


Appendix B – Noise Monitoring Forms

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML1 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	7/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.5441679	Y 174.52676
Address	80 Pakuranga Road, Pakuranga, New Zealand		
Equipment			
Manufacturer	SVAN		
Type	958		
Serial number	20892		
Date of last calibration	08/12/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✓		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Pakuranga Road		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3 m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	10-15 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	40 m		
Height of noise source(s)			
Distance from any reflective surfaces	7 m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

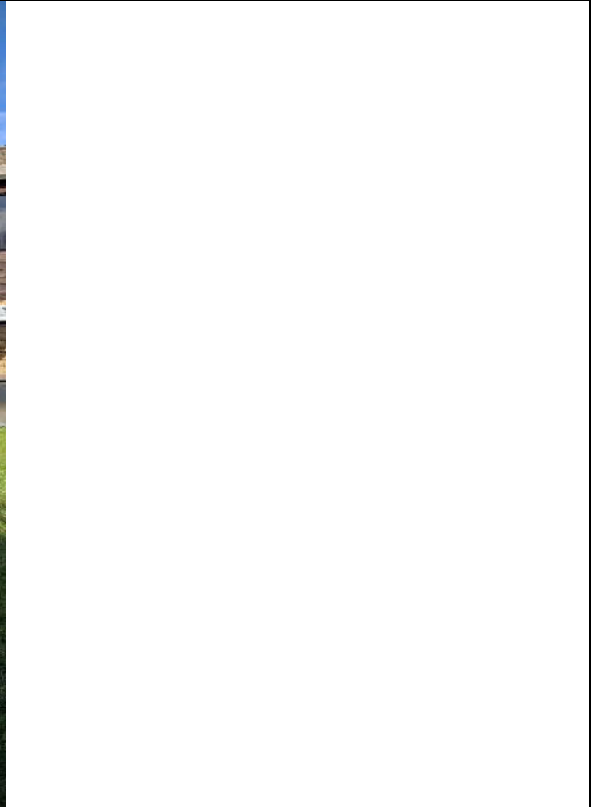


Photo B: Photo of the road surface




Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML2 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	7/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.543932	Y 174.523061
Address	179 Pakuranga Road, Pakuranga, New Zealand		
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00865768		
Date of last calibration	20/03/2018		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✗		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Pakuranga Road		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3 m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	10-15 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	45 m		
Height of noise source(s)			
Distance from any reflective surfaces	20 m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise

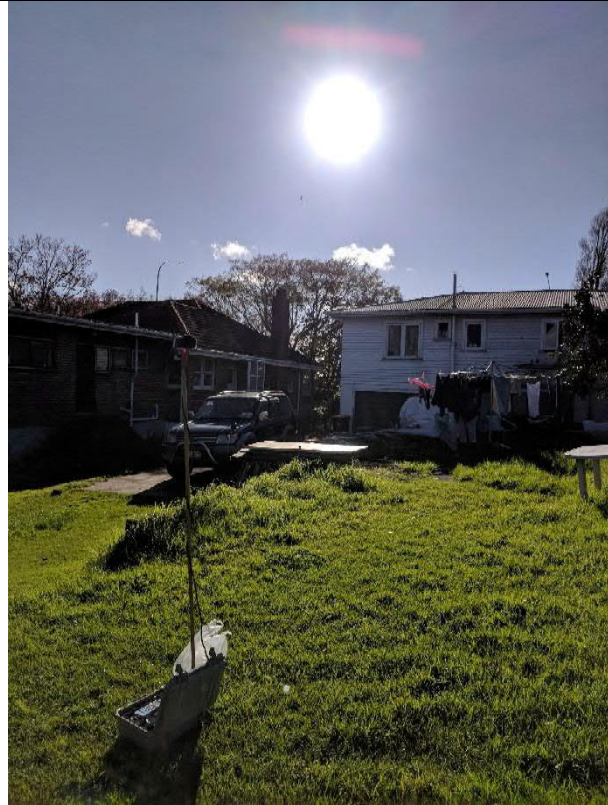


Photo A: View toward the source

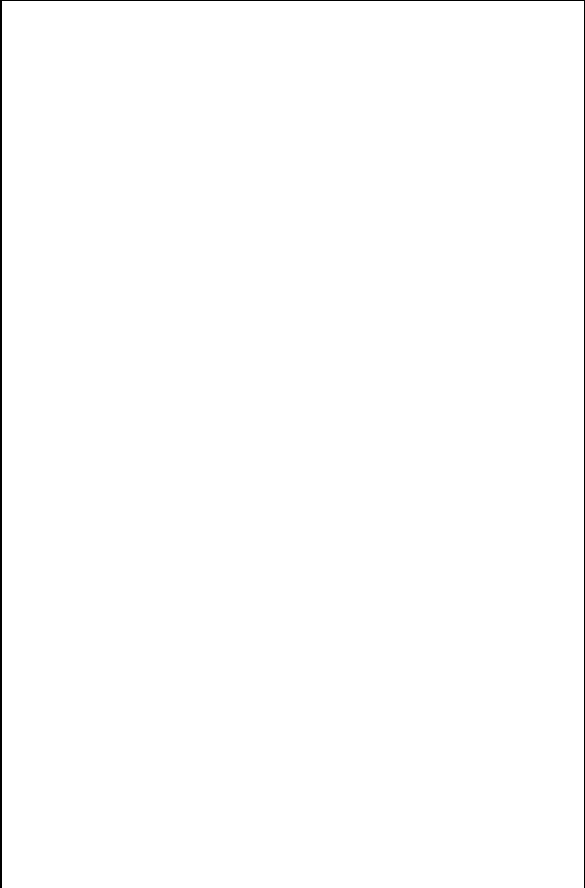


Photo B: Photo of the road surface



Photo C: Photo of the SLM (angle 1)

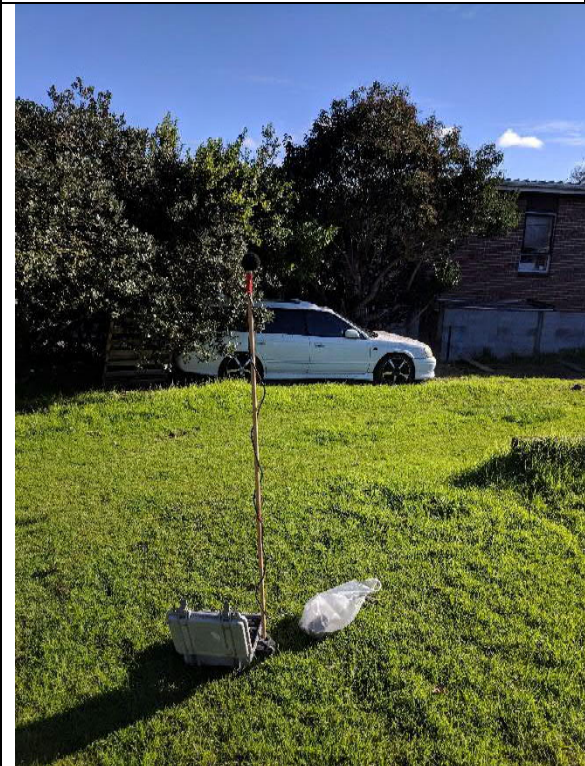

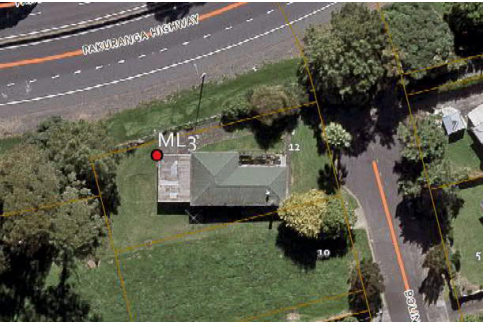


Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML3 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	7/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or Address	X	-36.916068	Y 174.869720
12 Bolina Cres, Pakuranga, Auckland 2010			
Equipment			
Manufacturer	SVAN		
Type	957		
Serial number	20164		
Date of last calibration	18/07/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✓		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	~150m from intersection. Traffic frequently backed up 150m to intersection on far lane.		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Pakuranga Highway.		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	N/A		
Meteorological Conditions			
Wind speed and direction at microphone	< 3m/s		
Wind speed and direction at dominant source(s)	SW		
Precipitation	None		
Fog	No		
Temperature	10 -15 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	15 m		
Height of noise source(s)			
Distance from any reflective surfaces	n/a		
Intervening topography	Flat		
Hard, mixed or soft ground	Soft		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

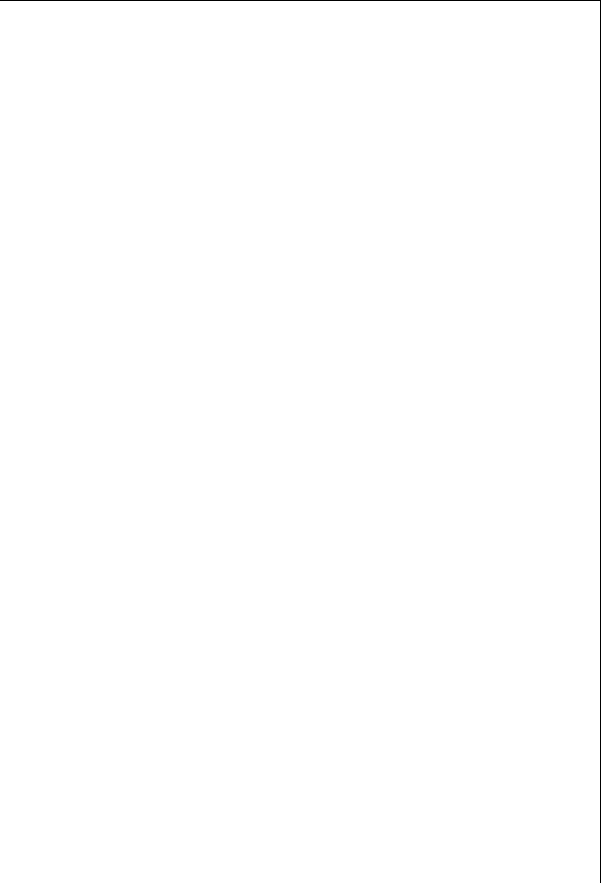


Photo B: Photo of the road surface




Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML4 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	7/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or Address	X	-36.545894	Y 174.5218109
47 Ti Rakau Drive, Paukuranga, Auckland 2010			
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00187447		
Date of last calibration	13/06/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✓		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3m/s		
Wind speed and direction at dominant source(s)	SW		
Precipitation	None		
Fog	No		
Temperature	10 -15 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	41 m		
Height of noise source(s)			
Distance from any reflective surfaces	10m to house (NE) ~5m to fence (NW, SW & SE)		
Intervening topography	Flat		
Hard, mixed or soft ground	Hard		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

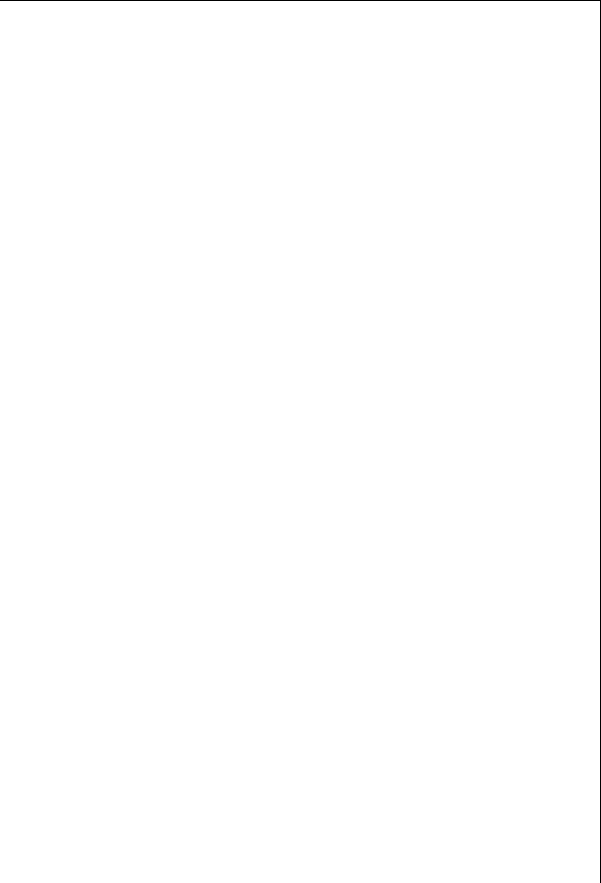


Photo B: Photo of the road surface





Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML5 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	20/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.5525079	Y 174.528030
Address	81 Ti Rakau Drive, Pakuranga, New Zealand		
Equipment			
Manufacturer	AC OEM		
Type	01dB Cube		
Serial number	11097		
Date of last calibration	27/07/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 <input checked="" type="checkbox"/>		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes <input checked="" type="checkbox"/>		No
Away from trees	Yes <input checked="" type="checkbox"/>		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3 m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	Light shower		
Fog	No		
Temperature	18 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	45 m		
Height of noise source(s)			
Distance from any reflective surfaces	5 m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

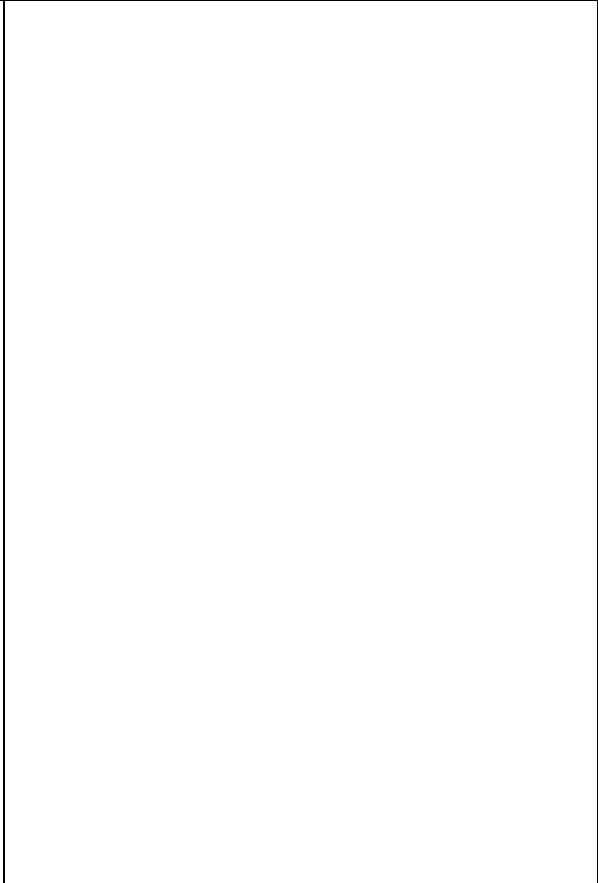


Photo B: Photo of the road surface





Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML6 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	20/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.5518579	Y 174.5244170
Address	81 Ti Rakau Drive, Paukuranga, Auckland 2010		
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00187447		
Date of last calibration	13/06/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes		No ✓
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	18°C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	20 m		
Height of noise source(s)			
Distance from any reflective surfaces	1m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

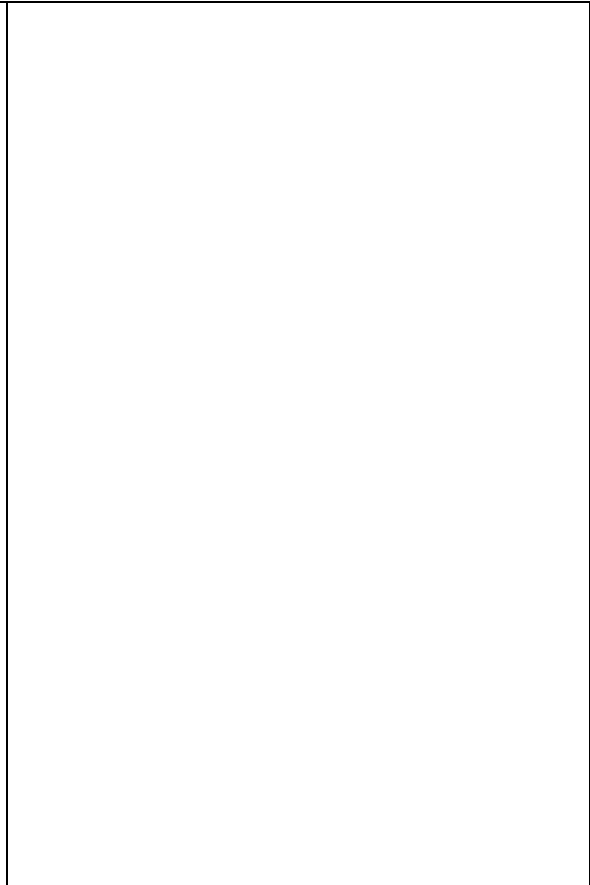


Photo B: Photo of the road surface


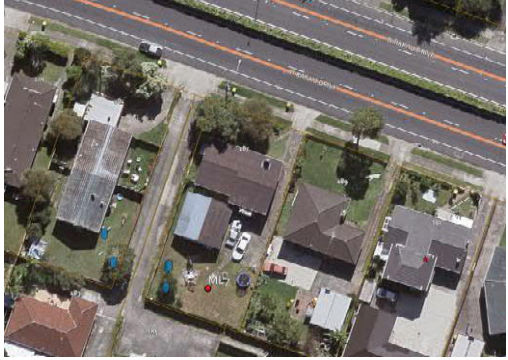


Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML7 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	20/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or Address	X	-36.5525079	Y 174.528030
187 Ti Rakau Drive, Pakuranga, New Zealand			
Equipment			
Manufacturer	SVAN		
Type	958		
Serial number	20892		
Date of last calibration	08/12/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes		No ✓
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3 m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	18 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	40 m		
Height of noise source(s)			
Distance from any reflective surfaces	10 m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

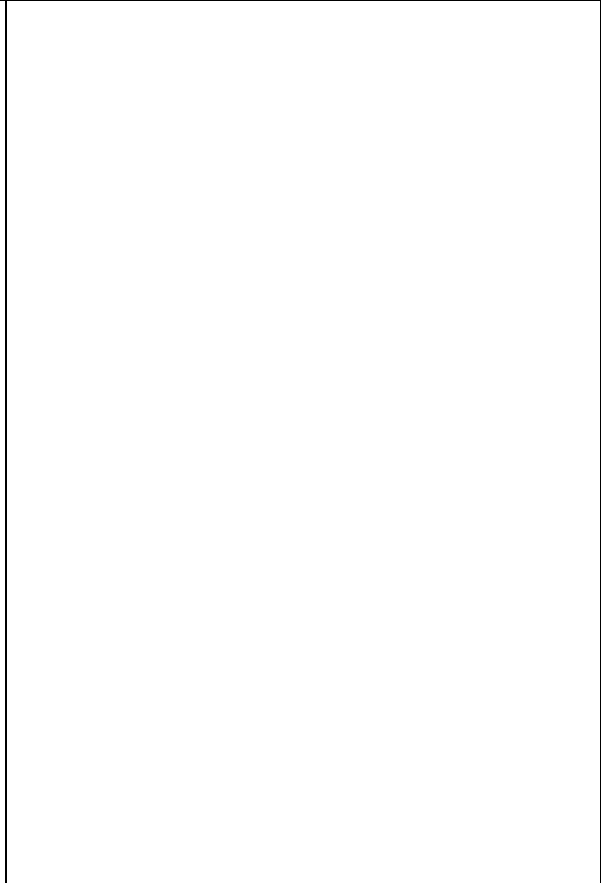


Photo B: Photo of the road surface





Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML8 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	20/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.5523790	Y 174.53956
Address	174 Gossemer Drive, Paukuranga, Auckland 2010		
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00865768		
Date of last calibration	20/03/2018		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes		No ✓
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	-		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	18°C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	86 m		
Height of noise source(s)			
Distance from any reflective surfaces	4m to house and shed		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

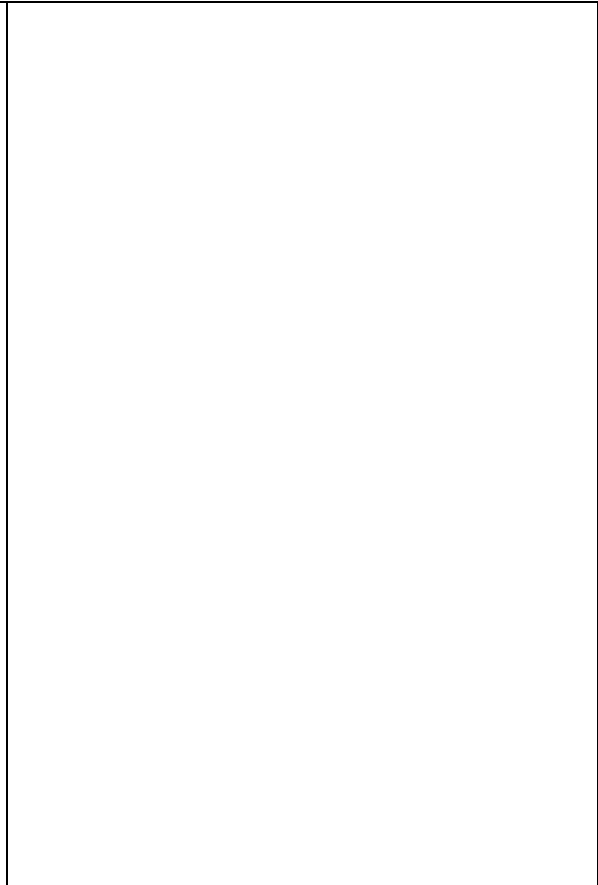


Photo B: Photo of the road surface

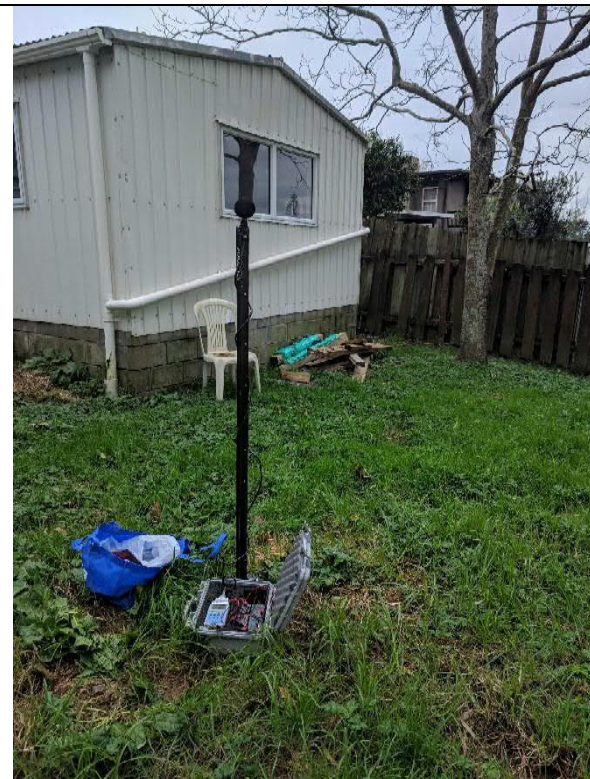




Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML9 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	28/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.913359	Y 174.873464
Address	13 Reeves Road, Paukuranga, Auckland 2010		
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00865768		
Date of last calibration	20/03/2018		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✓		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Reeves Drive		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	-		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	18°C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	15 m		
Height of noise source(s)	-		
Distance from any reflective surfaces	12m to Art gallery building		
Intervening topography	Flat		
Hard, mixed or soft ground	Soft		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

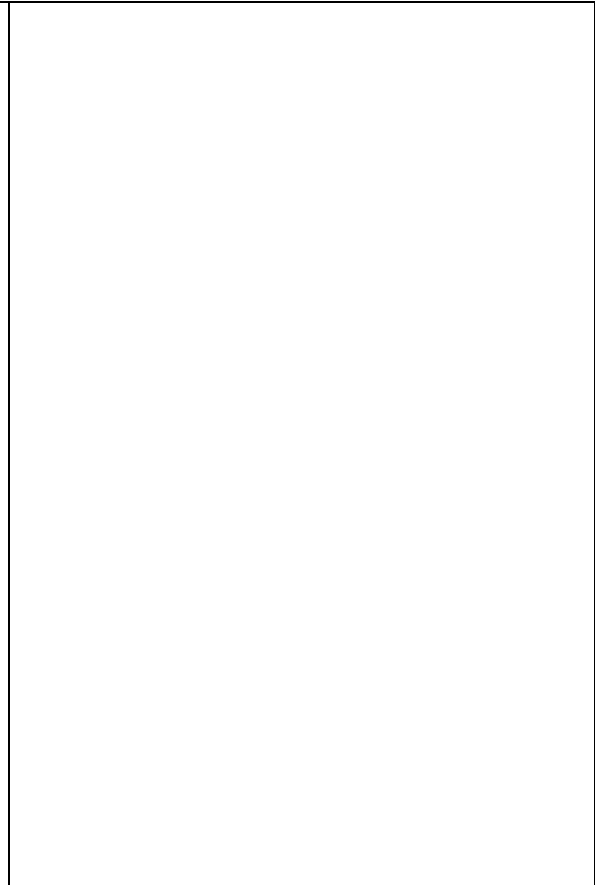


Photo B: Photo of the road surface

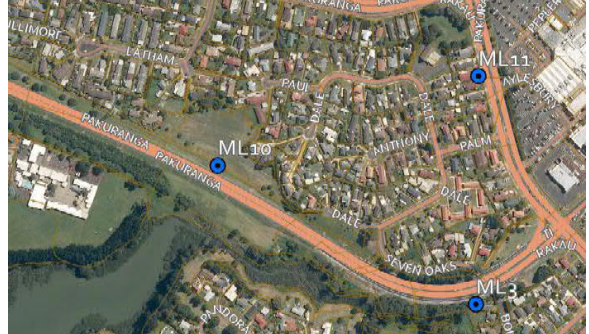



Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML10 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	28/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.914271	Y 174.865243
Address	Park area adjacent to Pakuranga Highway, Auckland 2010		
Equipment			
Manufacturer	Rion		
Type	NL-21		
Serial number	00187447		
Date of last calibration	13/06/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes ✓		No
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Pakuranga Highway		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	-		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	15°C		
Humidity	Medium		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	11 m		
Height of noise source(s)	-		
Distance from any reflective surfaces	> 50 m		
Intervening topography	Road elevated by approx. 2m from ground		
Hard, mixed or soft ground	Soft		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

Photo B: Photo of the road surface


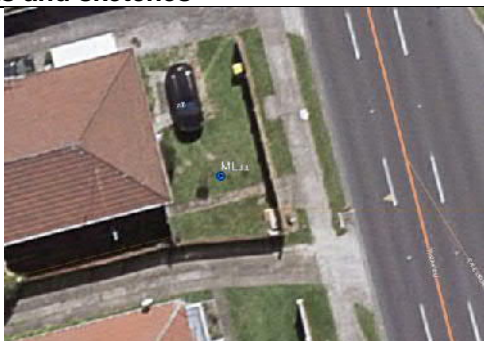


Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML11 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	28/6/2018		
Engineer(s)	Kieran Hill		
Location (NZTM2000) or	X	-36.912989	Y 174.869494
Address	Park area adjacent to Pakuranga Highway, Auckland 2010		
Equipment			
Manufacturer	01dB		
Type	Cube		
Serial number	11097		
Date of last calibration	27/7/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806 ✓		NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes ✓		No
Away from trees	Yes		No ✓
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Ti Rakau Drive & Pakuranga Road intersection		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	-		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	15°C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	7 m		
Height of noise source(s)	-		
Distance from any reflective surfaces	3.5m to building façade		
Intervening topography	Fence (non-acoustic rated) between road and slm		
Hard, mixed or soft ground	Soft		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source

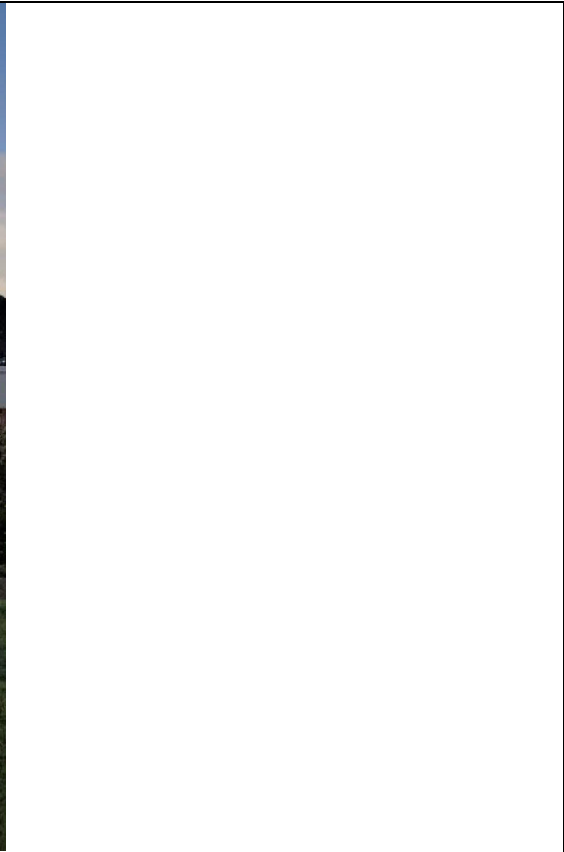


Photo B: Photo of the road surface





Photo C: Photo of the SLM (angle 1)



Photo C: Photo of the SLM (angle 2)

Environmental Noise Survey – Road Traffic Noise

NOISE MONITORING FORM			
ML13 Summary			
Project name	AMETI EB 2&3		
Project number	60563280		
Date / time	27/7/2018		
Engineer(s)	James Wright		
Location (NZTM2000)	X	1766967	Y 5913098
Address	17 Reeves Road, Pakuranga, New Zealand		
Equipment			
Manufacturer	SVAN		
Type	958		
Serial number	20892		
Date of last calibration	08/12/2017		
Calibration drift pre/post	TBC		
Noise Environment			
What assessment are you doing?	NZS: 6806	✓	NZTA Road Noise
Are you more than 10m from an existing road kerb?	Yes	✓	No
Away from trees	Yes		No ✓
Are there any pot-holes, speed bumps, old surfaces, expansion joints, special surfacing etc?	n/a		
General description of measured noise: specific and residual levels including comments on k ₁ adjustment and contamination	Dominant noise was from traffic on Pakuranga Road		
Any special audible characteristics (tonality, impulsivity etc.) and comment on k ₂ adjustment	n/a		
Meteorological Conditions			
Wind speed and direction at microphone	< 3 m/s		
Wind speed and direction at dominant source(s)	-		
Precipitation	None		
Fog	No		
Temperature	10-15 °C		
Humidity	Low		
Percentage cloud cover	None		
Site Conditions			
Microphone height	1.5 m		
Distance to dominant noise source(s)	40 m		
Height of noise source(s)			
Distance from any reflective surfaces	7 m to house		
Intervening topography	Flat		
Hard, mixed or soft ground	Mixed		
Barriers between source(s) and microphone	n/a		
General comments and sketches			
			

Environmental Noise Survey – Road Traffic Noise



Photo A: View toward the source



Photo B: Photo of the road surface



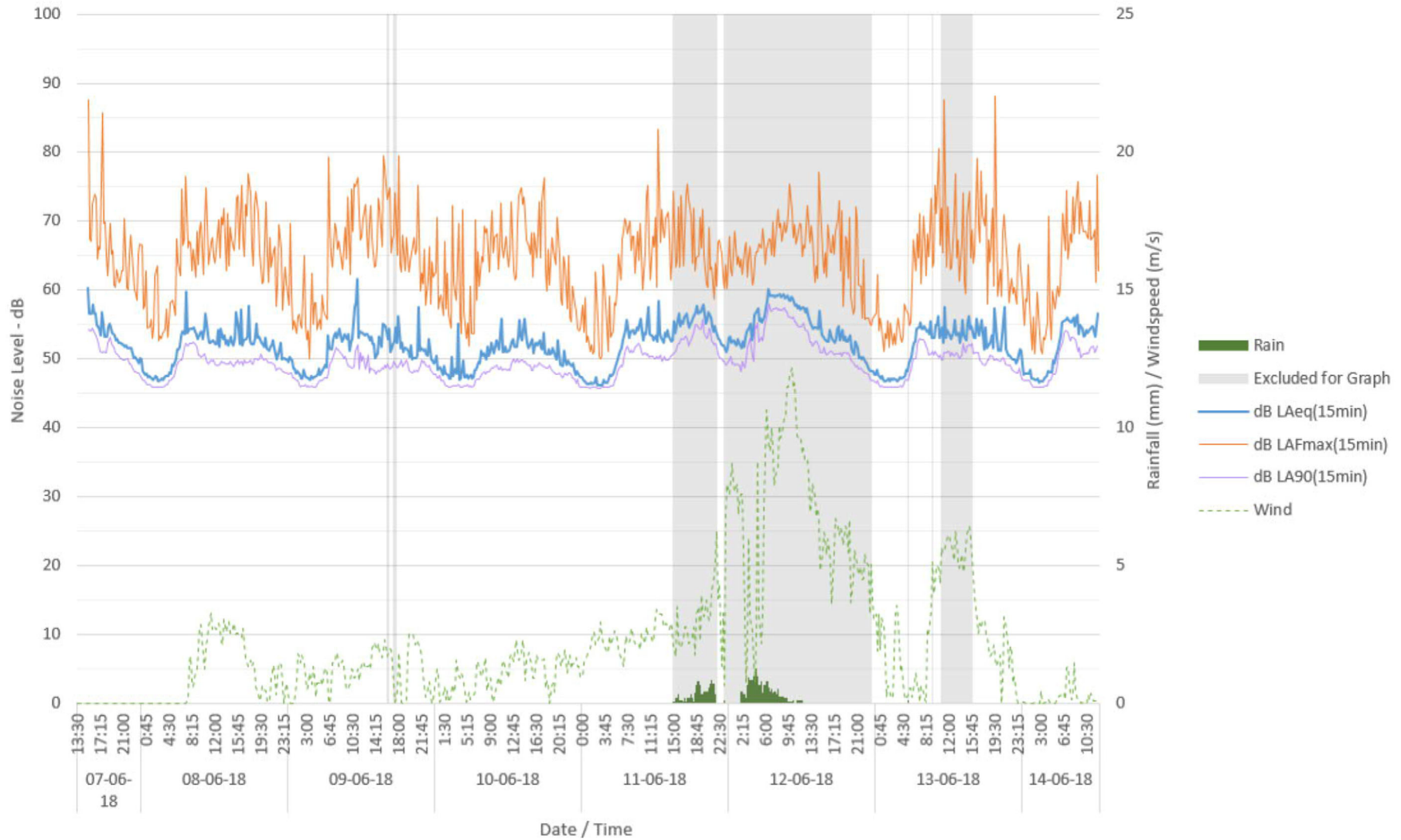
Photo C: Photo of the SLM (angle 1)



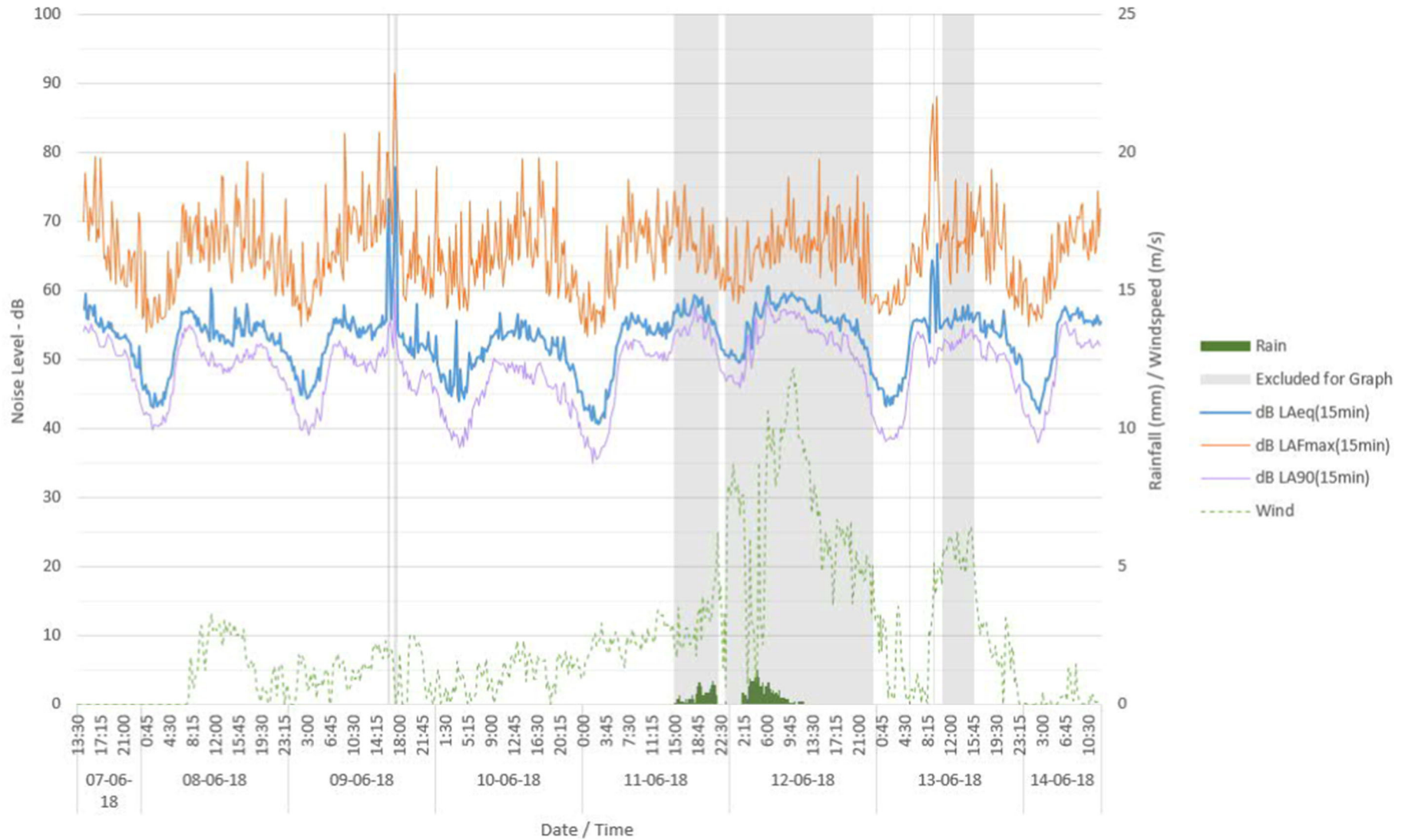
Photo C: Photo of the SLM (angle 2)

Appendix C – Noise Monitoring Results

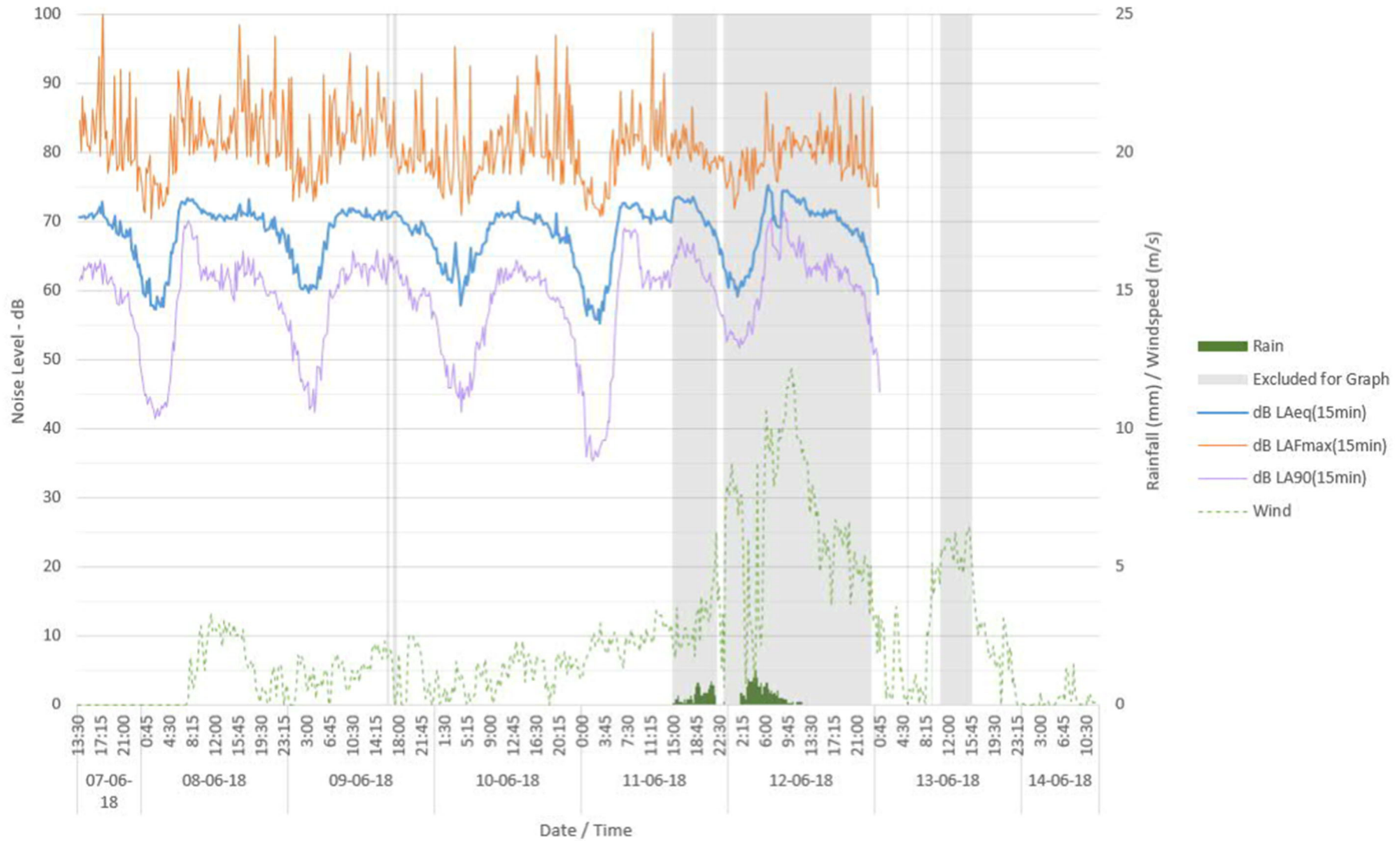
ML1 - 80 Pakuranga Road



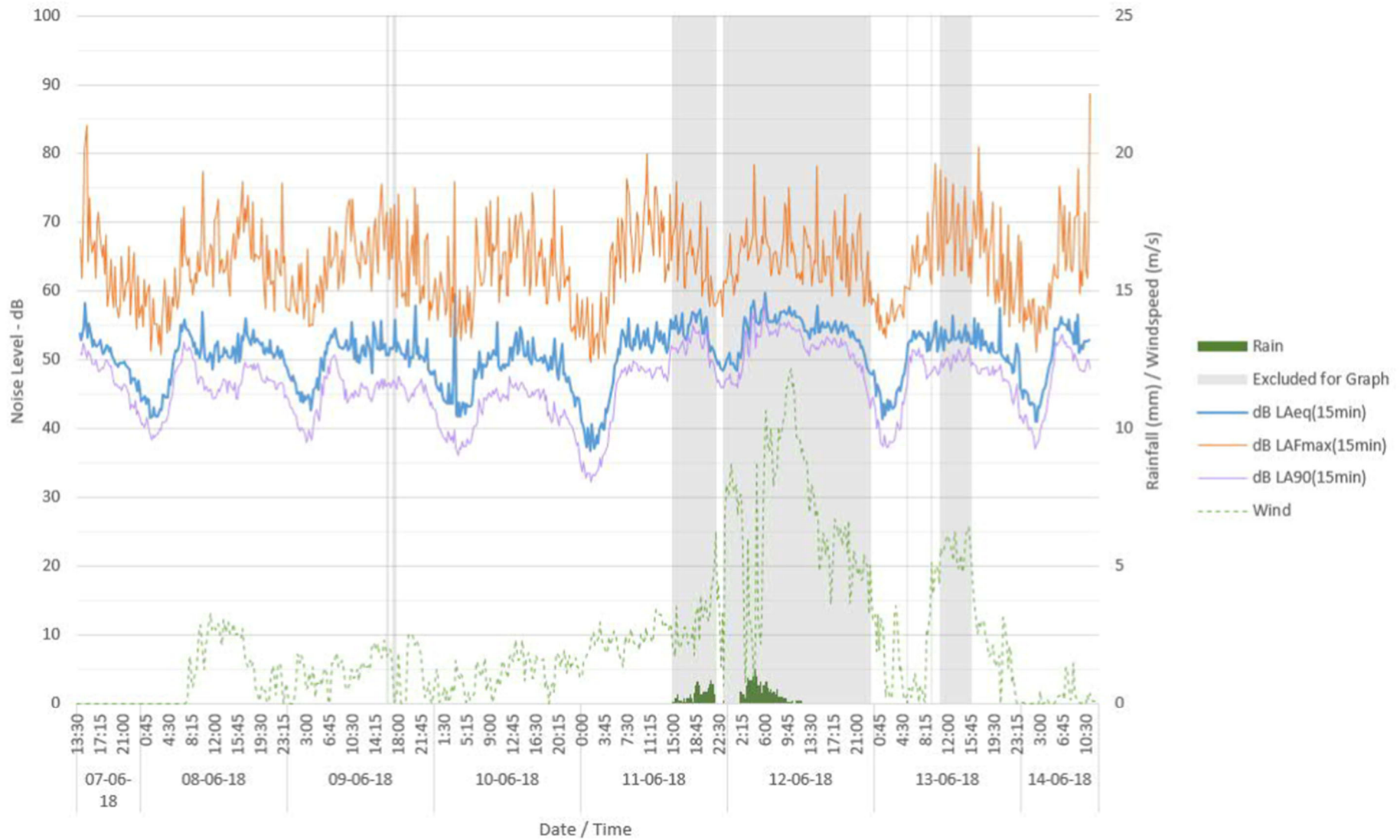
ML2 - 179 Pakuranga Road



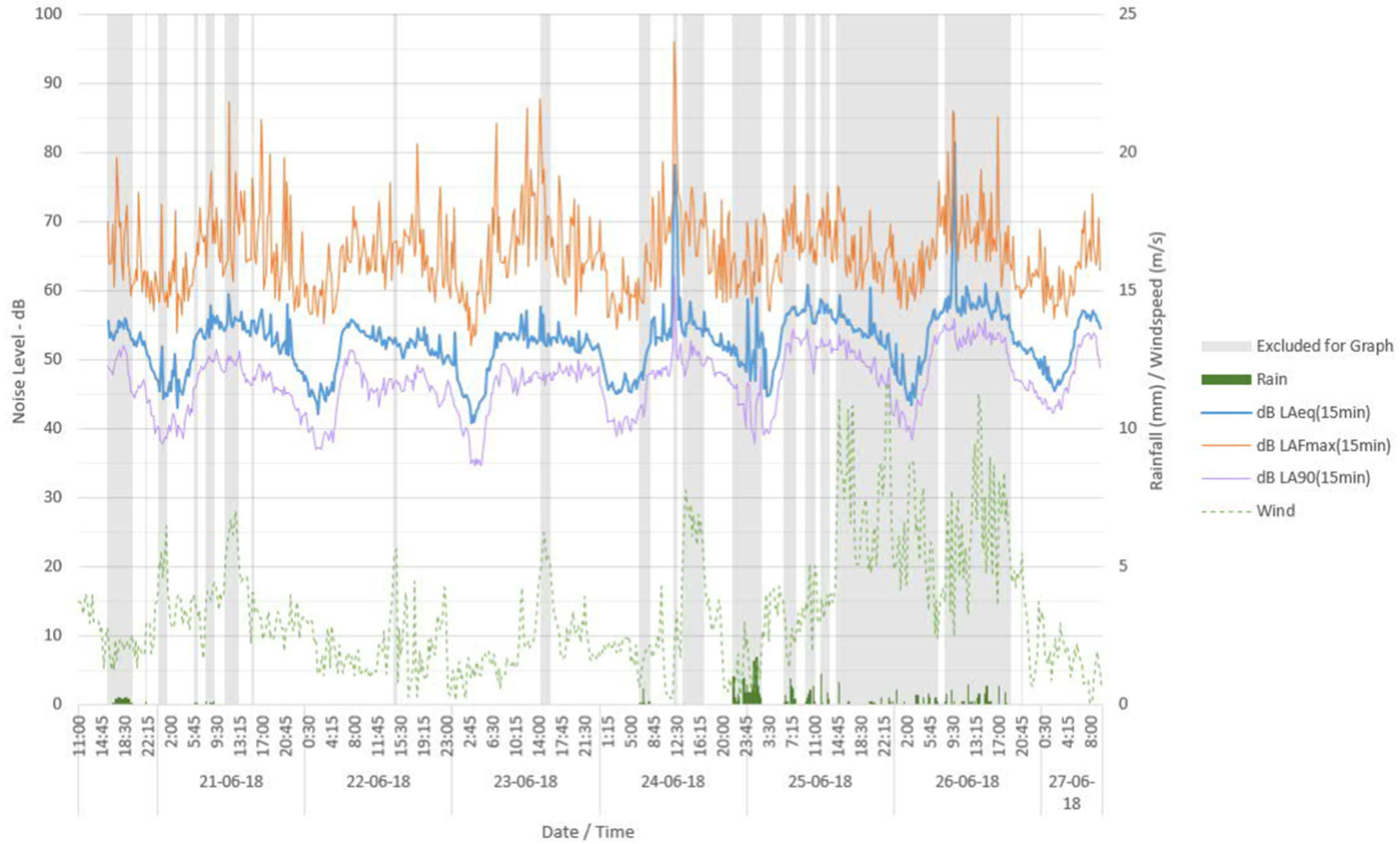
ML3 - 12 Bolina Crescent



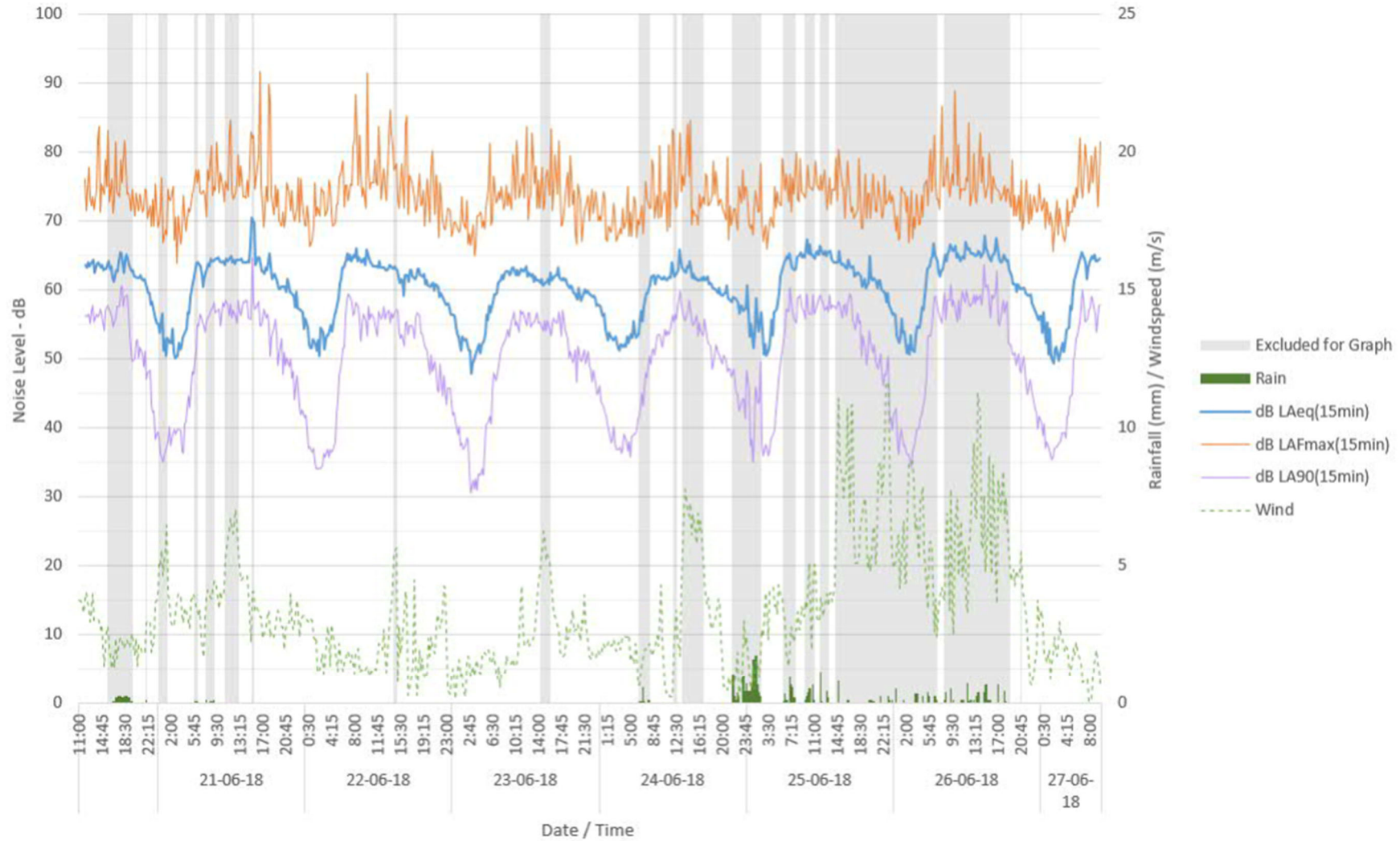
ML4 - 41 Ti Rakau Drive



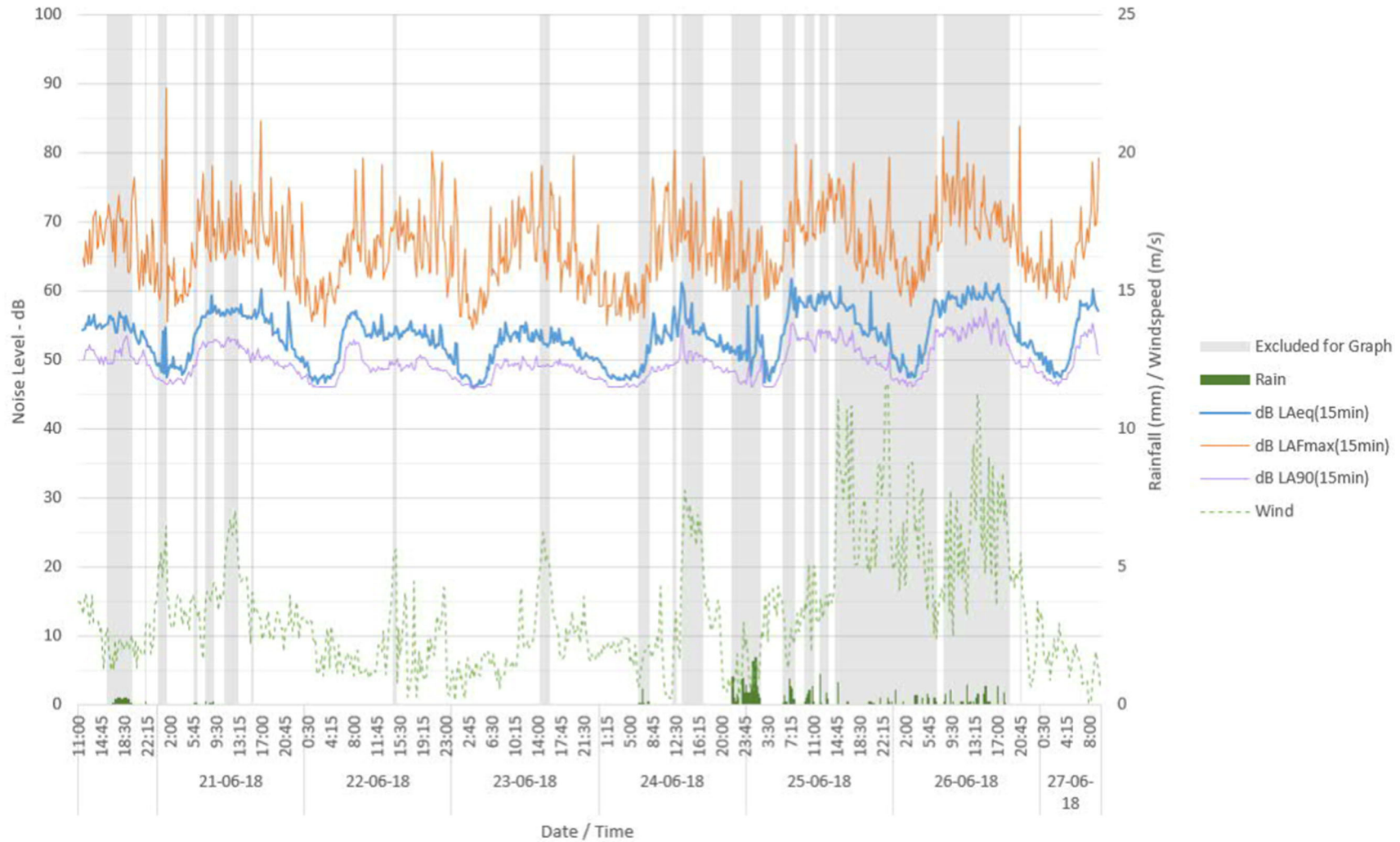
ML5 - 81 Ti Rakau Drive



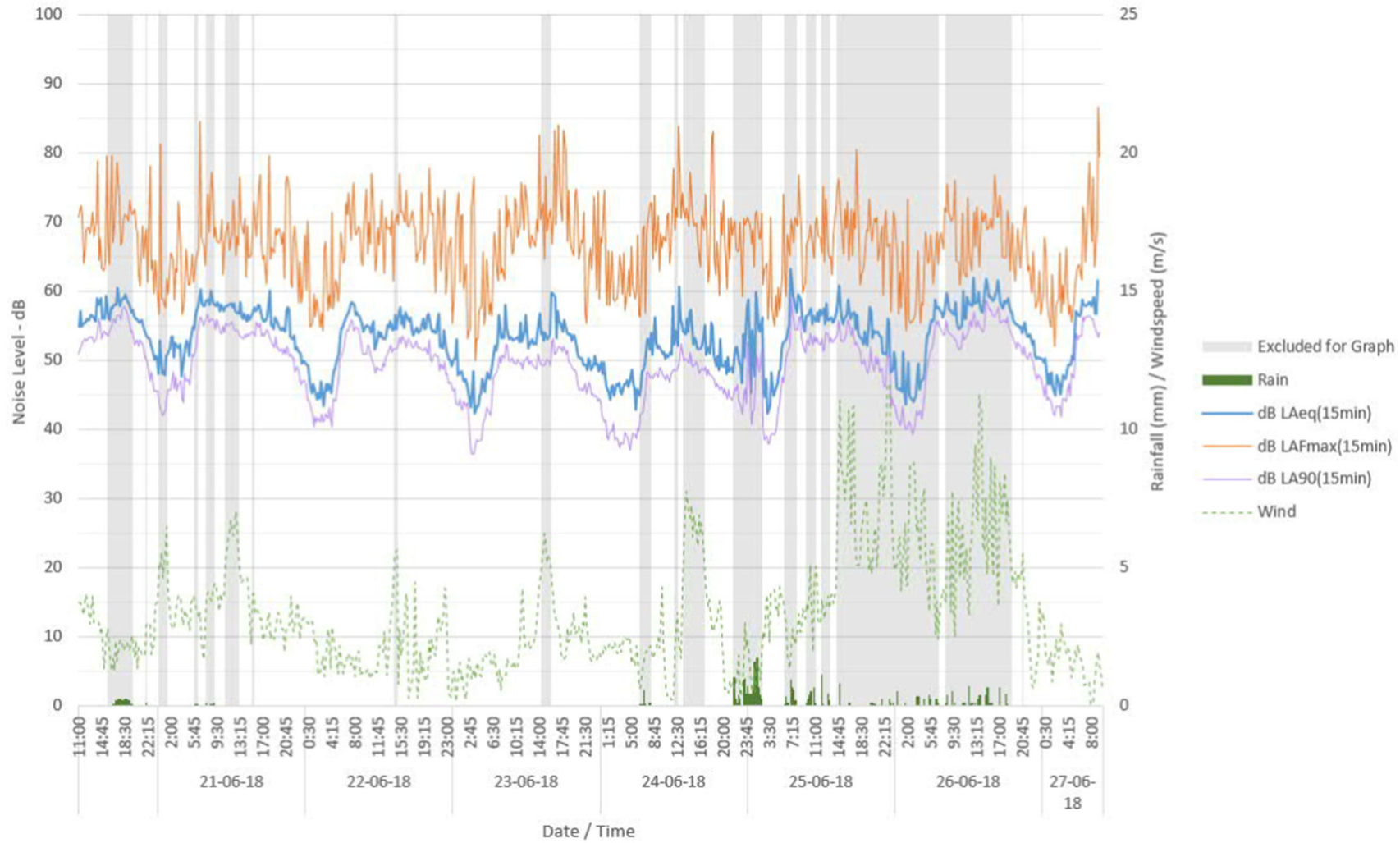
ML6 - 143 Ti Rakau Drive



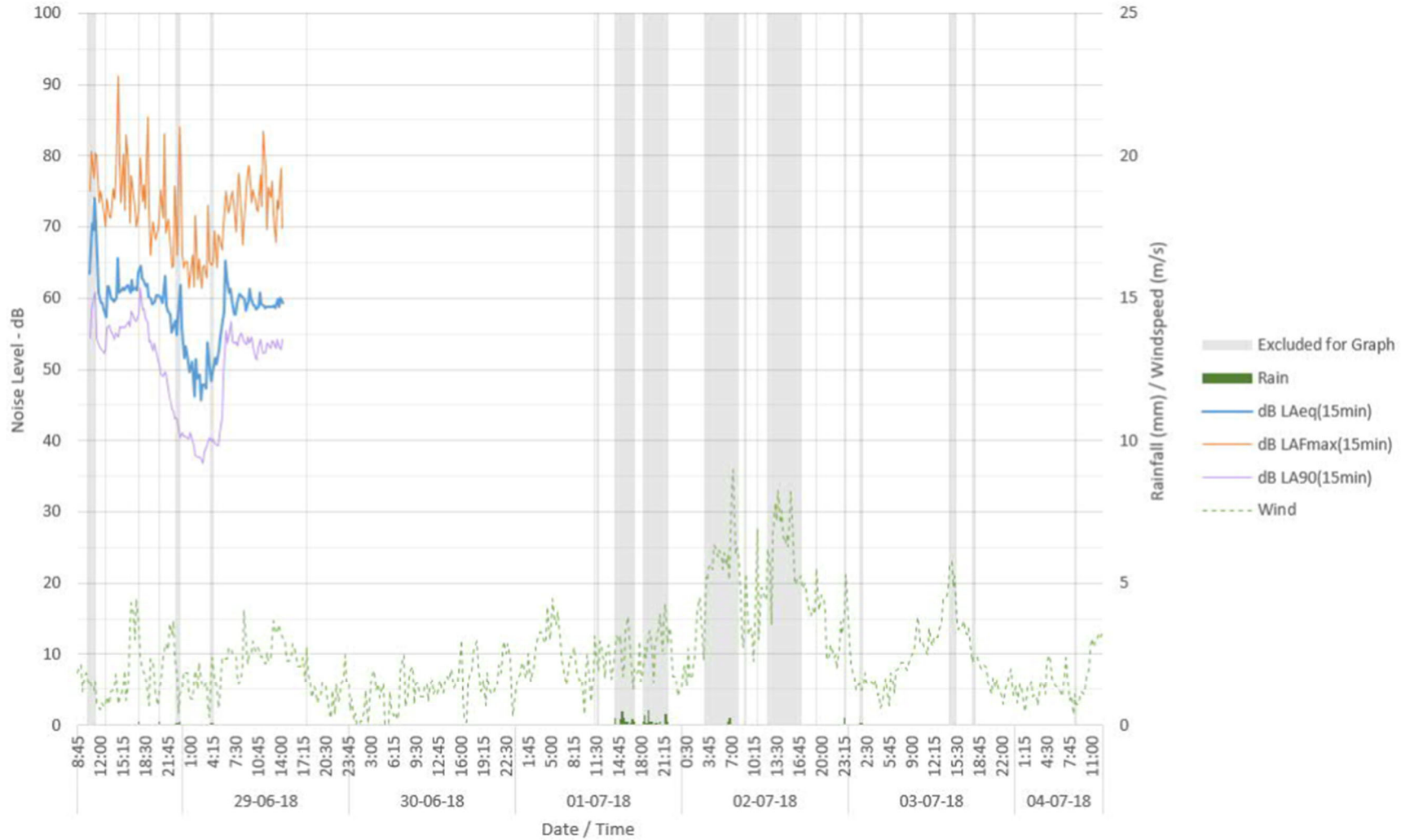
ML7 - 187 Ti Rakau Drive



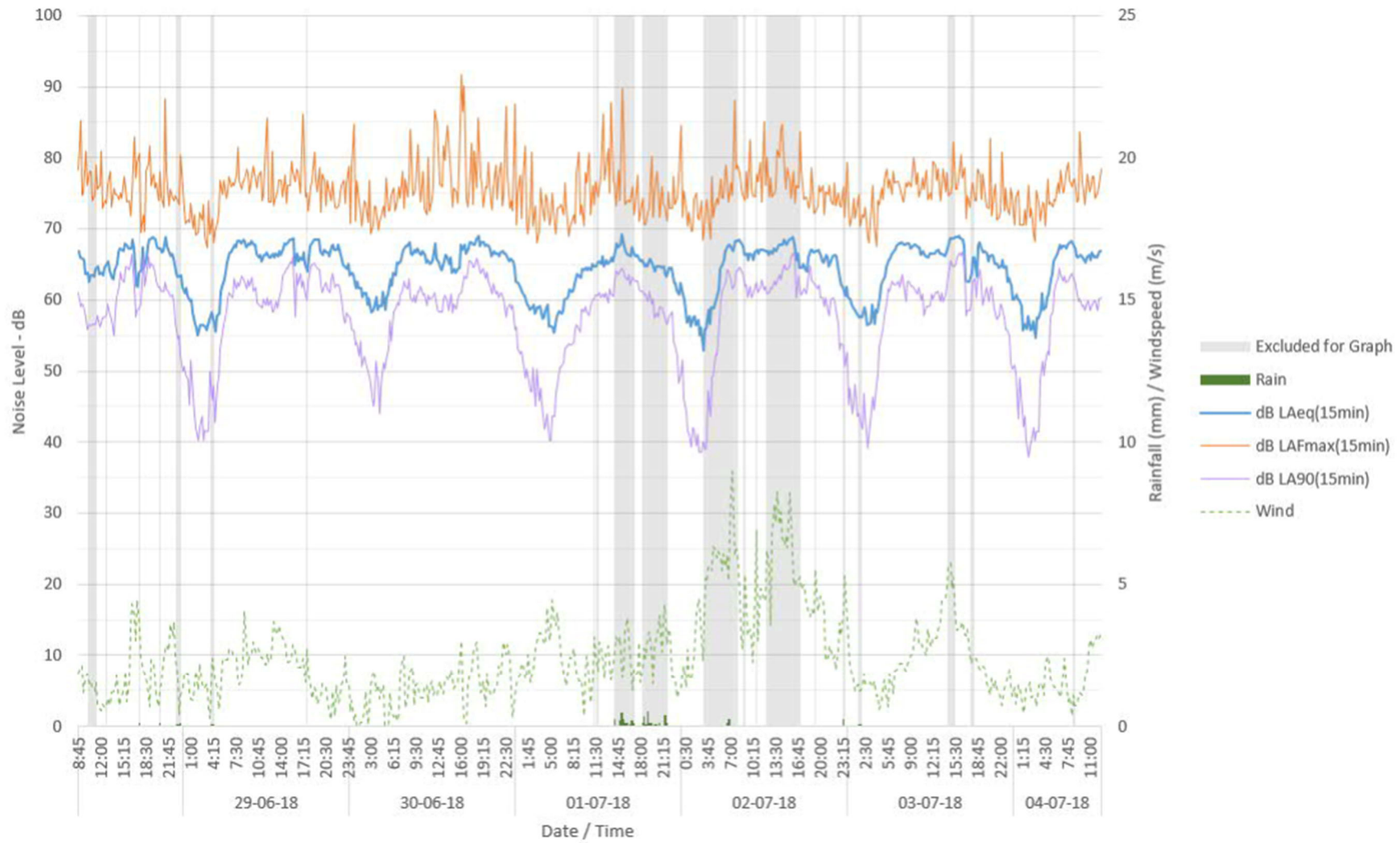
ML8 - 174 Gossamer Drive



ML9 - 13 Reeves Road



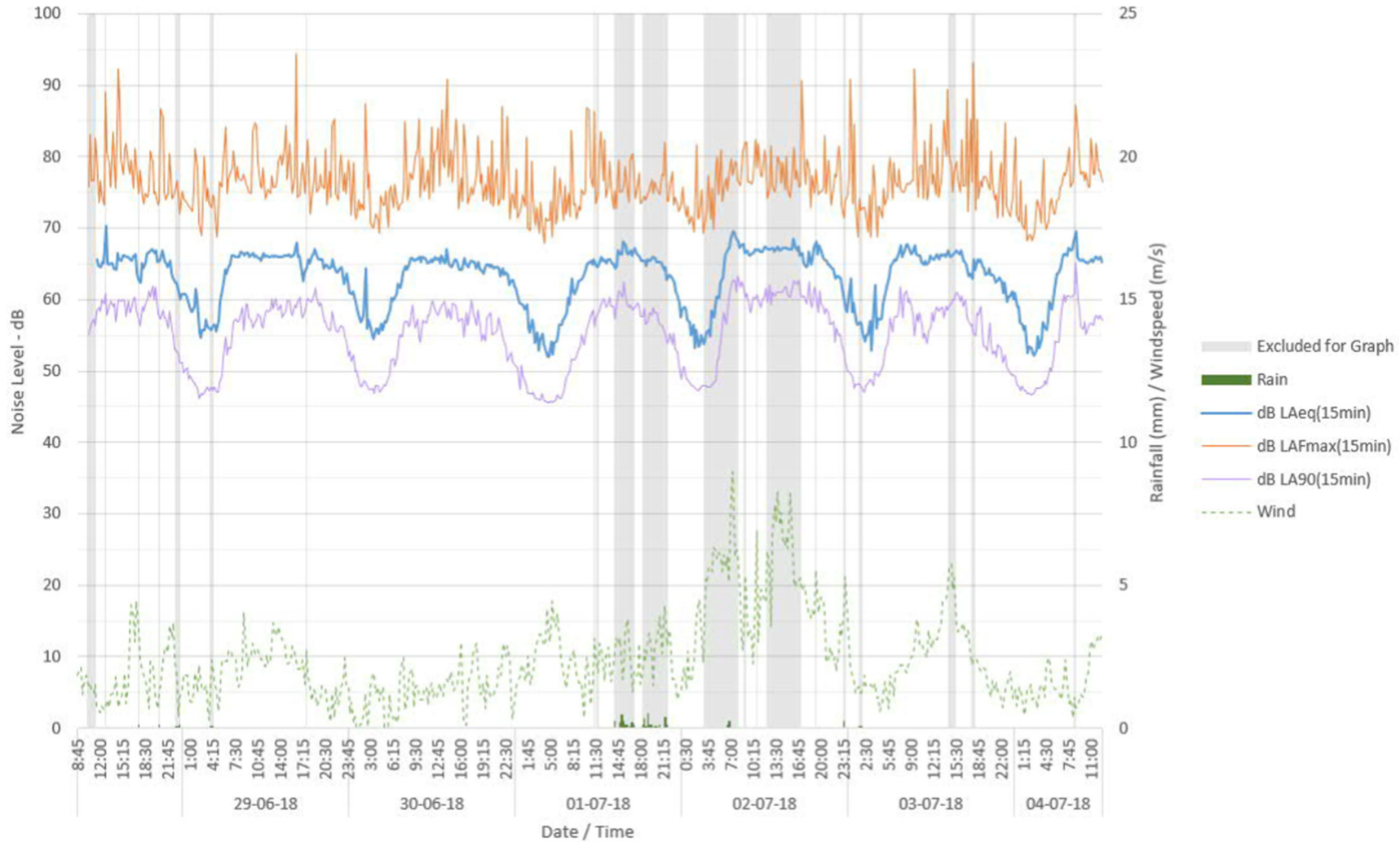
ML10 - Park



ML11 - 7 Ti Rakau Drive



ML12 - 76 Tiger Drive



ML13 - 17 Reeves Road



Appendix D – Noise Predictions

EB2			
Address	Building Use	Noise Level, dB LAeq	
		Worst Case Scenario (Concrete Saw, 30% On-Time, With Mitigation)	Typical Scenario (Excavator, With Mitigation)
141 Pakuranga Road	Commercial	>90	>90
2r Ti Rakau Drive	Commercial	>90	>90
11 Cortina Place	Commercial	>90	>90
11 Reeves Road	Commercial	>90	88
5 Reeves Road	Commercial	>90	87
23b Dale Crescent	Residential	>90	87
1-2/17 Ti Rakau Drive	Residential	89	86
10 7 Aylesbury Street	Commercial	89	86
1/15,15 Ti Rakau Drive	Residential	89	86
1/9 Cortina Place	Commercial	89	86
7a Cortina Place	Commercial	89	86
10 Aylesbury Street	Commercial	88	85
10-14 Cortina Place	Commercial	86	83
1-2/5 Ti Rakau Drive	Residential	81	78
1-2/13 Ti Rakau Drive	Residential	81	77
1-2/92 Pakuranga Road	Residential	80	77
126 Pakuranga Road	Commercial	80	77
120 Pakuranga Road	Commercial	79	76
100 Pakuranga Road	Residential	79	76
3 Reeves Road	Commercial	79	76
21 Dale Crescent	Residential	78	75
3 Ti Rakau Drive	Residential	78	75
1-2/7 Ti Rakau Drive	Residential	78	75
94 Pakuranga Road	Residential	78	75
116b Pakuranga Road	Residential	78	75
2/23 Ti Rakau Drive	Residential	78	74
13r Reeves Road	Commercial	78	74
1/11,11 Ti Rakau Drive	Residential	77	74
12,12a William Roberts Road	Residential	77	74
18a William Roberts Road	Residential	77	74
1/9,9 Ti Rakau Drive	Residential	77	74
106 Pakuranga Road	Residential	77	73
1-2/90 Pakuranga Road	Residential	77	73
1/14 William Roberts Road	Residential	76	73
24 William Roberts Road	Residential	76	73
1/19,19 Ti Rakau Drive	Residential	76	73
64 Dale Crescent	Residential	76	73
24r William Roberts Road	Residential	76	73
7 Cortina Place	Commercial	75	72
2 Dale Crescent	Residential	75	72
15 Reeves Road	Residential	75	72
100 Pakuranga Road	Residential	75	72
2 Cortina Place	Commercial	75	72
183 Pakuranga Road	Residential	74	71
21 Ti Rakau Drive	Residential	74	71
191 Pakuranga Road	Residential	73	70
84 Ti Rakau Drive	Residential	73	70
62 Dale Crescent	Residential	73	69
1/4 William Roberts Road	Residential	72	69
5 Cortina Place	Commercial	72	69
3 Reeves Road	Commercial	72	69
27r William Roberts Road	Commercial	72	69
26 Ti Rakau Drive	Commercial	72	68
10,2/10 William Roberts Road	Residential	71	68
193a Pakuranga Road	Residential	70	67
16 William Roberts Road	Residential	70	67
1-2/3 Palm Avenue	Residential	70	67

EB3R			
Address	Building Use	Noise Level, dB LAeq	
		Worst Case Scenario (Concrete Saw, 30% On-Time, With Mitigation)	Typical Scenario (Excavator, With Mitigation)
148 Edgewater Drive	Residential	>90	89
165b Edgewater Drive	Residential	>90	88
176 Gossamer Drive	Residential	>90	88
6,1/6 Mattson Road	Residential	>90	87
4 Edgewater Drive	Residential	>90	87
9a,9b Mattson Road	Residential	89	86
165a Edgewater Drive	Residential	87	84
212 Ti Rakau Drive	Residential	86	83
5a Tiraumea Drive	Residential	82	79
75a Ti Rakau Drive	Residential	81	78
1-2/2 Chevis Place	Residential	80	77
1-2/130 Ti Rakau Drive	Residential	79	76
128 Ti Rakau Drive	Residential	79	76
158 Ti Rakau Drive	Residential	79	76
214 Ti Rakau Drive	Residential	79	75
92 Ti Rakau Drive	Residential	79	75
1-2/1 Chevis Place	Residential	78	75
160 Ti Rakau Drive	Residential	78	75
5 Tiraumea Drive	Residential	78	75
176 Ti Rakau Drive	Residential	78	75
156 Ti Rakau Drive	Residential	78	75
138 Ti Rakau Drive	Residential	78	75
172 Gossamer Drive	Residential	77	74
207 Ti Rakau Drive	Commercial	77	74
4 Tiraumea Drive	Residential	77	74
184 Ti Rakau Drive	Residential	77	74
94 Ti Rakau Drive	Residential	77	74
171 Gossamer Drive	Residential	77	74
126-2/126 Ti Rakau Drive	Residential	76	73
146 Edgewater Drive	Residential	76	73
169 Gossamer Drive	Residential	76	73
108 Ti Rakau Drive	Residential	76	73
136 Ti Rakau Drive	Residential	76	73
210 Ti Rakau Drive	Residential	76	73
2a, 2b, 2c Marriott Road	Residential	75	72
174 Ti Rakau Drive	Residential	75	72
102 Ti Rakau Drive	Residential	75	72
106 Ti Rakau Drive	Residential	75	72
100 Ti Rakau Drive	Residential	75	72
140 Ti Rakau Drive	Residential	75	72
186 Ti Rakau Drive	Residential	74	71
166 Ti Rakau Drive	Residential	74	71
170 Ti Rakau Drive	Residential	74	71
1/9 Bolina Crescent	Residential	74	71
90 Ti Rakau Drive	Residential	74	71
114 Ti Rakau Drive	Residential	74	70
200 Ti Rakau Drive	Residential	73	70
116 Ti Rakau Drive	Residential	73	70
122 Ti Rakau Drive	Residential	73	70
110 Ti Rakau Drive	Residential	73	70
172 Ti Rakau Drive	Residential	73	70
180 Ti Rakau Drive	Residential	73	70
112 Ti Rakau Drive	Residential	73	70
192 Ti Rakau Drive	Residential	73	70
175 Gossamer Drive	Residential	73	70
190 Ti Rakau Drive	Residential	73	70

104 Ti Rakau Drive	Residential	73	70
154 Ti Rakau Drive	Residential	72	69
167 Gossamer Drive	Residential	72	69
2 Paradise Place	Residential	72	69
118 Ti Rakau Drive	Residential	72	69
219 Ti Rakau Drive	Commercial	72	69
3 Fremantle Place	Residential	72	69
98 Ti Rakau Drive	Residential	72	69
188 Ti Rakau Drive	Residential	72	69
120 Ti Rakau Drive	Residential	71	68
1-2/204 Ti Rakau Drive	Residential	71	68
8 Mattson Road	Residential	71	68
206 Ti Rakau Drive	Residential	71	68
9 Mattson Road	Residential	71	68
96 Ti Rakau Drive	Residential	70	67
208 Ti Rakau Drive	Residential	70	67

Building Removal, Night-time, EB2	
Address	Noise Level, dB LAeq
23b Dale Crescent	81
176 Gossamer Drive	77
1/4 William Roberts Road	74
5 Tiraumea Drive	73
21 Dale Crescent	73
5a Tiraumea Drive	71
9a,9b Mattson Road	71
2/4 William Roberts Road	70
17 Fremantle Place	69
12,12a William Roberts Road	69
183 Pakuranga Road	69
14a Dolphin Street	68
1/14 William Roberts Road	68
8 Mattson Road	68
2/23 Ti Rakau Drive	68
177 Ti Rakau Drive	68
175a-1/175a Ti Rakau Drive	67
14b Dolphin Street	67
4 Tiraumea Drive	67
8 Dolphin Street	67
9 Fremantle Place	67
7 Fremantle Place	67
3 Fremantle Place	67
10,2/10 William Roberts Road	67
6,1/6 Mattson Road	67
10 Mattson Road	67
1/23 Ti Rakau Drive	67
19 Fremantle Place	67
1/10 Dolphin Street	66
1/9 Bolina Crescent	66
185 Ti Rakau Drive	66
183 Ti Rakau Drive	66
16 William Roberts Road	66
23a Dale Crescent	66
6 William Roberts Road	66
18a William Roberts Road	66
2/10 Dolphin Street	65
7a Mattson Road	65
200 Ti Rakau Drive	65
94 Ti Rakau Drive	65
3/183 Pakuranga Road	65
1/8 William Roberts Road	65
212 Ti Rakau Drive	65
1-2/204 Ti Rakau Drive	65
9 Mattson Road	65
196 Ti Rakau Drive	64

Building Removal, Night-time, EB2	
Address	Noise Level, dB LAeq
190 Ti Rakau Drive	64
175 Gossamer Drive	64
100 Ti Rakau Drive	64
194 Ti Rakau Drive	64
214 Ti Rakau Drive	64
206 Ti Rakau Drive	64
92 Ti Rakau Drive	64
188 Ti Rakau Drive	64
96 Ti Rakau Drive	64
192 Ti Rakau Drive	64
198 Ti Rakau Drive	64
84 Ti Rakau Drive	64
6a Ayr Road	64
14 Dolphin Street	64
177a Ti Rakau Drive	64
98 Ti Rakau Drive	64
16 Dale Crescent	63
14 Dale Crescent	63
210 Ti Rakau Drive	63
90 Ti Rakau Drive	63
208 Ti Rakau Drive	63
173 Gossamer Drive	63
33 Dale Crescent	63
171 Gossamer Drive	63
21 Fremantle Place	62
15 Fremantle Place	62
6 Tiraumea Drive	62
12 Dale Crescent	62
2 Paradise Place	62
202 Ti Rakau Drive	62
31 Fremantle Place	62
2/183 Ti Rakau Drive	62
177b Ti Rakau Drive	62
2/200 Ti Rakau Drive	61
7b Mattson Road	61
140S Pakuranga Road	61
1a Ayr Road	61
2/8 William Roberts Road	61
8 Tiraumea Drive	61
7 Tiraumea Drive	61
169 Gossamer Drive	60
5 Fremantle Place	60
12b William Roberts Road	60
6 Ayr Road	60
1-2/18 Dale Crescent	60
18 William Roberts Road	60

Building Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
33 Dale Crescent	80
75a Ti Rakau Drive	73
4 Edgewater Drive	72
97 Ti Rakau Drive	71
27 Dale Crescent	70
165b Edgewater Drive	69
91 Ti Rakau Drive	69
165a Edgewater Drive	69
25 Dale Crescent	69
148 Edgewater Drive	69
83c Ti Rakau Drive	69
5 Snell Place	69
129 Ti Rakau Drive	68
1/144 Edgewater Drive	68
156 Ti Rakau Drive	67
14 Edgewater Drive	67
176 Ti Rakau Drive	66
154 Ti Rakau Drive	66
158 Ti Rakau Drive	66
83 Ti Rakau Drive	66
83a Ti Rakau Drive	65
1-2/2 Chevis Place	65
174 Ti Rakau Drive	65
136 Ti Rakau Drive	65
146 Edgewater Drive	65
140 Ti Rakau Drive	65
4 Wheatley Avenue	65
108 Ti Rakau Drive	65
166 Ti Rakau Drive	65
170 Ti Rakau Drive	65
184 Ti Rakau Drive	65
106 Ti Rakau Drive	65
138 Ti Rakau Drive	65
2a, 2b, 2c Marriott Road	65
172 Ti Rakau Drive	65
3 Snell Place	65
1-2/4 Roseburn Place	65
186 Ti Rakau Drive	65
116 Ti Rakau Drive	65
1/7 Wheatley Avenue	65
114 Ti Rakau Drive	65
102 Ti Rakau Drive	65
122 Ti Rakau Drive	65
110 Ti Rakau Drive	64
3 Roseburn Place	64
1-3/12 Mattson Road	64

Building Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
145 Ti Rakau Drive	64
112 Ti Rakau Drive	64
180 Ti Rakau Drive	64
104 Ti Rakau Drive	64
87 Ti Rakau Drive	64
9 Snell Place	64
1-2/6 Roseburn Place	64
178 Ti Rakau Drive	64
118 Ti Rakau Drive	64
152 Ti Rakau Drive	64
120 Ti Rakau Drive	64
162a Ti Rakau Drive	64
3 Wheatley Avenue	64
150 Ti Rakau Drive	63
1-2/1 Chevis Place	63
144 Ti Rakau Drive	63
146 Ti Rakau Drive	63
160 Ti Rakau Drive	63
184b Ti Rakau Drive	63
126-2/126 Ti Rakau Drive	63
148 Ti Rakau Drive	63
165 Edgewater Drive	62
7 Wheatley Avenue	62
163 Edgewater Drive	62
128 Ti Rakau Drive	61
1-2/130 Ti Rakau Drive	61
11 Snell Place	61
6, 1/6 Edgewater Drive	61
161 Edgewater Drive	61
83b Ti Rakau Drive	61
14 Mattson Road	61
19b Te Anau Place	61
2/144 Edgewater Drive	61
23 Te Anau Place	61
19a Te Anau Place	60
5 Roseburn Place	60
7 Snell Place	60
166a Ti Rakau Drive	60
142 Edgewater Drive	60
7 Roseburn Place	59
19c Te Anau Place	59
13 Snell Place	59
32 Te Anau Place	59
3 Chevis Place	58
1-2/9 Roseburn Place	58
4 Chevis Place	58

Building Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
162b Ti Rakau Drive	58
3r Marriott Road	58
2/18 Mattson Road	58
1-26/33 Dale Crescent	58
1/164 Ti Rakau Drive	58
114a Ti Rakau Drive	58
1-2/8 Edgewater Drive	58
14 Snell Place	58
1/168 Ti Rakau Drive	58
8 Roseburn Place	58
2/79 Cardiff Road	57
17a, 17b Te Anau Place	57
5a Roseburn Place	57
6 Chevis Place	57
8 Wheatley Avenue	57
5 Wheatley Avenue	57
89 Ti Rakau Drive	57
1-2/4 Marriott Road	57
2/10 Wheatley Avenue	57
1-2/10 Roseburn Place	57
10 Edgewater Drive	56
6 Wheatley Avenue	56
9 Wheatley Avenue	56
1/10 Wheatley Avenue	56
2/168 Ti Rakau Drive	56
3/10 Wheatley Avenue	55
35 Miramar Place	55
140 Edgewater Drive	55
1 Aurea Avenue	55
21 Te Anau Place	54
19 Te Anau Place	54
1-2/81 Cardiff Road	54
A-C/16 Mattson Road	53
138 Edgewater Drive	53
10 Snell Place	52
1/67 Cardiff Road	52
12 Snell Place	51
13 Wheatley Avenue	51
1/18 Mattson Road	50
8 Snell Place	50
1-2/73 Cardiff Road	49
A/8 Snell Place	47

Pavement Works, Night-time, EB2	
Address	Noise Level, dB LAeq
1-2/5 Ti Rakau Drive	71
1-2/13 Ti Rakau Drive	71
3 Ti Rakau Drive	71
1-2/17 Ti Rakau Drive	71
1/11,11 Ti Rakau Drive	70
1-2/7 Ti Rakau Drive	70
1/15,15 Ti Rakau Drive	70
1/19,19 Ti Rakau Drive	70
2/23 Ti Rakau Drive	70
1/9,9 Ti Rakau Drive	70
21 Ti Rakau Drive	70
1/23 Ti Rakau Drive	67
1-2/90 Pakuranga Road	63
1-2/3 Palm Avenue	62
4a - 4b Palm Avenue	62
1-2/92 Pakuranga Road	61
5a Tiraumea Drive	61
1/10 Dolphin Street	61
4 Tiraumea Drive	61
5 Tiraumea Drive	60
2/10 Dolphin Street	60
47c Dale Crescent	60
1/9 Bolina Crescent	59
5 Palm Avenue	59
8 Dolphin Street	59
94 Pakuranga Road	59
13 Dowling Place	59
33 Dale Crescent	59
105 Pakuranga Road	58
6 Palm Avenue	58
1-2/43 Dale Crescent	58
1-2/11 Dowling Place	58
14a Dolphin Street	58
1-2/15 Dowling Place	58
1-2/5 Dowling Place	57
7 Tiraumea Drive	57
6 Tiraumea Drive	57
14 Dolphin Street	56
9 Dowling Place	56
8 Palm Avenue	56
9a,9b Mattson Road	56
14b Dolphin Street	56
2/39 Dale Crescent	56
7 Dowling Place	55
2/9 Bolina Crescent	55
8 Tiraumea Drive	55

Pavement Works, Night-time, EB2	
Address	Noise Level, dB LAeq
12 Dolphin Street	55
7a Mattson Road	55
55 Dale Crescent	55
1-26/33 Dale Crescent	54
1-2/3 Dowling Place	54
84 Ti Rakau Drive	54
9 Tiraumea Drive	54
7 Bolina Crescent	54
10 Tiraumea Drive	54
45 Dale Crescent	54
11 Tiraumea Drive	54
13a Tiraumea Drive	53
1-2/24 Dale Crescent	53
41 Dale Crescent	53
1 Dowling Place	53
9 Mattson Road	53
103 Pakuranga Road	52
6,1/6 Mattson Road	52
24r William Roberts Road	52
26 Dale Crescent	52
1 Anthony Place	52
6 Dolphin Street	52
4,4a Dolphin Street	51
10 Dowling Place	51
12 Tiraumea Drive	51
3 Tamaki Bay Drive	51
24 William Roberts Road	50
100 Pakuranga Road	50
7g Mattson Road	50
3/9 Bolina Crescent	50
16 Dowling Place	50
5 Tamaki Bay Drive	50
1/5 Bolina Crescent	50
1 Tamaki Bay Drive	50
86 Ti Rakau Drive	50
19 Dowling Place	49
38 Dale Crescent	49
1-2/30 Dale Crescent	49
16 Dolphin Street	48
2/5 Bolina Crescent	48
7b Mattson Road	48
13 Dolphin Street	48
1-2/20 Dowling Place	48
93 Pakuranga Road	48
1-2/32 Dale Crescent	48
15 Dolphin Street	48

Pavement Works, Night-time, EB2	
Address	Noise Level, dB LAeq
1-2/17 Dowling Place	47
3 Dolphin Street	47
5 Dolphin Street	47
6 Bolina Crescent	47
2/34 Dale Crescent	47
17 Dolphin Street	47
1-2/101 Pakuranga Road	47
7h Mattson Road	46
13 Tiraumea Drive	46
11 Dolphin Street	46
97 Pakuranga Road	46
36 Dale Crescent	46
7c Mattson Road	46
15a Dolphin Street	46
4 Anthony Place	46
1/34 Dale Crescent	46
11a Dolphin Street	46
3 Bolina Crescent	46
1/9 Dolphin Street	46
4 Dowling Place	45
7 Dolphin Street	45
4 Bolina Crescent	45
95 Pakuranga Road	45
25 Dale Crescent	45
22 Dale Crescent	45
15 Tiraumea Drive	45
5 Anthony Place	44
1/14 Dowling Place	44
7 Anthony Place	44
23b Dale Crescent	44
40 Dale Crescent	44
1-2/9 Anthony Place	44
1a Dowling Place	44
59 Dale Crescent	44
1-2/2b Dowling Place	44

Pavement Works, Night-time, EB3R	
Address	Noise Level, dB LAeq
90 Ti Rakau Drive	51
92 Ti Rakau Drive	50
1-3/12 Mattson Road	49
10 Mattson Road	48
13 Mattson Road	48
94 Ti Rakau Drive	48
8 Mattson Road	47
1 Aurea Avenue	46
2/6 Cindy Place	45
1/6 Cindy Place	45
14 Mattson Road	45
5 Aurea Avenue	45
8 Cindy Place	45
1-3/57 Cardiff Road	44
7 Cindy Place	44
88 Ti Rakau Drive	44

RRF Works, Night-time	
Address	Noise Level, dB LAeq
18a William Roberts Road	68
12,12a William Roberts Road	67
1/14 William Roberts Road	67
23b Dale Crescent	67
1/9 Bolina Crescent	66
7 Bolina Crescent	65
16 William Roberts Road	65
2/9 Bolina Crescent	65
25 Dale Crescent	64
5a Tiraumea Drive	64
21 Dale Crescent	64
20 William Roberts Road	63
27 Dale Crescent	63
3/9 Bolina Crescent	63
18 William Roberts Road	62
15 Reeves Road	62
33 Dale Crescent	62
33 Dale Crescent	62
2/23 Ti Rakau Drive	62
1/5 Bolina Crescent	62
33 Dale Crescent	62
33 Dale Crescent	62
2/5 Bolina Crescent	62
1/23 Ti Rakau Drive	61
24 William Roberts Road	61
10,2/10 William Roberts Road	61
17 Reeves Road	61
19 Reeves Road	60
6 Bolina Crescent	60
4 Bolina Crescent	60
33 Dale Crescent	60
23a Dale Crescent	60
24r William Roberts Road	60
7 Tiraumea Drive	60
5 Tiraumea Drive	60
21 Ti Rakau Drive	59
17a Reeves Road	59
12 Reeves Road	59
1a Ayr Road	59
2/14 William Roberts Road	59
1-2/18 Dale Crescent	59
1/19,19 Ti Rakau Drive	59
3 Bolina Crescent	59
13a Tiraumea Drive	59
1-2/17 Ti Rakau Drive	58
15 Tiraumea Drive	58

RRF Works, Night-time	
Address	Noise Level, dB LAeq
9a Undine Street	58
1 Ayr Road	58
1-26/33 Dale Crescent	58
9 Tiraumea Drive	58
21 Reeves Road	58
9 Undine Street	58
11 Tiraumea Drive	57
4a Reeves Road	57
1-2/20 Dale Crescent	57
33 Dale Crescent	57
1/2 Reeves Road	57
22 Dale Crescent	57
14 Dale Crescent	57
23 Reeves Road	57
12b William Roberts Road	57
15 Undine Street	57
6 Palm Avenue	57
1/19 Reeves Road	57
12 Dale Crescent	56
4 Tiraumea Drive	56
16 Dale Crescent	56
2/17 Tiraumea Drive	56
3 Ayr Road	56
7a Undine Street	56
8 Palm Avenue	56
14 Undine Street	56
3/14 William Roberts Road	55
1-2/24 Dale Crescent	55
6 Tiraumea Drive	55
13 Tiraumea Drive	55
10a Dale Crescent	55
4a - 4b Palm Avenue	55
1/8 William Roberts Road	55
8 Tiraumea Drive	55
12 Undine Street	55
1/15,15 Ti Rakau Drive	55
10 Tiraumea Drive	55
6 William Roberts Road	54
2/8 William Roberts Road	54
10 Anthony Place	54
8 Dale Crescent	54
17 Osprey Street	54
15 Osprey Street	54
1-2/3 Palm Avenue	54
13 Osprey Street	54
14 Tiraumea Drive	54

RRF Works, Night-time	
Address	Noise Level, dB LAeq
26 Dale Crescent	54
12 Tiraumea Drive	54
2/39 Dale Crescent	54
10 Undine Street	54
8 Undine Street	54
11 Ayr Road	54
8 Anthony Place	53
8 Dolphin Street	53
6 Dale Crescent	53
18 Tiraumea Drive	53
23a Reeves Road	53
29 Tiraumea Drive	53
2/9 Ayr Road	53
2 Ayr Road	53
16 Tiraumea Drive	53
25 Reeves Road	53
1/4 William Roberts Road	53
31 Tiraumea Drive	53
1-2/13 Ti Rakau Drive	52
4 Dale Crescent	52
5 Palm Avenue	52
5 Ayr Road	52
24 Tiraumea Drive	52
5 Undine Street	52
24 Osprey Street	52
8 Ayr Road	52
6 Undine Street	52
2 Dale Crescent	52
4 Anthony Place	52
8 Reeves Road	51
7 Undine Street	51
7 Ayr Road	51
6 Reeves Road	51
14 Reeves Road	51
15c Anthony Place	51
10 Reeves Road	51
1/17 Tiraumea Drive	51
1/12 Reeves Road	51
7 Dolphin Street	51
3 Dolphin Street	50
116b Pakuranga Road	50
5 Dolphin Street	50
29 Reeves Road	50
3 Undine Street	50
4 Ayr Road	50
4,4a Dolphin Street	49

RRF Works, Night-time	
Address	Noise Level, dB LAeq
6 Anthony Place	49
14a Reeves Road	49
1 Undine Street	48
6 Ayr Road	48
2/13 Ayr Road	48
31 Reeves Road	48
10 Ayr Road	48
3/183 Pakuranga Road	48
12 Ayr Road	48
6 Dolphin Street	47
15 Anthony Place	47
12 Anthony Place	47
4 Undine Street	47
1/13 Ayr Road	47
14 Ayr Road	46
4 Reeves Road	46
6a Ayr Road	46
1/9 Ayr Road	46
10 Dale Crescent	46
11 Osprey Street	45
14 Anthony Place	44
4c Bennett Road	44
2c Bennett Road	44
2/12 Reeves Road	44

Tree Removal, Night-time, EB2	
Address	Noise Level, dB LAeq
1-2/5 Ti Rakau Drive	71
3 Ti Rakau Drive	70
1-2/7 Ti Rakau Drive	68
1/9,9 Ti Rakau Drive	64
21 Dale Crescent	64
23b Dale Crescent	62
1-2/90 Pakuranga Road	62
1/11,11 Ti Rakau Drive	61
1-2/92 Pakuranga Road	60
25 Dale Crescent	60
23a Dale Crescent	60
16 Dale Crescent	59
14 Dale Crescent	59
12 Dale Crescent	59
1-2/13 Ti Rakau Drive	58
7 Bolina Crescent	58
33 Dale Crescent	58
105 Pakuranga Road	57
10a Dale Crescent	57
94 Pakuranga Road	57
2/5 Bolina Crescent	57
27 Dale Crescent	56
1-2/11 Dowling Place	56
13 Dowling Place	56
1-2/15 Dowling Place	56
1/15,15 Ti Rakau Drive	56
6 Bolina Crescent	56
1-2/18 Dale Crescent	55
15 Undine Street	55
1-2/5 Dowling Place	55
8 Dale Crescent	55
1/9 Bolina Crescent	55
2/9 Bolina Crescent	55
14 Undine Street	54
9 Dowling Place	54
3 Bolina Crescent	54
7 Dowling Place	54
1-26/33 Dale Crescent	53
6 Dale Crescent	53
9a Undine Street	53
1-2/3 Dowling Place	53
15 Osprey Street	53
17 Osprey Street	53
1/23 Ti Rakau Drive	53
1-2/17 Ti Rakau Drive	53
1-2/20 Dale Crescent	53

Tree Removal, Night-time, EB2	
Address	Noise Level, dB LAeq
2 Dale Crescent	52
2/17 Tiraumea Drive	52
22 Dale Crescent	52
1/20 Osprey Street	52
24 Osprey Street	52
47c Dale Crescent	52
9 Undine Street	52
100 Pakuranga Road	52
103 Pakuranga Road	52
15 Tiraumea Drive	52
4 Dale Crescent	52
12 Undine Street	52
7a Undine Street	51
10 Undine Street	50
5 Tamaki Bay Drive	50
8 Undine Street	50
8 Palm Avenue	50
3/9 Bolina Crescent	50
4 Bolina Crescent	50
2/23 Ti Rakau Drive	50
55 Dale Crescent	50
1-2/101 Pakuranga Road	49
7 Undine Street	49
13 Osprey Street	49
1-2/24 Dale Crescent	49
1 Tamaki Bay Drive	49
1-2/30 Dale Crescent	49
10 Anthony Place	49
5a Tiraumea Drive	49
14 Tiraumea Drive	49
21 Ti Rakau Drive	49
6 Undine Street	49
95 Pakuranga Road	48
25 Pandora Place	48
12 Tiraumea Drive	48
2/39 Dale Crescent	48
6 Anthony Place	47
5 Undine Street	47
62 Dale Crescent	47
13 Tiraumea Drive	47
1 Dowling Place	47
60 Dale Crescent	46
29 Tiraumea Drive	46
1/5 Bolina Crescent	46
16 Dowling Place	46
1/19,19 Ti Rakau Drive	46

Tree Removal, Night-time, EB2	
Address	Noise Level, dB LAeq
1-2/32 Dale Crescent	46
45 Dale Crescent	46
10 Dowling Place	46
1-2/17 Dowling Place	46
4 Dowling Place	46
1/34 Dale Crescent	46
8 Anthony Place	46
31 Tiraumea Drive	46
9 Tiraumea Drive	46
1-2/20 Dowling Place	46
22 Osprey Street	45
36 Dale Crescent	45
1-2/2b Dowling Place	45
1-2/3 Palm Avenue	45
40 Dale Crescent	45
4a - 4b Palm Avenue	45
61 Dale Crescent	44
8 Dowling Place	44
97 Pakuranga Road	44
3 Undine Street	44
41 Dale Crescent	44
11 Tiraumea Drive	44
16 Osprey Street	44
3 Dolphin Street	44
40a Dale Crescent	44
65 Dale Crescent	44
10 Dale Crescent	44
1-2/43 Dale Crescent	44
38 Dale Crescent	44
16 Tiraumea Drive	44
12 Anthony Place	44
2a Dowling Place	44
18 Tiraumea Drive	44

Tree Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
176 Gossamer Drive	79
172 Gossamer Drive	77
138 Ti Rakau Drive	70
108 Ti Rakau Drive	69
106 Ti Rakau Drive	69
114 Ti Rakau Drive	69
112 Ti Rakau Drive	69
116 Ti Rakau Drive	68
140 Ti Rakau Drive	68
120 Ti Rakau Drive	68
110 Ti Rakau Drive	68
169 Gossamer Drive	68
118 Ti Rakau Drive	67
122 Ti Rakau Drive	67
136 Ti Rakau Drive	67
171 Gossamer Drive	67
104 Ti Rakau Drive	67
144 Ti Rakau Drive	66
175 Gossamer Drive	66
146 Ti Rakau Drive	65
167 Gossamer Drive	65
173 Gossamer Drive	65
148 Ti Rakau Drive	65
102 Ti Rakau Drive	64
1-2/2 Chevis Place	64
40 Riverhills Avenue	63
2a, 2b, 2c Marriott Road	62
150 Ti Rakau Drive	62
129 Ti Rakau Drive	61
75a Ti Rakau Drive	61
4 Edgewater Drive	61
83 Ti Rakau Drive	61
152 Ti Rakau Drive	61
8 Ellesmere Crescent	60
100 Ti Rakau Drive	60
14 Edgewater Drive	60
1/7 Wheatley Avenue	60
3 Wheatley Avenue	59
126-2/126 Ti Rakau Drive	59
1-2/6 Roseburn Place	59
83c Ti Rakau Drive	58
1-2/1 Chevis Place	58
36 Riverhills Avenue	57
2/79 Cardiff Road	57
9 Snell Place	57
91 Ti Rakau Drive	57

Tree Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
114a Ti Rakau Drive	57
10 Ellesmere Crescent	56
83b Ti Rakau Drive	56
65 Cardiff Road	56
6 Chevis Place	56
142 Ti Rakau Drive	56
154 Ti Rakau Drive	56
98 Ti Rakau Drive	56
156 Ti Rakau Drive	56
7 Wheatley Avenue	56
11 Snell Place	56
1/67 Cardiff Road	56
1-2/8 Edgewater Drive	56
87 Ti Rakau Drive	56
1-2/63 Cardiff Road	56
96 Ti Rakau Drive	55
5 Snell Place	55
1-2/130 Ti Rakau Drive	55
83a Ti Rakau Drive	55
128 Ti Rakau Drive	55
6, 1/6 Edgewater Drive	55
94 Ti Rakau Drive	55
14 Ellesmere Crescent	55
67 Cardiff Road	54
61 Cardiff Road	54
14 Chevis Place	54
7 Fremantle Place	54
13 Snell Place	54
2/4 Ellesmere Crescent	53
3 Fremantle Place	53
69a,69b Cardiff Road	53
1-2/4 Roseburn Place	53
12 Ellesmere Crescent	53
97 Ti Rakau Drive	53
2 Paradise Place	52
4 Wheatley Avenue	52
1-2/10 Roseburn Place	52
6 Paradise Place	51
89 Ti Rakau Drive	51
1-2/81 Cardiff Road	51
1 Paradise Place	51
6 Wheatley Avenue	51
158 Ti Rakau Drive	51
8 Roseburn Place	51
10 Chevis Place	50
14 Snell Place	50

Tree Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
3 Roseburn Place	50
39 Miramar Place	50
1-2/73 Cardiff Road	50
75 Cardiff Road	50
92 Ti Rakau Drive	50
17 Fremantle Place	50
9 Fremantle Place	50
1-2/4 Marriott Road	50
6 Ellesmere Crescent	50
9 Wheatley Avenue	49
71 Cardiff Road	49
5 Wheatley Avenue	49
8 Wheatley Avenue	49
88 Cardiff Road	49
35 Miramar Place	49
38 Riverhills Avenue	48
16 Ellesmere Crescent	48
92, 1/92 Cardiff Road	48
94 Cardiff Road	48
1-3/59 Cardiff Road	48
96 Cardiff Road	48
7 Paradise Place	48
148 Edgewater Drive	48
166 Ti Rakau Drive	48
7 Snell Place	48
8 Chevis Place	48
4 Chevis Place	48
210 Ti Rakau Drive	48
1-2/82 Cardiff Road	47
77 Cardiff Road	47
19 Fremantle Place	47
1-2/9 Roseburn Place	47
7 Ellesmere Crescent	47
3 Paradise Place	47
5 Fremantle Place	47
12 Fremantle Place	47
8 Paradise Place	47
2 Ellesmere Crescent	46
13 Wheatley Avenue	46
14 Mattson Road	46
1/79 Cardiff Road	46
10 Edgewater Drive	46
22 Miramar Place	46
7 Chevis Place	46
5 Ellesmere Crescent	46
7 Roseburn Place	46

Tree Removal, Night-time, EB3R	
Address	Noise Level, dB LAeq
98 Cardiff Road	46
13 Roseburn Place	46
12 Paradise Place	45
100 Cardiff Road	45
78 Cardiff Road	45
3 Chevis Place	45
12 Roseburn Place	45
1-2/14 Roseburn Place	45
24 Ellesmere Crescent	45
20 Ellesmere Crescent	45
1-2/11 Chevis Place	45
4 Snell Place	45
33 Miramar Place	45
9 Ellesmere Crescent	45
15 Fremantle Place	45
145 Ti Rakau Drive	45
3 Ellesmere Crescent	45
7 Marriott Road	45
102 Cardiff Road	44
2 Snell Place	44
18 Chevis Place	44
1-3/12 Mattson Road	44
5 Chevis Place	44
18a Ellesmere Crescent	44
214 Ti Rakau Drive	44
1/4 Ellesmere Crescent	44

Appendix E – Receivers Within DIN 4150-3 Vibration Contours

EB2, Daytime

Address	Distance to Works	Building Type/Structure	Exceeds Category A?	Exceeds Category B?
123 -135 Pakuranga Road	1	Commercial	Yes	Yes
2r Ti Rakau Drive	1	Commercial	Yes	Yes
1-2/17 Ti Rakau Drive	1	Residential	Yes	Yes
141 Pakuranga Road	1	Commercial	Yes	Yes
1/15,15 Ti Rakau Drive	1	Residential	Yes	Yes
26 Ti Rakau Drive	1	Commercial	Yes	Yes
10-14 Cortina Place	1	Commercial	Yes	Yes
23b Dale Crescent	1	Residential	Yes	Yes
120 Pakuranga Road	1	Commercial	Yes	Yes
3 Reeves Road	1	Commercial	Yes	Yes
10 7 Aylesbury Street	1	Commercial	Yes	Yes
10 Aylesbury Street	1	Commercial	Yes	Yes
11 Reeves Road	1	Commercial	Yes	Yes
11 Cortina Place	2	Commercial	Yes	Yes
1/9 Cortina Place	2	Commercial	Yes	Yes
7a Cortina Place	2	Commercial	Yes	Yes
1-2/92 Pakuranga Road	3	Residential	Yes	Yes
126 Pakuranga Road	3	Commercial	Yes	No
1-2/90 Pakuranga Road	4	Residential	Yes	Yes
1-2/5 Ti Rakau Drive	4	Residential	Yes	Yes
1-2/13 Ti Rakau Drive	4	Residential	Yes	Yes
2/23 Ti Rakau Drive	4	Residential	Yes	Yes
116b Pakuranga Road	5	Residential	Yes	Yes
21 Dale Crescent	5	Residential	Yes	Yes
106 Pakuranga Road	5	Residential	Yes	Yes
18a William Roberts Road	5	Residential	Yes	Yes
100 Pakuranga Road	5	Residential	Yes	Yes
3 Ti Rakau Drive	5	Residential	Yes	Yes
1-2/7 Ti Rakau Drive	5	Residential	Yes	Yes
24 William Roberts Road	6	Residential	Yes	Yes
94 Pakuranga Road	6	Residential	Yes	Yes
12,12a William Roberts Road	6	Residential	Yes	Yes
64 Dale Crescent	6	Residential	Yes	Yes
118 Pakuranga Road	6	Residential	Yes	Yes
3 Cortina Place	6	Commercial	Yes	No
1/11,11 Ti Rakau Drive	6	Residential	Yes	Yes
1/14 William Roberts Road	6	Residential	Yes	Yes
1/19,19 Ti Rakau Drive	6	Residential	Yes	Yes
1/9,9 Ti Rakau Drive	6	Residential	Yes	Yes
100 Pakuranga Road	6	Residential	Yes	Yes
2 Dale Crescent	6	Residential	Yes	Yes

13r Reeves Road	7	Commercial	Yes	No
24r William Roberts Road	7	Residential	Yes	Yes
15 Reeves Road	7	Residential	Yes	Yes
21 Ti Rakau Drive	8	Residential	Yes	Yes
183 Pakuranga Road	8	Residential	Yes	Yes
8 Cortina Place	8	Commercial	Yes	No
1/4 William Roberts Road	8	Residential	Yes	Yes
1-2/3 Palm Avenue	8	Residential	Yes	Yes
5 Cortina Place	8	Commercial	Yes	No
7 Cortina Place	8	Commercial	Yes	No
84 Ti Rakau Drive	9	Residential	Yes	No
27r William Roberts Road	9	Commercial	Yes	No
191 Pakuranga Road	9	Residential	Yes	No
62 Dale Crescent	9	Residential	Yes	No
4a - 4b Palm Avenue	10	Residential	Yes	No
1 Reeves Road	11	Commercial	Yes	No
102 Pakuranga Road	11	Commercial	Yes	No
10,2/10 William Roberts Road	12	Residential	Yes	No
1-2/30 Latham Avenue	12	Residential	Yes	No
193a Pakuranga Road	12	Residential	Yes	No
20 William Roberts Road	12	Residential	Yes	No
17 Reeves Road	13	Residential	Yes	No
16 William Roberts Road	14	Residential	Yes	No
1-2/104 Pakuranga Road	14	Residential	Yes	No
23a Dale Crescent	14	Residential	Yes	No
1/23 Ti Rakau Drive	15	Residential	Yes	No
140s Pakuranga Road	16	Residential	Yes	No
1-3/189 Pakuranga Road	16	Residential	Yes	No
140s Pakuranga Road	17	Commercial	Yes	No
66 Dale Crescent	17	Residential	Yes	No
2/32 Latham Avenue	19	Residential	Yes	No
118 Pakuranga Road	19	Residential	Yes	No
108 Pakuranga Road	19	Residential	Yes	No
2/4 William Roberts Road	19	Residential	Yes	No
6 William Roberts Road	20	Residential	Yes	No
1/8 William Roberts Road	20	Residential	Yes	No

EB3R, Daytime

Address	Distance to Works	Building Type/Structure	Exceeds Category A?	Exceeds Category B?
107-109 Ti Rakau Drive	1	Commercial	Yes	Yes
9a,9b Mattson Road	1	Residential	Yes	Yes
4 Edgewater Drive	1	Residential	Yes	Yes
148 Edgewater Drive	1	Residential	Yes	Yes
165a Edgewater Drive	1	Residential	Yes	Yes
165b Edgewater Drive	1	Residential	Yes	Yes
6,1/6 Mattson Road	1	Residential	Yes	Yes
212 Ti Rakau Drive	1	Residential	Yes	Yes
176 Gossamer Drive	1	Residential	Yes	Yes
5 Tiraumea Drive	3	Residential	Yes	Yes
3 Fremantle Place	3	Residential	Yes	Yes
5a Tiraumea Drive	4	Residential	Yes	Yes
176 Ti Rakau Drive	4	Residential	Yes	Yes
210 Ti Rakau Drive	4	Residential	Yes	Yes
75a Ti Rakau Drive	4	Residential	Yes	Yes
214 Ti Rakau Drive	4	Residential	Yes	Yes
1-2/2 Chevis Place	4	Residential	Yes	Yes
160 Ti Rakau Drive	4	Residential	Yes	Yes
4 Tiraumea Drive	4	Residential	Yes	Yes
1-2/130 Ti Rakau Drive	5	Residential	Yes	Yes
92 Ti Rakau Drive	5	Residential	Yes	Yes
158 Ti Rakau Drive	5	Residential	Yes	Yes
156 Ti Rakau Drive	5	Residential	Yes	Yes
207 Ti Rakau Drive	5	Commercial	Yes	No
128 Ti Rakau Drive	5	Residential	Yes	Yes
1-2/1 Chevis Place	5	Residential	Yes	Yes
180 Ti Rakau Drive	5	Residential	Yes	Yes
94 Ti Rakau Drive	5	Residential	Yes	Yes
146 Edgewater Drive	5	Residential	Yes	Yes
184 Ti Rakau Drive	5	Residential	Yes	Yes
172 Gossamer Drive	5	Residential	Yes	Yes
169 Gossamer Drive	6	Residential	Yes	Yes
138 Ti Rakau Drive	6	Residential	Yes	Yes
171 Gossamer Drive	6	Residential	Yes	Yes
126-2/126 Ti Rakau Drive	6	Residential	Yes	Yes
186 Ti Rakau Drive	7	Residential	Yes	Yes
219 Ti Rakau Drive	7	Commercial	Yes	No
108 Ti Rakau Drive	7	Residential	Yes	Yes
136 Ti Rakau Drive	7	Residential	Yes	Yes
2a, 2b, 2c Marriott Road	7	Residential	Yes	Yes
174 Ti Rakau Drive	7	Residential	Yes	Yes

100 Ti Rakau Drive	7	Residential	Yes	Yes
102 Ti Rakau Drive	7	Residential	Yes	Yes
106 Ti Rakau Drive	7	Residential	Yes	Yes
8 Mattson Road	7	Residential	Yes	Yes
1/9 Bolina Crescent	8	Residential	Yes	Yes
140 Ti Rakau Drive	8	Residential	Yes	Yes
200 Ti Rakau Drive	8	Residential	Yes	Yes
166 Ti Rakau Drive	8	Residential	Yes	Yes
172 Ti Rakau Drive	8	Residential	Yes	Yes
2 Paradise Place	8	Residential	Yes	Yes
170 Ti Rakau Drive	8	Residential	Yes	Yes
90 Ti Rakau Drive	9	Residential	Yes	No
192 Ti Rakau Drive	9	Residential	Yes	No
190 Ti Rakau Drive	9	Residential	Yes	No
167 Gossamer Drive	9	Residential	Yes	No
122 Ti Rakau Drive	9	Residential	Yes	No
116 Ti Rakau Drive	9	Residential	Yes	No
110 Ti Rakau Drive	9	Residential	Yes	No
175 Gossamer Drive	9	Residential	Yes	No
154 Ti Rakau Drive	9	Residential	Yes	No
104 Ti Rakau Drive	10	Residential	Yes	No
112 Ti Rakau Drive	10	Residential	Yes	No
120 Ti Rakau Drive	10	Residential	Yes	No
188 Ti Rakau Drive	10	Residential	Yes	No
114 Ti Rakau Drive	10	Residential	Yes	No
118 Ti Rakau Drive	10	Residential	Yes	No
1-2/204 Ti Rakau Drive	11	Residential	Yes	No
98 Ti Rakau Drive	11	Residential	Yes	No
9 Mattson Road	11	Residential	Yes	No
173 Gossamer Drive	11	Residential	Yes	No
206 Ti Rakau Drive	11	Residential	Yes	No
96 Ti Rakau Drive	12	Residential	Yes	No
208 Ti Rakau Drive	12	Residential	Yes	No
178 Ti Rakau Drive	12	Residential	Yes	No
194 Ti Rakau Drive	12	Residential	Yes	No
196 Ti Rakau Drive	12	Residential	Yes	No
4 Wheatley Avenue	12	Residential	Yes	No
3 Wheatley Avenue	13	Residential	Yes	No
6, 1/6 Edgewater Drive	13	Residential	Yes	No
144 Ti Rakau Drive	14	Residential	Yes	No
198 Ti Rakau Drive	14	Residential	Yes	No
152 Ti Rakau Drive	14	Residential	Yes	No
165 Edgewater Drive	14	Residential	Yes	No
129 Ti Rakau Drive	15	Residential	Yes	No

17 Fremantle Place	16	Residential	Yes	No
40 Riverhills Avenue	16	Residential	Yes	No
142 Edgewater Drive	16	Residential	Yes	No
177 Ti Rakau Drive	16	Residential	Yes	No
1/10 Dolphin Street	16	Residential	Yes	No
175a-1/175a Ti Rakau Drive	17	Residential	Yes	No
184b Ti Rakau Drive	17	Residential	Yes	No
1/144 Edgewater Drive	17	Residential	Yes	No
6 Tiraumea Drive	17	Residential	Yes	No
150 Ti Rakau Drive	18	Residential	Yes	No
146 Ti Rakau Drive	18	Residential	Yes	No
8 Dolphin Street	18	Residential	Yes	No
14 Edgewater Drive	18	Residential	Yes	No
148 Ti Rakau Drive	19	Residential	Yes	No
7 Tiraumea Drive	19	Residential	Yes	No
14 Edgewater Drive	19	Residential	Yes	No
7 Fremantle Place	19	Residential	Yes	No
19 Fremantle Place	19	Residential	Yes	No
7 Bolina Crescent	19	Residential	Yes	No
9 Fremantle Place	19	Residential	Yes	No
183 Ti Rakau Drive	20	Residential	Yes	No

Pavement Works, Night-time, EB3R

Address	Distance to works	Building Type/Structure	Exceeds Category A?	Exceeds Category B?
1-2/13 Ti Rakau Drive	19	Residential	Yes	No
1-2/5 Ti Rakau Drive	19	Residential	Yes	No
1-2/17 Ti Rakau Drive	19	Residential	Yes	No
3 Ti Rakau Drive	20	Residential	Yes	No
1/15,15 Ti Rakau Drive	20	Residential	Yes	No
1-2/7 Ti Rakau Drive	21	Residential	Yes	No
1/11,11 Ti Rakau Drive	21	Residential	Yes	No
1/19,19 Ti Rakau Drive	21	Residential	Yes	No
2/23 Ti Rakau Drive	21	Residential	Yes	No
1/9,9 Ti Rakau Drive	22	Residential	Yes	No
21 Ti Rakau Drive	23	Residential	Yes	No
1/23 Ti Rakau Drive	32	Residential	Yes	No
1-2/3 Palm Avenue	39	Residential	Yes	No
4a - 4b Palm Avenue	41	Residential	Yes	No
1-2/90 Pakuranga Road	44	Residential	Yes	No