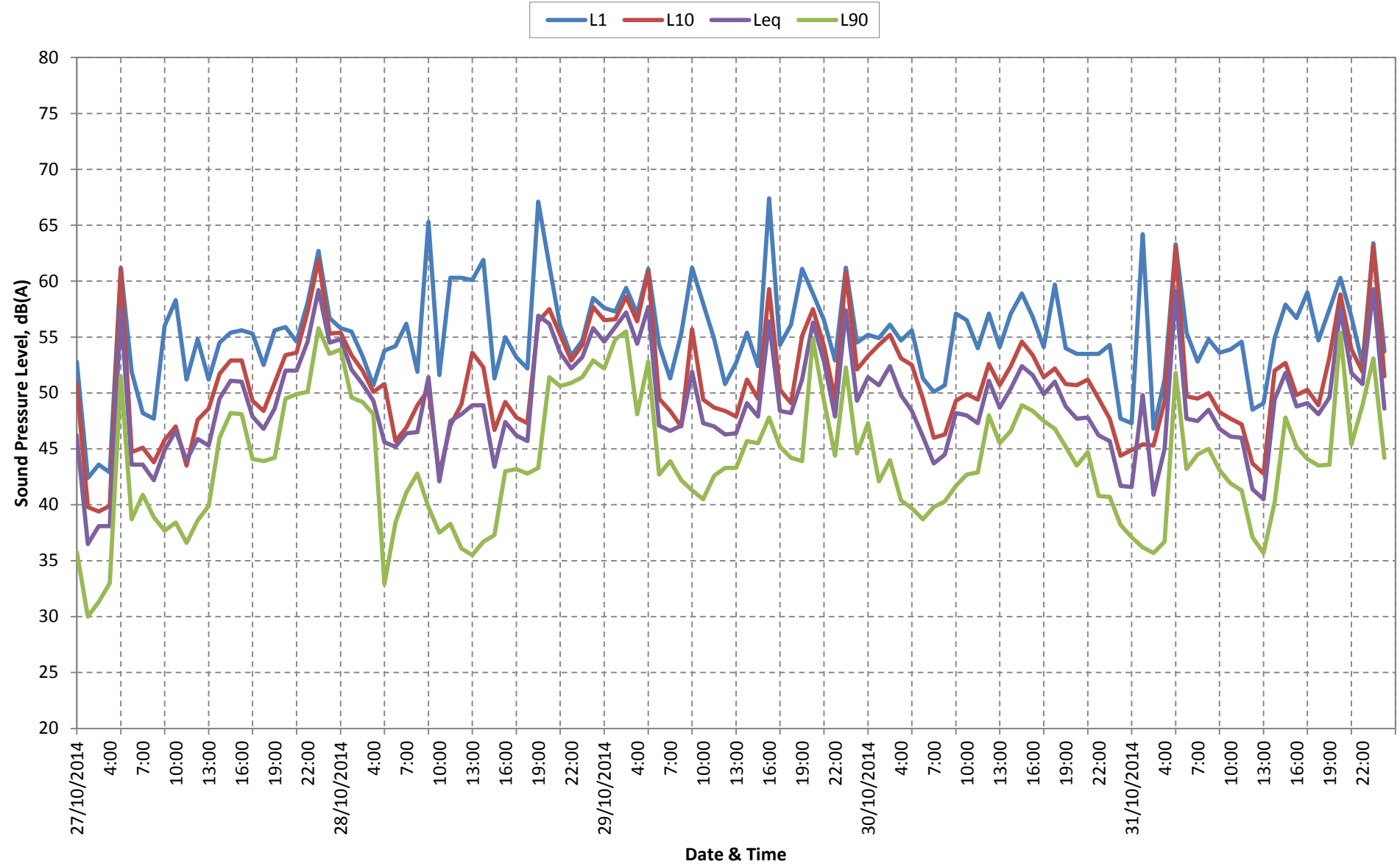


Table A14 – Results of Noise Logging 10 Cootha Court, Ballajura

Date	L_{A10,18hour}, dB	L_{Aeq,24hour}, dB	L_{Aeq(Day)}, dB	L_{Aeq(Night)}, dB
3 November 2014	48.4	46.8	47.9	42.8
4 November 2014	48.1	47.1	48.0	44.3
5 November 2014	47.0	45.2	46.2	42.4
6 November 2014*	46.4	44.6	45.5	41.6
7 November 2014*	47.8	45.0	46.1	41.5
Weekday Average	47.8	46.4	47.4	43.2

*Day excluded from the Average due to unacceptable weather conditions.

**Photograph A14 – Noise Logger at 10 Cootha Court, Ballajura**

Traffic Noise Measurement Data

Item	Details
<i>LOCATION</i>	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 10 Cootha Court
Locality	Ballajura
Occupier	Cuong Diep 0402003411
Dates	3/11/2014 to 7/11/2014.
Category	<i>Main Roads will provide this information if required.</i>
<i>SITE</i>	
Distance from the microphone to the kerb	80m to Hepburn
Height of the road in relation to the ground	+0m
Road surface type	DGA
Speed zone	60 km/h
Absorbing ground	70%
Angle of view	180
Road gradient	Flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	East
Carriageways & lanes.	1,2
<i>COMMENT</i>	
Comment	Microphone placed on East façade at Rear of house Rear property fence between microphone and road.
<i>REFERENCES</i>	
AMG Z50 E/N	
Road name	Hepburn Ave
EXCEL file	10 Cootha Ct MRWA Logger Sheet.xlsx
Raw data file	10 Cootha_Sta.csv
<i>EQUIPMENT</i>	
Analyser number	16-004-041
Microphone number	16-004-041
Calibrator number	34883971
Calibrator values	93.8,93.8
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
<i>WEATHER</i>	
Wind	Wind acceptability based on Mt Lawley Data 3/11/14 - Var Winds <18 km/h, 3 hours of Neg at 21 km/h 4/11/14 - Pos morning winds <11km/h, Neg Afternoon <18 km/h 5/11/14 - Var Winds <18 km/h, 1 hour of Neg at 22 km/h 6/11/14 - Neg Winds 11 to 17 km/h, 2 hours at 21 km/h, night rain 7/11/14 - Neg winds up to 18km/h, one hour at 21 km/h

Hourly Noise Level Data
10 Cootha Court, Ballajura

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
3/11/2014	3/11/2014	42.9	36.7	34.7	30.5	0	220	15
3/11/2014	2:00	41.4	35.8	34.0	29.7	0	230	13
3/11/2014	3:00	39.8	34.8	33.2	29.4	0	230	9
3/11/2014	4:00	45.7	38.1	36.1	30.9	0	190	8
3/11/2014	5:00	50.8	46.1	43	36.1	0	190	4
3/11/2014	6:00	58.2	52.2	49.9	44.8	0	190	2
3/11/2014	7:00	64.6	55.1	54.1	49.5	0	140	8
3/11/2014	8:00	58.7	51.7	49.4	44.5	0	160	11
3/11/2014	9:00	57.8	49.8	48	42.2	0	150	13
3/11/2014	10:00	58.2	48.9	47.4	40.3	0	190	11
3/11/2014	11:00	56.4	47.8	46.7	39.1	0	220	11
3/11/2014	12:00	53.3	46.6	43.9	38.2	0	210	15
3/11/2014	13:00	52.8	47.2	44	38.4	0	220	15
3/11/2014	14:00	55.3	48.1	45.8	40.1	0	210	21
3/11/2014	15:00	58.9	49.6	47	42.1	0	210	22
3/11/2014	16:00	57.9	50.2	48.2	43.2	0	210	18
3/11/2014	17:00	55.6	51	48.4	44.3	0	220	21
3/11/2014	18:00	55.3	50.2	47.8	43.5	0	220	17
3/11/2014	19:00	54.8	49.1	46.8	42.3	0	190	13
3/11/2014	20:00	53.9	48.1	46.2	41.6	0	200	13
3/11/2014	21:00	52.9	46.8	44.9	41.1	0	180	11
3/11/2014	22:00	51.3	45.5	43.5	40.3	0	170	13
3/11/2014	23:00	48.5	43.9	41.9	38.8	0	170	13
3/11/2014	0:00	46.8	41.7	39.6	36.1	0	170	9
4/11/2014	4/11/2014	49.7	40.6	39	33.6	0	190	9
4/11/2014	2:00	45.7	38.4	36.5	31.8	0	170	11
4/11/2014	3:00	47	40.9	38.1	32.1	0	160	9
4/11/2014	4:00	45.7	40.7	38.1	33.1	0	180	5
4/11/2014	5:00	54.7	48.3	45.9	39.3	0	0	0
4/11/2014	6:00	57.2	53.1	50.9	46.6	0	0	0
4/11/2014	7:00	62.8	54.2	53.8	47.9	0	80	9
4/11/2014	8:00	59	53.4	51.2	46.8	0	120	11
4/11/2014	9:00	59.7	50.2	47.9	42.8	0	130	9
4/11/2014	10:00	54.4	46.9	44.5	39.5	0	160	5
4/11/2014	11:00	56.1	46.0	43.7	39	0	40	9
4/11/2014	12:00	52.4	45.1	42.8	35.4	0	170	9
4/11/2014	13:00	55.2	44.8	43.5	34.8	0	250	17
4/11/2014	14:00	57.7	46.4	45.0	36.2	0	240	17
4/11/2014	15:00	55.9	48	46.4	40.8	0	200	18
4/11/2014	16:00	57.3	49.8	47.6	42.1	0	230	18
4/11/2014	17:00	55.6	50.7	48.7	43.7	0	220	15
4/11/2014	18:00	54.7	50.5	49	47.1	0	220	15
4/11/2014	19:00	55.1	49.7	48.9	46.7	0	210	15
4/11/2014	20:00	55.8	48.5	47.8	42	0	190	11
4/11/2014	21:00	55.1	47.2	45.8	41.7	0	180	15
4/11/2014	22:00	52.9	47.3	45	41.1	0	180	13
4/11/2014	23:00	50.7	45	43	39.2	0	190	13
4/11/2014	0:00	47.8	42.5	40.2	36.7	0	180	13
5/11/2014	5/11/2014	47.9	41.2	38.1	35.7	0	180	9
5/11/2014	2:00	44.4	38	35.9	32	0	160	8
5/11/2014	3:00	46.4	38	36.4	32	0	180	5
5/11/2014	4:00	44.4	40.3	37.7	33.2	0	190	2
5/11/2014	5:00	50.8	46.5	43.7	38.4	0	160	5
5/11/2014	6:00	54.7	50.8	48.5	43.9	0	150	5
5/11/2014	7:00	55.6	50.5	48.6	43.7	0	210	5
5/11/2014	8:00	58.7	51.3	49.5	41.8	0	190	8
5/11/2014	9:00	53.5	46.9	44.7	39.3	0	210	9
5/11/2014	10:00	56.7	46.4	44.5	37	0	210	13
5/11/2014	11:00	50.8	44.4	41.9	37.3	0	210	11
5/11/2014	12:00	52.2	44.7	42.4	35.5	0	230	9
5/11/2014	13:00	54.9	45.3	43.3	36	0	210	11
5/11/2014	14:00	53.3	44.7	42.6	35.6	0	240	13
5/11/2014	15:00	53.9	46.3	43.8	37.2	0	220	13
5/11/2014	16:00	55.7	48.1	45.7	39.4	0	230	15
5/11/2014	17:00	53.8	48.9	48.1	42	0	220	22
5/11/2014	18:00	54.6	50.2	48.1	43.5	0	220	18
5/11/2014	19:00	56.1	49.8	47.7	43.6	0	200	13
5/11/2014	20:00	54.9	49.6	47.6	42.5	0	210	13
5/11/2014	21:00	53.8	46.9	44.9	40.2	0	190	11
5/11/2014	22:00	56.4	47.2	45.6	39.3	0	180	13
5/11/2014	23:00	50.4	43.1	41.3	36.8	0	170	9
5/11/2014	0:00	50.1	41.1	39.7	34.9	0	170	2

Hourly Noise Level Data
10 Cootha Court, Ballajura

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
6/11/2014	6/11/2014	47.1	39.9	38.1	33.6	0	170	5
6/11/2014	2:00	45.3	38.3	36.8	31.7	0	170	9
6/11/2014	3:00	44.3	39.1	36.6	32.4	0	150	8
6/11/2014	4:00	44.8	38.8	37.5	32.1	0	0	0
6/11/2014	5:00	49.9	43.8	40.7	32.8	0	170	2
6/11/2014	6:00	53.9	50.5	47.4	42.2	0	0	0
6/11/2014	7:00	59.7	52	51	42.1	0	0	0
6/11/2014	8:00	54.8	48.3	45.5	39.1	0	80	5
6/11/2014	9:00	53.3	45.4	42.8	35.4	0	260	9
6/11/2014	10:00	52.7	44.3	41.6	34	0	300	11
6/11/2014	11:00	52	42.9	41	34.5	0	320	11
6/11/2014	12:00	51.6	43.2	40.9	34.1	0	290	13
6/11/2014	13:00	54.1	45.2	43.7	35.5	0	280	13
6/11/2014	14:00	53.1	46.2	43.5	36.4	0	310	17
6/11/2014	15:00	54.3	47.7	45.5	38.5	0	310	17
6/11/2014	16:00	58.4	49.2	47.5	39.9	0	300	21
6/11/2014	17:00	54.6	48.3	46.3	40.9	0	300	17
6/11/2014	18:00	54.3	47.3	45.1	40.2	0	300	15
6/11/2014	19:00	54.4	46.6	44.8	38.9	0	300	13
6/11/2014	20:00	54.5	45.9	44.5	38.6	0	300	17
6/11/2014	21:00	51.9	45.7	43.3	36.7	0	310	21
6/11/2014	22:00	59.2	50	47.6	36.7	1.4	270	5
6/11/2014	23:00	49.1	41.5	39.2	33.1	0.2	240	15
6/11/2014	0:00	51.7	45.5	42.6	36.4	0.6	240	11
7/11/2014	7/11/2014	46	39.2	37.1	31.5	0	250	15
7/11/2014	2:00	47.3	40.2	38.1	32.5	0	250	15
7/11/2014	3:00	50.1	42.7	40.3	32.9	0	250	15
7/11/2014	4:00	48.7	42.3	39.7	33.9	0	240	17
7/11/2014	5:00	48.9	41.9	40.2	34.8	0	250	13
7/11/2014	6:00	49.8	44.8	42.6	38.5	0	250	9
7/11/2014	7:00	54.9	46.8	45.1	40.1	0	250	15
7/11/2014	8:00	54.1	47.7	45.4	40.7	0	250	15
7/11/2014	9:00	54.5	48.2	45.6	40	0	230	17
7/11/2014	10:00	53.9	48.4	46.1	40.9	0	250	17
7/11/2014	11:00	53.9	47.5	45.1	39	0	250	17
7/11/2014	12:00	54.1	46.8	44.6	38.9	0	230	18
7/11/2014	13:00	55.1	47.2	44.8	39.9	0	230	17
7/11/2014	14:00	54.2	47.5	44.9	39.5	0	210	15
7/11/2014	15:00	54.5	47.6	45.1	40	0	220	17
7/11/2014	16:00	56.7	49.1	46.7	41.2	0	250	17
7/11/2014	17:00	55.7	49.6	48.2	41.7	0	230	21
7/11/2014	18:00	58	50.1	48.3	43.2	0	210	17
7/11/2014	19:00	58.6	50.4	48.4	41.2	0	210	11
7/11/2014	20:00	55.2	47.7	46.2	40.7	0	200	9
7/11/2014	21:00	54.4	47.5	45.1	39.5	0	190	11
7/11/2014	22:00	54.2	46.5	44.8	39.8	0	170	9
7/11/2014	23:00	52.8	45.7	44	39.9	0	170	8
7/11/2014	0:00	53.4	45.8	44.4	39.8	0	160	8

Noise Logging - 10 Cootha Court, Ballajura

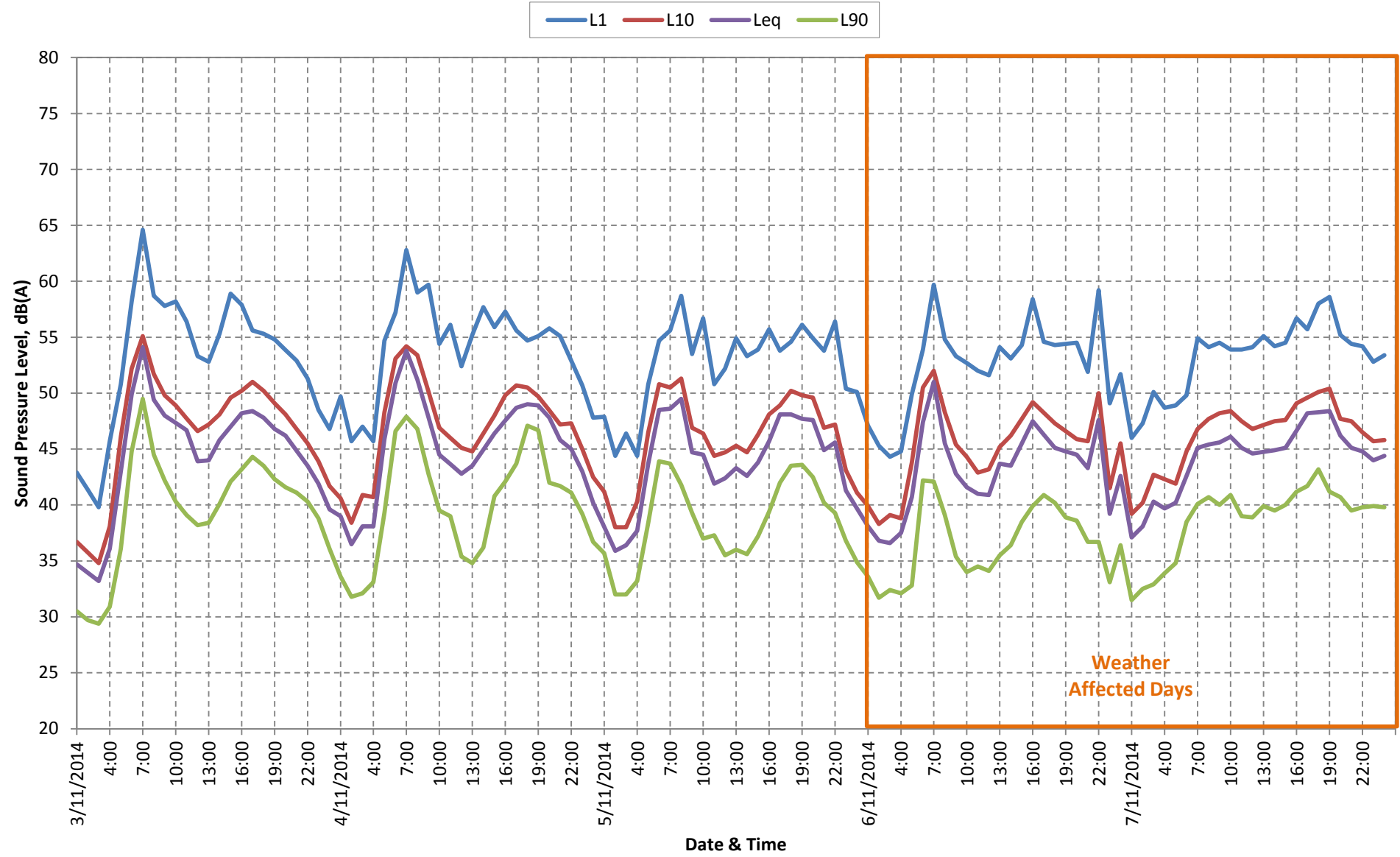


Table A15 – Results of Noise Logging 21 Madura Close, Ballajura

Date	L _{A10,18hour} , dB	L _{Aeq,24hour} , dB	L _{Aeq(Day)} , dB	L _{Aeq(Night)} , dB
20 November 2014	48.4	47.5	47.8	46.9
21 November 2014*	46.7	45.0	46.4	39.1
24 November 2014	49.6	48.2	49.2	45.4
25 November 2014	52.1	50.1	50.5	49.2
26 November 2014*	56.0	54.8	56.1	49.3
27 November 2014	51.0	49.3	50.3	46.3
Weekday Average	50.3	48.8	49.4	47.0

*Day excluded from the Average due to unacceptable weather conditions.

**Photograph A15 – Noise Logger at 21 Madura Close, Ballajura**

Traffic Noise Measurement Data

Item	Details
LOCATION	
Project	Perth-Darwin Highway NorthlinkWA
Street address	No. 21 Madura Close
Locality	Ballajura
Occupier	Florence
Dates	20/11/2014 to 27/11/2014.
Category	<i>Main Roads will provide this information if required.</i>
SITE	
Distance from the microphone to the kerb	85m to Hepburn
Height of the road in relation to the ground	+0m
Road surface type	DGA
Speed zone	60 km/h
Absorbing ground	70%
Angle of view	170
Road gradient	Flat
Traffic flow	Vehicles per day. Main Roads to provide this information
Heavy vehicles	Percentage. Main Roads to provide this information
House-Road orientation.	East
Carriageways & lanes.	2,5
COMMENT	
Comment	Microphone placed on East façade at Rear of house Rear property fence between microphone and road.
REFERENCES	
AMG Z50 E/N	
Road name	Hepburn Ave
EXCEL file	21 Madura Close MRWA Logger Sheet.xlsx
Raw data file	21 Madura_Sta.csv
EQUIPMENT	
Analyser number	15-301-468
Microphone number	15-301-468
Calibrator number	34883971
Calibrator values	94.0,94.0
Operator	Lloyd George Acoustics Pty Ltd - Matt Moyle
WEATHER	
Wind	Wind acceptability based on Mt Lawley Data 20/11/14 - Neg Winds <18 km/h from 9am, Morning <9km/h Pos winds 21/11/14 - Neg Winds <18 km/h continuous. 24/11/14 - Var Winds <18 km/h, 3 hour of Neg at 21 km/h 25/11/14 - Pos Winds 15 km/h, 1 hour at 18 km/h, night rain 26/11/14 - Pos winds all day, up to 21km/h, Evening Rain 27/11/14 - Var winds up to 18km/h, Morning Showers

Hourly Noise Level Data

21 Madura Close, Ballajura

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
20/11/2014	20/11/2014	52.8	48	44.5	31.7	0	0	0
20/11/2014	2:00	49.9	43.7	39.3	28.1	0	270	5
20/11/2014	3:00	55.2	46.4	42.9	28.7	0	0	0
20/11/2014	4:00	53.3	47.1	42.8	29.5	0	50	5
20/11/2014	5:00	57.8	52.9	49.4	38.5	0	40	4
20/11/2014	6:00	58.2	54.1	53.3	45.2	0	20	2
20/11/2014	7:00	56.9	52.5	49.9	44.8	0	0	0
20/11/2014	8:00	55	50.2	47.5	42.8	0	30	8
20/11/2014	9:00	57.2	53.4	50.1	41.7	0	300	13
20/11/2014	10:00	59.1	52.4	49.6	43.2	0	310	17
20/11/2014	11:00	56.8	51.4	49.1	42.1	0	290	17
20/11/2014	12:00	57	51.9	50.9	44.8	0	320	18
20/11/2014	13:00	57.6	52.3	49.5	41.3	0	290	18
20/11/2014	14:00	55.9	50.9	48	40.6	0	260	17
20/11/2014	15:00	52.9	47.6	45.1	40.2	0	270	15
20/11/2014	16:00	53.8	49.4	46.6	41.6	0	290	17
20/11/2014	17:00	61	51.1	48.1	43	0	260	15
20/11/2014	18:00	55.6	50.5	47.5	43.7	0	270	18
20/11/2014	19:00	52.5	47.5	44.6	40	0	270	17
20/11/2014	20:00	50.8	45.4	42.9	36.1	0	270	11
20/11/2014	21:00	52.8	42.2	41.0	34.8	0	270	9
20/11/2014	22:00	51.2	42	39	34.6	0	280	11
20/11/2014	23:00	47.2	40.9	38.5	32.4	0	280	13
20/11/2014	0:00	45.8	39.5	36.5	30.2	0	270	11
21/11/2014	21/11/2014	48.5	37.8	34.8	28.8	0	280	8
21/11/2014	2:00	51.2	37	34	27.9	0	270	8
21/11/2014	3:00	42.5	35	32.9	27.7	0	260	9
21/11/2014	4:00	38.6	34.7	32	28.2	0	260	9
21/11/2014	5:00	49.5	41.6	39.8	33	0	280	8
21/11/2014	6:00	53.5	48	45.3	38.9	0	280	8
21/11/2014	7:00	55.3	49.5	47.7	42.4	0	260	9
21/11/2014	8:00	64.8	54.5	52.5	43.9	0	250	13
21/11/2014	9:00	65.3	50	47	40.8	0	260	9
21/11/2014	10:00	56.8	48	45.9	39.3	0	240	11
21/11/2014	11:00	58	47.3	46.9	38.7	0	260	13
21/11/2014	12:00	56.2	47.6	46.1	40.8	0	230	17
21/11/2014	13:00	54.4	47.8	45.2	39.3	0	240	18
21/11/2014	14:00	52.3	46.7	44	38.7	0	250	17
21/11/2014	15:00	53.4	48.5	45.6	40.3	0	250	17
21/11/2014	16:00	54.1	48.8	46.2	41.2	0	250	17
21/11/2014	17:00	53.3	48.5	46	41.8	0	220	18
21/11/2014	18:00	53.5	47.6	45.7	40.8	0	250	13
21/11/2014	19:00	53.1	47.1	44.6	38.4	0	240	15
21/11/2014	20:00	66.8	46.5	43.5	37.3	0	240	13
21/11/2014	21:00	50.5	41.5	40	34.1	0	240	9
21/11/2014	22:00	54.3	41.0	39.2	34	0	230	13
21/11/2014	23:00	49.7	40.5	38.4	33.6	0	220	11
21/11/2014	0:00	48.6	38.9	38	31.8	0	220	9
24/11/2014	24/11/2014	46.9	42.7	40	32.1	0	170	15
24/11/2014	2:00	51.6	42.4	39.4	31.4	0	170	13
24/11/2014	3:00	48.6	40.6	39.4	29.2	0	160	11
24/11/2014	4:00	48.6	43.8	40.6	33.9	0	160	11
24/11/2014	5:00	54.8	50.1	47	39.9	0	140	11
24/11/2014	6:00	57.6	54.1	51.9	47.8	0	140	11
24/11/2014	7:00	61.4	56.2	54.7	50.8	0	110	9
24/11/2014	8:00	58.8	55.6	53.6	50.5	0	90	11
24/11/2014	9:00	59.2	54	52	48.1	0	100	13
24/11/2014	10:00	57	51.9	49.4	44	0	100	13
24/11/2014	11:00	56.5	50.1	47.6	41.8	0	110	11
24/11/2014	12:00	55.9	50	47.2	40.6	0	90	11
24/11/2014	13:00	52.5	47.6	44.7	38.7	0	100	9
24/11/2014	14:00	55.1	49.7	46.7	40	0	160	9
24/11/2014	15:00	56.8	48.2	45.2	39.5	0	200	15
24/11/2014	16:00	55.2	50.3	48.8	43.3	0	220	21
24/11/2014	17:00	55.8	51.2	48.8	44.7	0	230	21
24/11/2014	18:00	58.3	50.0	47.7	44.2	0	200	21
24/11/2014	19:00	54.6	48.7	46.6	42.3	0	210	18
24/11/2014	20:00	51.7	46.8	44.7	41.1	0	190	15
24/11/2014	21:00	50.4	46	43.8	39.8	0	180	13
24/11/2014	22:00	52	45.8	43.9	39	0	170	11
24/11/2014	23:00	54.1	45.3	43.0	38.4	0	170	11
24/11/2014	0:00	51.4	44.8	42.1	34.4	0	160	9

Hourly Noise Level Data

21 Madura Close, Ballajura

Date	Time	L1	L10	Leq	L90	Rain mm	Wind degrees	Wind km/h
25/11/2014	25/11/2014	52.7	45.9	43.1	34.1	0	0	0
25/11/2014	2:00	54	47	44	31.6	0	170	2
25/11/2014	3:00	52.7	46.8	43.8	36.1	0	90	9
25/11/2014	4:00	51.3	46.6	43.6	37.3	0	90	9
25/11/2014	5:00	55.5	51.4	48.3	40.6	0	90	9
25/11/2014	6:00	61.6	56.9	54.7	50.3	0	90	11
25/11/2014	7:00	62.2	57.5	55.6	52.2	0	80	15
25/11/2014	8:00	59.9	55.7	53.9	50.2	0	90	13
25/11/2014	9:00	58.5	53.7	51.5	48.7	0	90	13
25/11/2014	10:00	57	51.6	49.1	44.3	0	110	13
25/11/2014	11:00	57.6	51.2	48.4	42.3	0	100	11
25/11/2014	12:00	57.5	51	48.4	42	0	120	11
25/11/2014	13:00	57.5	51.1	48.3	41.4	0	120	11
25/11/2014	14:00	57.4	51.2	48.2	41.3	0	110	11
25/11/2014	15:00	55.4	50	47.8	42	0	120	9
25/11/2014	16:00	56.9	51	48.6	43.7	0	120	11
25/11/2014	17:00	56.9	52.3	50.4	45.9	0	130	9
25/11/2014	18:00	56.9	53.6	52.1	47.5	0	130	13
25/11/2014	19:00	55.7	52.7	50.2	46.2	0	140	15
25/11/2014	20:00	54.5	50.7	48.3	44.5	0	140	13
25/11/2014	21:00	52.3	48.4	46.2	42	0	150	9
25/11/2014	22:00	55.4	49.8	48.2	42.3	0	140	9
25/11/2014	23:00	58.5	52.8	50.1	44.1	0	130	13
25/11/2014	0:00	58.6	54.1	50.6	44	0	110	18
26/11/2014	26/11/2014	58.9	53.8	50.8	45.2	0	100	21
26/11/2014	2:00	58.1	50.7	48.2	40.6	0	100	21
26/11/2014	3:00	57.3	47.6	45.6	36.8	0	100	11
26/11/2014	4:00	57.5	49.5	47.5	42.8	0	90	17
26/11/2014	5:00	56.1	51.4	49.3	43.9	0	110	11
26/11/2014	6:00	60.5	56.1	53.8	48.8	0	90	18
26/11/2014	7:00	63.1	57.4	56.4	52.1	0	90	15
26/11/2014	8:00	60.4	56.4	54.8	48.7	0	100	9
26/11/2014	9:00	60.1	55.3	53.1	49.2	0	100	11
26/11/2014	10:00	59.8	55.2	52.9	48.3	0	80	9
26/11/2014	11:00	58.2	53.4	50.8	45.8	0	110	13
26/11/2014	12:00	59.6	54.8	52.3	44.9	0	100	9
26/11/2014	13:00	62.8	56.2	53.8	46	0	70	15
26/11/2014	14:00	64.3	59.7	56.3	48.6	0	80	9
26/11/2014	15:00	66	59.6	58.5	52.9	0	150	11
26/11/2014	16:00	66.8	59.4	58.4	53.3	0.2	130	13
26/11/2014	17:00	67	62.7	60.9	56.8	1.6	60	11
26/11/2014	18:00	66.9	61.4	60.2	57.3	2.8	70	17
26/11/2014	19:00	61.9	59.1	55.9	50.4	2	80	11
26/11/2014	20:00	57.6	55.7	53.1	49.1	0.4	70	8
26/11/2014	21:00	57.2	53.6	50.5	44	1	110	15
26/11/2014	22:00	56.6	52.1	49.8	44.5	0.4	100	5
26/11/2014	23:00	53.6	49.6	46.8	41.3	0	90	9
26/11/2014	0:00	52.5	47.2	45.2	36.8	0	90	11
27/11/2014	27/11/2014	51.4	46.2	43.4	36	0	60	9
27/11/2014	2:00	54.6	43.4	42.1	30.8	0	50	17
27/11/2014	3:00	50.7	44.9	41.3	32.1	0	50	13
27/11/2014	4:00	51.6	44.9	42.3	34.2	0	50	9
27/11/2014	5:00	57.5	50.7	47.4	40.9	0	40	11
27/11/2014	6:00	63.4	56.5	52.5	48.5	2	10	13
27/11/2014	7:00	59.3	56.1	53.5	48.8	0.2	10	8
27/11/2014	8:00	60	54	52.9	45.6	0.8	220	5
27/11/2014	9:00	58.6	52.5	50.1	42.8	0	220	4
27/11/2014	10:00	58	52.5	49.8	42.3	0	170	11
27/11/2014	11:00	56.8	52.2	48.7	42.6	0	230	9
27/11/2014	12:00	55	50.5	47.5	42.3	0	170	11
27/11/2014	13:00	58	50.5	47.8	42.4	0	150	17
27/11/2014	14:00	57.4	50.2	48	42.3	0	190	13
27/11/2014	15:00	57.3	51.3	49.1	44.6	0.4	200	9
27/11/2014	16:00	57.1	52.3	50.2	46.4	1	160	13
27/11/2014	17:00	60.8	54.2	53.2	47.3	0	150	17
27/11/2014	18:00	58.5	52.2	51.2	46.3	0	150	13
27/11/2014	19:00	56.1	50.1	49.1	44.5	0	100	9
27/11/2014	20:00	55.5	53.4	51.4	46.3	0	150	2
27/11/2014	21:00	56.9	50.0	47.7	43.1	0	0	0
27/11/2014	22:00	50.1	46.6	44	40	0	0	0
27/11/2014	23:00	51.1	45.4	43.1	36.8	0	200	8
27/11/2014	0:00	52	44.1	42.2	34.7	0	150	5

Noise Logging - 21 Madura Close, Ballajura

