

Environmental Noise Assessment Report

**To Provide a Noise Assessment to Support a Planning Application
to Provide a Timber Pergola and Fixed Customer External
Seating at The Queens, Bradley Fold, Radcliffe,
Lancashire, BL2 6RA**

Date of Report: February 2026

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NOISE SURVEY REPORT/DTL/February 2026
DANIEL THWAITES LTD
THE QUEENS, BRADLEY FOLD, RADCLIFFE, LANCASHIRE
TO SUPPORT A PLANNING APPLICATION TO PROVIDE A TIMBER PERGOLA
AND FIXED CUSTOMER EXTERNAL SEATING AT.

1.0 INTRODUCTION

- 1.1 Instruction: To provide a noise assessment and evaluation with to support a planning application to provide a timber Pergola and fixed customer external seating at The Queens, Bradley Fold, Radcliffe, Lancashire.
- 1.2 Client: Daniel Thwaites Ltd
- 1.3 Survey Location: The Queens, Bradley Fold, Radcliffe, Lancashire BL2 6RA.
- 1.4 Survey Date 17 February 2026 - environmental background noise monitoring.
- 1.5 Survey Times: 1700 hours to 2230 hours
- 1.6 Weather Conditions: Cloudy skies, no wind and dry.
- 1.7 Instrumentation: CEL 633 C1 Precision Sound Analyser Type 1
CEL 284/2 Acoustic Calibrator Type 1
(Calibration Status: Current Certification from July 2025)
- 1.8 Report Date: 24 February 2026
- 1.9 Consultant: R B Parker, MIOA, MCIEH
P E Gunter MIOA

2.0 BACKGROUND INFORMATION AND LOCATION DETAILS

2.1 Background

- 2.2 Danial Thwaites Ltd has applied for planning permission to install an external Pergola and provide changes to fixed external customer seating in that area at the Queens, Radcliffe. To assess the proposals and in particular the impact of sound from customer speech levels (as defined by the World Health Organisation) the Company has instructed an acoustic report to review this matter.

2.3 Building and Location Details

- 2.4 The Queens premises is a traditional detached 2 storey building with a part single storey rear extension. On the southern aspect there is an access road leading to the Pub car parking area. The raised customer external seating area is located on the north east side of the Pub. The licensed area of the Queens is the ground floor of the building with the first floor being staff accommodation.

2.5 Nearest Residential Properties

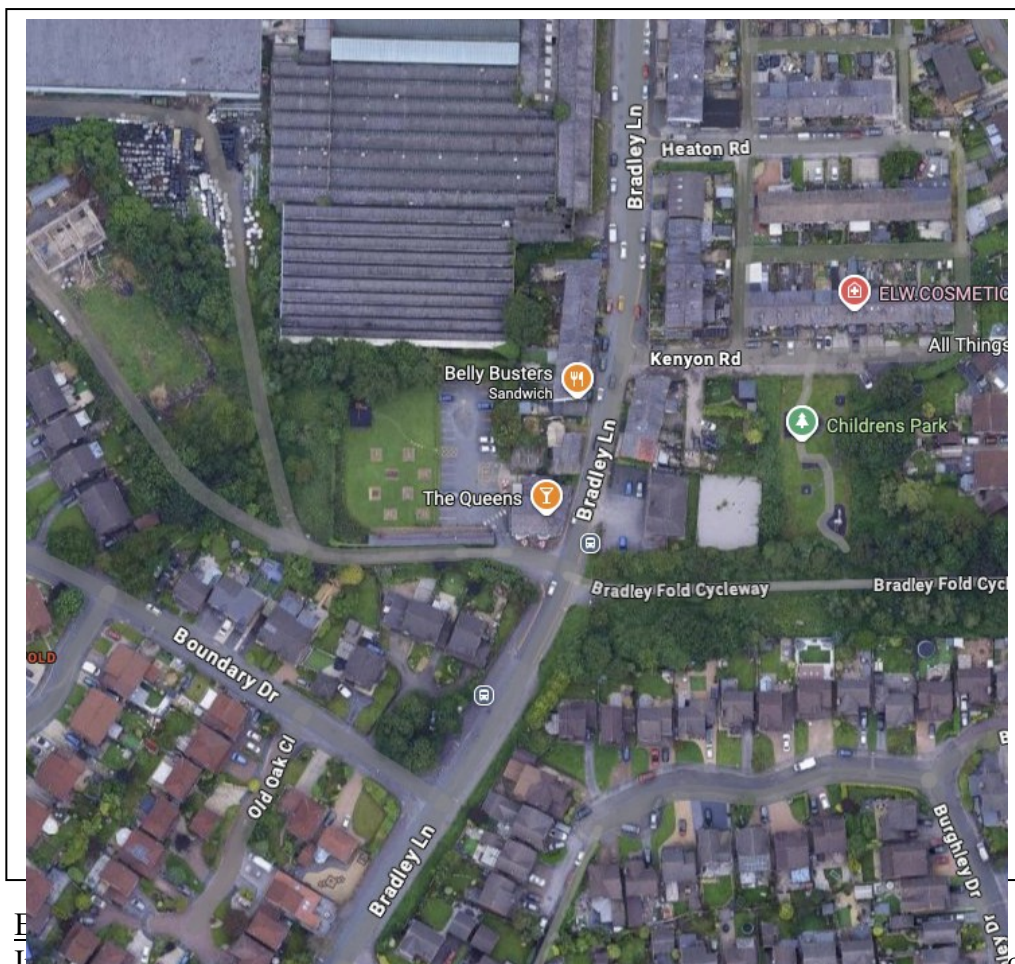
2.6 The nearest residential properties are:

- i) No 100 Bradley Lane – 2 storey end of terrace residential property to the north of the Pub being east of the raised seating area. The property is about 4 metres from the external seating area.
- ii) Nos 98-84 Bradley Lane – 2 storey terraced residential properties to the north of the Pub. The properties are about 10 metres from the external seating area.
- iii) No 2-12 Boundary Drive – 2 storey residential properties to the south side of the premises. The properties are about 20 metres from the external seating area.

2.7 Opening Hours

Monday to Thursday	1200 hours to 2300 hours
Friday and Saturday	1200 hours to 0100 hours
Sunday	1200 hours to 2300 hours

2.8 Google Location Map



3.0

3.1 In order to provide a background noise level from which to base assessments can be made, background noise readings were carried out at in the external customer seating area, on the north side of premises. This position was selected to as representative of the situation. These readings are in the table below and are used in the upcoming assessment tables.



- 3.2 In this case environmental measurements were made in accordance with BS7445:2003 Parts 1-3. The microphone was positioned 1.2 metres above ground level at the proposed monitoring positions as in para 3.1 above.
- 3.3 Measurements made have been assessed and rated under the guidance in the procedures in British Standard 4142:2014 +A1:2019- Method for rating industrial noise affecting mixed residential and industrial areas. This standard is extensively used to assess the impact of noise from commercial/industrial activity upon residential properties.
- 3.4 Measurement periods of 15 minutes are used during the survey to ensure these periods are considered an adequate range of measurements to be taken. Calibration of instrumentation was carried out at the beginning and end of each monitoring period, in accordance with good practice.

4.0 ENVIRONMENTAL NOISE MONITORING RESULTS

4.1 Environmental Background Noise Monitoring – 17 February 2026

Monitoring Position – mid point in car parking area	dB ref 2 x 10 ⁻⁵ Pascalls				
	L _{Aeq}	L _{A90}	L _{AMax}	L _{AMin}	L _{A10}
17/02/2026 17:57	48.9 dB	44.0 dB	65.3 dB	39.3 dB	51.5 dB
17/02/2026 18:12	47.7 dB	42.0 dB	69.9 dB	38.7 dB	50.0 dB
17/02/2026 18:27	46.2 dB	43.0 dB	55.0 dB	39.3 dB	48.5 dB
17/02/2026 18:32	48.8 dB	42.0 dB	74.1 dB	38.9 dB	49.5 dB
17/02/2026 18:47	50.6 dB	41.0 dB	73.0 dB	37.2 dB	51.5 dB
17/02/2026 19:02	53.2 dB	41.5 dB	80.1 dB	39.2 dB	53.5 dB
17/02/2026 19:17	47.0 dB	40.5 dB	67.9 dB	38.5 dB	49.5 dB
17/02/2026 19:32	47.7 dB	41.5 dB	74.0 dB	39.4 dB	50.0 dB
17/02/2026 19:47	48.7 dB	44.0 dB	59.7 dB	40.3 dB	51.5 dB
17/02/2026 20:02	49.0 dB	44.5 dB	65.8 dB	42.5 dB	51.0 dB
17/02/2026 20:17	48.8 dB	43.5 dB	70.4 dB	41.8 dB	50.0 dB
17/02/2026 20:32	45.1 dB	39.5 dB	64.1 dB	37.7 dB	47.5 dB
17/02/2026 21:30	44.9 dB	40.0 dB	63.1 dB	38.1 dB	48.0 dB
17/02/2026 21:45	44.8 dB	39.5 dB	63.0 dB	38.0 dB	47.5 dB
17/02/2026 22:00	44.7 dB	40.0 dB	65.6 dB	38.3 dB	48.5 dB
17/02/2026 22:15	43.7 dB	39.0 dB	65.9 dB	38.6 dB	47.0 dB

4.2 Comments

- 4.3 The existing customer external area is located at the north side and the grassed garden area of the premises.. During the survey it was noted that the background noise level measurements were influenced by limited road traffic noise.

5.0 ASSESSMENT CONSIDERATIONS

5.1 National Planning Policy Framework (replaces Planning Policy Guidance No 24).

- 5.2 The PPG24 was used in relation to planning approvals of any development. Under the new policy ie NPPF (July 2018) planning law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise.



- 5.3 The National Planning Policy Framework must be taken into account in the preparation of local and neighbourhood plans, and is a material consideration in planning decisions. Planning policies and decisions must reflect and where appropriate promote relevant EU obligations and statutory requirements.
- 5.4 BS 8233:2014
- 5.5 The guidance in BS 8233:2014 in relation to acceptable noise levels within buildings has been considered also and does not raise any issues in relation to the development. As part of the planning permissions process site boundary noise conditions are often set by local authorities. The method of calculating the effect of these conditions is as in BS 4142:2014+A1:2019.
- 5.6 This British Standard sets out guidance on the internal comfort levels that should be aimed for within a dwelling space. Noise from unpredictable sources such as road traffic noise, outside the control of the company, are more likely to cause sleep disturbance problems in this area.
- 6.0 NOISE ASSESSMENT.
- 6.1 British Standard 8233:2014 – For Impact of Patron Noise.
- 6.2 The guidance in BS 8233:2014 in relation to acceptable noise levels within buildings has been considered also and does not raise any issues in relation to the operation of the units when acoustical controls are applied. In BS8233:2014 the criteria which needs to be considered is that noise levels within the dwellings should not exceed LAeqT 30dB, where T = 5 minutes (ref BS4142:2014+A1:2019). The internal criteria of LAeq 30dB is unlikely to be exceeded in any nearby resident property by the operations of the plant due to the noise control measures proposed.
- 6.3 Assessment Table 1 – **Existing** Assessment for General Patron Noise (LAeq dB) at No 100 Bradley Lane.

Assessment Criteria	Level
1. Predicted <u>LAeq dB</u> for 1 No Patron voice raised (WHO data)	62dB
2. Predicted <u>LAeq dB</u> for 50 No Patrons voice raised (WHO data) **	79dB
3. Screening effect of fence	-5dB
4. Distance Correction to residential property (4 metres)	-12dB
5. Facade Reflection of houses	0dB
6. Resultant <u>LAeq dB</u> at residential property	62dB
7. Lowest Background Noise Level (updated to allow for actual situation)	42dB
8. Assessment Level (Line 6-7)	+20dB
9. Less open window correction ie WHO data	-10dB
10. Inside Residential Property (window slightly open)	48dB
This level exceeds the BS8233:2014 guidance of <u>LAeq</u> 45dB (0700-2300hrs)	

- 6.4 The above assessment was based on worst case full capacity general patron noise. Sound contribution from other sources such as aircraft and road traffic noise will be evident on a day to day basis.



6.5 Assessment Table 2 – **Proposed** Assessment for General Patron Noise (L_{Aeq} dB) at No 100 Bradley Lane.

Assessment Criteria	Level
1. Predicted L_{Aeq} dB for 1 No Patron voice raised (WHO data)	62dB
2. Predicted L_{Aeq} dB for 65 No Patrons voice raised (WHO data) **	80dB
3. Acoustic effect of works	-12dB
4. Angle of view correction	-5dB
5. Distance Correction to residential property (4 metres)	-12dB
6. Facade Reflection of nearby houses	0dB
7. Resultant L_{Aeq} dB at residential property	51dB
8. Lowest Background Noise Level (updated to allow for actual situation)	42dB
9. Assessment Level (Line 7-8)	-5dB
10. Less open window correction ie WHO data	-10dB
11. Inside Residential Property (window slightly open)	38dB
This level falls within the BS8233:2014 guidance of L_{Aeq} 45dB (0700-2300hrs)	

6.6 The above assessment was based on worst case full capacity general patron noise. Sound contribution from other sources such as aircraft and road traffic noise will be evident on a day to day basis.

6.7 BS8233:2014

6.8 This British Standard sets out guidance on the internal comfort levels that should be aimed for within a dwelling space. Noise from unpredictable sources such as road traffic noise, outside the control of the company, are more likely to cause sleep disturbance problems in this area.

6.9 In BS8233:2014 the criteria which needs to be considered is that noise levels within the dwellings. The British Standard providing guidance for the control of noise in and around both new and refurbished buildings applying for change of use, has been updated. Changes in noise standards could impact on planning decisions. The new document provides recommended guideline values for internal noise levels within dwellings which are similar in scope to guideline values contained within the World Health Organisation Guidelines for Community Noise, 1999 (WHO).

6.10 Unlike the previous version, BS 8233:2014 doesn't provide recommendations in relation to maximum noise levels in residential bedrooms at night from individual noise events such as vehicle pass-by or aircraft movements. Instead, it advises that: *“regular individual noise events...can cause sleep disturbance. A guideline value may be set in terms of SEL (Sound Exposure Level) or $L_{Amax,F}$ depending on the character and number of events per night. Sporadic noise events could require separate values”*.

6.11 The new guidance does, however, provide limited guidance for indoor noise levels from external noise events for bedrooms, with a recommended indoor noise range of 45 – 55 dB L_{Amax} . The Standard also adopts guideline external noise values provided in WHO for external amenity areas such as gardens and patios. The Standard states that it is “desirable” that the external noise does not exceed 50 dB $L_{Aeq,T}$ with an upper guideline value of 55 dB $L_{Aeq,T}$ whilst recognising that development in higher noise areas such as urban areas or those close to the transport network may require a com

promise between elevated noise levels and other factors that determine if development in such areas is warranted.

- 6.12 In this case when the acoustic works have been completed to the scheme noise levels within the proposed the adjacent noise sensitive properties should fall within the overall guidance in this standard.

6.13 Local Council Comments

- 6.14 Bury Council as the Local Planning Authority (LPA) are likely to set conditions. The assessments above offer support on the likely impact of the proposed use.

7.0 CONCLUSIONS

- 7.1 It is understood Bury Council will consider this planning application in conjunction with the supporting noise assessment. This has been undertaken to support this application. Subject to the implementation of the acoustic control scheme to the proposed area there should be a limited but improved situation from this application on the local amenity.

8.0 RECOMMENDATIONS

- 8.1 The following recommendations are based on improving the acoustic environment of the proposed customer seating area.

i) Proposed Pergola

The Pergola should be constructed from 25mm thick close boarded timber boarding or equivalent acoustic rated panels with minimal gaps/joints. To minimise this area becoming acoustically reverberant, which could cause speech to sound louder it is recommended that the proposed Pergola side paneling should be internally lined (exposed to sound source) with 25mm thick Class 'O' acoustic ST30 foam or suitable equivalent. There are proprietary materials available and should be installed and maintained as per manufacturer instructions. The sound absorption coefficient should be in the following range:

Absorption Coefficient							
63Hz	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz
0.1	0.2	0.45	0.65	0.75	0.65	0.65	0.65

ii) Proposed External Television

A Television (TV) is proposed to be located in the external Pergola in the customer seating area. In view of the proximity of the residential properties to minimise impact the volume output should be controlled and suitably limited to L_{Aeq} 70dB and no greater than L_{Amax} 80dB as measured by a suitably ISO/UKAS calibrated sound level meter at 1 metre from the front of the TV front panel. It is recommended that unauthorised access to the TV volume control should not be permitted.

iii) Management Plan

Due to the later permitted operating hours operation it is recommended that a Management Plan is provided to ensure use of this area does not cause noise issues to local residents.



9.0 LIMITATIONS OF THIS REPORT AND HEALTH AND SAFETY CONSIDERATIONS

- 9.1 This report has been prepared based on information provided and there may be operational reasons to make changes to ensure the assessment meet the Council's environmental noise requirements. All acoustic works must follow this specification. Any advice required contact ENL Acoustic Consultants Ltd. ENL Acoustic Consultants Ltd accepts no responsibility for changed to these recommendations without approval from ENL in writing.
- 9.2 The above recommendations are for acoustic purposes only, to support retention of the equipment as part of a planning application. All matters associated with Health & Safety, Structural Stability, Structural support and Conservation issues should be dealt with and approved professionally by other experts.
- 9.3 The above recommendations and evaluation are based on the information provided and observed during a site visit. Changes to the specific may be necessary if additional information comes to light during the installation process. The above recommendations are for acoustic purposes only, to support retention of the equipment. All matters associated with Health & Safety, Structural Stability, Structural support and Conservation issues should be dealt with by others.



APPENDIX 1 - GLOSSARY OF ACOUSTIC TERMS

1. **A-weighted decibels - dB(A)** - Approximately equivalent to the human ear frequency response. A simulated measure of the loudness level of the noise as heard by the listener. Specific corrections are made to simulate this response.
2. **Ambient noise** - Totally encompassing sound in a given situation at a given time.
3. **Attenuation** - the amount by which a noise is reduced.
4. **Corrected Noise Level or Rating level L_{ArT}** - the specific noise level plus any adjustment for the character of the noise.
5. **Decibels** - a unit of sound level using a logarithmic scale. It is the ratio of the measured sound pressure and the reference level ie $10 \log_{10}(P^2_1/P^2_{ref})$ where 1 = rms pressure and $ref = 2 \times 10^{-5} \text{ N/m}^2$.
6. **Frequency in Hertz** - sound is propagated in wave form. Sound frequency is expressed in cycles per second or Hertz. Most noises comprise many frequencies. One Hertz equals one cycle per second.
7. **L_{AeqT} - Equivalent Continuous A-weighted sound pressure level** - the value of the A-weighted sound pressure level in decibels of the continuous steady sound that within a specified time interval has the same mean square sound pressure as a sound that varies with time.
8. **L_{A90T} - Background Noise Level (BNL)** - the A-weighted level of the residual noise in decibels exceeded for 90% of a given time interval. The level of noise underlying all fluctuating noise s reaching a given location. This tends to be dominated by the more distant, non-local sources and events.
9. **$L_{A10(1hour)}$ dBA - Road Traffic Noise** - the value of $L_{A10(1hour)}$ dBA is the noise exceeded for 10% of a period of one hour.
10. **Noise** - A complex sound often defined as unwanted sound.
11. **Precision Grade Instrumentation** - There are 2 basic grades of instrumentation guaranteeing different grades of accuracy of which precision grade instrumentation is the most accurate.
12. **Sound Pressure Level** - the sound pressure level in decibels is given by:
 $20 \log_{10} (P_1/P_2)$.

APPENDIX 2 – LEGALS

The opinions and interpretations presented in this report represent our best technical interpretation of the data made available to us. However, due to uncertainty inherent in the estimation of all parameters, we cannot, and do not guarantee the accuracy or correctness of any interpretation and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. The findings and opinions expressed are relevant to the dates of the site works and should not be relied upon to represent conditions at substantially later dates. If additional information becomes available which may affect our comments, conclusions or recommendations, the author reserves the right to review the information, reassess any new potential concerns and modify our opinions accordingly. Except for the provision of professional services on a fee basis, ENL Acoustic Consultants Ltd / ENL Acoustics Ltd does not have a commercial arrangement with any person or company involved in the interests that are the subject of this report. ENL Acoustic Consultants Ltd / ENL Acoustics Ltd cannot accept any liability for the correctness, applicability or validity for the information they have provided, or indeed for any consequential costs or losses in this regard. Our efforts have been made on a “best endeavors” basis and no responsibility or liability is warranted or accepted by ENL Acoustic Consultants Ltd / ENL Acoustics Ltd.

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APENDIX 3 – PROFESSIONAL MEMBERSHIPS

R B Parker

MIOA - Member of the Institute of Acoustics (No: 34957)

MCIEH - Member of the Chartered Institute of Environmental Health (No: 00003507)

P E Gunter

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