

**NOISE ASSESSMENT**

**PROPOSED WASTE TRANSFER BUILDING  
BLAISE FARM QUARRY, WEST MALLING**

**ENVAR COMPOSTING LTD**

**OCTOBER 2025**

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Revision	Prepared By	Date
1.0	L Jephson BEng (Hons) MIOA	29/10/25

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## 1. Introduction

LF Acoustics Ltd have been appointed by EnVar Composting Ltd to carry out an assessment of the noise levels attributable to a proposed waste transfer building at their facility located within Blaise Farm Quarry, West Malling.

The site has been operational for a number of years. At present, the site provides a composting facility housed within three main buildings located at the base of the quarry.

The Company are proposing to construct a new waste transfer building to be located within the north-western corner of their site, adjacent to the main composting buildings, with the new building allowing a throughput of up to 50,000 tonnes per annum.

The main changes in relation to noise associated with the EnVar operations would be associated with the noise generated from the waste transfer building and a small increase in vehicle movements, associated with the increased capacity.

The following section of this report presents an overview of the relevant standards and guidelines applicable when assessing noise from this type of facility. Section 3 provides a description of the site, its surroundings and the proposed operation. A baseline noise assessment is provided within Section 4, with details of the calculation and assessment of noise levels associated with the operation of the facility provided in Section 5. A summary of the control measures adopted on site to control noise are presented in Section 6. Finally, Section 7 provides a summary of the assessment.

## 2. Standards and Guidelines

A description of the noise units referred to in this report is provided in Appendix A.

### 2.1. National Planning Policy Framework

The National Planning Policy Framework (NPPF) revised in December 2024 [1], sets out the Government's planning policies for England and how these should be applied. It provides a framework upon which locally prepared plans for housing and other development can be produced.

The purpose of the planning system is to contribute to the achievement of sustainable development and at the heart of the Framework is a presumption in favour of sustainable development.

With regards noise, local planning policies and decisions should contribute to and enhance the natural and local environment by:

- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels noise pollution.
- mitigate and reduce to a minimum, potential adverse impacts resulting from noise from new development (including cumulative effects) – and avoid noise giving rise to significant adverse impacts on health and the quality of life;
- identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

Reference is made within the NPPF to the Noise Policy Statement for England [2] (NPSE), which sets out the long term vision of the Government noise policy. Further information has been provided on the assessment of noise within Planning Practice Guidance, updated in July 2019 and available on the Government planning web site. Whilst this guidance does not provide any objective criteria upon which to base noise assessments, the guidance provides a description of the relevant Effects Levels identified within the NPPF and NPSE and this is reproduced in Table 2.1.

Perception	Examples of Outcomes	Increasing Effect Level	Action
<b>Not noticeable</b>	No Effect	No Observed Effect (NOEL)	No specific measures required
<b>Noticeable and not intrusive</b>	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 Observed Adverse Effect Level (LOAEL)	
<b>Noticeable and intrusive</b>	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)	
<b>Noticeable and disruptive</b>	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
<b>Noticeable and very disruptive</b>	Extensive 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 2.1 Significance Criteria**

## 2.2. 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 the estimated noise levels from the proposed development are compared to the representative / typical background noise level from existing uses.

BS 4142 relates the likelihood of adverse impact to the difference between the Rating Level of the noise being assessed and the background noise level.

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.

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.

During the daytime, the specified noise levels are determined over a reference time interval of 1 hour.

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.

The assessment method outlined above is intended for the assessment of external noise levels and is not intended to assess the extent of impact at internal locations.

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.

### 3. Current and Proposed Operations

The current site location and its surroundings are indicated on Figure 1.

#### 3.1. Noise Sensitive Receptors

There are no noise sensitive properties in close proximity to the EnVar operational area within Blaise Quarry.

The closest noise sensitive receptor is the wedding venue at Kentfield Country Estate, located approximately 230 metres to the north of the EnVar site.

The closest residential properties are Kentfield Farm, located approximately 500 metres to the north-west, Ashtree Farm to the north-east, approximately 570 metres from the site, and properties in St Leonards Street, which are over 700 metres from the site.

As EnVar operate at the base of the quarry, which is 18 metres below the surrounding ground levels, the neighbouring properties are effectively screened from the site by the old quarry faces.

The location of the noise sensitive receptors is shown on Figure 1.

#### 3.2. Current Planning Permission

Planning permission for the composting facility was originally granted in 2006 (Application Ref. TM/06/762).

There have since been several amendments to the planning permissions on site, with the latest permission granted in 2014 (Application Ref. TM/14/532). In 2021 a Section 73 application (20/02784/WAS, KCC/TM/0259/2020) was granted which allowed non-compliance with conditions 2 and 13 of this permission to enable the operation of the composting facility to its approved capacity for the same duration as the adjacent anaerobic digestion facility.

In relation to noise, conditions were imposed, restricting hours of operation, HGV movements and noise limits, as follows:

**Hours of Operation**

15. Unless otherwise approved beforehand in writing by the Waste Planning Authority, operations at the site shall only take place at the following times:-

Day	Activity			
	Deliveries <sup>1</sup>	Exports <sup>2</sup>	Operations <sup>3</sup>	Turning <sup>4</sup>
Monday to Friday	0700 to 1800	0700 to 1800	0700 to 1800	0700 to 1800
Saturdays (April to June inclusive and any Saturday following a Bank or Public Holiday)	0700 to 1730	0700 to 1300	0700 to 1300	0700 to 1800
Saturdays (July to March inclusive)	0700 to 1300	0700 to 1300	0700 to 1300	0700 to 1800
Sundays	None	None	None	0700 to 1800
Bank and Public Holidays	0700 to 1730	None	None	0700 to 1800
25, 26 December and 1 January	None	None	None	0700 to 1800

*Activity definitions for purposes of condition:*

<sup>1</sup> Waste deliveries to the site.

<sup>2</sup> Export of compost, contaminated materials and foul water from the site.

<sup>3</sup> Operations employing plant and vehicles for handling and screening compost on site.

<sup>4</sup> Windrow turning to maintain aerobic conditions and time temperature profiles required under the Animal By-Product Regulations 2004 (or any Regulations that may supersede these).

**Access and Routing**

16. No more than 82 HGV movements (41 in and 41 out) engaged in the delivery of waste to the site and the export of compost, contaminated materials and foul water from the site shall take place on any one day. On those Saturdays when the facility is open from 0700 to 1300 hours, this daily limit shall be reduced to 42 vehicle movements (21 in and 21 out).

*Reason: In the interests of highway safety and safeguarding the local environment and to accord with the aims of Kent Waste Local Plan Policy W22.*

17. No more than 9 HGV movements engaged in the delivery of waste to the site and the export of compost, contaminated materials and foul water from the site shall enter from, or leave the site to, the south on the A228 during each of the peak hours of 08.00 to 09.00 and 16.30 to 17.30.

*Reason: In the interests of highway safety and safeguarding the local environment and to accord with the aims of Kent Waste Local Plan Policy W22.*

### Noise, Odour and Dust

23. At no time during the operation of the composting facility hereby permitted shall the noise rating level  $L_{A,r,T}$ , calculated in accordance with the method provided in BS4142:1997, attributable to the operation of all fixed and mobile plant and machinery installed or otherwise used at the premises exceed the background noise level  $L_{A90,T}$  at any noise sensitive property.

*Reason: To ensure minimum disturbance from operations and avoidance of nuisance to the local community and to accord with the objectives of Kent Waste Local Plan Policy W18.*

24. For temporary operations, such as soil and overburden movement and placement associated with final restoration of the site, the noise level at any noise sensitive property shall not exceed  $70\text{dB}_{L_{Aeq,1hr}}$ . Temporary operations that exceed the normal day to day criterion shall be limited to a total of eight weeks in any twelve month period at any noise sensitive property.

*Reason: To ensure minimum disturbance from operations and avoidance of nuisance to the local community and to accord with the objectives of Kent Waste Local Plan Policy W18.*

25. The operator shall employ, amongst others, the suppression measures described in paragraphs 7.1 to 7.7 (inclusive) of the Supporting Statement dated March 2006 which accompanied planning application TM/06/762 to ensure that nuisance from noise, dust and fumes is not created as a result of operations at the site.

*Reasons: To safeguard the amenity of adjoining residents and landowners and to accord with the objectives of Kent Waste Local Plan Policy W18.*

There would be no changes to operational hours for the presently permitted operations should planning permission for the replacement waste transfer building be granted.

With regards to noise, BS 4142 was last updated in 2019. To minimise any potential for adverse noise impacts, it is proposed that the future operation of the site, including the operation of the waste transfer station, would continue to operate to ensure that the rating level of noise does not exceed the prevailing noise levels at surrounding noise sensitive properties when assessed in accordance with the current revision of BS 4142. We would advise, that if the condition were to be reimposed, it is amended to reflect the current revision to the Standard.

### 3.3. Present Site Operations

The current site layout is indicated on Figure 2.

At present, material is delivered to site by HGVs that tip within the reception building. A shredder operates within this building, with the materials handled by a loading shovel. The doors to this building are generally open during operational hours. Noise from the operation of this building was noted to be the main source of noise along the site boundaries.

The shredded material is then transferred internally to the two maturation buildings using loading shovels, with minimal activity carried out externally.

Loading shovels operate within the maturation buildings, with the easternmost building housing an electric screen that is used to process the final compost prior to loading out.

The loading out of finished compost is carried out between the two buildings, loading the material onto HGVs.

External noise levels adjacent to the two maturation buildings are low.

There are regular HGV movements within the site throughout the day.

#### 3.4. Proposed Site Operations

The proposed site layout is indicated on Figure 2.

It is proposed to construct a new waste transfer building within the north-western corner of the site.

The new building would be clad with steel profile cladding. There would be two doorways within the southern façade to allow vehicle movements into and out of the building. The doors would remain open whilst operational, with the assessment based upon them fully open. The main source of noise breakout from the building would be through the open doorways.

Internally, an excavator would operate, with the materials sorted by hand. There would also be an electric shredder and bailer operating within the building on occasion.

There would be a requirement for a small increase in the number of HGVs accessing the site once the waste transfer building was operational with up to 26, plus additional vehicle movements per day comprising a mix of HGVs and smaller vehicles.

#### 4. Baseline Noise Assessment

To evaluate the baseline noise conditions within the surrounding area, an unattended noise survey was carried out between Thursday 9 and Wednesday 15 October 2025.

A Rion NL-52 Class 1 Sound level Meter was used for the survey. The microphone was fitted with Rion WS-15 Outdoor Microphone Protection, which maintains Class 1 performance. The instrument was field calibrated before and after the exercise using a Rion NC-74 Class 1, reading 94.0 dB on both occasions. Both instruments had been laboratory calibrated within the past 12 / 24 months in accordance with national standards. A summary of the calibration dates is provided below (full calibration certificates can be provided on request).

Instrument	Serial No.	Calibration Date	Laboratory / Certificate No.
Rion NL-52 Class 1 SLM	01021287	22/4/25	AcSoft – 1511971-4
Rion NC-74 Class 1 Acoustic Calibrator	35125830	1/10/25	AcSoft – 1513568-5

**Table 4.1 Calibration Details**

The monitoring equipment was located to the north of the site, along the boundary with the wedding venue, as indicated on Figure 1. The microphone was set at a height of 1.5 metres above the ground and in free-field conditions.

The instrument was configured to record over 15-minute periods during the survey, in accordance with the requirements of BS 4142.

Weather conditions during monitored during the survey period and were suitable for undertaking an environmental noise survey. The weather conditions are summarised below.

Date		Conditions	Wind Strength [m/s]	Wind Direction
Thursday	9/10/25	Fine & Dry	0 – 1 m/s	W
Friday	10/10/25	Fine & Dry	Calm	-
Saturday	11/10/25	Fine & Dry	Calm	-
Sunday	12/10/25	Fine & Dry	0 – 1 m/s	NE
Monday	13/10/25	Fine & Dry	1 – 2 m/s	NE
Tuesday	14/10/25	Fine & Dry	0 – 1 m/s	NE
Wednesday	15/10/25	Fine & Dry	0 – 1 m/s	NE

**Table 4.2 Summary of Weather Conditions**

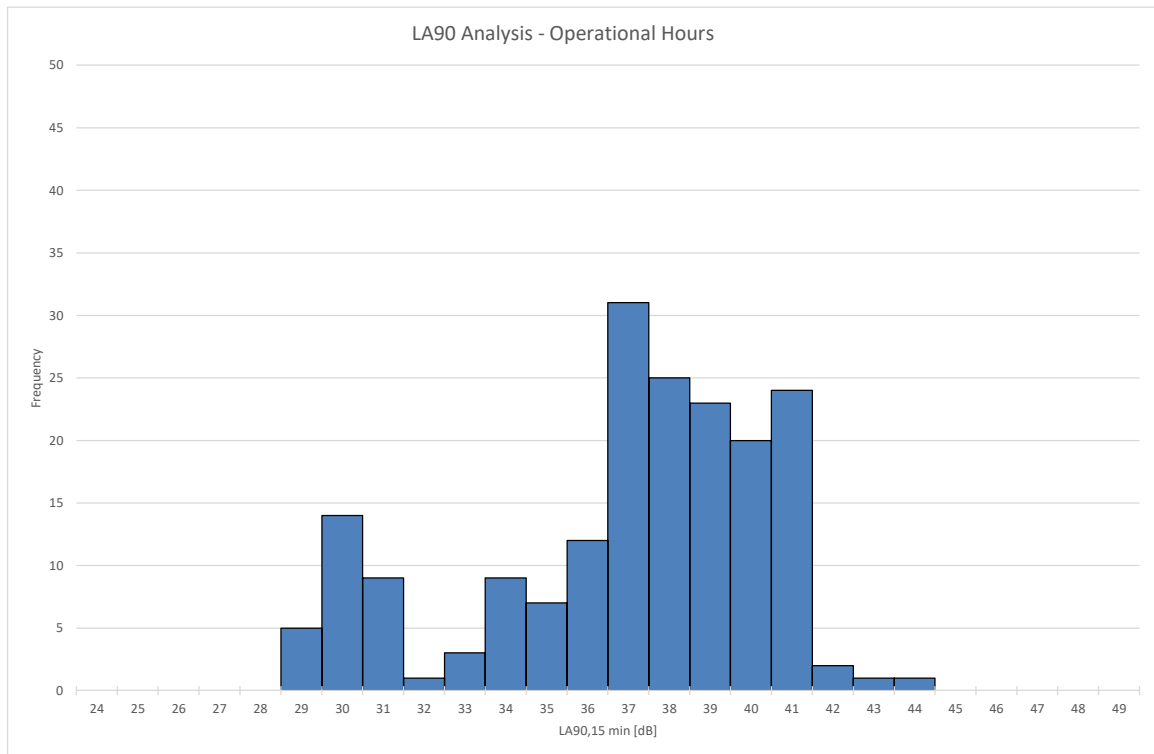
The results of the noise monitoring are presented within Appendix B.

Noise attributable to the operation of the EnVar composting facility was not audible at the monitoring position throughout the survey period.

Generally, during the daytime periods, noise levels were noted to be associated with distant road traffic, with operations within the main quarry audible at times.

Given that the present site operations did not influence the measured noise levels, the background noise levels monitored were considered to be representative of the general noise environment.

Based upon an evaluation of the operational periods for the site, the typical background noise levels were as follows:



The above data indicates that the typical background noise levels during the site operational hours, along the northern site boundary, which is representative of the properties and wedding venue to the north, are 37 dB  $L_{A90}$ .

## 5. Calculation and Assessment of Noise from the Operation of the Site

### 5.1. Plant and Equipment

To enable an assessment of the noise levels attributable to the current site operations and those proposed with the waste transfer station operational, noise levels have been obtained adjacent to the composting buildings and associated with loading operations.

The composting buildings are constructed using double-skinned insulated panels, thus provide a good amount of sound reduction between outside and in. As indicated previously, the majority of the operations are carried out within the buildings, with generally only loading operations and HGV movements externally.

There was minimal activity within the maturation buildings at the time of the survey. Based upon the plant which operates within those buildings, noise levels are low and a level of 75 dB  $L_{Aeq}$  has been assumed, based upon monitoring and experience of similar sites.

To facilitate an assessment of the noise levels associated with the operation of the waste transfer station, noise levels have been obtained within a similar building, where a small excavator and loading shovel were operating with vehicles tipping materials, which was representative of the anticipated noise levels within the proposed waste transfer building.

The measured noise levels have been converted into equivalent Sound Power Levels (SWL) for use within the modelling software. The source term noise levels utilised within this assessment are as follows.

Plant	Octave Band Noise Level [dB $L_{eq,T}$ / SWL]							Overall Noise Level
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	
Shredding Operations within Reception Building ( $L_{eq}$ )	98	94	83	77	77	68	53	82.5 dB $L_{Aeq,T}$
Typical Operations within Composting Buildings ( $L_{eq}$ )	91	86	75	69	70	61	45	75.0 dB $L_{Aeq,T}$
Noise Level Within Waste Transfer Building ( $L_{eq}$ )	78	81	80	74	64	57	49	80.7 dB $L_{Aeq,T}$
HGV Movements (SWL)	102	105	101	96	97	93	89	101.3 dB(A) SWL
Loading Operations External (complete loading operation) (SWL)	88	86	83	82	79	76	74	84.7 dB(A) SWL

**Table 5.1 Source Term Noise Levels**

### 5.2. Calculation of Noise Levels

Calculations of the noise levels at the surrounding properties have been made using the SoundPlan computer modelling package, which implements the calculation methodology from ISO 9613-2 [4]. The calculations have taken account of the land formation around the site and surrounding area, based upon LiDAR mapping data.

To provide an indication of the present noise levels at the surrounding properties attributable to the presently permitted operations, an initial model has been prepared based upon the plant presently operating on the site.

A second model has been prepared based upon the operation of the new waste transfer station building and including the current operations, to provide a worst-case cumulative assessment.

The modelling has assumed all plant operational over an assessment period of 1 hour, in accordance with BS 4142.

The current scenario has assumed 12 vehicle movements per hour associated with the composting operations. With regards the operation of the waste transfer station, 6 vehicle movements per hour have been assumed to provide worst-case conditions.

The noise modelling results for the existing scenario are presented on Figure 3. Figure 4 presents the corresponding noise levels for the future operations with the new waste transfer building.

The calculated noise levels at the closest properties are summarised in Table 5.2 below.

Location	Calculated Noise Levels [dB LAeq,1 hr]	
	Present Operations	Future Operations
Kentfield Farm	25.7	27.7
Kentfield Country Estate	28.8	30.5
Ashtree Farm	25.8	27.7
St Leonards Street	22.0	26.9

**Table 5.2 Noise Levels Generated by Current and Proposed Operation of the Site**

### 5.3. Assessment

The noise modelling results indicate very low levels of noise at the neighbouring noise sensitive properties. This is consistent with the observations made during the noise monitoring exercise, which concluded that the site operations were not audible beyond the site boundary, as the site is effectively screened by the quarry faces.

The modelling results indicate that the noise levels with the MRF operational would increase slightly, however, the overall noise levels would remain very low.

An assessment of the future operational noise levels, taking account of noise from the presently permitted operations and the proposed MRF has been made at Kentfield Country Estate, where the highest noise levels were predicted. In ensuring an acceptable noise environment at this location will also ensure acceptable noise levels at other surrounding properties.

The initial BS 4142 assessment is provided in the table below.

Description	Site Noise Level [dB]	
	Existing Operations	Proposed Operations
Calculated Noise Level at Dwelling [dB L <sub>Aeq, T</sub> ]	29	31
Acoustic Feature Correction	3	3
Rating Level [dB L <sub>Aeq, 1 hour</sub> ]	32	34
Background Level [dB L <sub>A90</sub> ]	37	37
Excess Over Background	-5	-3
Likelihood of Impact	Indication of Low Impact	Indication of Low Impact

**Table 5.3 Initial BS 4142 Assessment – Kentfield Country Estate**

The initial assessment of the noise levels attributable to the proposed operations at this location indicates that the noise levels attributable to the future operation of the site would remain below the prevailing background noise levels.

The initial BS 4142 assessment above, which takes account of the potential character of the noise in deriving the rating level, indicates a low potential for adverse impact.

The overall noise levels would remain very low, considerably below the general ambient noise level in the area and would thus remain below a level which would be audible at the properties.

More importantly, the assessment above demonstrates that the overall noise levels with the MRF operational would not result in noise levels above the prevailing background noise levels, thus complying with the current requirements of Condition 23.

Measures would continue to be adopted on site to ensure noise levels were minimised, as required in Condition 24. The general measures adopted on site are summarised in the following Section.

## 6. Noise Control Measures

Measures are presently adopted on site to ensure noise levels are minimised. These measures would continue once the MRF was operational.

The general noise control measures are summarised below.

- Controls on operational hours, with plant operating on site during daytime periods only;
- Ensuring the majority of the site operations are undertaken within the buildings;
- Best Available Techniques (BAT) are used to minimise noise;
- Handling material carefully to minimise noise;
- Site speed limits to minimise noise from HGV movements;
- Minimising the requirement for HGVs to reverse outside.

## 7. Summary

LF Acoustics Ltd have been appointed by EnVar Composting Ltd to carry out an assessment of the noise levels attributable to a proposed waste transfer building at their facility located within Blaise Farm Quarry, West Malling.

The site has been operational for a number of years. At present, the site provides a composting facility housed within three main buildings located at the base of the quarry.

The Company are proposing to construct a new waste transfer building, to be located within the north-western corner of their site, adjacent to the main composting buildings, with the new building allowing a throughput of up to 50,000 tonnes per annum.

Noise levels attributable to the present operations at surrounding noise sensitive properties are very low as the facility is located at the base of the quarry and effectively screened by the quarry faces.

Calculations and an assessment of the noise levels generated by the operation of the presently permitted and proposed operations have been made at the surrounding noise sensitive properties.

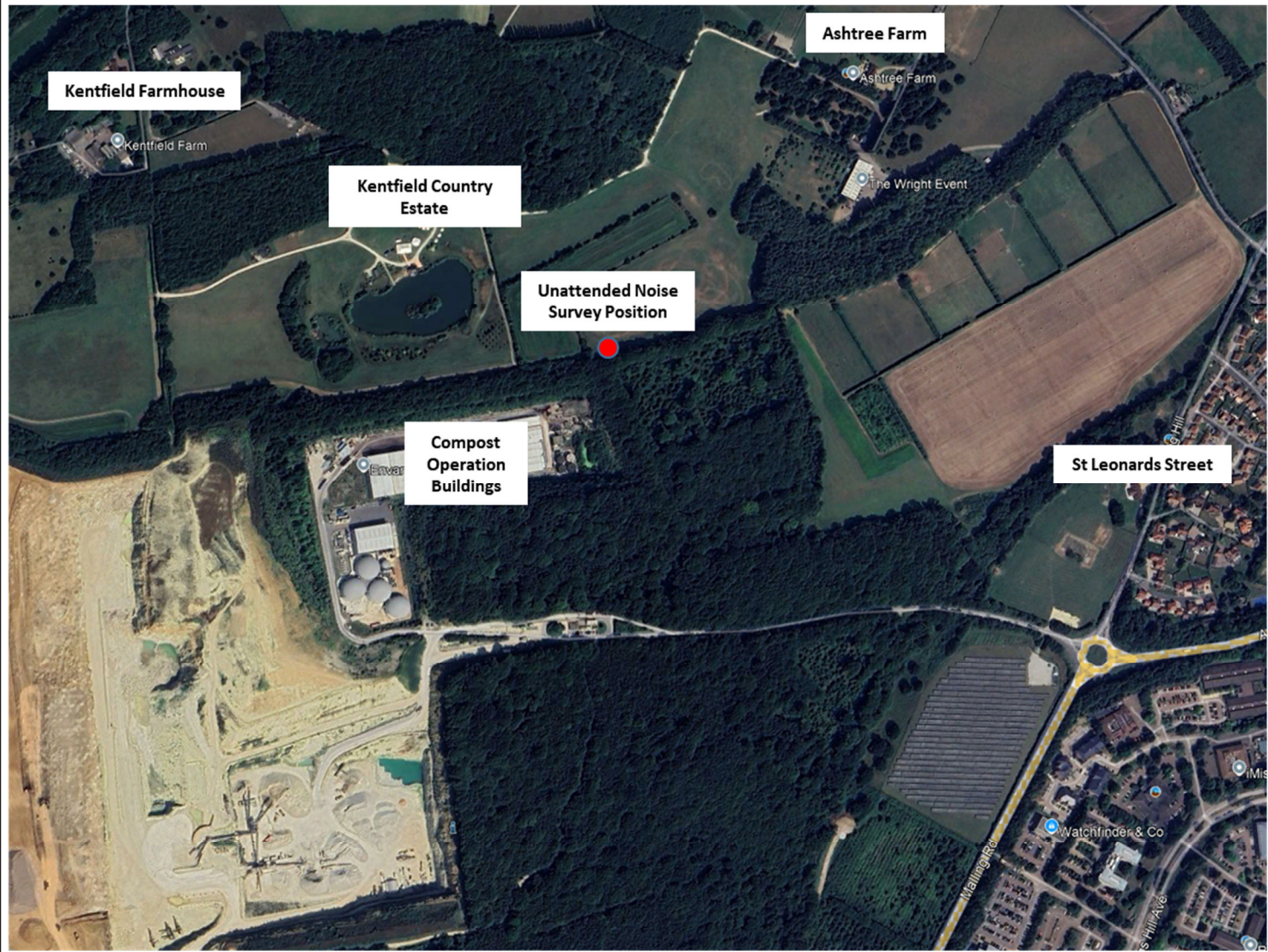
No changes to the operational hours of the site are proposed, nor to any conditions presently imposed in relation to noise.

The assessment concluded that, whilst there would be a small increase in noise levels attributable to the operation of the waste transfer station, the overall noise levels would remain very low and below the prevailing background noise levels. The future operational noise levels would therefore remain within the noise limits specified in Condition 23 of the extant planning permission, thereby ensuring that the future noise levels remained acceptable.

## References

1. Ministry of Housing, Communities and Local Government. National Planning Policy Framework. December 2024.
2. Department for Communities and Local Government. Noise Policy Statement for England. 2010.
3. British Standards Institute. Methods for Rating and Assessing Industrial and Commercial Sound. BS 4142:2014 +A1:2019.
4. 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.

## Figures



● Unattended Noise Survey Position

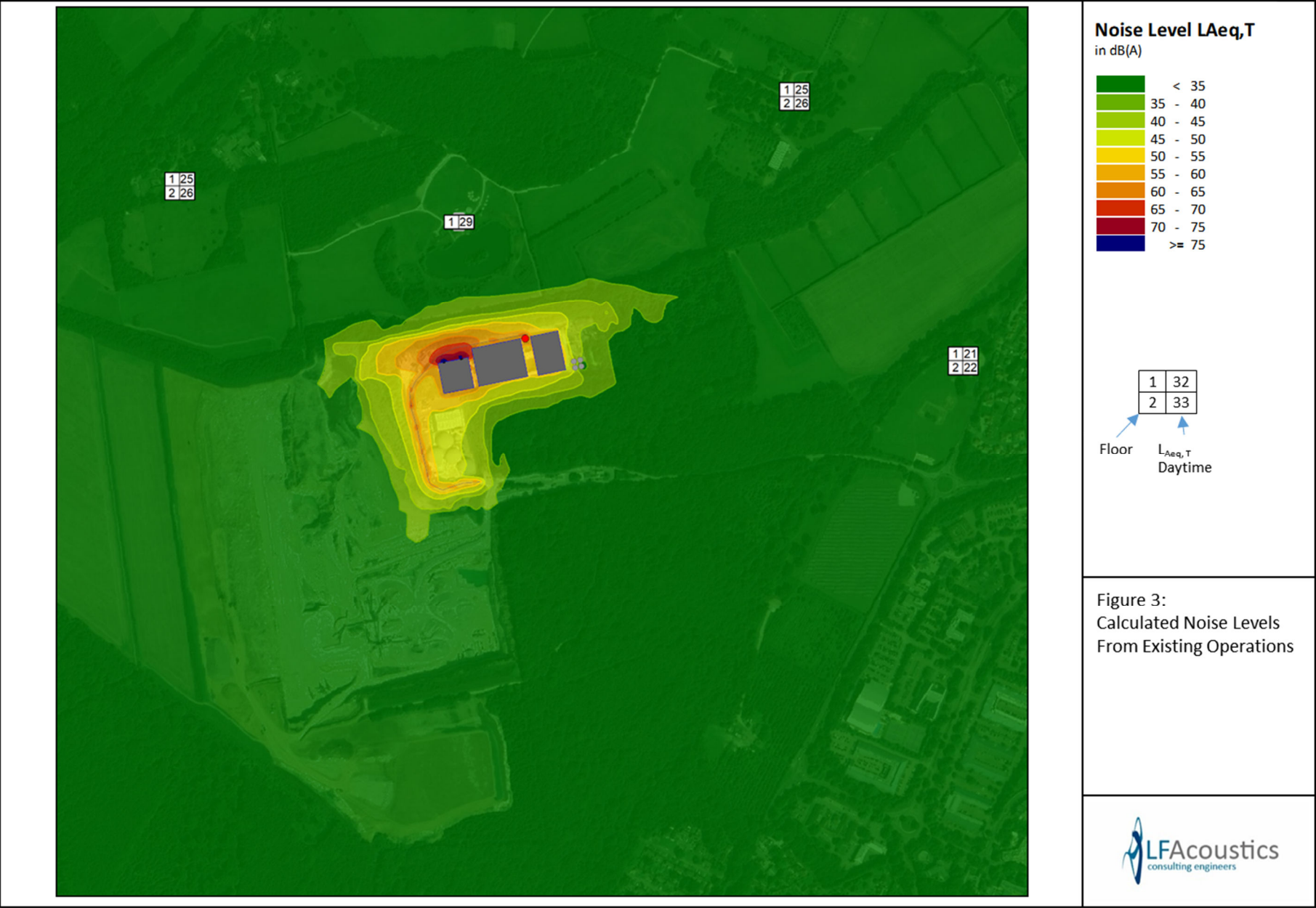
Figure 1:  
Site Location Showing  
Noise Monitoring  
Position





Figure 2:  
Location of Proposed  
Waste Transfer Building





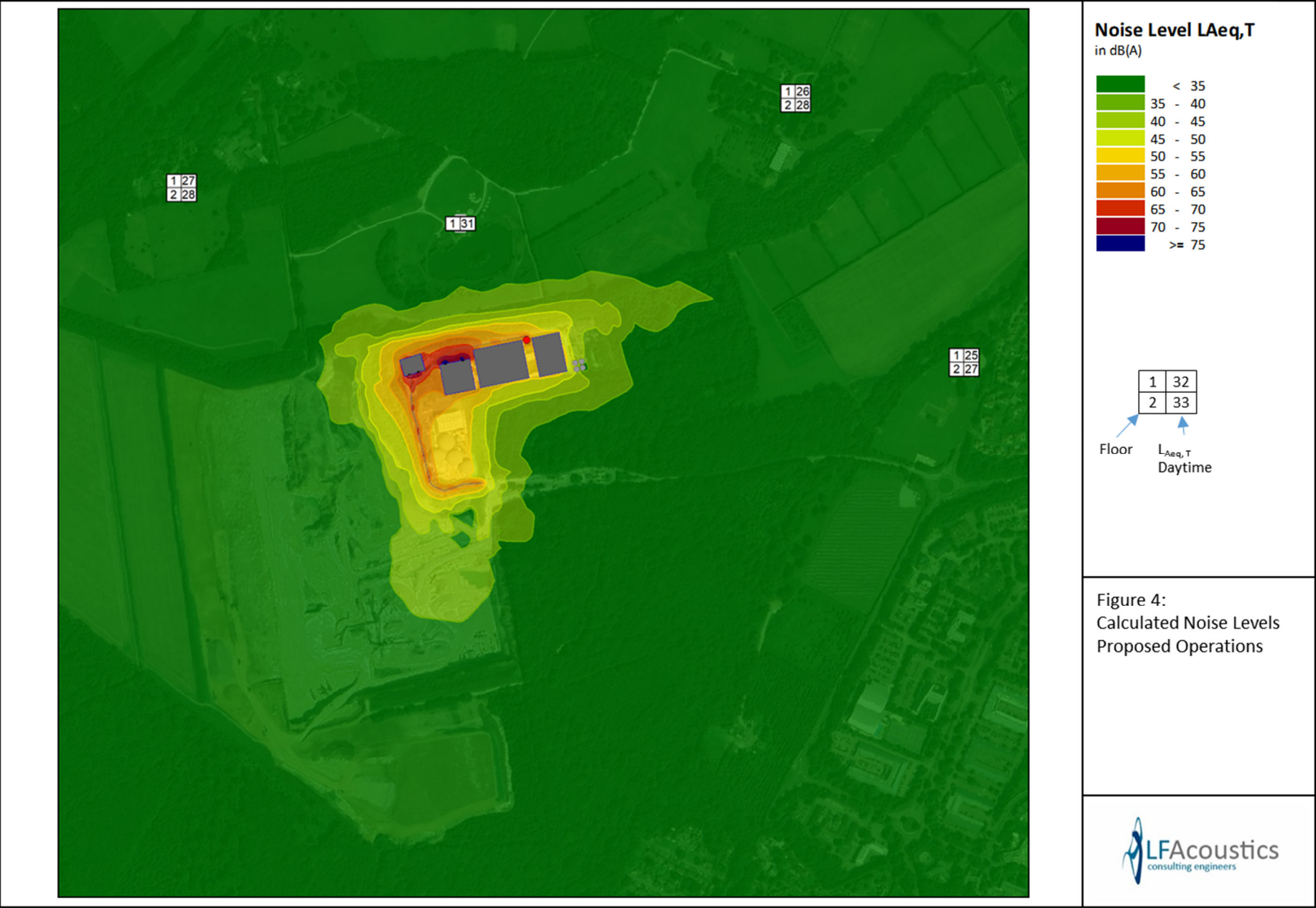


Figure 4:  
Calculated Noise Levels  
Proposed Operations



## Appendix A Noise Units

### *Decibels (dB)*

Noise can be defined 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 and a 10 dB change is generally accepted as leading to the subjective impression of a doubling or halving of loudness. A 5 dB change is generally considered to be clearly discernible.

### *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 which has a frequency response similar to the human auditory system.

### *Units Used to Describe Noises Which Change Their Level with Time*

The Equivalent Continuous A-Weighted Sound Pressure Level ( $L_{Aeq,T}$ ) is the principal measurement index for environmental noise. 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  $L_{A90}$  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 which is present even during the quieter parts of the measurement period.

The  $L_{Amax}$  is the single 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. The measured  $L_{Amax}$  noise levels in this assessment are Fast.

**Appendix B**  
**Unattended Noise Monitoring Results**

