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**PROPOSED WASTE RECYCLING CENTRE,
SOMERSET BRIDGE, BRIDGEWATER**

NOISE IMPACT ASSESSMENT

Technical Report: R11399-1 Rev 0

Date: 18th December 2025

For: ETM Recycling Ltd
77-81 Hartcliffe Way
Bristol
BS3 5RN

24 Acoustics Document Control Sheet

Project Title: Proposed Waste Recycling Centre, Somerset Bridge, Bridgewater
Noise Impact Assessment

Report Ref: R11399-1 Rev 0

Date: 18th December 2025

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For and on behalf of 24 Acoustics Ltd				

Document Status and Approval Schedule

Revision	Description	Prepared By	Checked By	Approved By
0	Approved for Issue	Reuben Peckham	Steve Gosling	Steve Gosling

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EXECUTIVE SUMMARY

24 Acoustics Ltd has been retained by ETM Recycling Ltd (ETM) to provide an assessment of the potential impact of noise from their proposed new waste recycling site at Somerset Bridge in Bridgewater.

This report provides an assessment of the noise impact of the first phase which is that from the operation of a soil wash plant and associated activities.

It is proposed that the operations will be undertaken on a 24/7 basis (with reduced mobile plant operational at night). The calculations and analysis indicate that an acoustic barrier fence, 3 m in height will be required on the northern and west site boundaries with residential neighbours.

With these measures in place, however, it can be seen that the noise impact associated with the operations will be 'low' both during the day and at night and there is no reason, on noise grounds, why planning consent should not be granted.

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1.0 INTRODUCTION

- 1.1 24 Acoustics Ltd has been retained by ETM Recycling Ltd (ETM) to provide an assessment of the potential impact of noise from their proposed new waste recycling site at Somerset Bridge in Bridgewater.
- 1.2 This report provides an assessment of the noise impact of the first phase which is that from the operation of a soil wash plant and associated activities.
- 1.3 All noise levels in this report are provided in dB relative to 20 μ Pa. A glossary of the acoustic terminology used is provided in Appendix A.

2.0 SITE DESCRIPTION AND OPERATION

- 2.1 The site is located off Somerset Bridge in Bridgewater. ETM are seeking planning consent to redevelop the site to become a waste recycling centre. The first phase (to which this noise impact assessment relates) will be the operation of a soil wash works. Soil and inert waste will be imported by HGV, processed, washed and screened prior to being stockpiled and distributed onwards.
- 2.2 The site is located in a primarily industrial and commercial area. The M5 motorway is located adjacent to the south-eastern site boundary and is the dominant source of ambient noise in the area. The nearest residential properties are 1 & 2 Canal Cottages which neighbour the site on the south-western boundary, 3 Canal Cottages is located to the south (on the opposite side of the M5 motorway) and houses located off Somerset Bridge are located to the north of the site.
- 2.3 Figure 1 shows an aerial image of the site, surrounding area and noise-sensitive receptors.
- 2.4 It is proposed that the site will operate on a 24/7 continuous basis. There will be reduced need for mobile plant at night, however, and just a single loader will operate during the night time hours.

2.5 The operations will utilise the following plant:

- New wash plant (precise make and model to be decided);
- 2* Slew telehandler;
- 2 * Loading shovels
- HGV movements- typically between 200 and 300 per day.

2.7 Figure 2 provides a site plan showing the proposed layout and operations. Figure 3 provides an illustrative drawing of a CDE wash plant.

3.0 NOISE IMPACT ASSESSMENT CRITERIA

National Planning Policy Framework and Noise Policy Statement for England

3.1 The National Planning Policy Framework (NPPF) [Reference 1] states that planning policies and decisions should aim to:

- Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
- Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions, while recognising that many developments will create some noise.

3.2 The NPPF also refers to the Noise Policy Statement for England (NPSE) [Reference 2] which is intended to apply to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise. The NPSE sets out the Government's long-term vision to 'promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development' which is supported by the following aims:

- Avoid significant adverse impacts on health and quality of life;
- Mitigate and minimise adverse impacts on health and quality of life.

3.3 The NPSE defines the concept of a 'significant observed adverse effect level' (SOAEL) as 'the level above which significant adverse effects on health and quality of life occur'. The following guidance is provided within the NPSE:

"It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available."

- 3.4 The National Planning Practice Guidance (NPPG) [Reference 3] is written to support the NPPF with more specific planning guidance. The NPPG reflects the NPSE and states that noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment. It also states that opportunities should be taken, where practicable, to achieve improvements to the acoustic environment. The NPPG states that noise can over-ride other planning concerns but should not be considered in isolation from the other economic, social and environmental dimensions of the proposed development.
- 3.5 The NPPG expands upon the concept of SOAEL (together with Lowest Observable Adverse Effect Level, LOAEL and No Observed Effect Level, NOEL) as introduced in the NPSE and provides a table of noise exposure hierarchy for use in noise impact assessments in the planning system. Table 1 is reproduced from the NPPG and summarises the noise exposure hierarchy, based on the likely average response.

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No Effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life	No Observed Adverse Effect	No specific measures required
Lowest Observable Adverse Effect Level (LOAEL)			
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/ or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life	Observed Adverse Effect	Mitigate and reduce to a minimum
Significant Observed Adverse Effect Level (SOAEL)			
Noticeable and disruptive	The noise causes a material change in behaviour and/ or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extension and regular changes in behaviour and/ or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/ awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

Table 1: NPPG Noise Exposure Hierarchy

- 3.6 In general terms it is considered that a noise impact with an effect level which is lower than SOAEL is acceptable (providing the effect is mitigated to a minimum). There is currently, however, a discontinuity between the above guidance and objective technical criteria for use in planning noise impact assessments.

British Standard 4142:2014+A1:2019

- 3.7 British Standard 4142:2014+A1:2019 [Reference 4] provides a methodology for the assessment of commercial sound at (the exterior of) residential properties. The standard advocates a comparison between the prevailing typical L_{A90} background noise level and the L_{Aeq} source noise level. For rating purposes, if the noise source is tonal, or impulsive, in character, a rating correction of up to 15 dBA is applied. Several methods of determining the rating penalty are described. The standard states that a difference between the rating level and the background level of around +10 dBA is an indication of a 'significant adverse impact', depending on the context and a difference of around +5 dBA is likely to be an indication of an adverse impact again depending on the context. Where the rating level does not exceed the background noise (sound) level, this is an indication of the specific sound source having a low impact (depending upon the context).

4.0 SITE NOISE SURVEYS

Background Noise Survey

- 4.1 Background noise surveys were undertaken at two locations on the site, representative of 1&2 Canal Cottages (Location 1) and Somerset Bridge (Location 2) between 11 and 17 December 2025. The precise survey locations are shown in Figure 1.
- 4.2 The following instrumentation was used in the surveys:
- 2 * Rion NL31 Class 1 accuracy sound level meters
 - Bruel and Kjaer Type 4231 Class 1 accuracy acoustic calibrator.
- 4.3 Noise measurements were undertaken at a height of 1.5 m above local grade. An environmental windshield was used. The sound level meters were calibrated before and after the surveys in accordance with the manufacturer's instructions. No drift in calibration was recorded. Calibration certificates of the instrumentation used are provided in Appendix B. Data was recorded in terms of the overall A-weighted L_{eq} , L_{90} and $L_{Max,f}$ sound pressure levels in samples of 5 minutes. Hourly values were then calculated from the measured data for analysis.

- 4.4 A Davis Instruments weather station was used to log weather conditions. This was installed on the site boundary as shown in Figure 1. The weather during the surveys was variable. Periods with unsuitable weather have been removed from the analysis.
- 4.5 The results of the surveys are shown graphically in Appendix C and summarised below. Note 24 Acoustics' definition of the typical background noise level is the average of the range of values less one standard deviation.

Date	Time of Day and Noise Level	
	Daytime, dB LA90, 1 hr	Night, dB LA90, 15 min
Thursday 11/12/2025	61	56
Friday 12/12/2025	55	54
Saturday 13/12/2025	60	51
Sunday 14/12/2025	59	55
Monday 15/12/2025	59	50
Tuesday 16/12/2025	55	50
Representative	58	52

Table 2: Typical Background Noise Survey Results, Location 1- 1 & 2 Canal Cottages

Date	Time of Day and Noise Level	
	Daytime, dB LA90, 1 hr	Night, dB LA90, 15 min
Thursday 11/12/2025	57	50
Friday 12/12/2025	50	51
Saturday 13/12/2025	58	46
Sunday 14/12/2025	57	49
Monday 15/12/2025	53	40
Tuesday 16/12/2025	48	44
Representative	54	47

Table 3: Typical Background Noise Survey Results, Location 2- Somerset Bridge

5.0 CALCULATIONS AND NOISE IMPACT ASSESSMENT

Source-Term Noise Data

- 5.1 The site operation will utilise a soil wash plant together with ancilliary plant including loaders and HGV movements. A more detailed description of each is provided below.
- Soil wash plant. Precise make currently undecided but is likely to be manufactured by either CDE or Parnaby Cyclones;

This is bespoke to each site/ operation and as such noise output may vary according to the plant. 24 Acoustics has previously undertaken detailed noise surveys on an operational Parnaby Cyclones system which is similar to that proposed at Somerset Bridge.

- Mobile plant. Most likely to include 2 slew telehandlers, 2 loading shovels, and 2 forklift trucks. However, at night (between 23:00 and 07:00 hours) only a single loading shovel will operate;
- HGV movements. The site estimate that there will be between 200 and 300 HGV movements in/ out per day. On the basis of the higher figure this would result in 125 movements during a daytime hourly assessment period and 32 during a 15 min night time assessment period.

5.2 Details of the sound power levels of the plant are provided in Appendix D.

Acoustic Model

5.3 The sound power data for plant to be used on site has been used to populate an acoustic model of the operations. The propagation methodology of ISO 9613 [Reference 6] has been used to determine the likely noise level at receptor locations from the operations taking into account geometric divergence, acoustic screening and ground and atmospheric absorption. The model uses near worst-case light downwind propagation conditions and the following specific parameters:

- Ambient temperature of 10 degrees C;
- Relative humidity of 70%;
- Soft ground propagation ($G=1$) on land/ hard ground propagation ($G=0$) on solid surfaces.

5.4 The assessment includes the provision of acoustic barrier fences, 3 m in height at the boundaries with receptor locations as shown in Figure 1. The barrier should be impervious with a minimum surface density of 14 kg/m^2 .

5.5 The associated noise contour map is provided in Figures 4 and 5 and indicates the following noise levels at receptor properties.

Receptor	Time of Day and Noise Level	
	Daytime (23:00- 07:00 hours)	Night time (23:00- 07:00 hours)
1 & 2 Canal Cottages	50 dB $L_{Aeq, 1 \text{ hr}}$	49 dB $L_{Aeq, 15 \text{ min}}$
Somerset Bridge	48 dB $L_{Aeq, 1 \text{ hr}}$	47 dB $L_{Aeq, 15 \text{ min}}$
3 Canal Cottages	52 dB $L_{Aeq, 1 \text{ hr}}$	51 dB $L_{Aeq, 15 \text{ min}}$

Table 4: Estimated Operational Noise Levels at Receptor Properties

Assessment

- 5.6 Tables 5 and 6 below shows the assessment of noise impact relative to the prevailing background noise level using the rating methodology of BS4142. The noise emission from the operations is not considered impulsive or tonal at receptors but does contain a degree of intermittency. For this reason a noise character correction of + 3 dB has been applied in accordance with the standard.

	Time of Day and Noise Level	
	Daytime	Night Time
Representative background level, dB $L_{A90 \text{ 1 hour}}$	58	52
Specific Source Noise Level, dB $L_{Aeq, 1 \text{ hr}}$	50	49
Character correction, dB	+3	+3
Rating noise level, dBA	53	52
Difference between background and rating level, dB	-5	0

Table 5: Noise Impact Assessment, 1 & 2 Canal Cottages

	Time of Day and Noise Level	
	Daytime	Night Time
Representative background level, dB $L_{A90 \text{ T}}$	54	47
Specific Source Noise Level, dB $L_{Aeq, \text{T}}$	48	47
Character correction, dB	+3	+3
Rating noise level, dBA	51	50
Difference between background and rating level, dB	-3	-3

Table 6: Noise Impact Assessment, Somerset Bridge

- 5.7 The assessment indicates that the noise impact at all receptors will be low (subject to context) at all times.
- 5.8 The background noise level at 3 Canal Cottages was not surveyed, however, this property is significantly closer to the M5 motorway than 1 and 2 Canal Cottages and hence will be subject to a greater level of ambient noise. It is anticipated that the operational noise impact at these receptors will be substantially lower than that quantified above in Table 5 at 1 & 2 Canal Cottages.

Uncertainty

- 5.9 All reasonable measures have been undertaken to ensure minimal uncertainty in the measurement procedures and assessment. This includes:
- Representative background noise levels determined during periods of suitable weather conditions;
 - Measurement equipment fully calibrated to national standards and traceable with on-site calibration checks undertaken before and after the measurement exercises;
 - Calculations undertaken using proprietary software including the calculation methodology of ISO 9613;
 - One metre resolution topographical data utilised in the acoustic model to ensure accurate topography of the site and surrounding area.
- 5.10 Based on the above, uncertainty associated with the assessment has been reduced to a minimum.

6.0 CONCLUSIONS

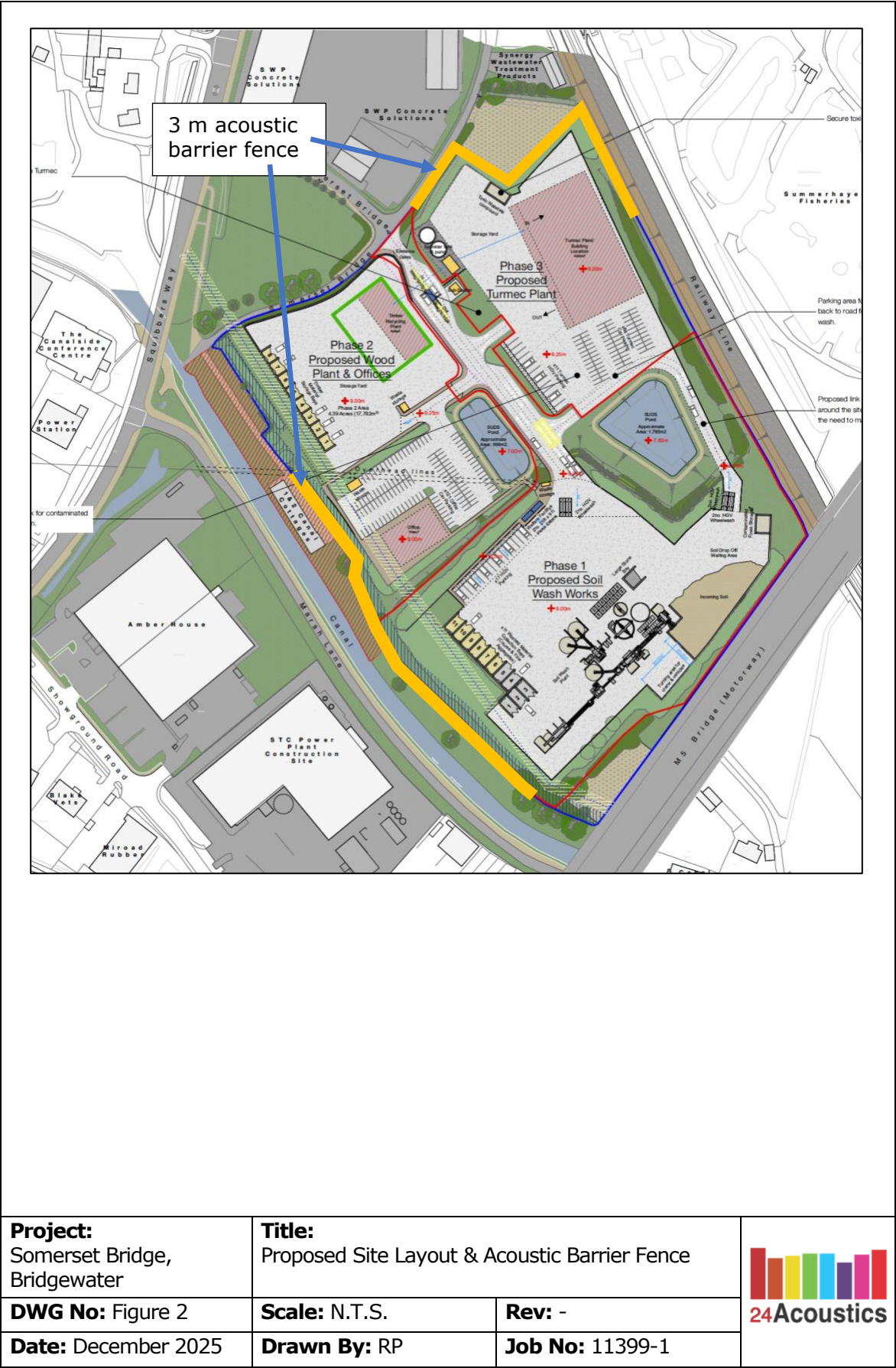
- 6.1 24 Acoustics Ltd has been retained by ETM Recycling Ltd (ETM) to provide an assessment of the potential impact of noise from their proposed new waste recycling site at Somerset Bridge in Bridgewater.
- 6.2 This report provides an assessment of the noise impact of the first phase which is that from the operation of a soil wash plant and associated activities.
- 6.3 It is proposed that the operations will be undertaken on a 24/7 basis (with reduced mobile plant operational at night). The calculations and analysis indicate that an acoustic barrier fence, 3 m in height will be required on the northern and west site boundaries with residential neighbours.
- 6.4 With these measures in place, however, it can be seen that the noise impact associated with the operations will be 'low' both during the day and at night and there is no reason, on noise grounds, why planning consent should not be granted.

REFERENCES

1. Department for Communities and Local Government. National Planning Policy Framework, 2012.
2. DEFRA. Noise Policy Statement for England, 2010.
3. Department of Communities and Local Government. National Planning Practice Guidance, March 2014.
4. British Standards Institution. British Standard 4142:2014 Methods for rating and assessing industrial and commercial sound, 2014.
5. International Standards Institution. ISO 9614-2. Determination of sound power levels of noise sources using sound intensity, 1996.
6. International Standards Institution. ISO 9613. Acoustics- Attenuation during Propagation of Sound Outdoors, Parts 1 and 2, 1993.

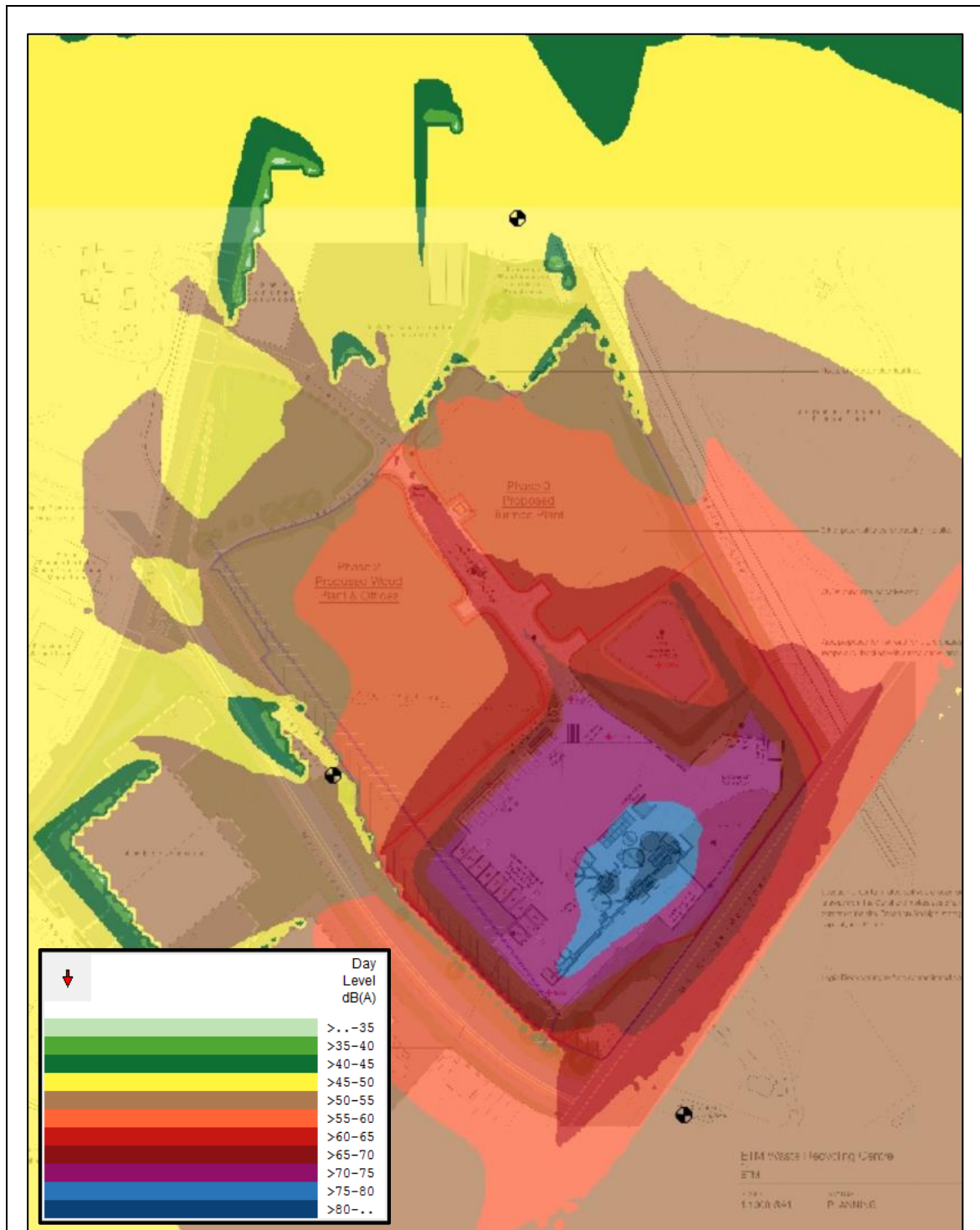


Project: Somerset Bridge, Bridgewater	Title: Site Aerial Image and Background Noise Survey Locations		 24Acoustics
DWG No: Figure 1	Scale: N.T.S.	Rev:	
Date: December 2025	Drawn By: RP	Job No: 11399-1	

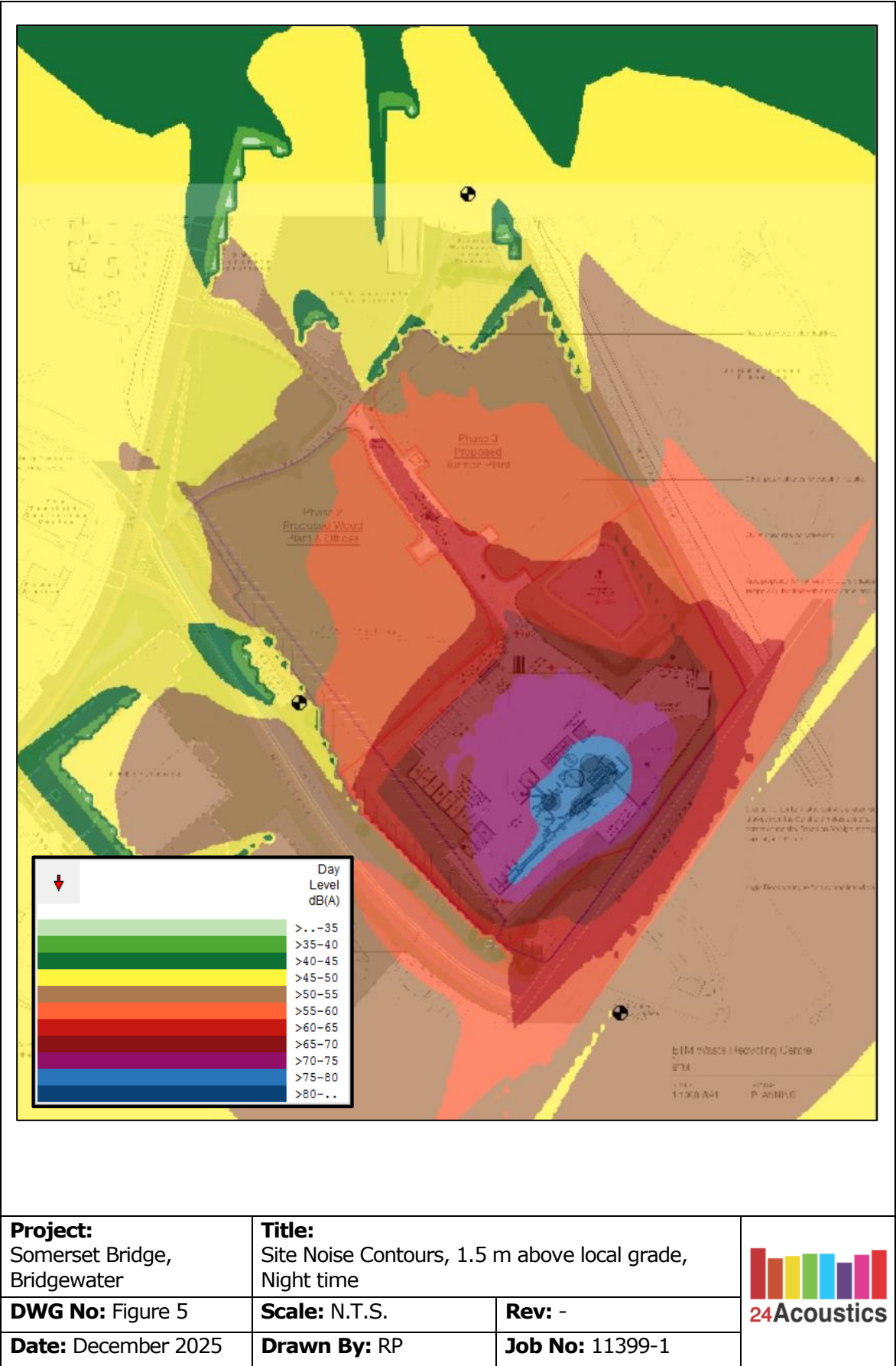




Project: Somerset Bridge, Bridgewater		Title: Illustrative CDE Soil Wash Plant		 24Acoustics
DWG No: Figure 3		Scale: N.T.S.	Rev: -	
Date: December 2025		Drawn By: RP	Job No: 11399-1	



Project: Somerset Bridge, Bridgewater	Title: Site Noise Contours, 1.5 m above local grade, Daytime		 24Acoustics
DWG No: Figure 4	Scale: N.T.S.	Rev: -	
Date: December 2025	Drawn By: RP	Job No: 11399-1	



APPENDIX A: Acoustic Terminology

Noise is defined as unwanted sound. The range of audible sound is from 0 to 140 dB. The frequency response of the ear is usually taken to be around 18 Hz (number of oscillations per second) to 18000 Hz. The ear does not respond equally to different frequencies at the same level. It is more sensitive in the mid-frequency range than the lower and higher frequencies and because of this, the low and high frequency components of a sound are reduced in importance by applying a weighting (filtering) circuit to the noise measuring instrument. The weighting which is most widely used and which correlates best with subjective response to noise is the dBA weighting. This is an internationally accepted standard for noise measurements.

For variable sources, such as traffic, a difference of 3 dBA is just distinguishable. In addition, a doubling of traffic flow will increase the overall noise by 3 dBA. The 'loudness' of a noise is a purely subjective parameter, but it is generally accepted that an increase/ decrease of 10 dBA corresponds to a doubling/ halving in perceived loudness.

External noise levels are rarely steady, but rise and fall according to activities within an area. In attempt to produce a figure that relates this variable noise level to subjective response, a number of noise indices have been developed. These include:

i) The L_{Amax} noise level

This is the maximum noise level recorded over the measurement period.

ii) The L_{Aeq} noise level

This is "equivalent continuous A-weighted sound pressure level, in decibels" and is defined in British Standard BS 7445 as the "value of the A-weighted sound pressure level of a continuous, steady sound that, within a specified time interval, T , has the same mean square sound pressure as a sound under consideration whose level varies with time".

It is a unit commonly used to describe construction noise and noise from industrial premises and is the most suitable unit for the description of other forms of environmental noise. In more straightforward terms, it is a measure of energy within the varying noise.

iii) The L_{A10} noise level

This is the noise level that is exceeded for 10% of the measurement period and gives an indication of the noisier levels. It is a unit that has been used over many years for the measurement and assessment of road traffic noise.

iv) The L_{A90} noise level

This is the noise level that is exceeded for 90% of the measurement period and gives an indication of the noise level during the quieter periods. It is often referred to as the background noise level and is used in the assessment of disturbance from industrial noise.

APPENDIX B: Instrumentation Calibration Certificates

Calibration Certificate

Calibration undertaken by Noise and Vibration Calibration Services Ltd
The Old Kennels Building, 3 Bassett Avenue, Southampton, SO16 7DP
+44 (0)23 8155 5020 hello@nvcal.co.uk



IEC 61672-3:2006 Calibration

Procedures from IEC 61672-3:2006 were used to perform the periodic tests on **18th December 2023** for the following sound level meter:

Rion NL-31, serial number 01141958

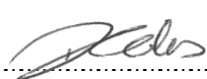
The following tests were undertaken:

Acoustical signal tests of a frequency weighting	PASS
Electrical signal tests of frequency weightings	PASS
Frequency and time weightings at 1 kHz	PASS
Long-term stability	PASS
Level linearity on the reference level range	PASS
Level linearity including the level range control	PASS
Toneburst response	PASS
Peak C sound level	PASS
Overload indication	PASS

Calibration result

Sound level meter: Rion NL-31, serial 01141958
Performance Specification: IEC 61672-3:2006 Class 1
Date: 18th December 2023
Certificate Number: C00453

PASS

Approved Signatory: 

Notes

No information on the uncertainty of measurement, required by 11.7 of IEC 61672-3:2006, of the adjustment data given in the instruction manual or obtained from the manufacturer or supplier of the sound level meter, or the manufacturer of the microphone, or the manufacturer of the multi-frequency sound calibrator was published in the instruction manual or made available by the manufacturer or supplier. The uncertainty of measurement of the adjustment data has therefore been assumed to be numerically zero for the purpose of this periodic test. If these uncertainties are not actually zero, there is a possibility that the frequency response of the sound level meter may not conform to the requirements of IEC 61672-1:2002.

This certificate provides traceability of measurement to the SI system of units and to units of measurements realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Certificate Number: C00453

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Calibration Certificate

Calibration undertaken by Noise and Vibration Calibration Services Ltd
The Old Kennels Building, 3 Bassett Avenue, Southampton, SO16 7DP
+44 (0)23 8155 5020 hello@nvcal.co.uk



IEC 61672-3:2006 Calibration

Procedures from IEC 61672-3:2006 were used to perform the periodic tests on **5th December 2025** for the following sound level meter:

Rion NL-31, serial number 01141958

The following tests were undertaken:

Acoustical signal tests of a frequency weighting	PASS
Electrical signal tests of frequency weightings	PASS
Frequency and time weightings at 1 kHz	PASS
Long-term stability	PASS
Level linearity on the reference level range	PASS
Level linearity including the level range control	PASS
Toneburst response	PASS
Peak C sound level	PASS
Overload indication	PASS

Calibration result

Sound level meter: Rion NL-31, serial 01141958
Performance Specification: IEC 61672-3:2006 Class 1
Date: 5th December 2025
Certificate Number: C00608
Customer: 24 Acoustics Ltd

PASS

Approved Signatory: 

Notes

No information on the uncertainty of measurement, required by 11.7 of IEC 61672-3:2006, of the adjustment data given in the instruction manual or obtained from the manufacturer or supplier of the sound level meter, or the manufacturer of the microphone, or the manufacturer of the multi-frequency sound calibrator was published in the instruction manual or made available by the manufacturer or supplier. The uncertainty of measurement of the adjustment data has therefore been assumed to be numerically zero for the purpose of this periodic test. If these uncertainties are not actually zero, there is a possibility that the frequency response of the sound level meter may not conform to the requirements of IEC 61672-1:2002.

This certificate provides traceability of measurement to the SI system of units and to units of measurements realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Certificate Number: C00608

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Calibration Certificate

Calibration undertaken by Noise and Vibration Calibration Services Ltd
The Old Kennels Building, 3 Bassett Avenue, Southampton, SO16 7DP
+44 (0)23 8155 5020 hello@nvcal.co.uk



IEC 60942:2003 Calibration

Periodic tests were performed in accordance with procedures from Annex B of IEC 60942:2003 (using the Insert Voltage Technique) on **6th January 2025** for the following sound calibrator:

Brüel & Kjær 4231, serial number 2253117

Calibration result

Sound Calibrator: Brüel & Kjær 4231, serial 2253117
Performance Specification: IEC 60942:2003 Class 1
Date: 6th January 2025
Certificate Number: C00541

PASS

Approved Signatory:



Test results

Level		93.87	dB re 20 μ Pa	+/- 0.092 dB
		113.90	dB re 20 μ Pa	+/- 0.092 dB
Frequency	@ 94 dB	999.975	Hz	+/- 0.01 Hz
	@ 114 dB	999.974	Hz	+/- 0.01 Hz
Distortion	@ 94 dB	0.35	%	+/- 0.016 %
	@ 114 dB	0.14	%	+/- 0.011 %

Notes

As public evidence was available, from a testing organisation (PTB) responsible for approving the result of pattern evaluation tests, to demonstrate that the model of sound calibrator fully conformed to the requirements for pattern evaluation described in Annex A of IEC 60942:2003, the sound calibrator tested is considered to conform to all the class 1 requirements of IEC 60942:2003.

This certificate provides traceability of measurement to the SI system of units and to units of measurements realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Certificate Number: C00541

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APPENDIX C: Background Noise Survey & Meteorological Survey Results

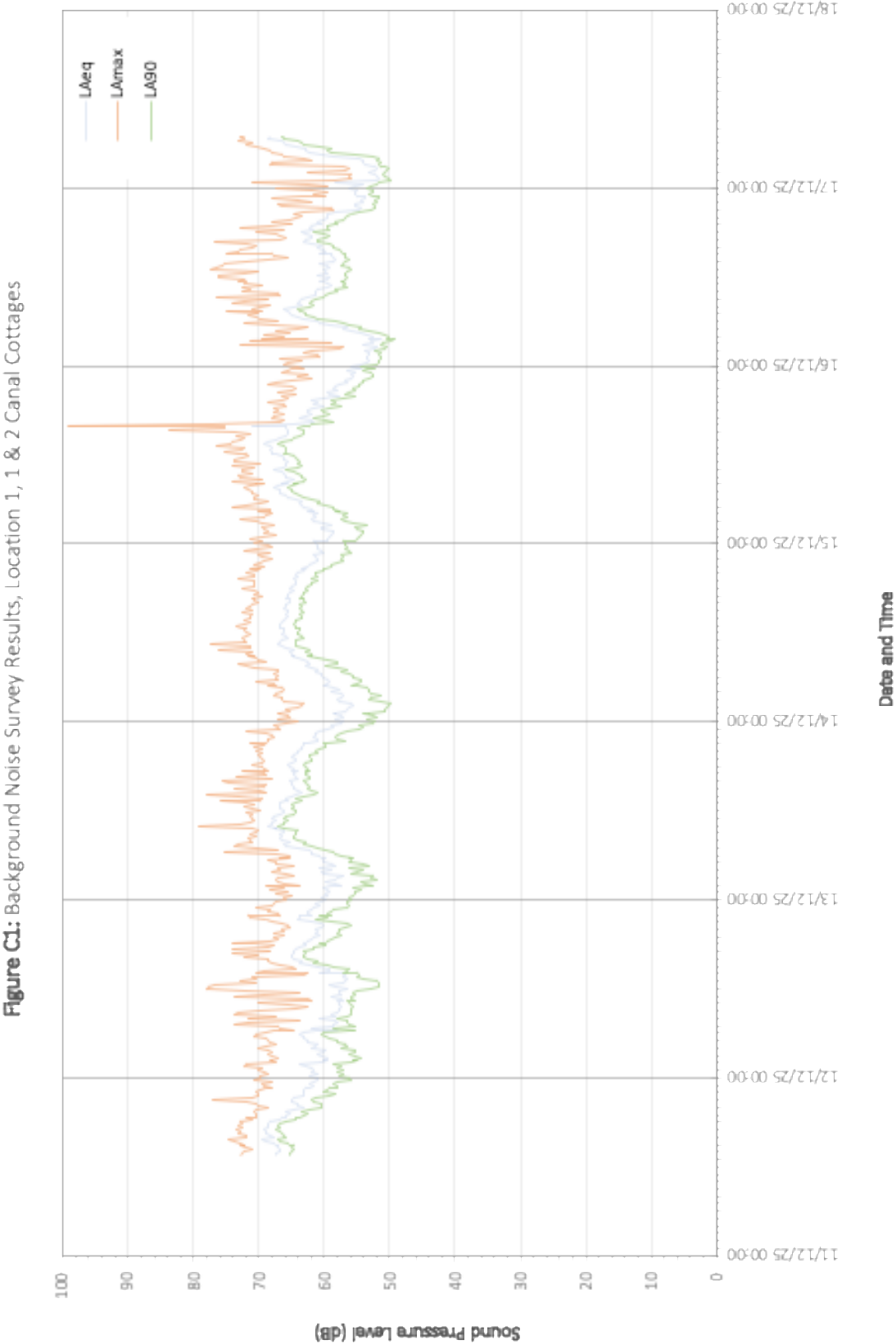
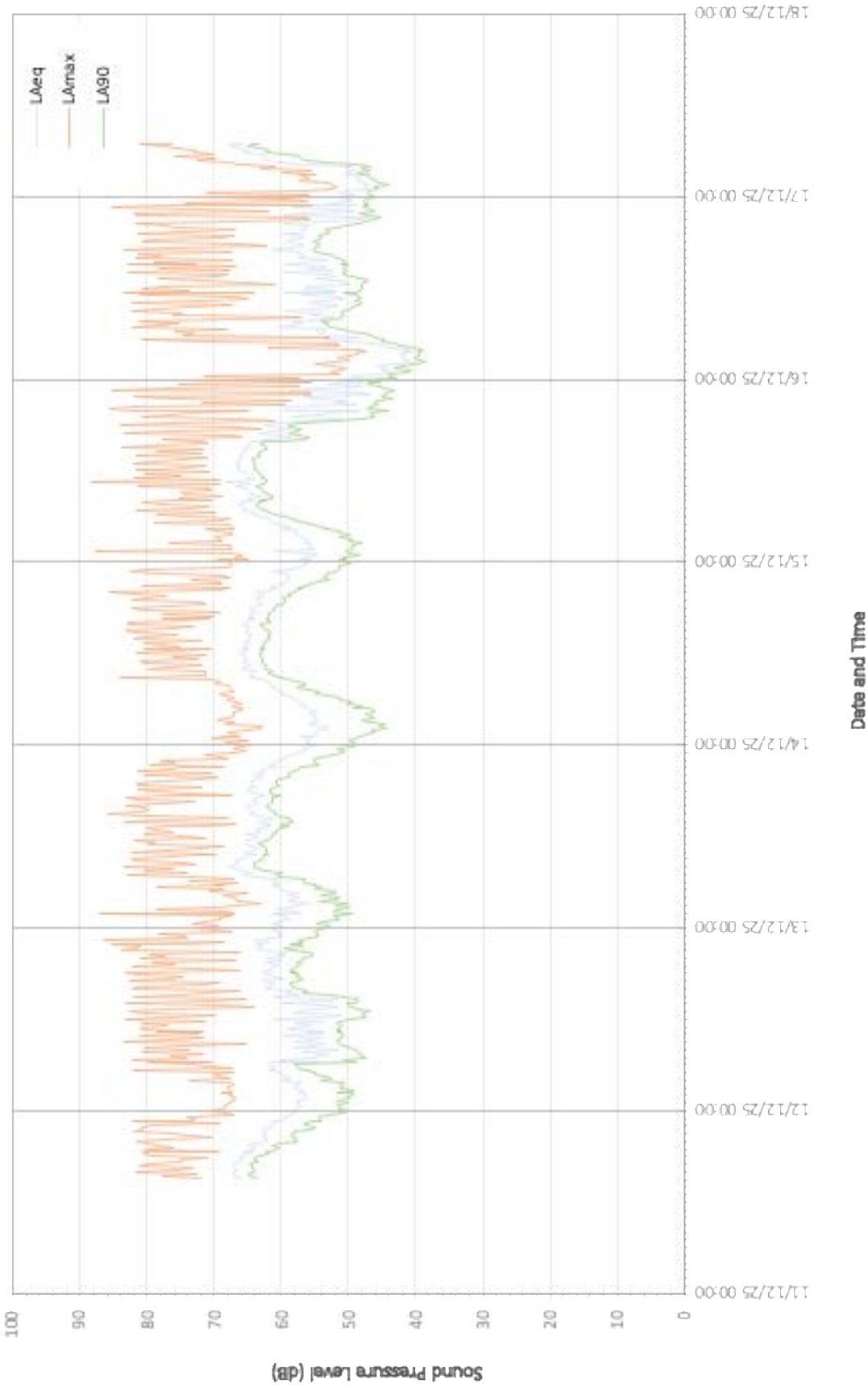


Figure C2: Background Noise Survey Results, Location 2, Somerset Bridge



Date	Time	Temp Out	Wind Speed	Wind Dir	Rain	Date	Time	Temp Out	Wind Speed	Wind Dir	Rain	Date	Time	Temp Out	Wind Speed	Wind Dir	Rain
						12/12/2025	00:00	11.7	3.1	S	0	13/12/2025	00:00	1.3	0	---	0
						12/12/2025	00:15	11.7	3.1	S	0	13/12/2025	00:15	1.9	0	---	0
						12/12/2025	00:30	11.7	3.1	S	0	13/12/2025	00:30	1.9	0	---	0
						12/12/2025	00:45	11.7	3.6	S	0	13/12/2025	00:45	1.9	0	---	0
						12/12/2025	01:00	11.7	4	S	0	13/12/2025	01:00	1.9	0	FNF	0
						12/12/2025	01:15	11.7	3.6	S	0	13/12/2025	01:15	2	0	FNF	0
						12/12/2025	01:30	11.7	3.6	S	0	13/12/2025	01:30	1.8	0	E	0
						12/12/2025	01:45	11.6	3.6	S	0	13/12/2025	01:45	1.8	0	---	0
						12/12/2025	02:00	11.7	3.1	S	0	13/12/2025	02:00	2	0	---	0
						12/12/2025	02:15	11.7	3.1	S	0	13/12/2025	02:15	2.2	0	E	0
						12/12/2025	02:30	11.8	2.7	S	0	13/12/2025	02:30	1.9	0	---	0
						12/12/2025	02:45	11.7	2.7	S	0	13/12/2025	02:45	2.1	0	E	0
						12/12/2025	03:00	11.8	2.7	S	0	13/12/2025	03:00	1.8	0	---	0
						12/12/2025	03:15	11.8	2.7	S	0	13/12/2025	03:15	1.5	0	---	0
						12/12/2025	03:30	11.8	2.2	S	0	13/12/2025	03:30	1.6	0	FNF	0
						12/12/2025	03:45	11.9	2.7	S	0	13/12/2025	03:45	1.6	0	FNF	0
						12/12/2025	04:00	11.7	2.2	S	0	13/12/2025	04:00	1.4	0	---	0
						12/12/2025	04:15	11.7	2.2	SSE	0	13/12/2025	04:15	2.2	0	ESE	0
						12/12/2025	04:30	11.6	1.3	SE	0	13/12/2025	04:30	2.2	0	SE	0
						12/12/2025	04:45	11.6	1.3	SE	0	13/12/2025	04:45	2.4	0	ESE	0
						12/12/2025	05:00	11.5	1.3	SE	0.4	13/12/2025	05:00	2.1	0	S	0
						12/12/2025	05:15	11.4	0.9	SE	0	13/12/2025	05:15	2.9	0.4	SSE	0
						12/12/2025	05:30	11.3	0.9	SE	0.4	13/12/2025	05:30	3	0	SE	0
						12/12/2025	05:45	11.3	0.9	SF	0	13/12/2025	05:45	3.1	0	FSF	0
						12/12/2025	06:00	11.3	0.9	SF	0	13/12/2025	06:00	3.1	0	F	0
						12/12/2025	06:15	11.3	0.4	SSE	0.2	13/12/2025	06:15	2.8	0	F	0
						12/12/2025	06:30	11.2	0	SSW	0.2	13/12/2025	06:30	2.4	0	E	0
						12/12/2025	06:45	9.6	0.4	W	1	13/12/2025	06:45	2.2	0	E	0
						12/12/2025	07:00	9.3	0.4	SSW	1	13/12/2025	07:00	1.7	0	E	0
						12/12/2025	07:15	9.3	0.4	WNW	0.6	13/12/2025	07:15	1.8	0.4	SE	0
						12/12/2025	07:30	9.3	0	NW	0	13/12/2025	07:30	2	0	SE	0
						12/12/2025	07:45	9.3	0.4	NW	0.2	13/12/2025	07:45	2.1	0	ESE	0
						12/12/2025	08:00	9.3	0.4	NW	0.2	13/12/2025	08:00	1.3	0	---	0
						12/12/2025	08:15	9.4	0.4	NW	0	13/12/2025	08:15	1.1	0	SE	0.2
						12/12/2025	08:30	9.4	0.9	WNW	0	13/12/2025	08:30	1	0	---	0
						12/12/2025	08:45	9.2	0.9	NW	0.2	13/12/2025	08:45	0.9	0	---	0
						12/12/2025	09:00	9.2	0.9	WNW	0	13/12/2025	09:00	2.3	0	ESE	0
						12/12/2025	09:15	9.2	0.9	WNW	0	13/12/2025	09:15	3.1	0	E	0
						12/12/2025	09:30	9.2	0.9	W	0	13/12/2025	09:30	3.2	0	ESE	0
						12/12/2025	09:45	9.3	0.9	WNW	0	13/12/2025	09:45	3.9	0	ESE	0
						12/12/2025	10:00	9.4	0.9	WNW	0	13/12/2025	10:00	4.1	0	SE	0
						12/12/2025	10:15	9.8	0.9	W	0	13/12/2025	10:15	4.4	0.4	SE	0
						12/12/2025	10:30	10.1	0.9	W	0	13/12/2025	10:30	4.7	0	ESE	0
						12/12/2025	10:45	10.2	0.9	W	0	13/12/2025	10:45	4.9	0.4	SF	0
						12/12/2025	11:00	10.3	0.9	W	0	13/12/2025	11:00	5.7	0	FSF	0
						12/12/2025	11:15	10.3	1.3	WNW	0	13/12/2025	11:15	6.3	0	FSF	0
						12/12/2025	11:30	10.5	1.3	WNW	0	13/12/2025	11:30	6.9	0	SE	0
						12/12/2025	11:45	10.6	1.3	W	0	13/12/2025	11:45	7.5	0.4	SE	0
						12/12/2025	12:00	10.8	1.3	WNW	0	13/12/2025	12:00	8	0.4	SSE	0
						12/12/2025	12:15	10.8	1.3	W	0	13/12/2025	12:15	8.6	0.4	SSE	0
						12/12/2025	12:30	10.9	1.3	W	0	13/12/2025	12:30	8.7	0	SE	0
						12/12/2025	12:45	11.1	1.3	W	0	13/12/2025	12:45	9.2	0.9	SE	0
						12/12/2025	13:00	11.2	0.9	W	0	13/12/2025	13:00	9.7	0.9	SE	0
						12/12/2025	13:15	11.4	0.4	W	0	13/12/2025	13:15	10.1	0.4	SF	0
						12/12/2025	13:30	11.5	0.9	NW	0	13/12/2025	13:30	10.6	0	SSF	0
						12/12/2025	13:45	11.5	0.9	W	0	13/12/2025	13:45	10.9	0.4	SF	0
						12/12/2025	14:00	11.6	0.9	WNW	0	13/12/2025	14:00	10.9	0.4	SE	0
						12/12/2025	14:15	11.7	0.4	W	0	13/12/2025	14:15	11.3	0	SSW	0
						12/12/2025	14:30	11.7	0.4	WNW	0	13/12/2025	14:30	11.4	0.4	WSW	0
						12/12/2025	14:45	11.6	0	NW	0	13/12/2025	14:45	11.4	0.9	SW	0
						12/12/2025	15:00	11.6	0	NW	0	13/12/2025	15:00	11.1	1.8	SW	0
						12/12/2025	15:15	11.3	0	NNW	0	13/12/2025	15:15	10.4	1.3	SW	0
						12/12/2025	15:30	11.1	0	W	0	13/12/2025	15:30	9.9	0.9	SSW	0
						12/12/2025	15:45	10.8	0	WSW	0	13/12/2025	15:45	9.2	0.4	SSW	0
						12/12/2025	16:00	9.7	0	---	0	13/12/2025	16:00	8.8	0.4	SSW	0
						12/12/2025	16:15	8.4	0	---	0	13/12/2025	16:15	8.4	0.4	SSW	0
						12/12/2025	16:30	7.8	0	---	0	13/12/2025	16:30	8	0	SSW	0
						12/12/2025	16:45	7.3	0	---	0	13/12/2025	16:45	7.9	0	SSW	0
						12/12/2025	17:00	6.9	0	---	0	13/12/2025	17:00	7.7	0	SW	0
						12/12/2025	17:15	6.1	0	---	0	13/12/2025	17:15	7.6	0	ESE	0
						12/12/2025	17:30	5.4	0	---	0	13/12/2025	17:30	7.5	0	SE	0
						12/12/2025	17:45	5.4	0	---	0	13/12/2025	17:45	6.8	0	SE	0
						12/12/2025	18:00	5.8	0	W	0	13/12/2025	18:00	6.8	0	SW	0
						12/12/2025	18:15	5.6	0	SW	0	13/12/2025	18:15	6.7	0	SSW	0
						12/12/2025	18:30	4.9	0	---	0	13/12/2025	18:30	6.9	0.4	SSW	0
						12/12/2025	18:45	5.3	0	SW	0	13/12/2025	18:45	7.1	0.4	SSW	0
						12/12/2025	19:00	5.4	0	WSW	0	13/12/2025	19:00	7.2	0.4	SSF	0
						12/12/2025	19:15	4.9	0	SW	0	13/12/2025	19:15	6.8	0.4	SE	0
						12/12/2025	19:30	4.6	0	---	0	13/12/2025	19:30	7.3	0.9	S	0
						12/12/2025	19:45	4.9	0	---	0	13/12/2025	19:45	7.7	1.3	SSE	0
						12/12/2025	20:00	4.9	0	---	0	13/12/2025	20:00	7.9	1.3	SSE	0
						12/12/2025	20:15	4.9	0	---	0	13/12/2025	20:15	7.9	0.9	SSF	0
						12/12/2025	20:30	4.4	0	---	0	13/12/2025	20:30	7.9	0.9	SF	0
						12/12/2025	20:45	4.8	0	---	0	13/12/2025	20:45	8.2	1.3	SF	0
						12/12/2025	21:00	4.3	0	---	0	13/12/2025	21:00	7.9	1.3	SF	0
						12/12/2025	21:15	4.3	0	E	0	13/12/2025	21:15	7.9	1.3	SSF	0
						12/12/2025	21:30	3.3	0	---	0	13/12/2025	21:30	7.9	0.9	SSF	0
						12/12/2025	21:45	2.9	0	---	0	13/12/2025	21:45	7.8	0.4	SE	0
						12/12/2025	22:00	3.3	0	---	0	13/12/2025	22:00	7.8	0.9	SSE	0
						12/12/2025	22:15	3	0	NNE	0	13/12/2025	22:15	8.2	1.3	SSE	0
						12/12/2025	22:30	2.4	0	---	0	13/12/2025	22:30	8.7	1.3		

Date	Time	Temp Out	Wind Speed	Wind Dir	Rain	Date	Time	Temp Out	Wind Speed	Wind Dir	Rain	Date	Time	Temp Out	Wind Speed	Wind Dir	Rain
14/12/2025	00:00	9.2	0.4	ESE	0	15/12/2025	00:00	12.3	3.1	SSE	0	16/12/2025	00:00	9.2	0.4	NW	1
14/12/2025	00:15	9.2	0.4	SE	0	15/12/2025	00:15	12.3	3.1	S	0	16/12/2025	00:15	9.2	0.4	NW	1.4
14/12/2025	00:30	8.9	0.9	SE	0	15/12/2025	00:30	12.3	3.6	S	0	16/12/2025	00:30	9.2	0.4	N	0.8
14/12/2025	00:45	8.3	0.4	SE	0	15/12/2025	00:45	12.3	4.5	SSW	0	16/12/2025	00:45	9.3	0	N	0.6
14/12/2025	01:00	8.3	0.4	SE	0	15/12/2025	01:00	12.4	4.9	SSW	0	16/12/2025	01:00	9.3	0.4	WNW	0.6
14/12/2025	01:15	8.4	0.9	SE	0	15/12/2025	01:15	12.4	4.5	S	0	16/12/2025	01:15	9.2	0.9	NW	0.2
14/12/2025	01:30	8.5	0.9	SSE	0	15/12/2025	01:30	12.2	4.9	SSW	0	16/12/2025	01:30	9.2	0.4	NW	0.2
14/12/2025	01:45	8.2	0.9	SSE	0	15/12/2025	01:45	11.9	4.9	SSW	0	16/12/2025	01:45	9.2	0.4	NW	0.4
14/12/2025	02:00	8.1	0.9	SSW	0	15/12/2025	02:00	11.5	4	SSW	0.2	16/12/2025	02:00	9.1	0.4	NW	0.4
14/12/2025	02:15	7.8	0.4	SSW	0	15/12/2025	02:15	11.4	4	SSW	0	16/12/2025	02:15	9.1	0.4	NW	0.2
14/12/2025	02:30	8.1	0.4	SSE	0	15/12/2025	02:30	11.3	4	S	0	16/12/2025	02:30	8.9	0.4	NW	0.2
14/12/2025	02:45	8.2	0.4	SE	0	15/12/2025	02:45	11.3	4	SSW	0	16/12/2025	02:45	8.8	0.4	NW	0
14/12/2025	03:00	7.9	0.4	SE	0	15/12/2025	03:00	11.4	3.6	S	0	16/12/2025	03:00	8.8	0.4	NW	0.2
14/12/2025	03:15	8.6	1.3	S	0	15/12/2025	03:15	11.5	3.6	S	0	16/12/2025	03:15	8.9	0.4	NW	0
14/12/2025	03:30	8.6	1.3	S	0	15/12/2025	03:30	11.6	3.6	S	0	16/12/2025	03:30	8.9	0.4	NW	0
14/12/2025	03:45	8.3	0.9	SE	0	15/12/2025	03:45	11.4	3.1	S	0.2	16/12/2025	03:45	8.9	0.4	NW	0
14/12/2025	04:00	8.3	0.4	SSE	0	15/12/2025	04:00	11.4	3.6	S	0.2	16/12/2025	04:00	8.8	0.9	NW	0
14/12/2025	04:15	8.9	1.3	SSE	0	15/12/2025	04:15	11.3	3.1	S	0	16/12/2025	04:15	8.8	0.4	NNW	0
14/12/2025	04:30	9.1	0.9	SSW	0	15/12/2025	04:30	11.2	3.1	S	0.2	16/12/2025	04:30	8.8	0.4	N	0
14/12/2025	04:45	8.8	0.9	SSW	0	15/12/2025	04:45	11.3	3.6	S	0.4	16/12/2025	04:45	8.8	0.4	NW	0
14/12/2025	05:00	9.1	1.3	SSE	0	15/12/2025	05:00	11.2	3.1	S	0.4	16/12/2025	05:00	8.8	0.4	NNW	0
14/12/2025	05:15	9.4	1.8	S	0	15/12/2025	05:15	11.2	2.7	S	0.6	16/12/2025	05:15	8.8	0.9	NNW	0
14/12/2025	05:30	9.4	1.3	S	0	15/12/2025	05:30	11.1	2.2	S	0.8	16/12/2025	05:30	8.8	0.4	NW	0
14/12/2025	05:45	9.2	1.3	SSW	0	15/12/2025	05:45	11.1	2.2	S	0.6	16/12/2025	05:45	8.8	0.4	N	0
14/12/2025	06:00	9.1	1.3	S	0	15/12/2025	06:00	11.1	2.2	S	0.8	16/12/2025	06:00	8.9	0.4	N	0
14/12/2025	06:15	9.4	1.8	SSW	0	15/12/2025	06:15	11.1	1.8	SSE	0.6	16/12/2025	06:15	8.6	0.4	N	0
14/12/2025	06:30	9.3	1.8	S	0	15/12/2025	06:30	11.1	1.8	SSE	0.6	16/12/2025	06:30	8.1	0.4	NNE	0
14/12/2025	06:45	9	1.3	S	0	15/12/2025	06:45	11.1	2.2	SSE	0.4	16/12/2025	06:45	7.9	0.4	NE	0
14/12/2025	07:00	8.6	0.4	SE	0	15/12/2025	07:00	11.1	2.2	S	0	16/12/2025	07:00	7.6	0.4	N	0
14/12/2025	07:15	8.2	0.4	SE	0	15/12/2025	07:15	11.1	2.2	S	0.2	16/12/2025	07:15	7.5	0.4	NNE	0
14/12/2025	07:30	7.9	0.4	SE	0	15/12/2025	07:30	11.1	1.8	S	0.2	16/12/2025	07:30	7.6	0.4	N	0
14/12/2025	07:45	7.9	0.4	ESE	0	15/12/2025	07:45	11.1	2.2	SSE	0.2	16/12/2025	07:45	7.6	0.4	N	0
14/12/2025	08:00	8	0.4	SE	0	15/12/2025	08:00	11	2.2	S	0.2	16/12/2025	08:00	7.6	0.4	NNE	0
14/12/2025	08:15	8.8	1.3	SSE	0	15/12/2025	08:15	11	1.3	SSE	0.2	16/12/2025	08:15	7.6	0.4	N	0
14/12/2025	08:30	9.6	2.2	SSW	0	15/12/2025	08:30	11.1	1.8	SSE	0.2	16/12/2025	08:30	7.7	0	NW	0
14/12/2025	08:45	9.8	2.2	S	0	15/12/2025	08:45	11	2.2	S	0.4	16/12/2025	08:45	7.6	0.4	N	0
14/12/2025	09:00	10.1	2.7	S	0	15/12/2025	09:00	10.8	1.8	SSW	0	16/12/2025	09:00	7.6	0	N	0
14/12/2025	09:15	10.4	3.1	SSW	0	15/12/2025	09:15	10.7	2.2	S	0	16/12/2025	09:15	7.6	0.4	N	0
14/12/2025	09:30	10.7	2.7	SSW	0	15/12/2025	09:30	10.6	2.2	S	0	16/12/2025	09:30	7.7	0.4	NNW	0
14/12/2025	09:45	11.1	3.1	SSW	0	15/12/2025	09:45	10.3	1.8	S	0	16/12/2025	09:45	7.8	0.4	NW	0
14/12/2025	10:00	11.2	3.6	SW	0	15/12/2025	10:00	10.2	1.3	SSE	0	16/12/2025	10:00	7.8	0	NW	0
14/12/2025	10:15	11.3	3.1	SSW	0	15/12/2025	10:15	10.2	1.3	SSE	0	16/12/2025	10:15	8.2	0	NNW	0
14/12/2025	10:30	11.4	3.1	S	0	15/12/2025	10:30	10.2	0.9	S	0	16/12/2025	10:30	8.5	0.4	NW	0
14/12/2025	10:45	11.6	1.8	S	0	15/12/2025	10:45	10.3	0.4	SE	0.6	16/12/2025	10:45	8.9	0.4	NW	0
14/12/2025	11:00	11.7	2.2	S	0	15/12/2025	11:00	10.6	0.9	SE	0.8	16/12/2025	11:00	9.1	0.4	NW	0
14/12/2025	11:15	11.9	2.7	S	0	15/12/2025	11:15	10.9	1.3	S	0.8	16/12/2025	11:15	9.3	0.9	NW	0
14/12/2025	11:30	12.3	3.1	SSW	0	15/12/2025	11:30	11.3	1.3	S	0.2	16/12/2025	11:30	9.4	0.4	NW	0
14/12/2025	11:45	12.6	3.6	SSW	0	15/12/2025	11:45	11.5	2.2	S	0.6	16/12/2025	11:45	9.7	0.4	NW	0
14/12/2025	12:00	12.5	4	SSW	0	15/12/2025	12:00	11.6	2.2	S	0	16/12/2025	12:00	9.9	0.9	WNW	0
14/12/2025	12:15	12.7	3.1	SSW	0	15/12/2025	12:15	11.6	2.2	SSE	0	16/12/2025	12:15	10.1	0.9	NW	0
14/12/2025	12:30	12.7	3.1	SW	0	15/12/2025	12:30	11.8	2.7	S	0	16/12/2025	12:30	10.2	0.9	NW	0
14/12/2025	12:45	12.6	3.1	SSW	0	15/12/2025	12:45	11.8	2.7	SSE	0	16/12/2025	12:45	10.3	0.9	NW	0
14/12/2025	13:00	12.6	4	SSW	0	15/12/2025	13:00	11.8	2.7	SSE	0	16/12/2025	13:00	10.4	0.9	NNW	0
14/12/2025	13:15	12.5	3.6	S	0	15/12/2025	13:15	11.7	2.7	SSE	0.2	16/12/2025	13:15	10.7	0.9	NW	0
14/12/2025	13:30	12.7	3.1	S	0	15/12/2025	13:30	11.7	2.7	SSE	0.2	16/12/2025	13:30	10.2	0.9	WNW	0
14/12/2025	13:45	12.6	3.1	S	0	15/12/2025	13:45	11.7	2.7	SSE	0.2	16/12/2025	13:45	9.9	0.4	WNW	0
14/12/2025	14:00	12.4	3.1	S	0	15/12/2025	14:00	11.7	3.6	SE	0.4	16/12/2025	14:00	9.7	0.9	NW	0
14/12/2025	14:15	12.6	2.7	SSW	0	15/12/2025	14:15	11.8	4.5	S	0.6	16/12/2025	14:15	9.5	0.9	NW	0
14/12/2025	14:30	12.7	2.7	SSW	0	15/12/2025	14:30	11.9	4.9	S	0.4	16/12/2025	14:30	9.4	0.4	WNW	0
14/12/2025	14:45	12.7	2.7	SSW	0	15/12/2025	14:45	12.1	4.9	SSW	0.2	16/12/2025	14:45	9.3	0.4	WNW	0
14/12/2025	15:00	12.8	3.1	SSW	0	15/12/2025	15:00	12	4.5	SW	0	16/12/2025	15:00	9.3	0.4	NW	0
14/12/2025	15:15	12.8	2.7	SSW	0	15/12/2025	15:15	11.9	3.6	SW	0	16/12/2025	15:15	9.2	0	NW	0
14/12/2025	15:30	12.7	3.1	SSW	0	15/12/2025	15:30	11.9	2.2	SW	0	16/12/2025	15:30	9.1	0	WNW	0
14/12/2025	15:45	12.6	3.1	SSW	0	15/12/2025	15:45	11.9	2.2	SSW	0	16/12/2025	15:45	9.1	0	W	0
14/12/2025	16:00	12.4	2.2	SSW	0	15/12/2025	16:00	12.1	1.8	SSW	0	16/12/2025	16:00	8.7	0	NW	0
14/12/2025	16:15	12.3	2.7	SW	0	15/12/2025	16:15	12.1	1.8	SW	0	16/12/2025	16:15	8.3	0	NNW	0
14/12/2025	16:30	12.3	2.2	SSW	0	15/12/2025	16:30	11.9	0.9	SW	0	16/12/2025	16:30	8	0	NNW	0
14/12/2025	16:45	12.3	2.2	SSW	0	15/12/2025	16:45	11.5	0.4	W	0	16/12/2025	16:45	7.8	0	WSW	0
14/12/2025	17:00	12.3	2.2	S	0	15/12/2025	17:00	11	0.4	WSW	0.6	16/12/2025	17:00	7.3	0	---	0
14/12/2025	17:15	12.3	2.2	S	0	15/12/2025	17:15	10.8	0.4	SSW	0	16/12/2025	17:15	6.8	0	---	0
14/12/2025	17:30	12.4	2.2	S	0	15/12/2025	17:30	10.7	0	W	0	16/12/2025	17:30	6.9	0	W	0
14/12/2025	17:45	12.4	1.8	SSW	0	15/12/2025	17:45	10.6	0.4	W	0.2	16/12/2025	17:45	6.6	0	W	0
14/12/2025	18:00	12.6	1.8	SSW	0	15/12/2025	18:00	10.6	0.4	SW	0	16/12/2025	18:00	6.1	0	W	0
14/12/2025	18:15																

Date	Time	Temp Out	Wind Speed	Wind Dir	Rain
17/12/2025	00:00	0.2	0	---	0
17/12/2025	00:15	0.1	0	---	0
17/12/2025	00:30	-0.6	0	---	0
17/12/2025	00:45	0.2	0	F	0
17/12/2025	01:00	0.1	0	---	0
17/12/2025	01:15	0.3	0	E	0
17/12/2025	01:30	0	0	---	0
17/12/2025	01:45	0.2	0	---	0
17/12/2025	02:00	0.4	0	E	0
17/12/2025	02:15	0.7	0	ESE	0
17/12/2025	02:30	0.6	0	ESE	0
17/12/2025	02:45	0.8	0	ESF	0
17/12/2025	03:00	0.7	0	FSF	0
17/12/2025	03:15	0.9	0	FSF	0
17/12/2025	03:30	1	0	E	0
17/12/2025	03:45	0.8	0	---	0
17/12/2025	04:00	0.6	0	---	0
17/12/2025	04:15	0.6	0	---	0
17/12/2025	04:30	0.6	0	E	0
17/12/2025	04:45	1	0	ESE	0
17/12/2025	05:00	1.4	0	FSF	0
17/12/2025	05:15	1.9	0.9	SSF	0
17/12/2025	05:30	2.4	0.4	SE	0
17/12/2025	05:45	2.6	0.4	SE	0
17/12/2025	06:00	2.9	0.4	SE	0
17/12/2025	06:15	3.1	0.4	SSE	0
17/12/2025	06:30	3.3	0.4	SE	0
17/12/2025	06:45	3.7	0.4	SE	0.2
17/12/2025	07:00	4.3	0.4	FSF	0
17/12/2025	07:15	4.7	0.4	SE	0
17/12/2025	07:30	6.3	0.4	SSE	0.4

Table C1: Meteorological Conditions

cont'

APPENDIX D: Plant Source Term Noise Data

Plant	L _{Aw} , dB	Octave Band Centre Frequency, Hz and Sound Power Level, dB L _w								
		31	63	125	250	500	1k	2k	4k	8k
Lw, Sizing Screen	108	120	108	108	105	107	102	99	97	91
Lw, Pre-screen	104	108	111	95	95	95	97	98	96	95
Sizing & pre-screen	109	120	113	108	105	107	103	101	100	97
Three Way Screen	102	115	110	107	101	100	97	94	89	82
JCI Shaker, Lw	98	108	103	94	96	98	92	89	87	83
Lw, Log washer fans	97	12	90	93	88	93	95	89	84	74
Lw, Tertiary Valve Pump	96	99	70	85	86	88	93	91	86	73
Lw, Primary Cyclone Pump	96	96	82	89	96	90	94	84	80	73
Lw, Trash Screen	95	107	96	89	88	90	89	88	86	84
Lw, Course Fill Aggregate Screen	95	111	119	96	86	86	87	86	86	85
Lw, Organics Dewatering Screen	89	102	107	89	88	86	83	80	80	78
Lw, Secondary Cyclone Pump	88	106	74	90	89	79	83	82	78	74
Lw, clarified water pump	87			84	86	79	82	80	80	74
Lw, sump pump	85			78	82	80	82	79	72	
All remaining plant (line source)	103	114	119	100	99	98	100	96	93	89

Table 1: Wash Plant Sound Power Levels (Parnaby Cyclones). Data surveyed by 24 Acoustics Ltd

Plant	L _{Aw} , dB	Octave Band Centre Frequency, Hz and Sound Power Level, dB L _w								
		31	63	125	250	500	1 k	2 k	4 k	8 k
Telehandler	99	100	108	109	96	95	93	90	89	83
Loading shovel	107	-	109	110	105	104	102	100	94	90
Forklift truck	90	95	109	94	89	80	80	78	73	68
Total (2 of each 50% on time),(area source)	108	101	114	113	106	105	103	100	95	91

Table D2: Mobile Plant Sound Power Levels, Daytime

Plant	L _{Aw} , dB	Octave Band Centre Frequency, Hz and Sound Power Level, dB L _w								
		31	63	125	250	500	1 k	2 k	4 k	8 k
Loading shovel (50% on-time)	104	-	106	107	102	101	99	97	91	87

Table D3: Mobile Plant Sound Power Levels, Night time

		Overall	Octave Band Centre Frequency and Sound Power Level, dB Lw							
		dB LAw	63	125	250	500	1k	2k	4k	8k
40 Tonne HGV	Lw	85	85	86	81	82	78	77	73	67
Average distance travelled/ movement		600	m							
Average speed		10	kph							
Duration of each HGV movement		2.01	mins							
Duration per HGV movement- rounded up		5	mins							
No movements- day (in 60 mins)		125								
No movements- night (in 15 mins)		32								
Corrected Lw for model- all movements	Total Lw Day	95	95	96	91	92	88	87	83	77
	Total Lw Night	95	95	96	91	92	88	87	83	77

Table D4: HGV Sound Power Calculations

APPENDIX E: Noise Management Plan

Objective

This noise management plan has been written to inform ETM Recycling, customer and subcontractor operatives involved in the operations at the Somerset Bridge Recycling Site of their obligations to minimise environmental noise emissions.

ETM is a responsible operator and as such we respect and value the considerations of our neighbours.

Any staff or supplier operative found not to be adhering to this policy will be subject to disciplinary action.

Staff Awareness

- All ETM staff are to be made aware of this NMP and the nature of the site as a noise-sensitive site;
- Awareness of the NMP is to form part of the induction for new starts;
- All ETM and supplier delivery drivers are to be made aware of this NMP via their own company procedures;

Vehicle Movements

- All vehicles under ETMs control will be fitted with broadband (white noise) reversing alarms;
- Delivery vehicle radios to be switched off before arriving on site;
- All unloading and re-loading of any vehicle shall be undertaken in a manner which makes the least amount of noise and shall ideally be undertaken behind existing stockpiles which act as noise bunds to the nearest noise-sensitive properties;
- Vehicle horns only to be sounded if required in safety-critical situations;
- Engines to be shutdown when vehicles are stationary;
- Driver should seek to:
 - Engage gears with a minimum of noise;
 - Keep engine revs to a minimum;
 - Apply brakes gently;
 - Close doors with minimum noise.

Operation of Screening and Wash Plant

- Any plant/ machinery which is used on the site for the purposes of crushing and/ or screening shall be operated in accordance with the manufacturer's instructions with particular regard to noise emissions;
- The company will inspect the operations at least twice a day (when the site is operational and plant/ machinery is being used) and will carefully check to make sure that excessive noise is not being caused. In the event that excessive amounts of noise is being created, the company will ensure that any plant/ machinery is switched off until they have been able to identify the source of the malfunction;
- Any plant/ machinery which is used on the site for the purposes of crushing and/ or screening and washing should be operated within any existing stockpiles between plant and receivers wherever reasonably practicable;
- Where any plant item has an associated directivity pattern, the plant should be operated with the noisiest direction facing away from the nearest noise sensitive receivers wherever reasonably practicable;
- The acoustic enclosures around specific items of wash plant will be inspected weekly and any defects or damage immediately rectified to ensure their integrity and ongoing fitness for purpose.

Operation of Other Plant

- Plant operating on site which is not directly associated with loading/ unloading, crushing, washing or screening operations will be operated in accordance with the manufacturer's instructions with particular regard to noise emissions;
- The company will inspect this plant at least twice a day (when the site is operational and this plant being used) and will carefully check to make sure that excessive noise is not being caused;
- In the event that excessive amounts of noise is being created the company will ensure that any plant/ machinery is switched off until they have been able to identify the source of the noise;
- Where any plant item has an associated directivity pattern, the plant should be operated with the noisiest direction facing away from the nearest noise sensitive receivers wherever reasonably practicable;
- Night-time operations (between 23:00 and 07:00 hours) will be limited to

Communication

- Spoken communication between staff/ vehicle delivery drivers to be undertaken at normal vocal effort. Shouting or raised voices are not permitted at any time (unless to warn of a safety-critical situation).

Training and Ongoing Management

The following training and management measures will be implemented.

- Regular training will be delivered by ETM management to operatives to ensure the Noise Management Plan is adhered to;
- ETM management will undertake checks that the NMP is being implemented on a weekly basis during crushing campaigns;

Complaints

- Should a complaint from a member of the public be received, the site manager will be responsible for recording, investigating and identifying the nature of the complaint according to the following procedure:
 - The date and time of the complaint together with the complainant's location will be noted;
 - Where possible, the complaint will be acknowledged on the day of receipt;
 - In investigating the complaint the following measures will be taken:
 - An inspection of the plant in use will be made to identify any excessive noise from any particular item of plant;
 - An inspection of the location of the plant relative to the stockpile bunds will be undertaken to ensure that the receptors remain adequately screened;
 - A check of working practices;
 - The complaint will be logged in the site log book;
 - Feedback will be given to the resident within 2 working days of receipt of the complaint.
- Where necessary additional staff training will be provided to ensure compliance with the Noise Management Plan;
- Where necessary the Noise Management Plan will be revised.

Communication with Stakeholders

- Local residents will be advised of a dedicated email address and phone no that they may use to contact the site in the event of concerns about noise.

Record Keeping & Document Review

- A site log book will be retained by the site manager and will record the following information:
 - Dates and times of crushing, screening, washing and sorting activities;
 - Records of contact and correspondence with stakeholders (local residents and the local authority) regarding noise;
 - Records of days when noise surveys are undertaken.
- The log book will be made available to the Waste Planning Authority on request.
- This document will be reviewed on an annual basis or sooner should the outcome of complaints require it.