



Noise Management Plan

NRS Bromsgrove Aggregates Limited
Sandy Lane Quarry,
Sandy Lane,
Wildmoor,
Bromsgrove,
Worcestershire
B61 0QT



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



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1. Introduction

- 1.1. Westbury Environmental Limited has prepared this Noise Management Plan (NMP) on behalf of NRS Bromsgrove Aggregates Limited (the Operator) at Sandy Lane Quarry, Sandy Lane, Wildmoor, Bromsgrove, Worcestershire, B61 0QT (Site).
- 1.2. The following waste activities are carried out on the Site:
 - The deposit of waste for recovery
 - The treatment of construction and demolition waste to produce soil, soil substitutes and aggregates.
- 1.3. The Site extends to an area of approximately 5.5ha. The location and extent of the Site is shown in Drawing No. 20/022 004 Indicative Site Layout Plan.
- 1.4. The Operator has not yet determined where the waste treatment operations will take place. This NMP assumes the worst-case scenario, with waste treatment activities placed near the closest sensitive receptors.
- 1.5. This NMP provides detailed information on the sources, risk and mitigation measures related to potential noise emissions from the operations proposed to be undertaken on Site.
- 1.6. This NMP has been prepared in accordance with:
 - The Environment Agency guidance on Noise Management Plans: Environmental Permits, last updated 31 January 2022 (NMP Guidance).
 - JRC Science for Policy Report: Best available techniques (BAT) reference document for waste treatment, October 2018 (BREF).
 - Non-hazardous and inert waste: appropriate measures for permitted facilities, updated August 2023 (Appropriate Measures).

Noise Impact Assessment

- 1.7. A Noise Impact Assessment (NIA) has been completed to fully assess the impact of the waste activities in relation to noise, see Appendix 1 Noise Impact Assessment.
- 1.8. The requirements of both the NMP and the NIA will be implemented by the Noise Procedure in the EMS.
- 1.9. The NIA concludes that:
 - An assessment of the proposed operations against the appropriate national minerals (including infilling) and EA guidance for waste operations indicated that, with appropriate noise mitigation and control measures, noise levels at the neighbouring properties would be acceptable.
 - The BS 4142 assessment based upon the EA guidance indicated that, with appropriate management controls implemented, the operations would generally result in a low potential for adverse impacts, with the noise from the operation of the plant barely audible.
 - The assessment has indicated periods when noise levels would be higher, principally during the temporary operations to construct the bunding along the western boundary of the quarry and during the final periods of restoration in each stage, when the plant would be operating close to the final restoration levels. During these periods, the assessment concluded that there would be a potential for adverse noise impacts, with the noise from the operation of the plant clearly audible.
 - The construction of the bunding would provide longer term benefits during the site operations and would be completed during a short time scale. Noise levels during these operations would be controlled and minimised through appropriate site controls.
 - With appropriate mitigation and control measures adopted during the operations within the quarry, noise levels would be minimised, seeking to ensure that the noise from the operation remain acceptable at neighbouring properties.



Responsibilities

- 1.10. The Site Manager is responsible for the general management of the Site. In relation to this NMP the Site Manager will undertake the following responsibilities:
- Implement the requirements of the NMP and ensure that mitigation measures are adhered to.
 - Investigate complaints.
 - Cease activities in the event of significant complaints / noise emissions.
 - Review the NMP to ensure continuing effectiveness of meeting the requirements in the Best Available Techniques (BAT) guidance.
 - Delegate duties to suitably trained personnel.
 - Deliver or organise the necessary training for site Operatives.
 - Ensure all plant and equipment is maintained as required.
- 1.11. The Site Manager will ensure all operational staff are familiar with the requirements and conditions of the NMP.
- 1.12. All Site staff are responsible for:
- Detecting and reporting significant noise emissions from waste operations to management as soon as possible.
 - Carrying out routine checks, see Appendix 2 Inspection Checklist.

Training

- 1.13. The Noise Procedure in the EMS requires staff to be trained on the details included within this Noise Management Plan, including noise mitigation measures and the monitoring of noise. Staff training will be complete via toolbox talks.
- 1.14. It is the responsibility of the Site Manager to arrange and execute any staff training. A record of this training will be maintained on each staff members Training Record. Copies of the staff Training Records are kept in a secure location on Site.
- 1.15. Should any noise complaint investigations conclude that a noise emission arose as a result of the NMP not being followed by Site staff, further training will be completed on implementation of the Noise procedure within the EMS.

Review

- 1.16. The NMP will be reviewed annually or in the event of the following:
- If the operator receives persistent noise complaints, see Section 6 Complaints Reporting.
 - When a change in operations is deemed to have a potential effect on increasing noise emissions.
 - If a failure in the existing mitigation measures has been identified.

Content of the Noise Management Plan

- 1.17. This Noise Management Plan will form part of the Environmental Management System (EMS) for the Site. Procedures and Forms referenced within this Noise Management Plan will be included within the EMS. Completed forms (records) will be kept, as required by conditions included in the Environmental Permit.
- 1.18. This Noise Management Plan is structured as follows:
- Section 2 provides information relating to the Site setting and Site activities.
 - Section 3 provides information relating to nearby sensitive receptors.
 - Section 4 provides a summary of noise sources on and around site.
 - Section 5 provides information on the site management and the mitigation measures employed at the Site.
 - Section 6 provides a description of how complaints can be made and how they are addressed by the site management.



2. Site Description

Site Location

- 2.1. The proposed Site is located at Sandy Lane, Wildmoor, Bromsgrove, Worcestershire, B61 0QT.
- 2.2. The Site is located approximately 5km to the north of Bromsgrove and 3km east of Rubery. The centre of the Site is located at National Grid Reference SO 94980 76290.
- 2.3. The proposed Site extends to approximately 5.5ha, see Drawing No. 20/022 004 Indicative Site Layout Plan.
- 2.4. Land-use surrounding the Site is predominantly agricultural, however there is a residential area located 20m to the west. There is also an active quarry, Wildmoor Quarry, located 25m southeast of the Site. Immediately east of the site is a closed non-hazardous waste landfill.
- 2.5. Being located within a quarry, the waste deposit activities will be largely carried out below the surface level of the surrounding ground.

Activities

- 2.6. The proposed activities for the Site include the deposit of waste for recovery, and the treatment of waste to produce soil, soil substitutes and aggregates.
- 2.7. Waste activities include:
 - Sorting
 - Separation
 - Screening
 - Crushing
 - Blending
 - Deposit in the restoration
- 2.8. The following plant and equipment are proposed to be used on Site for the waste operations:
 - Loading Shovel
 - 360° excavators
 - Mechanical grabber
 - Crusher
 - Screener
- 2.9. All plant and equipment used on the Site will be subject to maintenance checks in accordance with the procedures within the EMS.
- 2.10. All plant will be operated in accordance with industry good practice, for example, operation of a no-idling policy, no revving of engines etc.
- 2.11. The Operator will implement a policy of replacing older machinery with new, lower emission machinery as it becomes available and as the business development allows.

Operating hours

- 2.12. The proposed operational hours for the Site are:
 - 07:00 – 19:00 hrs Monday to Friday
 - 07:00 to 13:00 hrs Saturday

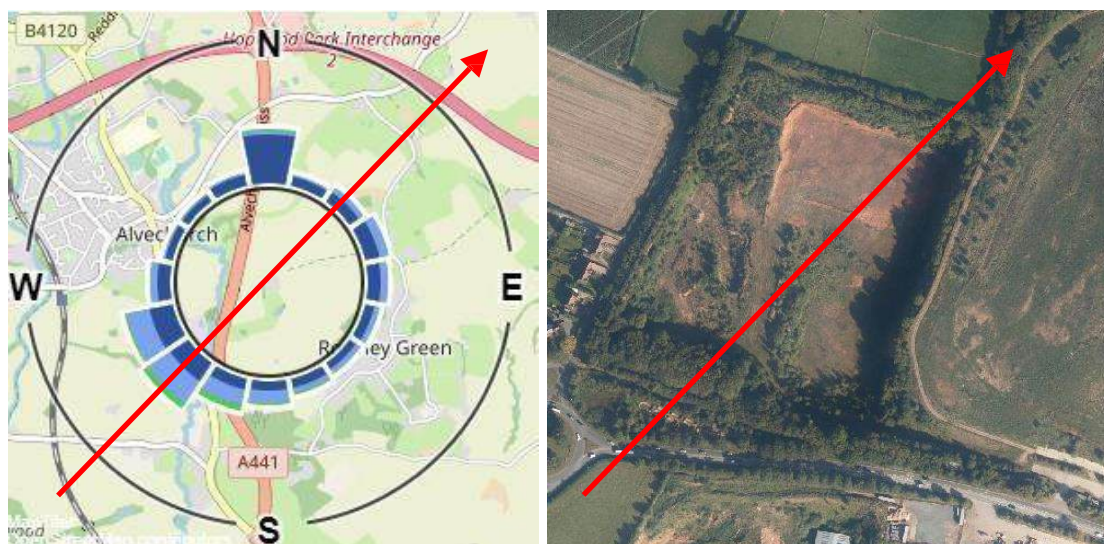


3. Sensitive Receptors

Pathway

- 3.1. Wind direction plays a significant role in the potential impact experienced from noise. Noise will be 'carried' by the wind. It is therefore considered that noise is more likely to travel towards sensitive receptors that are 'down-wind' of the Site.
- 3.2. The distance from the Site boundary to the sensitive receptor plays an important role in the potential impact experienced from noise. Noise at sensitive receptors will reduce with distance from the source. Noise has the potential to cause a nuisance where sensitive receptors are closer to the Site.
- 3.3. Wind speed and direction data have been obtained from the Alvechurch weather station for the period from April 2013 to May 2022, see Figure 3.1. Alvechurch weather station is located approximately 9.2km southeast of the Site. This observing station has wind speed and direction data appropriate for characterisation of the wind climate at Site.

Figure 3.1 Wind rose from Alvechurch weather station, April 2013 to May 2022



Sensitive Receptors

- 3.4. Operations on the Site have the potential to cause noise emissions. Noise emissions can create a potential nuisance in the community (residents and employees of nearby businesses) or can have an impact on local wildlife.
- 3.5. This NMP identifies receptors that may be sensitive to noise emissions.
- 3.6. Sensitive receptors to the north-east are considered most at risk from noise emissions due to the predominant wind direction being from the south-west.
- 3.7. The direction and distances from the permit boundary to the closest boundary of sensitive receptors, within 1000m of the Site, are provided in Table 3.1.

Table 3.1 Noise Sensitive Receptors within 1km of the Site boundary

Ref	Receptor	Description	Direction from site boundary	Distance from site boundary (m)
1	Sandy Lane- A491	Road	South	5
2	Madeley Road	Road	West	10
3	Stoney Bridge Estate	Residential	West	20



4	Wildmoor Quarry	Industrial	South	25
5	The Stables residence off Madeley Road	Residential	North	55
6	Accumix Concrete Ltd	Commercial	South	140
7	Harbours Hill	Road	Northeast	265
8	LJ Beauty Clinic	Commercial	North	295
9	Bromsgrove Van Hire	Commercial	Southwest	325
10	Meadowcroft Kennels	Commercial	West	325
11	Residence off Harbours Hill Road	Residential	Northeast	330
12	Deciduous woodland	Deciduous Woodland	East	360
13	Westside Forestry	Commercial	Northeast	385
14	Worlifts	Commercial	East	420
15	Lake	Surface Water Feature	East	420

- 3.8. The location of the sensitive receptors listed in Table 3.1 are shown in drawing Sensitive Receptors, Drawing No. 20/022 002.
- 3.9. The nearest residential receptor is Stone Bridge Estate, located 20m west of the Site. There is a difference in elevation (approximately 20m) between these properties and the base of the quarry void where the waste deposit activities will occur. It is considered that this receptor will be screened from potential noise emissions due to the fact that operations are to take place at a lower ground level than the receptor.
- 3.10. The western boundary of the Site is populated with a thick bank of trees and shrubbery which will act as a screen between the Site and the nearest residential receptors. The Operator proposes to erect a 5m high screening bund along the southwestern boundary of the Site with Madeley Road which will further screen the nearby properties from noise emissions.



4. Noise Sources

Contextual Information

- 4.1. The Site is located in a predominantly agricultural area. There is a residential area located 20m west of the Site. There is also an active quarry, Wildmoor Quarry, located 25m southeast of the Site. Immediately east of the site is a closed non-hazardous waste Landfill.
- 4.2. The restoration works will be completed in two phases:
- Stage 1 involves the infilling of the western side of the quarry to enable the construction of a 5m bund along the western boundary of the Site, and the establishment of a stabilisation buttress along the eastern side of the quarry.
 - Stage 2 involves the infilling of the central area of the quarry and completion of the restoration.
- 4.3. The construction of the 5m bund along the western boundary of the Site will provide longer term benefits in reducing noise levels.

Noise Sources

- 4.4. The activities with the potential to cause noise emissions from the Site are:
- Vehicle movements.
 - Treatment (crushing/screening) of waste
 - Movement of materials

Other Sources of Noise

- 4.5. Wildmoor Quarry is located approximately 25m south of the Site. This is an active quarry and is therefore considered to be a nearby source of noise to Site that also has an impact on local sensitive receptors.
- 4.6. It is considered that seasonal activities on the surrounding agricultural land will also be a source of noise at various times throughout the year.



5. Control measures and process monitoring

5.1. Table 5.1 provides details of mitigation measures that will be employed at the Site.

**Table 5.1 Control Measures**

Potential noise source	Proposed Operational times	Contribution to overall impact	Control measures (Appropriate Measures/BAT)	Contribution to overall impact post control measures	Action taken following a noise complaint
Plant movements within the Site	07:00– 19:00 Monday to Friday 07:00 – 13:00 Saturdays	High	<p>Driver's of mobile plant will be instructed to avoid leaving engines running unnecessarily or excessive revving of engines. Non-intrusive broadband noise type reverse alarms to be used.</p> <p>Minimise drop heights for materials at all times.</p> <p>Maintenance of plant in accordance with manufacturer guidelines.</p> <p>The speed limit for all vehicles on Site is 5mph.</p> <p>The Site surface will be maintained to ensure the surface is kept free from potholes and ruts where possible.</p> <p>Only trained and competent staff will operate the machinery.</p>	Medium	<p>Investigate complaint.</p> <p>Check that operations are being carried out in accordance with the Noise Procedure within the EMS.</p> <p>Provide additional staff training should it be required.</p> <p>Plant and equipment will be checked for faults that could lead to increased noise. Repairs/maintenance carried out if necessary</p> <p>Temporary cessation of activities that are identified to be a source of noise emissions.</p>
Material handling Tipping off/ loading and deposit in the restoration	07:00– 19:00 Monday to Friday 07:00 – 13:00 Saturdays	Medium	<p>The speed limit for all vehicles on Site is 5mph. Speed humps will not be used on Site.</p> <p>No unnecessary double-handling of material.</p>	Low	<p>Investigate complaint.</p> <p>Check that operations are being carried out in accordance with the Noise Procedure within the EMS.</p>



Potential noise source	Proposed Operational times	Contribution to overall impact	Control measures (Appropriate Measures/BAT)	Contribution to overall impact post control measures	Action taken following a noise complaint
			<p>Drop heights will be minimised, which will reduce noise.</p> <p>Material will be deposited where it is needed to avoid double handling.</p>		Provide additional staff training should it be required.
<p>HGV Movements</p> <p>Imports and exports</p>	<p>07:00– 19:00</p> <p>Monday to Friday</p> <p>07:00 – 13:00</p> <p>Saturdays</p>	Medium	<p>The speed limit for all vehicles on Site is 5mph. Speed humps will not be used on Site.</p> <p>The Site surface will be maintained to ensure the surface is kept free from potholes and ruts where possible.</p> <p>All vehicles must only use non-intrusive broadband noise type reversing alarms. Pulsed and/or tonal reversing alarms will not be permitted on Site.</p> <p>Where HGV's are sub-contractor vehicles they will be encouraged to use this type of non-tonal alarm.</p> <p>Driver's of HGVs will be instructed to avoid leaving engines running unnecessarily or excessive revving of engines.</p> <p>Deliveries will not take place outside of operational hours.</p>	Low	<p>Investigate complaint.</p> <p>Vehicles will be checked for faults that could lead to increased noise. Repairs/maintenance carried out if necessary.</p> <p>Check that operations are being carried out in accordance with the Noise Procedure within the EMS.</p> <p>Provide additional staff training should it be required.</p>



Potential noise source	Proposed Operational times	Contribution to overall impact	Control measures (Appropriate Measures/BAT)	Contribution to overall impact post control measures	Action taken following a noise complaint
Crushing and screening operations	07:00– 19:00 Monday to Friday 07:00 – 13:00 Saturdays	High	<p>Only trained and competent staff will operate the machinery.</p> <p>Machinery will be maintained in line with manufacturer guidance.</p> <p>A 5m high bund is proposed to be constructed along the southwestern boundary of site. This will screen the nearest residential receptor (Stone Bridge Estate) from noise emissions at the Site.</p> <p>Waste processing will not take place outside of operational hours.</p> <p>The area assigned for waste processing will be positioned to maximise the distance from nearby sensitive receptors where possible.</p>	Medium	<p>Investigate complaint.</p> <p>Complete complaint form within the EMS and investigate the complaint.</p> <p>Check that operations are being carried out in accordance with the Noise Procedure within the EMS.</p> <p>Provide additional staff training should it be required. Plant and equipment will be checked for faults that could lead to increased noise.</p> <p>Repairs/maintenance carried out if necessary.</p> <p>Temporary cessation of activities that are identified to be a source of noise emissions if relevant.</p>



Noise Monitoring

- 5.1 All staff must report unusual or abnormal noise to Site Management, in accordance with the requirements of the Noise Procedure within the EMS.
- 5.2 Should noise be identified as an issue, following multiple complaints, recorded noise monitoring may be used to identify the source of the noise and ensure appropriate control measures are put in place.

Process to Manage Noise

Table 5.2 Description of onsite processes which will ensure impacts do not increase on Site.

Description of procedure	Procedure	When this will be carried out?	Corrective action
Replacing old / faulty equipment	Procurement of new equipment	When equipment requires replacing	Replace equipment that have sound levels which are equivalent or lower sound levels compared to existing equipment
EMS Procedures	Noise Procedure	When new staff start, following changes to the Noise Procedure and when a need for refresher training is identified.	Training to be provided to new staff and refresher training provided for existing staff when required i.e when the Noise Procedure is not being followed.
EMS procedures	Planned Preventative Maintenance and Inspections checklist	Annually, monthly, weekly	Routine inspections will be undertaken to ensure that the Site is maintained to ensure noise is minimised. Inspections will cover site surfacing, plant etc.
Staff Training	Staff Training and Induction Procedure	All staff will receive training on control measures for noise within the Noise Procedure. when they start working at the Site.	Refresher training shall be provided should a need be identified i.e. staff not following Noise Procedure within the EMS.



6 Complaints reporting

- 6.1 In the case of any incidents that cause significant noise emissions, staff will report the incident to the Site Manager.
- 6.2 The Site Manager will record the incident and any steps taken to resolve the issue e.g., pausing operation or repairing failing machinery. Procedures and forms relating to the recording of incidents are included within the EMS.
- 6.3 If the incident was raised because of a complaint, a Complaint Form will be completed. All complaints are acknowledged and recorded.
- 6.4 The Complaint Form will record the incident that led to the complaint and any remedial action taken. A copy of the Complaints Form is provided in Appendix 3 Complaint Form.
- 6.5 It is the responsibility of the Site Manager or their delegate to complete the Complaints Form.
- 6.6 Staff will investigate all complaints to identify the source of the problem. All incidents/ complaints will be investigated on the same day, where possible. The investigation will include:
 - Travel to the site from which the complaint is reported to originate to make checks on noise levels.
 - Ensuring the inspections of plant /equipment have been complete.
 - Ensuring this Noise Management Plan is being followed accordingly.
 - Aural monitoring of noise emissions from the area from which the noise originated.
 - If noise is detectable, identification of where on site the noise may be originating.
- 6.7 If the source is not from the Site and is attributable to another source, the complainant will be notified, and the source recorded. If the source of the noise is found to be from the Site the complainant will be notified as part of the response to the complaint.
- 6.8 The Operator will then go about identifying the reason for the noise emission e.g., breach of procedure, training, mitigation or increase in noise at the source.
- 6.9 Records of any monitoring carried out as part of the complaint investigation process will be kept with the completed complaint form.
- 6.10 A complaint is considered to be resolved when the source of the noise is identified, and remedial action is taken (if required) and relevant persons notified. Feedback will be requested from the complainant to check they are satisfied with the outcome.
- 6.11 Should the investigation identify the need for additional mitigation or other remedial action, the appropriate mitigation/ action will be implemented as soon as practicable.



Drawings

Drawing No. 20/022 002 V2	Sensitive Receptors Plan
Drawing No. 20/022 004	Indicative Site Layout Plan



NRS Bromsgrove Aggregates Limited

Sensitive Receptors Plan V3

Sandy Lane Quarry,
Sandy Lane,
Wildmoor,
Bromsgrove,
Worcestershire,
B61 0QT

31st May 2024

Scale: 1:10,000

Reference: 20/022 002 V3

Produced By: HB
Checked By: TW

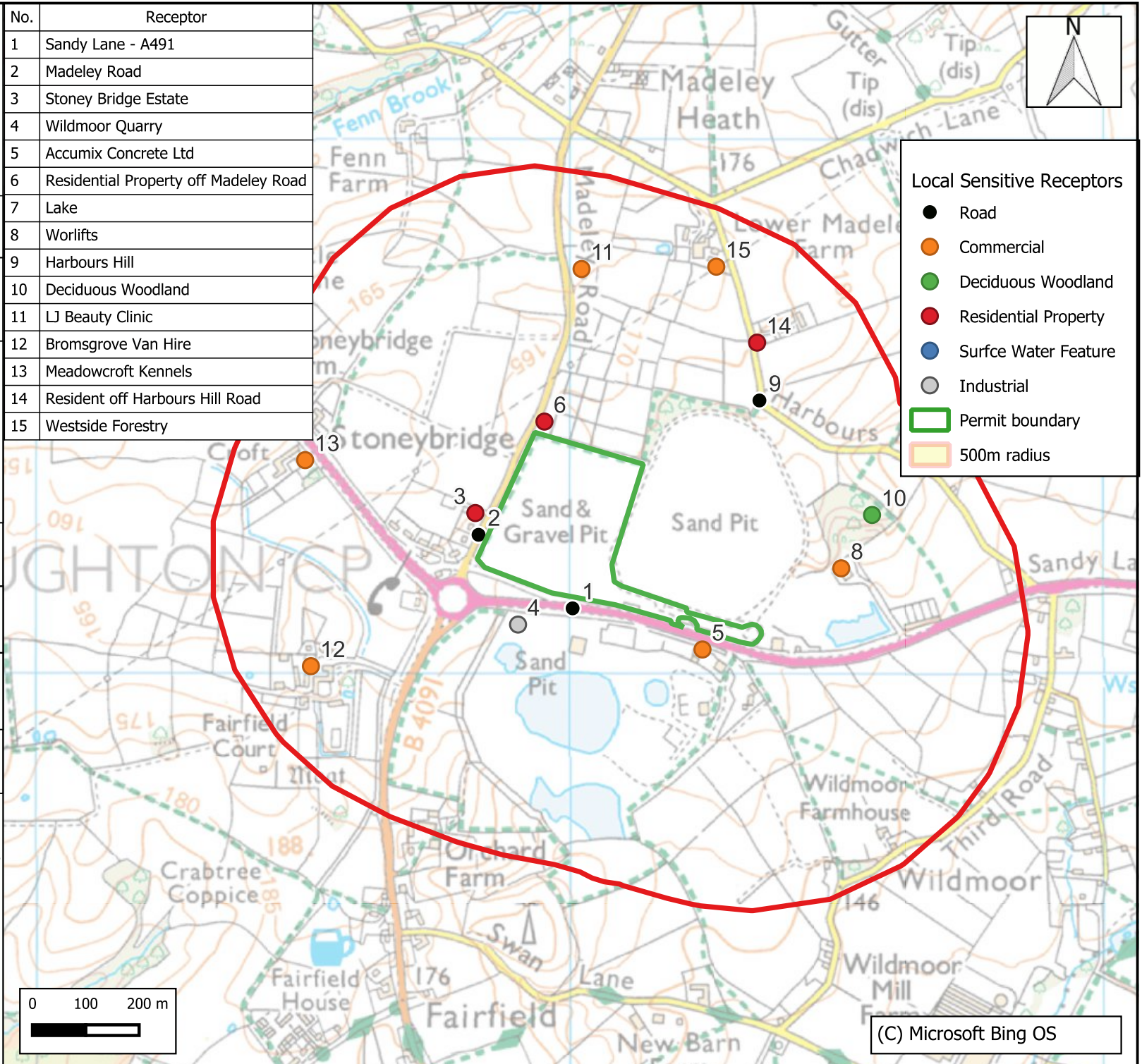


T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk

No.	Receptor
1	Sandy Lane - A491
2	Madeley Road
3	Stoney Bridge Estate
4	Wildmoor Quarry
5	Accumix Concrete Ltd
6	Residential Property off Madeley Road
7	Lake
8	Worlifts
9	Harbours Hill
10	Deciduous Woodland
11	LJ Beauty Clinic
12	Bromsgrove Van Hire
13	Meadowcroft Kennels
14	Resident off Harbours Hill Road
15	Westside Forestry



Client: NRS Bromsgrove Aggregates Limited

Title: Indicitive Site Layout Plan

Site:
Sandy Lane Quarry,
Sandy Lane,
Wildmoor,
Bromsgrove,
Worcestershire,
B61 0QT

Date: 07 February 2025

Scale: 1:3286

Reference: 20/022 004

Produced by: SW
Checked by: TW





Appendix 1

Noise Impact Assessment

NOISE ASSESSMENT

INFILLING, INERT WASTE TREATMENT AND RECYCLING SANDY LANE QUARRY

NRS BROMSGROVE AGGREGATES LIMITED

JUNE 2025

LF Acoustics Ltd
Pond Farm
7 High Street
Pulloxhill, Beds
MK45 5HA

t: 01525 888046
e: mail@lfacoustics.co.uk

Registered in England
Company Reg: 8434608

NOISE ASSESSMENT

INFILLING, INERT WASTE TREATMENT AND RECYCLING SANDY LANE QUARRY

NRS BROMSGROVE AGGREGATES LIMITED

JUNE 2025

Status	Prepared By	Date
1.0	L Jephson BEng (Hons) MIOA	23/6/25

This report has been prepared using all reasonable skill, care and diligence within the resources and brief agreed with the client. LF Acoustics Ltd accept no responsibility for matters outside the terms of the brief or for use of this report, wholly or in part, by third parties.

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References

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Appendices

1. Introduction

LF Acoustics Ltd have been appointed to undertake an updated assessment of the noise levels associated with the infilling, inert waste treatment, and recycling operations at Sandy Lane Quarry.

The quarry is presently dormant, with the main extraction having been completed previously, leaving the present quarry void. It is proposed to infill and restore the quarry with inert materials.

This report presents an assessment of the noise levels associated with the proposed operations.

Section 2 of this report describes the noise units adopted when assessing environmental noise together with a description of the relevant standards. Section 3 discusses the existing noise environment at the potentially affected noise sensitive receptors and derived baseline noise levels upon which the assessment has been based. Section 4 presents an assessment of the future noise levels associated with the operation of the site. Section 5 provides information on control procedures to minimise noise levels. Finally, Section 6 provides a summary of the assessment.

This report has been prepared by L Jephson BEng (Hons), MIOA, Director of LF Acoustics Ltd.

2. Noise Units and Guidance

2.1. Noise Units

Decibels (dB)

Noise can be considered as 'unwanted sound'. Sound in air can be considered as the propagation of energy through the air in the form of oscillatory changes in pressure. The size of the pressure changes in acoustic waves is quantified on a logarithmic decibel (dB) scale firstly because the range of audible sound pressures is very great, and secondly because the loudness function of the human auditory system is approximately logarithmic.

The dynamic range of the auditory system is generally taken to be 0 dB to 140 dB. Generally, the addition of noise from two sources producing the same sound pressure level will lead to an increase in sound pressure level of 3 dB. A 3 dB noise change is generally considered to be just noticeable, a 5 dB change is generally considered to be clearly discernible and a 10 dB change is generally accepted as leading to the subjective impression of a doubling or halving of loudness.

A-Weighting

The bandwidth of the frequency response of the ear is usually taken to be from about 18 Hz to 18,000 Hz. The auditory system is not equally sensitive throughout this frequency range. This is taken into account when making acoustic measurements by the use of A-weighting, a filter circuit that has a frequency response similar to the human auditory system. All the measurement results referred to in this report are A-weighted.

Units Used to Describe Time-Varying Noise Sources (L_{Aeq} , L_{Amax} and L_{A90})

Instantaneous A-weighted sound pressure level is not generally considered as an adequate indicator of subjective response to noise because levels of noise usually vary with time.

For many types of noise, the Equivalent Continuous A-Weighted Sound Pressure Level ($L_{Aeq,T}$) is used as the basis of determining community response. The $L_{Aeq,T}$ is defined as the A-weighted sound pressure level of the steady sound which contains the same acoustic energy as the noise being assessed over a specific time period, T.

The L_{Amax} is the maximum value that the A-weighted sound pressure level reaches during a measurement period. $L_{Amax F}$, or Fast, is averaged over 0.125 of a second and $L_{Amax S}$, or Slow, is averaged over 1 second. All L_{Amax} values referred to in this report are Fast.

The L_{A90} is the noise level exceeded for 90% of the measurement period. It is generally used to quantify the background noise level, the underlying level of noise that is present even during the quieter parts of measurement period.

2.2. National Planning Policy Framework.

The principal planning guidance in the UK is presented within the National Planning Policy Framework [1]. At the heart of the NPPF is a presumption in favour of sustainable development, although environmental criteria should be set out to ensure that the permitted operations do not have unacceptable adverse impacts, with appropriate noise limits adopted to control noise.

The current minerals planning practice guidance attached to the NPPF relating to noise was updated in March 2014 [2]. The MPPG provides guidance and advises upon acceptable levels of noise from minerals operations, which includes related similar processes such as aggregates recycling and disposal of construction waste. This guidance is therefore the most appropriate for the assessment of the minerals extraction operations, restoration, including the importation of materials.

For normal daytime works the guidance seeks to ensure that the operations do not result in significant adverse effects and advises for normal daytime operations that the following limits (in terms of $L_{Aeq, 1 \text{ hr}}$ free-field noise levels) should not be exceeded:

- 10 dB above the background (L_{A90}) noise level; subject to
- a maximum value of 55 dB $L_{Aeq, 1 \text{ hr}}$ (free field).

The PPG advises in the evening (19:00 – 22:00) $L_{Aeq, 1 \text{ hr}}$ noise levels should not exceed the background (L_{A90}) noise level by more than 10 dB and during the night-time a limit of 42 dB $L_{Aeq, 1 \text{ hr}}$ should be adopted.

In addition to the general daytime works, the guidance advises that all mineral operations will have some particularly noisy short-term activities that cannot meet the limits set for normal operations. These include soil-stripping, construction or removal of bunding or spoil heaps and construction of new permanent landforms. A level of 70 dB $L_{Aeq, 1 \text{ hr}}$ is suggested as a limit for these activities for periods of up to eight weeks in any one year. Where the duration of temporary works may exceed eight weeks it can be appropriate to apply a lower limit for a longer period. The guidance also recognises that, in wholly exceptional cases, where there is no viable alternative, a limit of more than 70 dB $L_{Aeq, 1 \text{ hr}}$ may be appropriate in order to obtain other environmental benefits.

2.3. British Standard BS 4142

BS 4142 [3] is the British Standard for rating and assessing noise of a commercial or industrial nature.

BS 4142 is a comparative standard in which initial estimates of the potential impacts are assessed on the basis of a comparison of noise levels from the proposed development to the representative / typical background noise level from existing uses.

The background noise level is the L_{A90} noise level, usually measured in the absence of noise from the source being assessed, but may include other existing industrial or commercial sounds. The background noise levels should generally be obtained from a series of measurements each of not less than 15 minute duration and taken over a representative period.

The Rating Level of the noise being assessed is defined as its L_{Aeq} noise level (the 'specific noise level'), with the addition of appropriate corrections should the noise exhibit a marked impulsive and/or tonal component or should the noise be irregular enough in character to attract attention. The extent of the correction is dependent upon the degree of tonality or character in the noise and is determined either by professional judgement, where the plant is not operational at present, or by measurement.

Where the noise is tonal in nature, the standard applies the following acoustic feature corrections when assessing the rating level:

- 2 dB for a tone which is just perceptible;
- 4 dB where the tone is clearly perceptible; and
- 6 dB where the tone is highly perceptible.

Where noise exhibits other sound characteristics, the Standard advises a correction of 3 dB should be applied.

During the daytime, the specified noise levels are determined over a reference time interval of 1 hour, with a 15 minute reference period adopted when assessing night-time noise.

If the Rating Level of the noise being assessed exceeds the background level by 10 dB or more BS 4142 advises that there is likely to be an indication of a significant adverse impact, depending upon context. A difference between background level and Rating Level of around 5 dB is likely to be an indication of an adverse impact, depending upon context. The lower the Rating Level is, relative to the background noise level, the less likely the specific source will have an adverse or significant adverse impact. Where the Rating Level does not exceed the background noise level is an indication of a low impact, depending upon context.

Where the initial assessment of impact, based upon and assessment of the external noise levels, needs to be modified due to the context, all pertinent factors should be taken into account, including:

- The absolute level of sound;
- Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night; and
- The sensitivity of the receptor and whether the premises will already incorporate measures to ensure good internal and/or external acoustic conditions.

2.4. Environment Agency Guidelines

The Environment Agency (EA) have published guidance on the requirements for noise assessments for permit applications [4].

The guidance requires the use of BS 4142 to quantify the level of environmental noise impact from industrial processes.

Whilst the guidance requires the use of BS 4142 to assess potential impacts, the EA assessment methodology differs from that within BS 4142 and following criteria to be considered:

Unacceptable level of audible or detectable noise

This level of noise means that significant pollution is being, or is likely to be, caused at a receptor (regardless of whether you are taking appropriate measures).

You must take further action or you may have to reduce or stop operations. The environment agencies will not issue a permit if you are likely to be operating at this level.

The closest corresponding BS 4142 descriptor is 'significant adverse impact' (following consideration of the context).

Audible or detectable noise

This level of noise means that noise pollution is being (or is likely to be) caused at a receptor.

Your duty is to use appropriate measures to prevent or, where that is not practicable, minimise noise. You are not in breach if you are using appropriate measures. But you will need to rigorously demonstrate that you are using appropriate measures.

The closest corresponding BS 4142 descriptor is 'adverse impact' (following consideration of the context).

No noise, or barely audible or detectable noise

This level of noise means that no action is needed beyond basic appropriate measures or BAT.

The closest corresponding BS 4142 descriptor is 'low impact or no impact' (following consideration of context).

Low impact does not mean there is no pollution. However, if you have correctly assessed it as low impact under BS 4142, the environment agencies may decide that taking action to minimise noise is a low priority. Note that BS 4142 is unlikely to be the appropriate methodology on its own to assess low frequency noise.

In undertaking the assessment and deriving the rating level of noise, the EA guidance specifies "where the sound is neither impulsive nor tonal, but you can readily distinguish it against the usual residual acoustic environment, the environment agencies will expect you to apply a minimum character correction of +3 decibels (dB) 'other'. This is unless you can robustly justify that you do not need such a correction."

3. Baseline Noise Assessment

3.1. Identification of Potentially Affected Noise-Sensitive Locations

The quarry is bounded by the A491, Sandy Lane to the south and Madeley Road to the west.

There are a small number of properties within Stoneybridge to the west of the quarry which may be potentially affected by the proposed operations and have been considered within this assessment.

The properties are all set back approximately 15 metres from Madeley Road and approximately 25 metres from the western boundary of the quarry.

These properties are indicated on Figure 1.

3.2. Unattended Noise Surveys

To evaluate the present noise levels at the neighbouring noise sensitive properties, an unattended noise survey was carried out at one location along the western quarry boundary between 6 and 13 June 2025.

The monitoring location is indicated on Figure 1.

Weather conditions were monitored throughout the survey period using a Davis Vantage Vue weather station, which was installed within the quarry. The weather data is provided in Appendix A and summarised for the daytime operational periods below.

Date		Conditions	Wind Strength	Wind Direction
Friday	6/6/25	Fine & Dry	1 – 2 m/s	NW
Saturday	7/6/25	Mainly dry during day	0 – 2 m/s	NW
Sunday	8/6/25	Fine & Dry	1 – 2 m/s	NW
Monday	9/6/25	Fine & Dry	0 – 1 m/s	Variable
Tuesday	10/6/25	Fine & Dry	2 – 4 m/s	NW
Wednesday	11/6/25	Fine & Dry	0 – 2 m/s	E
Thursday	12/6/25	Mainly dry / rain shower pm	1 – 2 m/s	E
Friday	13/6/25	Fine & Dry	1 m/s	E

Table 3.1 Summary of Weather Conditions

The weather conditions were noted to be good during the survey period and suitable for undertaking an environmental noise survey.

Unattended noise measurements were obtained at one position representative of the properties identified above using a Rion NL-52 Class 1 Sound Level Meter. The meter was fitted with Rion WS-15 outdoor microphone protection which maintains Class 1 performance over a wide range of weather conditions. The meter was calibrated using a Rion NC-75 Class 1 Acoustic Calibrator prior to and following the monitoring exercise, with the instrument reading 94.0 dB on both occasions.

All instrumentation had been laboratory calibrated in accordance with National Standards within the previous 12 / 24 months. Details of the instrumentation used, and calibration dates are provided below.

Instrument	Serial No.	Calibration Date	Laboratory / Certificate No.
Rion NL-52 Class 1 SLM	01076306	27/2/25	AcSoft – 1511409-4
Rion NC-75 Class 1 Acoustic Calibrator	35270122	17/9/24	AcSoft – 1509857-1

Table 3.2 Instrumentation Details for Unattended Noise Survey

The microphone was set in free-field conditions and at a height of 1.4 metres above local ground and set 15 metres from the kerb of Madeley Road. The monitoring position was representative of the properties along the western side of the road.

The instrument was configured to record noise levels over 15-minute monitoring periods, which is an appropriate duration over which to derive the background noise levels. In addition, the meters had audio recording capability installed, which allowed periodic snapshots of the audio to be recorded throughout the survey, also assisting with source identification.

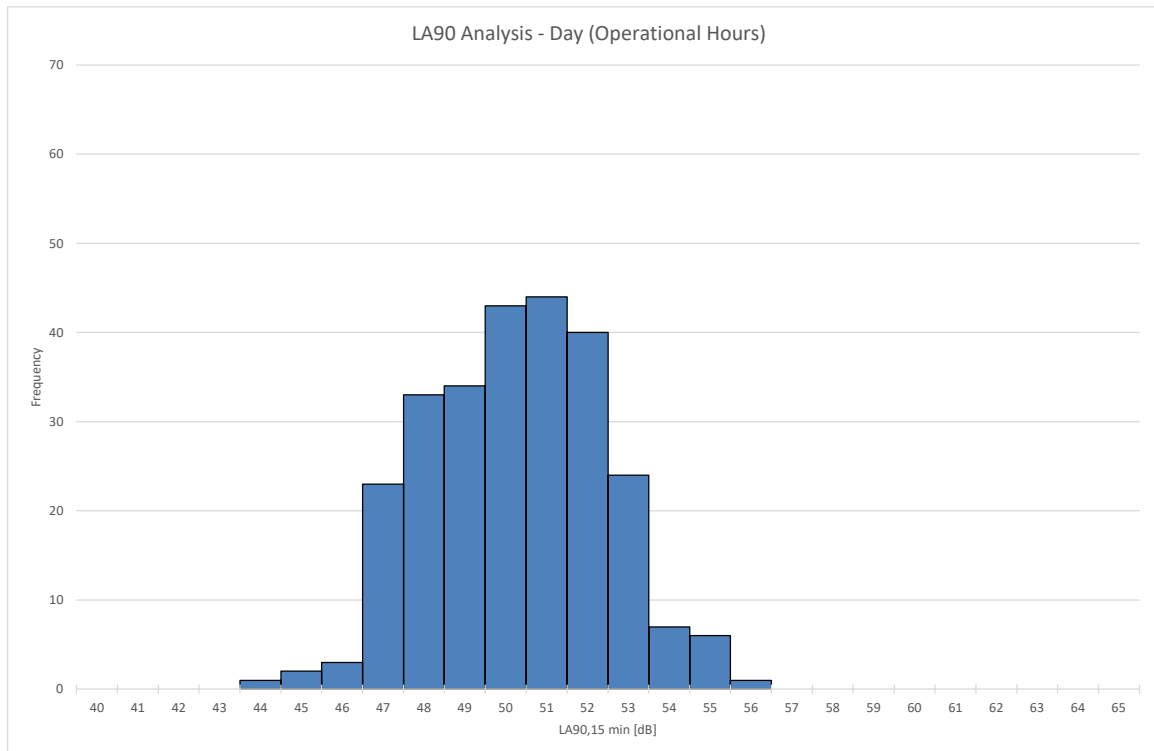
A description of the noise environment and the monitoring results are provided below.

3.3. Results and Analysis of Noise Monitoring

Noise levels monitored at the survey position were observed to be principally attributable to road traffic travelling along Madeley Road. Traffic travelling along Sandy Lane was also audible. Road traffic noise was the principal influence on both the ambient (L_{Aeq}) and background (L_{A90}) noise levels, throughout the daytime periods, when the site would be operational.

The results of the noise survey are presented in Appendix B.

The background noise levels have been analysed over the periods when the quarry would be operational (07:00 – 19:00 hours Mondays to Fridays and 07:00 – 13:00 hours on Saturdays). A modal and median analysis has been undertaken to derive the typical background noise levels, as follows.



The analysis above indicates a peak within the data at a level of 51 dB L_{A90} . The median analysis indicates a level of 50 dB L_{A90} at this location. On this basis, the median value would be considered to be the most representative level to consider within the assessment.

4. Calculations and Assessment

4.1. Noise Limits

The MPPG advises that noise levels associated with site operations at surrounding properties should not normally exceed 10 dB(A) above background, subject to an upper limit of 55 dB $L_{Aeq, 1 \text{ hour}}$. For temporary operations, such as the construction of bunds or soils stripping, a limit of 70 dB $L_{Aeq, 1 \text{ hour}}$ is advised.

Based upon the results of the noise monitoring, which indicated a typical background noise level of 50 dB L_{A90} , a normal working limit of 55 dB $L_{Aeq, 1 \text{ hr}}$ would be applicable, with a limit of 70 dB $L_{Aeq, 1 \text{ hr}}$ adopted for temporary work.

Reference has also been made to the EA guidelines when considering appropriate limits for site operations to ensure potential adverse noise impacts are minimised. Consideration has been given to ensuring the operations do not result in noise levels above an audible or detectable level of noise, and thus the aim of ensuring the rating levels of noise do not exceed a level of more than 10 dB(A) above the prevailing background noise levels. Taking account of an acoustic feature correction of 3 dB(A) for the general character of the noise from the operation of the plant on site, this effectively results in a limit 7 dB(A) above the prevailing background noise levels.

Adopting these limits ensures that the operations do not result in significant adverse noise impacts when considered against the most relevant guidance contained in the MPPG and when considering an assessment against the BS 4142 guidance and would thus fully comply with the requirements of the NPPF.

4.2. Potential Sources of Impact

The site would be operational between the following hours:

- 07:00 – 19:00 hours Mondays to Fridays;
- 07:00 – 13:00 hours Saturdays;
- No working on Sundays, Public or Bank Holidays.

The quarry would be restored in two main stages.

Stage 1 would initially involve the importation of material and infilling along the western site boundary to enable a 5-metre-high bund to be constructed along the western site boundary, to provide screening for the properties along Madeley Road.

Stage 1 would also include the establishment of a stabilisation buttress along the eastern side of the quarry.

Stage 2 would involve the infilling of the central area of the quarry and completion of the restoration.

A recycling area would be provided within the quarry to process a proportion of the incoming materials. This area would include a screening and potentially a crushing plant, which would be serviced using an excavator and loading shovel. The recycling area would be located at the base of the quarry to ensure that the plant was effectively screened from the neighbouring properties, to minimise noise levels.

The material would be screened to recover any recyclable material, which would be transported back off site. The material unsuitable for recycling would be loaded onto articulated dump trucks and transported to the current phase of the landfill.

Materials would be delivered to the site by HGV and taken either into the recycling area, where the material would be processed into recycled materials, or directly to the infill / restoration areas.

A dozer would operate within the infill areas, working periodically to spread and compact material which had been tipped either by HGV or an articulated dump truck, operating between the recycling area and the working phase.

Based upon the anticipated traffic movements of 84 HGV movements per day, 10 HGV hourly movements have been assumed into the site with a further 12 movements between the recycling area and infilling area. A speed of 15 km/h has been assumed for vehicle movements on site.

Noise source terms for items of plant to be used within the site have been measured previously in similar sites. Table 4.1 lists the plant assumed for the calculations along with the source term information, based upon the equivalent Sound Power Level (SWL) generated by the plant.

Item of Plant	Sound Power Level SWL [dB(A)]
<i>Recycling Area</i>	
Screen	109.0
Crusher (Loaded by Excavator)	109.4
Loading Shovel	101.1
Vehicle Movements	103.9
<i>Infilling Operations</i>	
Dozer	107.5
HGV /ADT Movements	103.9

Table 4.1: Noise Source Terms

4.3. Calculated Noise Levels

Noise levels have been predicted at the potentially affected receptors for the principal items of plant anticipated to be used on site operating in the areas closest to the surrounding properties.

Calculations have been prepared for the following stages:

- Stage 1 initial operations. This includes the recycling operations and the infilling operations along the western side of the quarry, operating at the existing ground levels. These operations also include the construction of the bund, which would involve plant operating close to the quarry boundary for a period of time (temporary operation);
- Stage 1 general operations. This includes the recycling operations and the infilling operations along the western side of the quarry following the construction of the bunding;
- Stage 2 initial operations. This includes the recycling operations and the infilling operations within the central area of the quarry; and

- Stage 2 final operations. This includes the recycling operations and the infilling operations within the central area of the quarry, assuming the ground level at the final restoration level.

Consideration of these stages provides a worst-case assessment, and any potential screening effects would be minimised. Generally, with the plant operating at lower levels within each phase, the operations would be effectively screened resulting in lower noise levels.

Noise levels have been calculated utilising the SoundPlan computer modelling package, which implements the calculations methodology from ISO 9613 [5]. The model takes account of distance, local ground conditions and screening effects. Ground levels used in the modelling software are specified as heights above ordnance datum.

Estimated worst-case noise levels have been calculated based on a realistic operating scenario, and assuming all plant within the recycling area would be operational 100% of the time. With regards the dozer, an on-time of 75 % has been assumed, which is a reasonable worst case, as the plant would often be stood between loads.

Calculations have been made based upon the typical operation of the dozer within each stage, with the plant working generally across each working area, to represent typical conditions. Calculations have also been made assuming the plant operating at a position closest to each property, to represent worst-case conditions. This would be unlikely, as the plant would be considered to be operating at a stationary position and thus clearly represents worst-case conditions.

The results of the calculations are provided in Appendix C.

4.4. Assessment Criteria

An assessment of the noise levels attributable to the permitted operations against the industrial and commercial noise guidance provided within BS 4142:2014+A1:2019 has been undertaken in addition to the general assessment of noise levels against the main requirements of the MPPG (assessing the noise levels against the limits proposed in Section 4.1).

The BS 4142 guidance provides a methodology for assessing the initial estimate of the impact of the specific sound by subtracting the measured background sound level from the rating level. This initial assessment should therefore consider the context of the noise when determining the likely effects.

With regards the rating level, the specific sound generated by the operations should be corrected for a number of factors, including tonality, impulsivity, intermittency and other sound characteristics. The majority of the plant proposed to be used for the permitted operations is that which is presently used within the quarry as part of the initial soils stripping and minerals operations and as such would not be characteristic in nature, as the noise from the minerals operations has formed part of the noise climate in the surrounding area for many years. The noise generated by the proposed operations will be principally attributable to the diesel engines of the plant operating on site and as such would not be tonal or impulsive in nature. On this basis, and in accordance with the EA guidelines, a correction of 3 dB has been made to the specific sound levels to derive the rating level of noise upon which the initial BS 4142 assessment has been made.

The calculations made above are based upon worst-case conditions, with the plant operating at the final restoration levels and generally fully operational, as it is often stood for prolonged periods between loads delivered to site. In addition, the source terms utilised within the calculations were based upon measurements taken adjacent to existing plant and represent reasonable worst-case operating conditions. On this basis, any uncertainty in the calculations will be low and should an exceedance be noted, amendments to the operational practices would be made to ensure noise levels are reduced to an acceptable level to ensure there are no significant adverse noise effects.

4.5. Assessment of Noise Levels from the Operation of the Site

An assessment of the calculated noise levels at the properties along Madeley Road is given below.

Stage	Calculated Noise Levels [dB L _{Aeq, 1 hr}]		Working Limit [dB L _{Aeq, 1 hr}]	Limit Exceeded?
	Typical	Worst Case		
Stage 1 Initial / Bund Construction	53.7 – 53.9	63.7 – 63.8	55 / 70	No
Stage 1 Normal Operation	47.0 – 47.9	50.1 – 53.1	55	No
Stage 2 Initial Operations	46.1	48.5 – 50.1	55	No
Stage 2 Final Operations	48.5	52.3 – 53.2	55	No

Table 4.2 Calculated Noise Levels at Cornets End Farm

The calculations above, indicate that the noise levels attributable to the general operations are anticipated to be typically 48 – 53 dB L_{Aeq, 1 hr}. The highest noise levels are predicted during the initial Stage 1 operations when the bund is under construction, resulting in noise levels of up to 64 L_{Aeq, 1 hr} at these properties. The construction of the bund would be completed within a period of 8 weeks and would be a temporary operation providing longer term benefits to the residents of the properties.

The noise levels attributable to the normal operations would remain below the normal working limit of 55 dB L_{Aeq, 1 hr} defined in accordance with the MPPG, with the noise levels during the bund construction remaining below the MPPG temporary working limit of 70 dB L_{Aeq, 1 hr}.

Noise levels at the properties along Madeley Road would be highest during the initial period of Stage 1, when the western side of the quarry is being infilled to allow the construction of the bunding. Noise levels during this stage are anticipated to be generally up to 54 dB L_{Aeq, 1 hr} at the properties along Madeley Road. Applying an acoustic feature correction of 3 dB(A) to derive a rating level of 57 dB L_{Aeq, 1 hr}, an assessment against the typical background noise level of 50 dB L_{A90} would indicate a potential for adverse impact when assessed against the BS 4142 guidelines, with the noise attributable to the operation of the plant audible or detectable noise when assessed against the EA guidelines.

Measures would be taken on site to minimise noise and potential adverse impacts during this stage, which would include minimising the time the plant was operating close to properties, ensuring the plant was well maintained and powered down when not in use. Further details of the measures which would be taken to minimise noise are described within the Noise Management Plan.

The highest noise levels would be anticipated during the construction of the bund, which would be a temporary operation and would provide longer term benefits to the residents. Noise levels during this period, whilst the plant was operating closest to the properties, would be up to 64 dB $L_{Aeq, 1 \text{ hr}}$ for a short duration. Applying an acoustic feature correction of 3 dB(A) to derive a rating level of 67 dB $L_{Aeq, 1 \text{ hr}}$, an assessment against the typical background noise level of 50 dB L_{A90} would indicate a potential for significant adverse impact when assessed against the BS 4142 guidelines, with the noise attributable to the operation of the plant resulting in potentially unacceptable level of audible or detectable noise when assessed against the EA guidelines.

Given the fact that the construction of the bund would provide longer term benefits in reducing noise levels, it is considered that noise levels attributable to the operations associated with the bund construction would remain acceptable, providing appropriate measures are maintained on site to minimise noise, with the operations closest to the properties being completed in a short timescale.

Noise levels attributable to the normal operations within Stage 1 and the lower levels during Stage 2 following the construction of the bunding would be typically up to 49 dB $L_{Aeq, 1 \text{ hr}}$. Applying an acoustic feature correction of 3 dB(A) to derive a rating level of 52 dB $L_{Aeq, 1 \text{ hr}}$, an assessment against the typical background noise level of 50 dB L_{A90} would indicate a low potential for adverse impact when assessed against the BS 4142 guidelines, and barely audible or detectable noise when assessed against the EA guidelines.

Noise levels would increase marginally during the final periods of infilling and restoration in each stage, as the plant was operating at a higher ground level, thus the effectiveness of the bunding reduced. During these final periods, noise levels are predicted to be up to 53 dB $L_{Aeq, 1 \text{ hr}}$ at the neighbouring properties. An assessment against the typical background noise level, taking account of a 3 dB acoustic feature correction would indicate a potential for adverse impact during these periods when assessed against the BS 4142 guidelines, with the noise attributable to the operation of the plant audible or detectable noise when assessed against the EA guidelines. As with the initial stages, measures would be taken on site to ensure noise levels were minimised during these stages.

5. Noise Management and Control Regime

To manage noise at the site a noise management plan has been prepared. The plan provides details for the control and monitoring of noise levels from the site and a procedure to deal with potential complaints.

In general, however, plant and machinery operating on site should be well maintained at all times. Non-tonal reversing signals should be used on mobile plant to minimise any potential disturbance from these sources.

Particular consideration would be given to plant working at higher levels within the quarry and close to the properties along Madeley Road to ensure any potential adverse impacts were minimised. Plant requirements within these areas would be minimised, with the works carried out within as short a duration as possible.

HGVs and dump trucks travelling on the access roads also have potential to cause disturbance even at low noise levels. To ensure potential disturbance is minimised, the access roads should be inspected at regular intervals (at least once every week) to ensure that the surface remains in good condition. Where defects are identified these should be rectified immediately. This action seeks to ensure that empty vehicles travelling on the haul roads and passing over the defect do not give rise to body rattle, which is potentially disturbing. Furthermore, the speed limit on the link road should be well enforced. This measure also seeks to minimise the likelihood of body rattle from empty vehicles.

6. Summary

LF Acoustics Ltd were appointed to undertake an assessment of the noise levels associated with the infilling, inert waste treatment, and recycling operations at Sandy Lane Quarry.

The quarry is presently dormant, with the mineral having been previously extracted. It is proposed to stabilise and restore the quarry by infilling with inert materials.

Materials would be imported into the quarry by HGV and either deposited directly onto the restoration areas or within a recycling area, to be located at the base of the quarry. A processing plant would be located within the recycling area to enable the recovery and reuse of materials, where possible.

An assessment of the proposed operations against the appropriate national minerals (including infilling) and EA guidance for waste operations indicated that, with appropriate noise mitigation and control measures, noise levels at the neighbouring properties would be acceptable.

The BS 4142 assessment based upon the EA guidance indicated that, with appropriate management controls implemented, the operations would generally result in a low potential for adverse impacts, with the noise from the operation of the plant barely audible.

The assessment has indicated periods when noise levels would be higher, principally during the temporary operations to construct the bunding along the western boundary of the quarry and during the final periods of restoration in each stage, when the plant would be operating close to the final restoration levels. During these periods, the assessment concluded that there would be a potential for adverse noise impacts, with the noise from the operation of the plant clearly audible. The construction of the bunding would provide longer term benefits during the site operations and would be completed during a short time scale. Noise levels during these operations would be controlled and minimised through appropriate site controls.

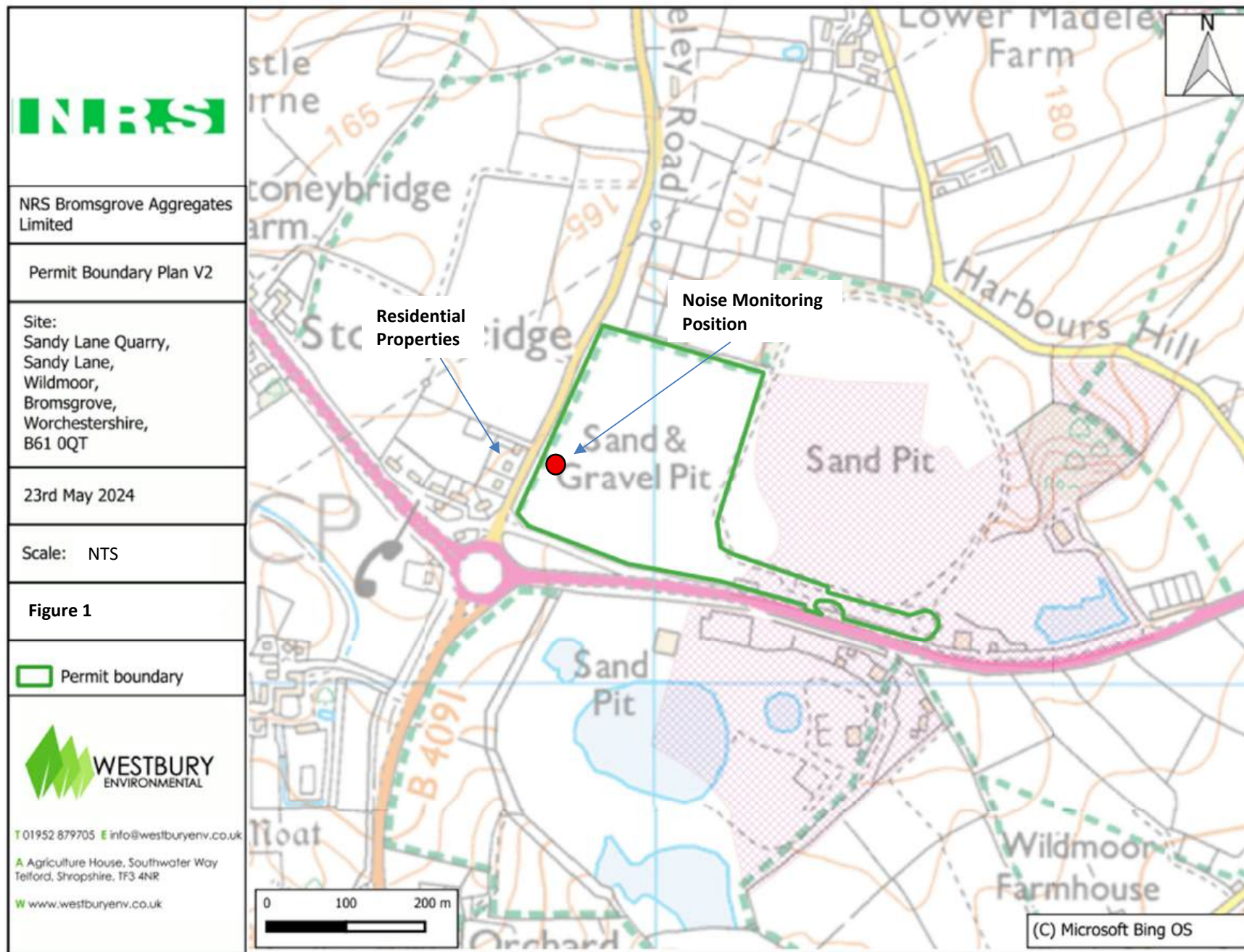
To ensure noise levels are effectively controlled, a noise management plan has been prepared, which would be adopted for the duration of the works.

In summary, with appropriate mitigation and control measures adopted during the operations within the quarry, noise levels would be minimised, seeking to ensure that the noise from the operation remain acceptable at neighbouring properties.

References

1. Ministry of Housing, Communities and Local Government. National Planning Policy Framework. December 2024.
2. Department for Communities and Local Government. Planning Practice Guidance. Assessing Environmental Impacts from Minerals Extraction. 6 March 2014.
3. British Standards Institute. Methods for Rating and Assessing Industrial and Commercial Sound. BS 4142. 2014+A1:2019.
4. Environment Agency. Noise and Vibration Management: Environmental Permits. Published 23 July 2021.
5. Bsi. Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: Engineering Method for the Prediction of Sound Pressure Levels Outdoors. BS ISO 9613-2. 2024.

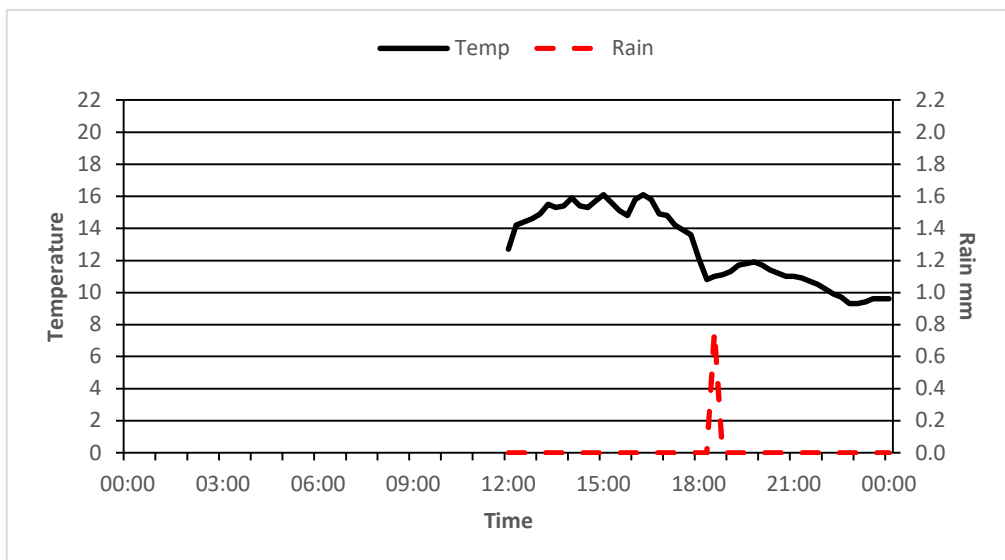
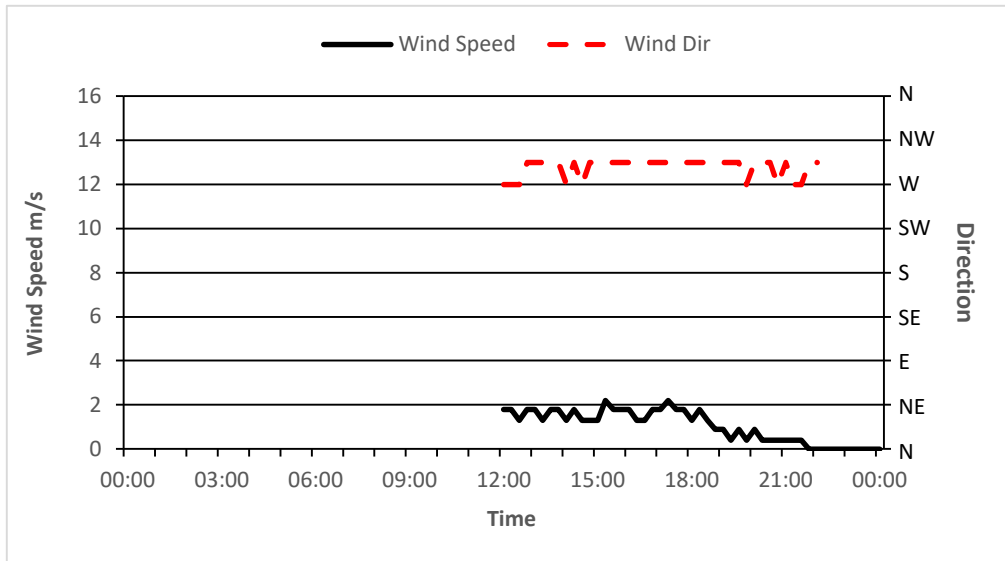
Figure



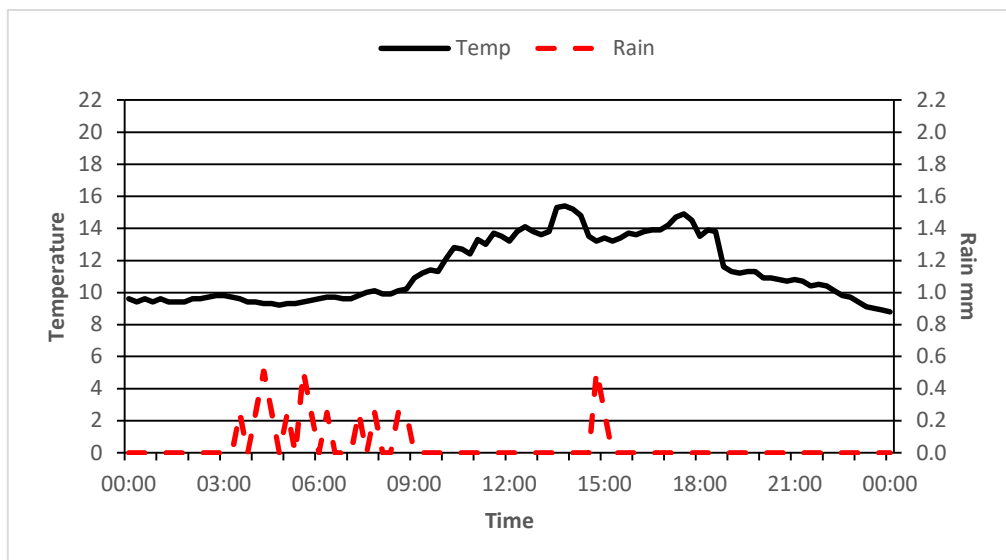
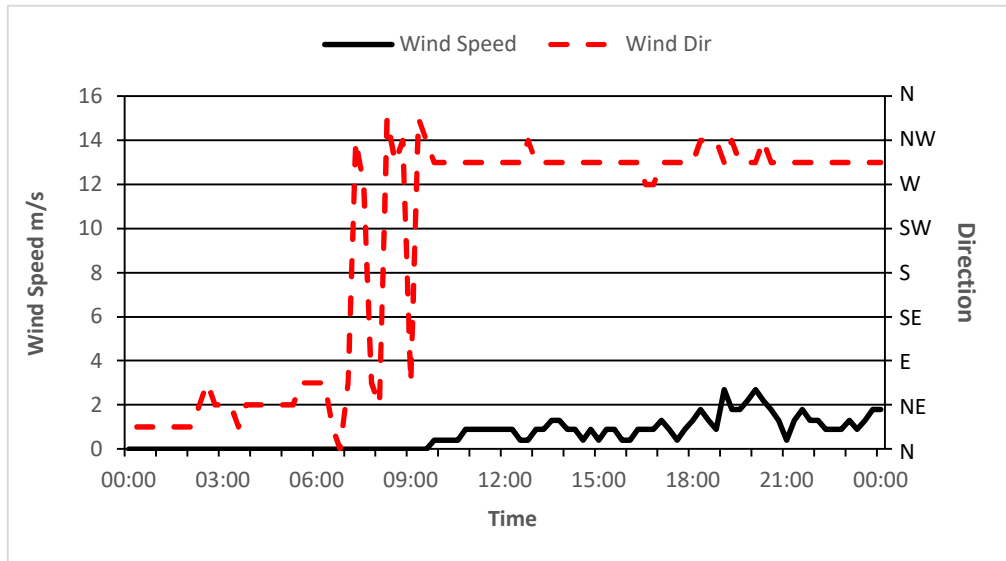
Appendix A

Weather Data

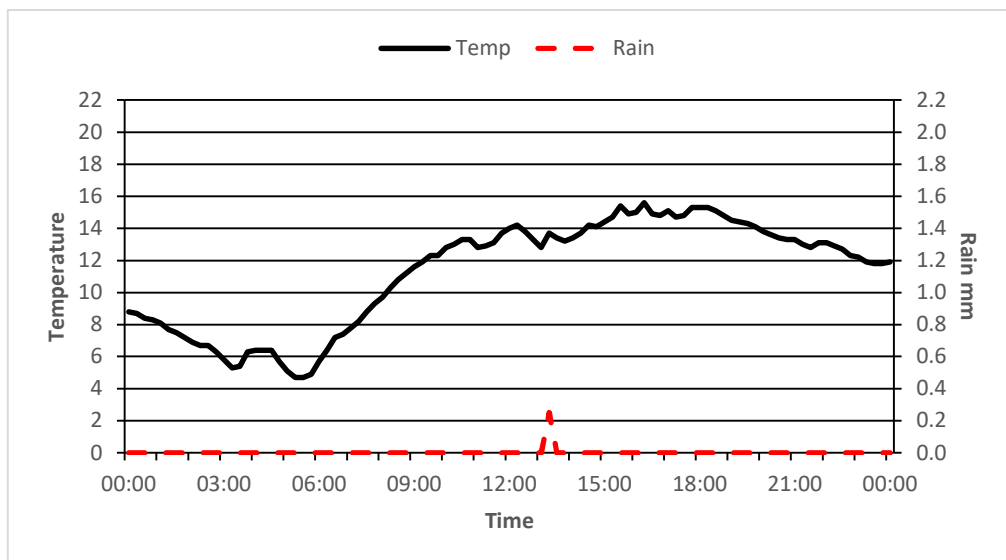
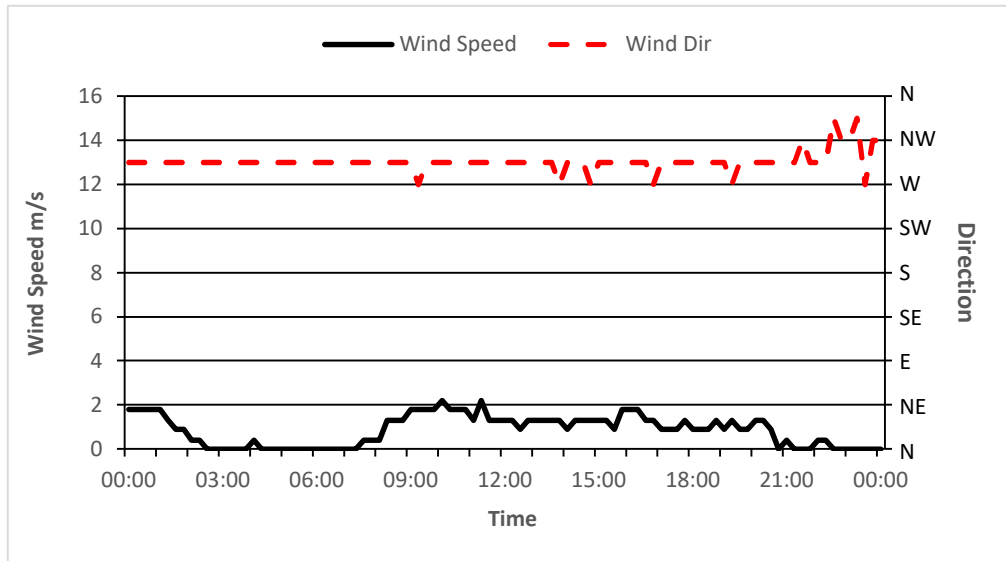
Sandy Lane Quarry
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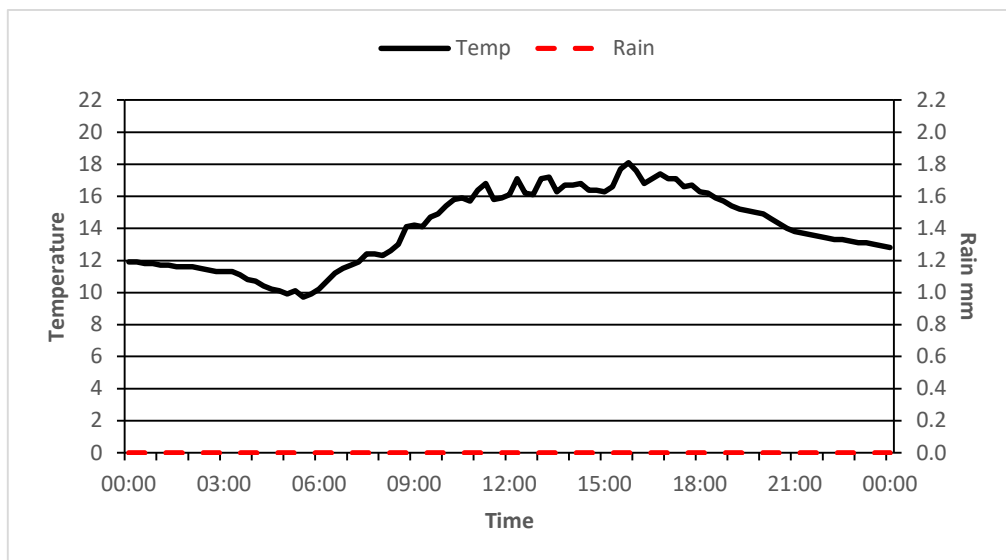
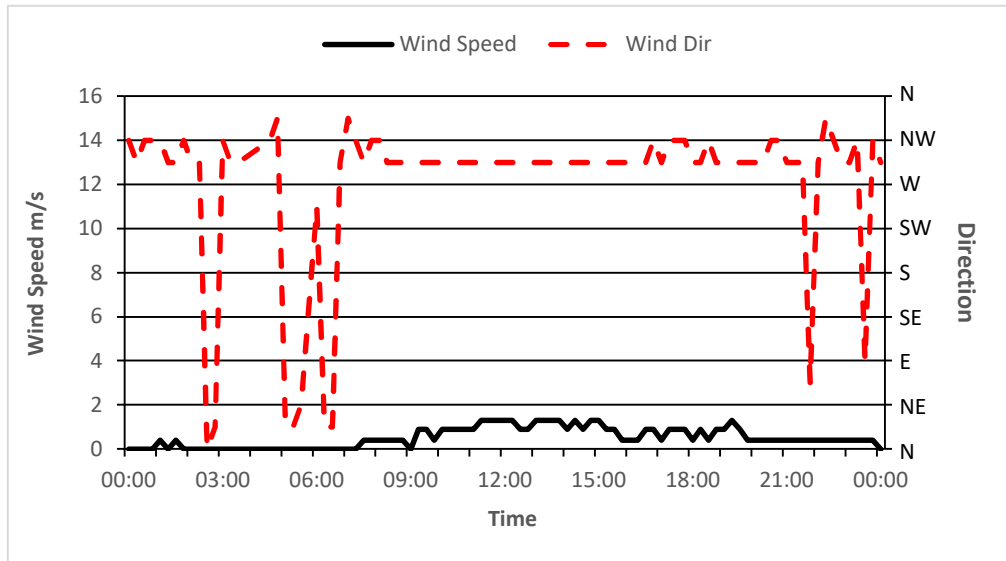
Sandy Lane Quarry
Saturday 7 June 2025



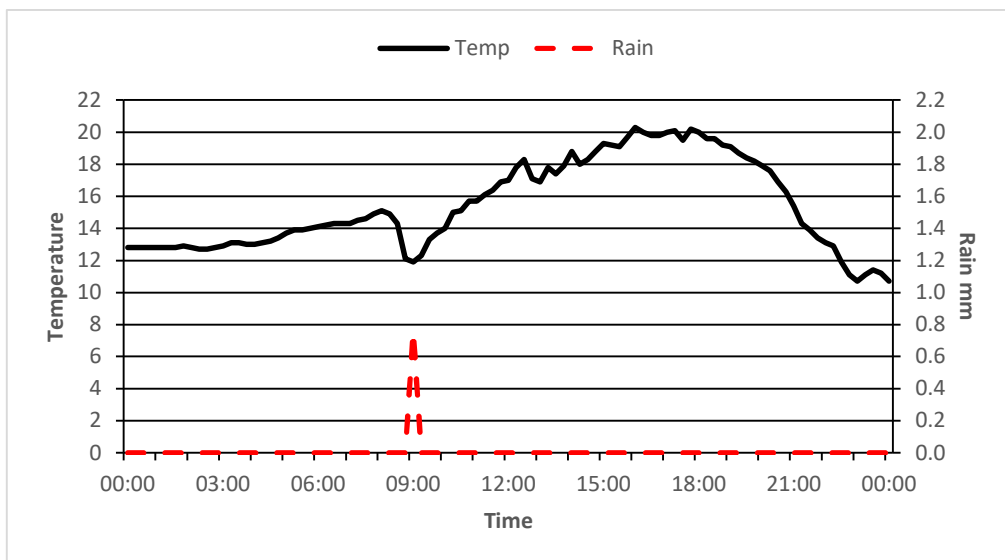
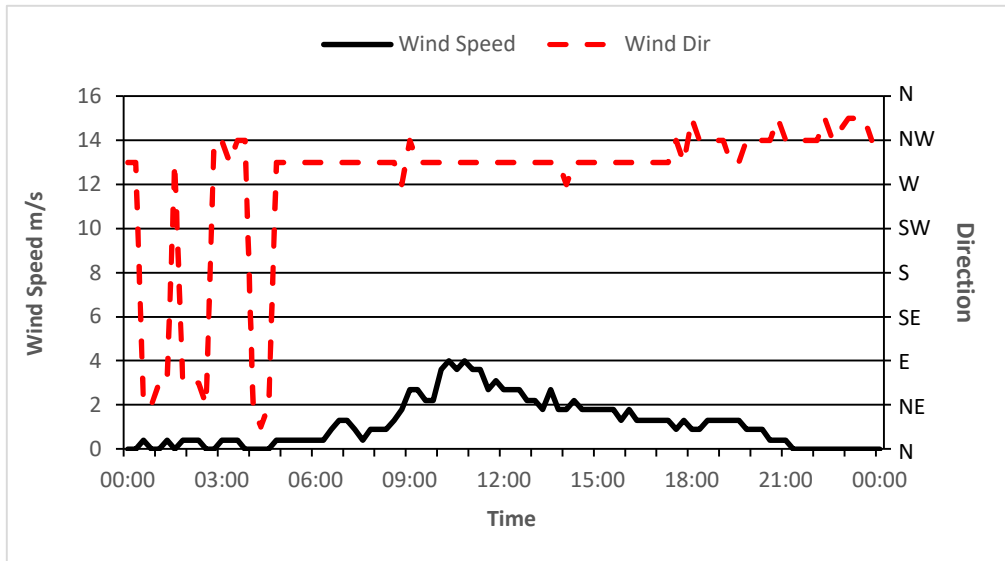
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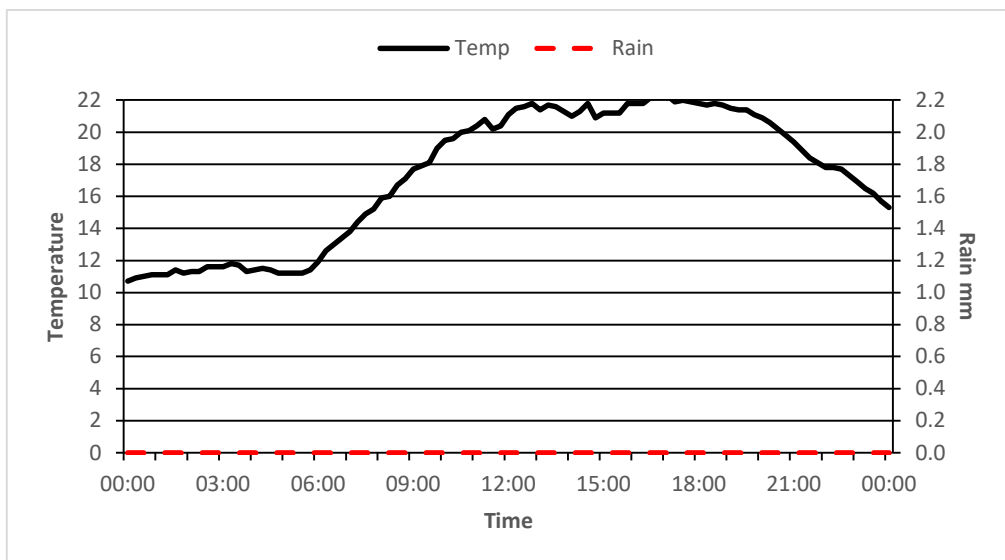
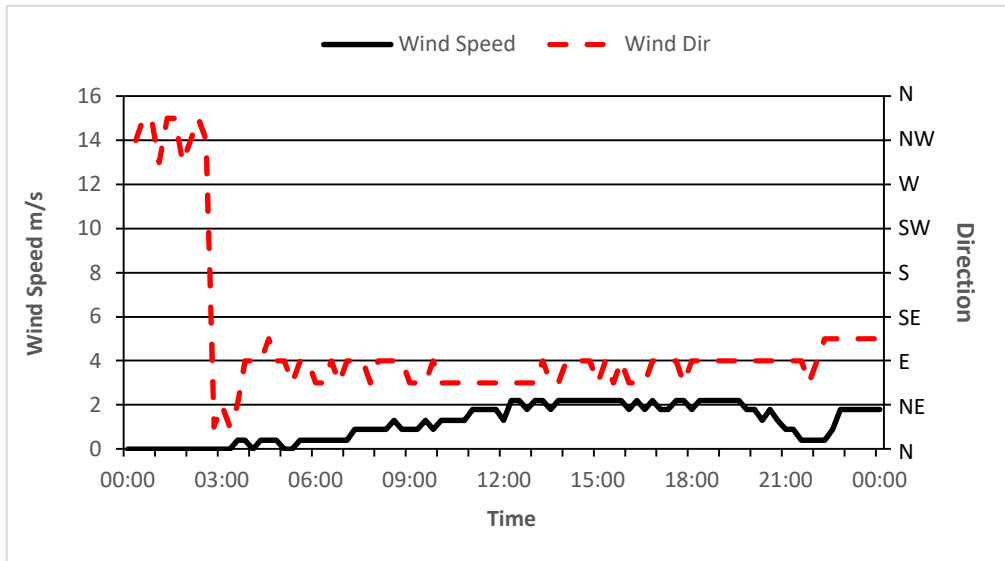
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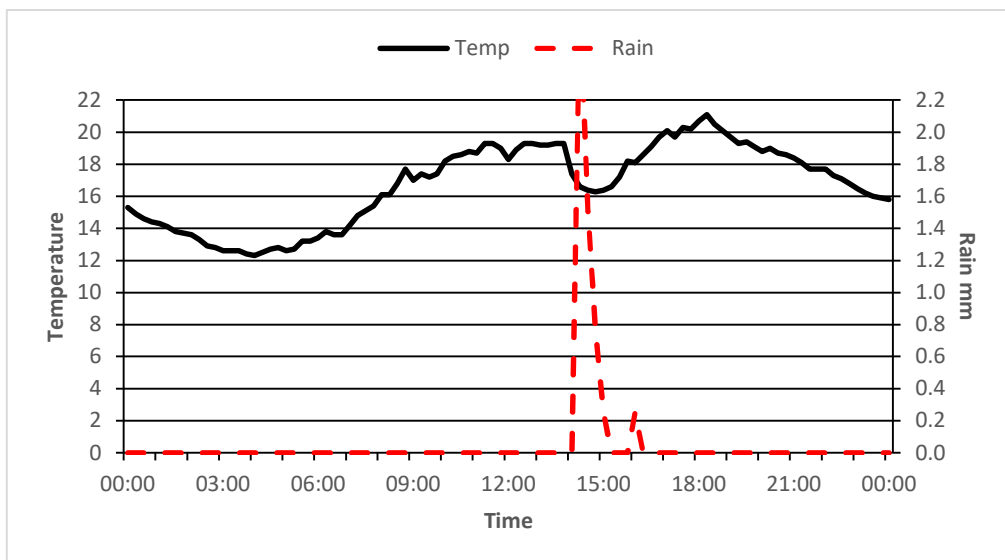
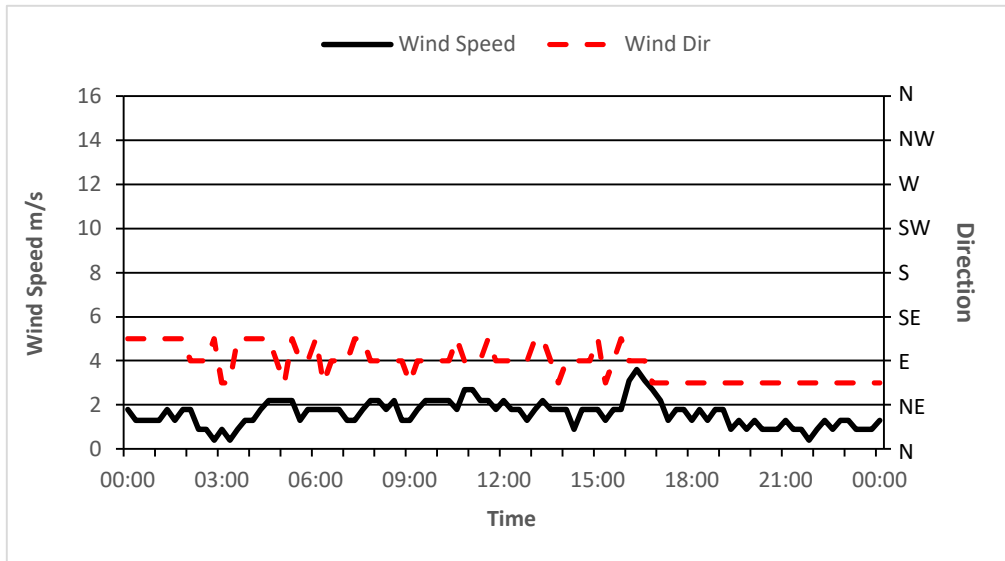
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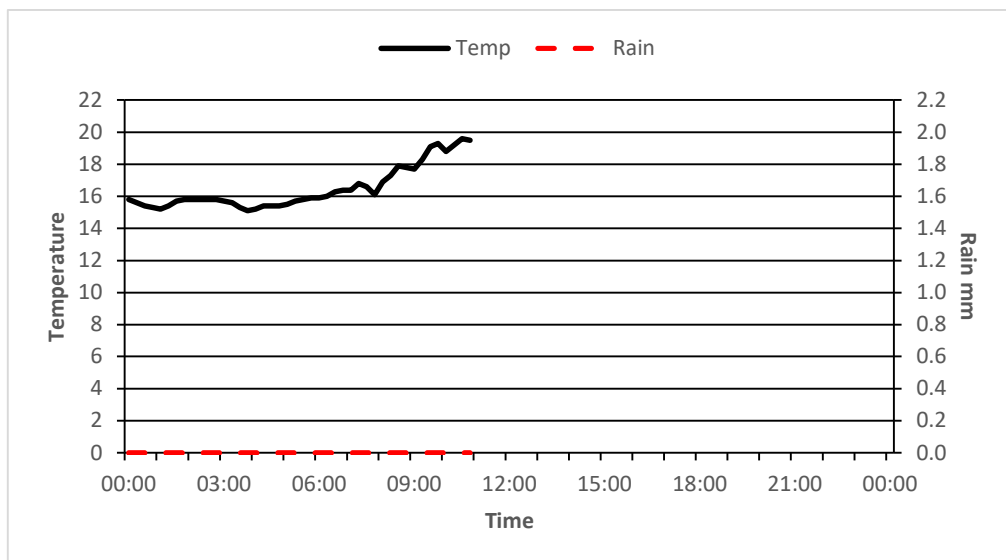
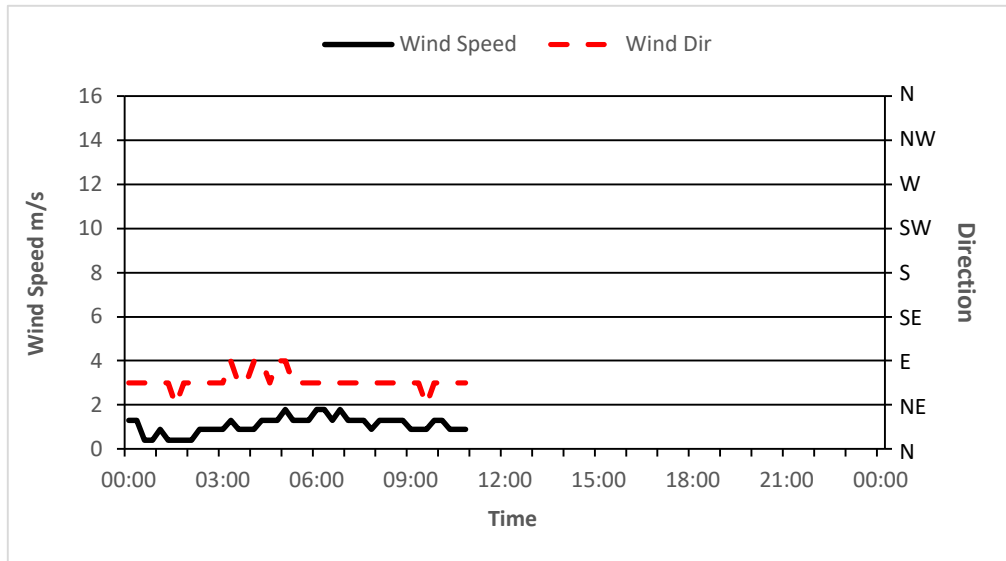
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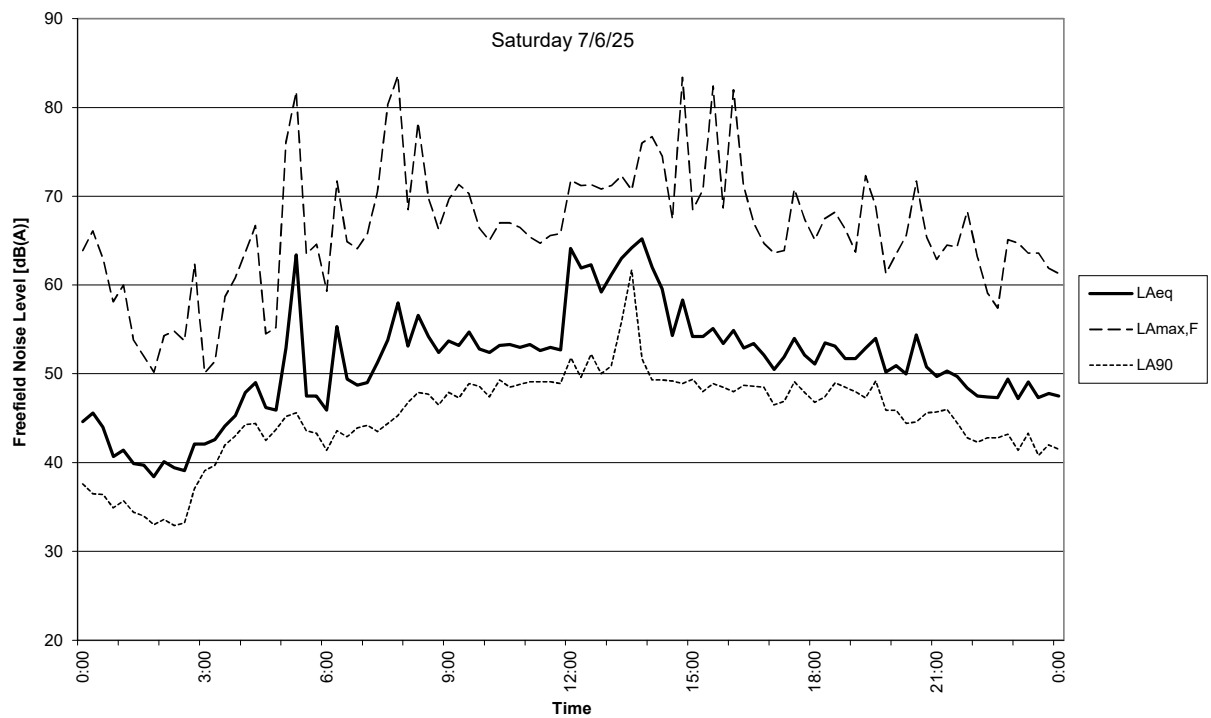
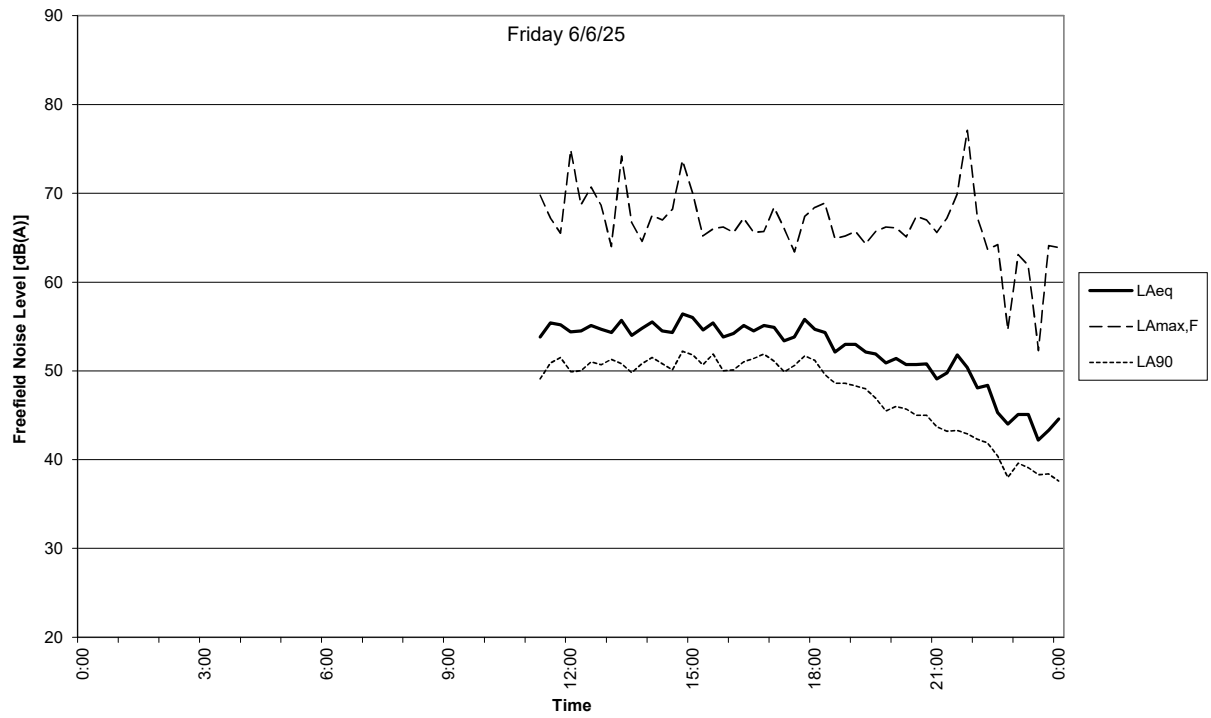
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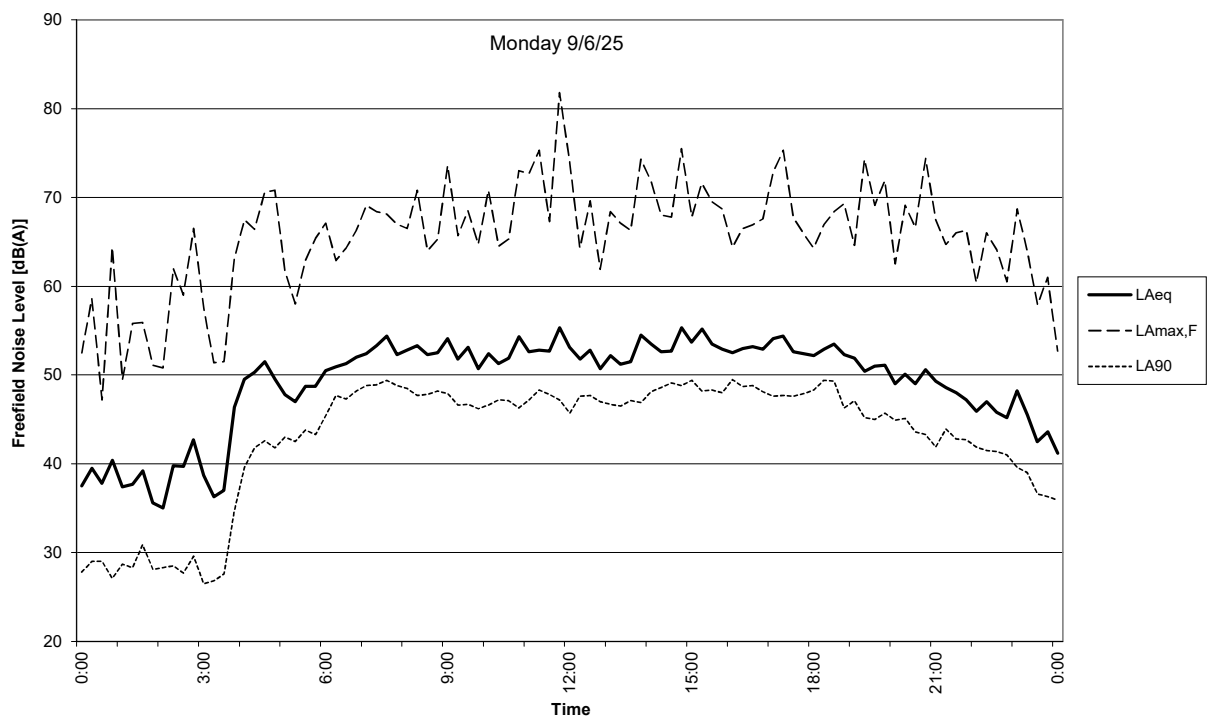
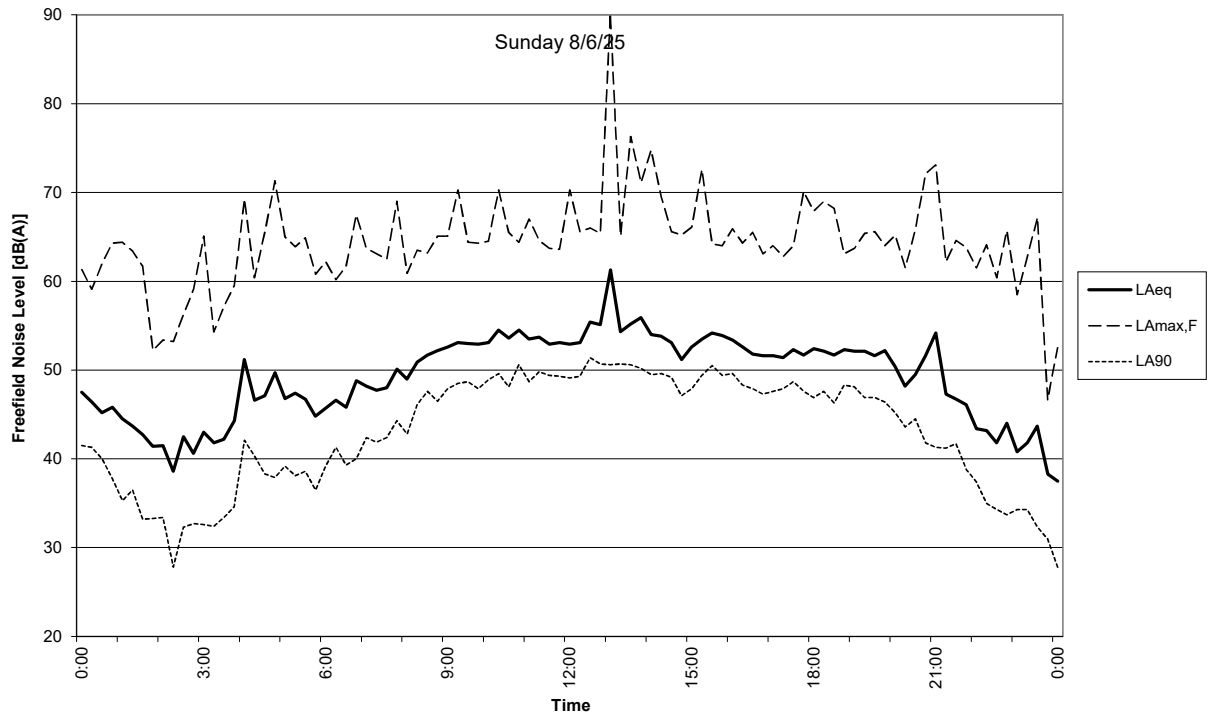


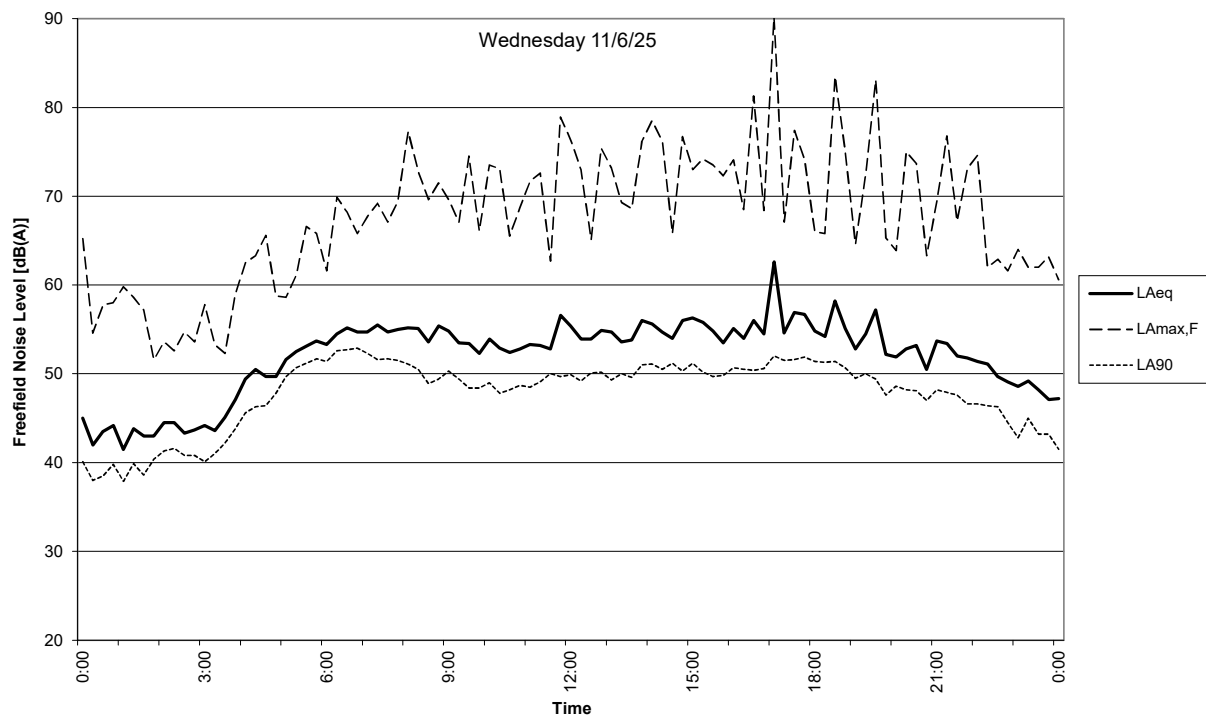
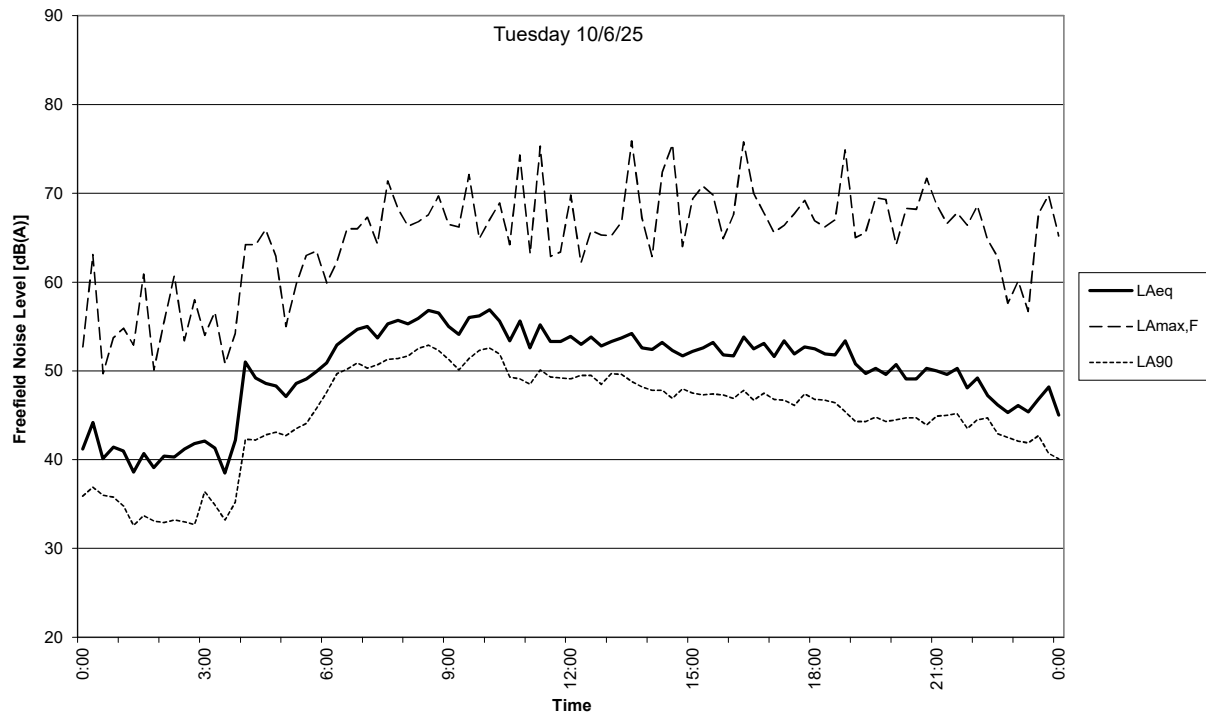
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Friday 13 June 2025

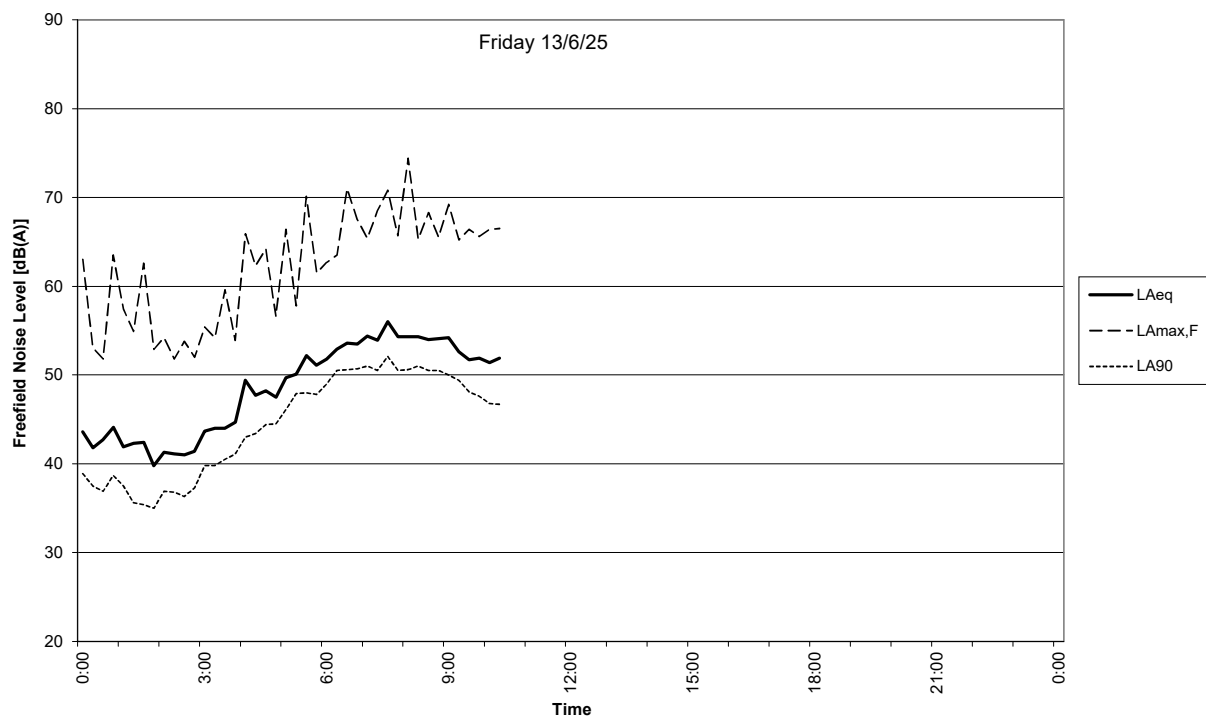
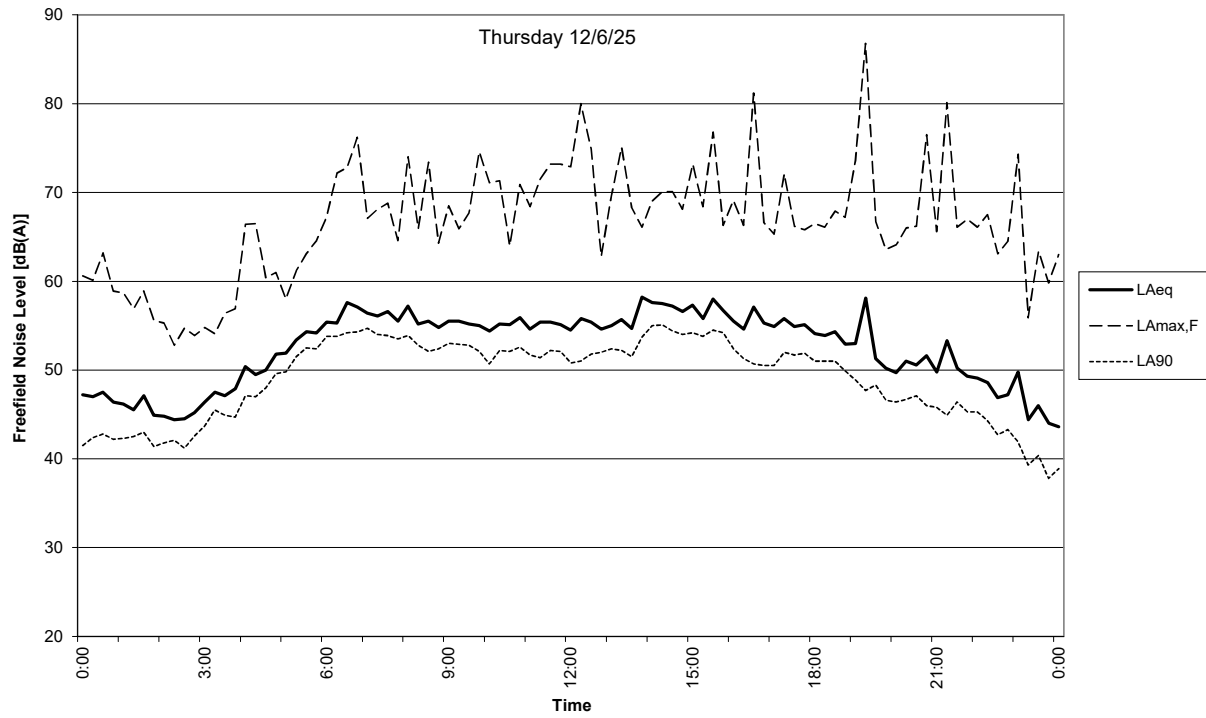


Appendix B
Results of Unattended Noise Survey









Appendix C

Calculation Details

Sandy Lane Quarry
Calculation of Noise Levels from Site Operations
Results from Soundplan Modelling

Prepared By: LPJ - 23/6/25

Phase: Stage 1 - Initial Operations - Western Landfilling and Bund Construction

Receiver	Source	Source Type	L'w dB(A)	Lw dB(A)	I or A m,m ²	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Ls dB	dLw dB	Activity		Overall L _{Aeq, 1 hr}	
													Typical	Max		
													L _{Aeq, 1 hr} dB	L _{Aeq, 1 hr} dB		
Fairfield Lodge	Crusher & Excavator	Point	109.4	109.4		216.5	-57.7	-0.6	-10.0	-0.7	40.3	0.0	40.3	40.4	Typical Maximum	45.4 51.2
	Dozer	Area	68.1	107.5	8685.7	170.4	-55.6	-1.2	-6.9	-1.3	42.4	-1.2	41.1	50.4		
	HGV / ADT Movement	Line	62.1	88.2	403.2	163.7	-55.3	-3.0	-14.7	-0.6	14.5	10.8	25.3	25.3		
	HGV Movements	Line	62.1	90.7	725.3	342.2	-61.7	-2.9	-7.3	-2.3	16.6	10.0	26.6	26.6		
	Loading Shovel	Point	101.1	101.1		218.7	-57.8	-0.3	-10.1	-0.8	32.2	0.0	32.2	32.2		
	Screen	Point	109.0	109.0		211.1	-57.5	-0.6	-10.5	-0.9	39.5	0.0	39.5	39.5		
Madeley Road (N)	Crusher & Excavator	Point	109.4	109.4		123.5	-52.8	-0.7	-6.9	-0.6	48.4	0.0	48.4	48.4	Typical Maximum	53.9 63.7
	Dozer	Area	68.1	107.5	8685.7	72.1	-48.1	-1.0	-6.5	-0.6	51.3	-1.2	50.1	63.4		
	HGV / ADT Movement	Line	62.1	88.2	403.2	75.4	-48.5	-2.6	-12.6	-0.5	23.9	10.8	34.7	34.7		
	HGV Movements	Line	62.1	90.7	725.3	277.7	-59.9	-1.9	-3.8	-2.0	23.2	10.0	33.2	33.2		
	Loading Shovel	Point	101.1	101.1		128.9	-53.2	-0.4	-7.0	-0.6	39.9	0.0	39.9	39.9		
	Screen	Point	109.0	109.0		124.6	-52.9	-0.7	-6.9	-0.7	47.8	0.0	47.8	47.8		
Madeley Road (S)	Crusher & Excavator	Point	109.4	109.4		149.9	-54.5	-0.6	-4.6	-0.8	48.8	0.0	48.8	48.8	Typical Maximum	53.7 63.8
	Dozer	Area	68.1	107.5	8685.7	87.3	-49.8	-1.0	-5.7	-0.6	50.4	-1.2	49.1	63.5		
	HGV / ADT Movement	Line	62.1	88.2	403.2	86.0	-49.7	-2.6	-11.5	-0.6	23.8	10.8	34.6	34.6		
	HGV Movements	Line	62.1	90.7	725.3	288.0	-60.2	-2.3	-3.1	-2.2	23.0	10.0	33.0	33.0		
	Loading Shovel	Point	101.1	101.1		153.5	-54.7	-0.3	-4.3	-0.8	40.9	0.0	40.9	40.9		
	Screen	Point	109.0	109.0		147.1	-54.3	-0.6	-5.2	-0.8	47.9	0.0	47.9	47.9		

Sandy Lane Quarry
Calculation of Noise Levels from Site Operations
Results from Soundplan Modelling

Prepared By: LPJ - 23/6/25

Phase: Stage 1 Operations - Western Side

Receiver	Source	Source Type	L'w dB(A)	Lw dB(A)	I or A m,m ²	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Ls dB	dLw dB	Activity		Overall L _{Aeq, 1 hr}	
													L _{Aeq, 1 hr} dB	Max L _{Aeq, 1 hr} dB		
Fairfield Lodge	Crusher & Excavator	Point	109.4	109.4		216.5	-57.7	-0.6	-13.0	-0.7	37.4	0.0	37.4	37.4	Typical Maximum	42.0 45.6
	Dozer	Area	68.4	107.5	7986.2	203.9	-57.2	-1.5	-10.0	-1.3	37.4	-1.2	36.2	43.9		
	HGV / ADT Movement	Line	62.1	87.4	339.9	197.1	-56.9	-2.1	-7.9	-1.0	19.5	10.8	30.3	30.3		
	HGV Movements	Line	62.1	90.7	725.3	341.8	-61.7	-2.9	-7.5	-2.4	16.2	10.0	26.2	26.2		
	Loading Shovel	Point	101.1	101.1		218.7	-57.8	-0.3	-13.4	-0.7	28.9	0.0	28.9	28.9		
	Screen	Point	109.0	109.0		211.1	-57.5	-0.6	-14.3	-0.9	35.8	0.0	35.8	35.8		
Madeley Road (N)	Crusher & Excavator	Point	109.4	109.4		123.5	-52.8	-0.7	-12.9	-0.4	42.6	0.0	42.6	42.6	Typical Maximum	47.9 53.1
	Dozer	Area	68.4	107.5	7986.2	99.0	-50.9	-1.2	-9.9	-0.9	44.5	-1.2	43.3	52.1		
	HGV / ADT Movement	Line	62.1	87.4	339.9	106.4	-51.5	-1.9	-7.6	-0.7	25.7	10.8	36.5	36.5		
	HGV Movements	Line	62.1	90.7	725.3	277.7	-59.9	-1.9	-6.9	-2.0	20.1	10.0	30.1	30.1		
	Loading Shovel	Point	101.1	101.1		128.9	-53.2	-0.4	-13.0	-0.4	34.1	0.0	34.1	34.1		
	Screen	Point	109.0	109.0		124.6	-52.9	-0.7	-13.5	-0.5	41.4	0.0	41.4	41.4		
Madeley Road (S)	Crusher & Excavator	Point	109.4	109.4		149.9	-54.5	-0.6	-13.2	-0.5	40.5	0.0	40.5	40.5	Typical Maximum	47.0 50.1
	Dozer	Area	68.4	107.5	7986.2	126.1	-53.0	-1.3	-9.8	-0.9	42.4	-1.2	41.2	48.1		
	HGV / ADT Movement	Line	62.1	87.4	339.9	129.1	-53.2	-1.8	-6.9	-0.6	24.9	10.8	35.7	35.7		
	HGV Movements	Line	62.1	90.7	725.3	288.4	-60.2	-2.3	-4.6	-2.4	21.1	10.0	31.1	31.1		
	Loading Shovel	Point	101.1	101.1		153.5	-54.7	-0.3	-10.6	-0.5	34.9	0.0	34.9	34.9		
	Screen	Point	109.0	109.0		147.1	-54.3	-0.6	-10.9	-0.6	42.6	0.0	42.6	42.6		

Sandy Lane Quarry
Calculation of Noise Levels from Site Operations
Results from Soundplan Modelling

Prepared By: LPJ - 23/6/25

Phase: Stage 2 Operations - Initial Operations

Receiver	Source	Source Type	L'w dB(A)	Lw dB(A)	I or A m,m ²	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Ls dB	dLw dB	Activity		Overall L _{Aeq, 1 hr}	
													Typical	Max		
													L _{Aeq, 1 hr} dB	L _{Aeq, 1 hr} dB		
Fairfield Lodge	Crusher & Excavator	Point	109.4	109.4		216.5	-57.7	-0.6	-13.0	-0.7	37.4	0.0	37.4	37.4	Typical Maximum	41.7 44.7
	Dozer	Area	69.3	107.5	6493.2	288.2	-60.2	-0.6	-7.3	-1.7	37.6	-1.2	36.4	42.7		
	HGV / ADT Movement	Line	62.1	84.5	174.0	264.0	-59.4	-1.5	-13.9	-1.0	8.7	10.8	19.5	19.5		
	HGV Movements	Line	62.1	90.7	725.3	341.8	-61.7	-2.9	-7.5	-2.4	16.3	10.0	26.3	26.3		
	Loading Shovel	Point	101.1	101.1		218.7	-57.8	-0.3	-13.4	-0.7	28.9	0.0	28.9	28.9		
	Screen	Point	109.0	109.0		211.1	-57.5	-0.6	-14.3	-0.9	35.8	0.0	35.8	35.8		
Madeley Road (N)	Crusher & Excavator	Point	109.4	109.4		123.5	-52.8	-0.7	-12.9	-0.4	42.6	0.0	42.6	42.6	Typical Maximum	46.1 50.1
	Dozer	Area	69.3	107.5	6493.2	172.4	-55.7	-0.6	-11.7	-0.8	38.6	-1.2	37.3	48.2		
	HGV / ADT Movement	Line	62.1	84.5	174.0	163.5	-55.3	-1.4	-17.0	-0.6	10.3	10.8	21.1	21.1		
	HGV Movements	Line	62.1	90.7	725.3	277.4	-59.9	-1.9	-6.9	-2.0	20.1	10.0	30.1	30.1		
	Loading Shovel	Point	101.1	101.1		128.9	-53.2	-0.4	-13.0	-0.4	34.1	0.0	34.1	34.1		
	Screen	Point	109.0	109.0		124.6	-52.9	-0.7	-13.5	-0.5	41.4	0.0	41.4	41.4		
Madeley Road (S)	Crusher & Excavator	Point	109.4	109.4		149.9	-54.5	-0.6	-13.2	-0.5	40.5	0.0	40.5	40.5	Typical Maximum	46.1 48.5
	Dozer	Area	69.3	107.5	6493.2	213.2	-57.6	-0.6	-8.4	-1.3	39.7	-1.2	38.4	45.7		
	HGV / ADT Movement	Line	62.1	84.5	174.0	194.9	-56.8	-1.4	-14.9	-0.7	10.7	10.8	21.5	21.5		
	HGV Movements	Line	62.1	90.7	725.3	288.6	-60.2	-2.3	-4.6	-2.4	21.1	10.0	31.1	31.1		
	Loading Shovel	Point	101.1	101.1		153.5	-54.7	-0.3	-10.6	-0.5	34.9	0.0	34.9	34.9		
	Screen	Point	109.0	109.0		147.1	-54.3	-0.6	-10.9	-0.6	42.6	0.0	42.6	42.6		

Sandy Lane Quarry
Calculation of Noise Levels from Site Operations
Results from Soundplan Modelling

Prepared By: LPJ - 23/6/25

Phase: Stage 2 Operations - Final Operations

Receiver	Source	Source Type	L'w dB(A)	Lw dB(A)	I or A m,m ²	S m	Adiv dB	Agr dB	Abar dB	Aatm dB	Ls dB	dLw dB	Activity		Overall L _{Aeq, 1 hr}	
													Typical	Max		
													L _{Aeq, 1 hr} dB	L _{Aeq, 1 hr} dB		
Fairfield Lodge	Crusher & Excavator	Point	109.4	109.4		213.4	-57.6	-1.7	-14.0	-0.7	35.3	0.0	35.3	35.3	Typical Maximum	45.7 50.0
	Dozer	Area	66.5	107.5	12402.8	241.0	-58.6	-0.7	-0.6	-1.9	45.6	-1.2	44.3	49.5		
	HGV / ADT Movement	Line	62.1	85.7	230.0	246.9	-58.8	-1.8	-0.9	-1.7	22.4	10.8	33.2	33.2		
	HGV Movements	Line	62.1	90.2	636.9	384.3	-62.7	-3.5	-5.4	-2.4	16.2	10.0	26.2	26.2		
	Loading Shovel	Point	101.1	101.1		210.3	-57.4	-1.4	-6.2	-1.0	35.1	0.0	35.1	35.1		
	Screen	Point	109.0	109.0		215.9	-57.7	-1.5	-17.2	-0.9	31.8	0.0	31.8	31.8		
Madeley Road (N)	Crusher & Excavator	Point	109.4	109.4		180.1	-56.1	-0.6	-19.4	-0.6	32.7	0.0	32.7	32.7	Typical Maximum	48.5 52.3
	Dozer	Area	66.5	107.5	12402.8	150.6	-54.5	-0.5	-2.0	-1.2	49.2	-1.2	47.9	52.1		
	HGV / ADT Movement	Line	62.1	85.7	230.0	161.6	-55.2	-1.4	-2.0	-1.2	26.0	10.8	36.8	36.8		
	HGV Movements	Line	62.1	90.2	636.9	343.9	-61.7	-2.3	-8.7	-2.0	15.4	10.0	25.4	25.4		
	Loading Shovel	Point	101.1	101.1		176.1	-55.9	-0.3	-12.4	-0.6	31.9	0.0	31.9	31.9		
	Screen	Point	109.0	109.0		185.2	-56.3	-0.6	-21.4	-0.9	29.7	0.0	29.7	29.7		
Madeley Road (S)	Crusher & Excavator	Point	109.4	109.4		177.3	-56.0	-1.7	-16.2	-0.5	35.0	0.0	35.0	35.0	Typical Maximum	48.5 53.2
	Dozer	Area	66.5	107.5	12402.8	174.8	-55.8	-0.5	-1.0	-1.4	48.7	-1.2	47.4	52.9		
	HGV / ADT Movement	Line	62.1	85.7	230.0	185.5	-56.4	-1.4	-1.2	-1.3	25.4	10.8	36.2	36.2		
	HGV Movements	Line	62.1	90.2	636.9	344.1	-61.7	-3.1	-3.2	-2.7	19.5	10.0	29.5	29.5		
	Loading Shovel	Point	101.1	101.1		173.4	-55.8	-1.4	-5.5	-0.9	37.5	0.0	37.5	37.5		
	Screen	Point	109.0	109.0		181.5	-56.2	-1.5	-18.8	-0.8	31.8	0.0	31.8	31.8		



Appendix 2

Inspection Checklist



Item for Visual Inspection	Aspects for Inspection	Checked Y/N	Remedial Action Required (Y/N, describe)
Weather	Absence of adverse weather conditions -wind >Beaufort scale 4 -prolonged dry and hot (20 deg) weather. (if not, what additional dust mitigation is needed for activities to continue)		
Mud and Debris	Site surfaces clear of mud		
	Public highway clear of mud		
Plant/Equipment	Pre-use checks completed		
Litter	None present in waste storage areas		
	None present in waste processing area		
	None present along site boundaries (fencing etc.)		
Odour	No odorous waste on Site		
Dust	No significant dust emissions at monitoring points.		
	No significant dust emissions are escaping the boundary of the site		
	Water supply dust suppression is adequate		
Fuel oil storage	Fuel tank checked for any sign of damage, corrosion, deterioration, incident, leakage, or spillage.		
Fugitive emissions to water	No visible contamination in runoff water i.e. no oily sheen visible.		
	No leaks from containers or the quarantine area that could cause contamination in runoff water.		

Date: _____

Completed by: _____

Signature: _____



Item for Visual Inspection	Aspects for Inspection	Checked Y/N	Remedial Action Required (Y/N, describe)
Oil storage	Storage secure (i.e. locks operational)		
	No evidence of oil storage leakage.		
	Oil storage container is free from damage, corrosion, deterioration, incident, leakage, or spillage.		
Site Security	Fencing around site perimeter in good condition – no holes etc.		
	Lock on gated entrance working and no signs of corrosion		
Site surfaces	Clear, swept and free from damage, defects, or ruts.		
Pests and vermin	No activity or damage caused by pests/vermin e.g. holes in fencing, chewed cables.		
Drainage	Drains are clear of debris, odour and are draining sufficiently.		

Date: _____

Completed by: _____

Signature: _____



Item for Visual Inspection	Aspects for Inspection	Checked Y/N	Remedial Action Required (Y/N, describe)
Impermeable surfacing	Surfaces free from cracks which may allow water to reach the ground below.		
Containers	Containers free from cracks which may result in loss of containment.		
Fuel tank	Integrity of the fuel tanks – there should be no cracks or leaks.		
Drains	Drains are free from blockages		
Electrics	Wires are not frayed / damaged.		
	Sockets are not overloaded.		
Waste storage	Waste storage containers have no holes or leakage.		
	No damage, corrosion, deterioration, of waste storage areas.		

Date: _____

Completed by: _____

Signature: _____



Item for Visual Inspection	Aspects for Inspection	Checked Y/N	Remedial Action Required (Y/N, describe)
Electrics	Electrics to be inspected and certified by a qualified electrician.		
Fire extinguishers within vehicles	Fire extinguishers are serviceable.		
All site plant:	Service completed (if required) No leaks or cracks requiring repair Full working order		

Date: _____

Completed by: _____

Signature: _____



Appendix 3

Complaint Form

**Incident / Complaints Form****V.1 October 2022**

Who made the complaint?	Name:	
	Address:	
	Phone No.:	
Date and time they made the complaint:		
What happened? What was it about?		
Was anyone else aware of this – other neighbours or your staff? If so, who?		
Did the complaint relate to your site? If so, what happened? What went wrong?		
What have you done to make sure that it does not happen again?		
Was there any significant pollution – for example: dust, odour or noise outside the site or spillage of polluting liquids onto the ground, into a drain or a watercourse?		
If there was, then you must notify the Environment Agency on 0800 807060 and any other relevant regulators. Have you done so? Yes <input type="checkbox"/> No <input type="checkbox"/>		At what time did you phone?
You must also write or send an email to confirm this to your local Environment Agency office. Have you done so? Yes <input type="checkbox"/> No <input type="checkbox"/>		What date did you contact?
Please print and sign your name:		