# ACOUSTIC SOLUTIONS

# **Consultant in Noise and Vibration**

20 Netherhall Road, Baildon, North Yorkshire BD17 6QD; Telephone: 01274580796/07786028451; Email: acousticsolutions@email.com

Ref: AS22-59 Date: 13 September 2022

#### NOISE IMPACT ASSESSMENT FOR PROPOSED DEVELOPMENT:

293 Roundhay Road, Leeds, West Yorkshire LS8 4HS

## Prepared for:

Mr Rahat Javid 293 Roundhay Road Leeds West Yorkshire LS8 4HS

### Prepared by:

Acoustic Solutions 20 Netherhall Road Baildon BD17 6QD

Institute of Acoustics number: 43468

Test Report Number: AS22-59

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Acoustic Solutions Consultant in Noise & Vibration AS22-59

Noise Impact Assessment: 293 Roundhay Road, Leeds, West Yorkshire LS8 4HS

1.00 INTRODUCTION

1.1

293 Roundhay Road, AKA Shimlas, Leeds is a restaurant/takeaway. Acoustic

Solutions has been commissioned by Mr Javid to undertake a noise impact

assessment for the proposed premises licence application, reference,

PREM/04962/001 for a change of operational hours from 11:00 - 23:00 hours

(seven days per week) to 11:00 – 03:00 hours (Monday to Saturday) and 11:00

- 02:30 hours (Sundays) at 293 Roundhay Road, Leeds. It is also proposed

that amplified music will be played within the premises between 11:00 – 00:00

hours (seven days per week).

Concern has been raised by Leeds City Council about potential noise

disturbance arising from this change of hours. In particular, the following noise

sources occurring after 00:00 hours have been identified as being potentially

problematic:

Customers (in the street);

Delivery drivers and vehicles arriving and leaving;

Car doors slamming;

Music from delivery/customers' car radios which would continue into

hours where it may adversely affect sleep and other loss of the use and

enjoyment of a property;

Recorded music coming from the premises;

The kitchen extract ventilation system;

General activities of the business transmitting through the structure to

the residents in the surrounding properties.

The objectives for the noise impact assessment were as follows:

At the nearest identified noise-sensitive dwelling to 293 Roundhay

Road, 137 Harehills Lane, establish the noise impact of each of the noise

sources identified:

• Establish the current 00:00 to 03:00 hours noise environment in the

vicinity of the nearest noise-sensitive dwelling to 293 Roundhay Road.

• At the nearest noise-sensitive dwelling, predict the likely noise impact

from the identified noise sources at 293 Roundhay Road, between the

hours of 23:00 and 03:00 hours.

1.3

This report details the methodology and results of the assessment. It has been

prepared to accompany an application for planning permission that is to be

submitted to Leeds City Council for the proposed development of the

application site.

1.4

This report has been prepared for the sole purpose described above and no

extended duty of care to any third party is implied or offered. Third parties

referring to the report should consult Mr Javid and Acoustic Solutions as to the

extent to which the findings may be appropriate for their use.

1.05

A glossary of acoustic terms used in the main body of the text is contained in

Appendix One.

2.00 NOISE IMPACT ASSESSMENT CRITERIA

2.1

In terms of noise impact assessment criteria, Paragraph 170e of the National

Planning Policy Framework (NPPF) 2018 states that planning policies and

decisions should contribute to and enhance the natural local environment by

'preventing new and existing development from contributing to, being put at

unacceptable risk from, or being adversely affected by, unacceptable levels of

soil, air, water or noise pollution or land instability.'

2.2

Planning Practice Guidance specifically dealing with noise was uploaded to the

Government's Planning Portal in March 2014 as an accompaniment to the

National Planning Policy Framework. This guidance is summarised herein.

2.3

The guidance states that noise needs to be considered when new

developments may create additional noise. Whilst noise can override other

planning concerns, neither the Noise Policy Statement for England nor the

National Planning Policy Framework (which reflects the Noise Policy Statement

for England) expects noise to be considered in isolation, separately from the

economic, social and other environmental dimensions of proposed

development.

2.4

In order to determine noise impact, local planning authorities' plan-making and

decision taking should take account of the acoustic environment and in doing

so consider:

Whether or not a significant adverse effect is occurring or likely to occur;

Whether or not an adverse effect is occurring or likely to occur, and;

Whether or not a good standard of amenity can be achieved.

In line with the Explanatory Note of the Noise Policy Statement for England, this

would include identifying whether the overall effect of the noise exposure is, or

would be, above or below the significant observed adverse effect level and the

lowest observed adverse effect level for the given situation.

2.6

In terms of Observed Effect Levels:

No Observed Adverse Effect Level (NOAEL) – This is the level of noise

exposure below which no effect at all on health or quality of life can be

detected;

Lowest Observed Adverse Effect Level (LOAEL) - This is the level of

noise exposure above which adverse effects on health and quality of life

can be detected, and;

Significant Observed Adverse Effect Level (SOAEL) – This is the level

of noise exposure above which significant adverse effects on health and

quality of life occur.

2.7

At the lowest extreme, when noise is not noticeable, there is by definition no

effect. As the noise exposure increases, it will cross the 'no observed' effect

level as it becomes noticeable. However, the noise has no adverse effect so

long as the exposure is such that it does not cause any change in behaviour or

attitude. The noise can slightly affect the acoustic character of an area but not

to the extent there is a perceived change in quality of life. If the noise

exposure is at this level no specific measures are required to manage the

acoustic environment.

As the exposure increases further, it crosses the lowest observed adverse

effect level boundary above which the noise starts to cause small changes in

behaviour and attitude, for example, having to turn up the volume on the

television or needing to speak more loudly to be heard. The noise therefore

starts to have an adverse effect and consideration needs to be given to

mitigating and minimising those effects (taking account of the economic and

social benefits being derived from the activity causing the noise).

2.9

Increasing noise exposure will at some point cause the significant observed

adverse effect level boundary to be crossed. Above this level the noise causes

a material change in behaviour such as keeping windows closed for most of the

time or avoiding certain activities during periods when the noise is present. If

the exposure is above this level the planning process should be used to avoid

this effect occurring, by use of appropriate mitigation such as

by altering the design and layout. Such decisions must be made taking account

of the economic and social benefit of the activity causing the noise, but it is

undesirable for such exposure to be caused.

2.10

At the highest extreme, noise exposure would cause extensive and sustained

changes in behaviour without an ability to mitigate the effect of noise. The

impacts on health and quality of life are such that regardless of the benefits of

the activity causing the noise, this situation should be prevented from occurring.

2.11

The following table summarises noise exposure hierarchy, based on likely

average response.

		Table 2.1 Guideline "Absolute" Sound Level						
	Absolut	te Level:	≤40Db	41 - 45dB	46 - 50dB	51 - 55dB	56 - 60dB	≥60dB
_	Davtime	Effoct:2	NOAEL	NOAEL	NOAEL	LOAEL	SOAEL	SOAEL+
2	Evening		NOAEL	NOAEL	LOAEL	SOAEL	SOAEL	SOAEL+
\=	Night-time		NOAEL	LOAEL	SOAEL	SOAEL	SOAEL	SOAEL+
Absolute Sound Level		/Impact cription:	No observed effect on health or quality of life.	Sleep disturbance in bedrooms with window open.	Speech intelligibility within living areas with windows open resulting in moderate annoyance.  Greater potential for sleep disturbance and adverse health impact.	Increased potential for sleep disturbance, including significant adverse health effects. Gardens and amenity spaces affected.	Significant adverse health effects likely to all habitable rooms. Occupants unable to open windows due to noise ingress and unable to enjoy garden / amenity areas.	High risk of significant adverse health impact. Unable to use garden and amenity space or have windows open for ventilation.
	Mitigation Conside	erations:	Use design, layout and landscaping (DLL) to create and preserve areas of amenity and tranquillity to enhance the noise environment.	Protect bedroom facades from noise through DLL. Provide minimum double-glazing with trickle vents to bedrooms.	Protect habitable room facades from noise through DLL with greater protection for bedrooms.  Provide higher spec double-glazing with trickle-vents to all habitable rooms.	A4  Bedroom facades to be protected through DLL to bring below LOAEL.  Provide higher spec double-glazing with trickle vents to all habitable rooms.  Protection of gardens and amenity space through DLL and acoustic fencing.	A5  Bespoke assessment of noise mitigation needs, including consideration of alternative to open window ventilation provision to protect internal noise environment and protection of garden / amenity areas through DLL to bring below LOAEL.	A6  Bespoke assessment of noise impact and mitigation, including DLL, protection of building envelope and provision of alternative amenity space.
	Planning Consid	deration:	No objection	No objection subject to Approved Plans and/or conditions to include satisfactory window specification to bedrooms with facades exposed to LOAEL noise.	No objection subject to Approved Plans and/or conditions to include satisfactory window specification to all habitable rooms with facades exposed to LOAEL noise.	Details of noise mitigation to be supplied as part of planning approval process. Conditions required to implement control measures within the noise report. Refusal if noise report is inadequate.	Details of noise mitigation to be supplied as part of planning approval process. Conditions required to implement control measures within the noise report. Refusal if noise report is inadequate.	Presumption against planning permission being granted, unless detailed noise impact assessment and approved mitigation measures implemented through conditions. Post completion verification of mitgation measures required.

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<sup>&</sup>lt;sup>1</sup> Free-field, outdoor noise level expressed as dB LAeq(T), where T is the reference time period for the relevant Day, Evening or Night-time period.

<sup>&</sup>lt;sup>2</sup> Day is from 07:00 to 19:00 and the reference time period (T) is 8 hours.

<sup>&</sup>lt;sup>3</sup> Evening is from 19:00 to 23:00 and the reference time period (T) is 4 hours.

<sup>&</sup>lt;sup>4</sup> Night is from 23:00 to 07:00 and the reference time period (T) is 8 hours.

The subjective nature of noise means that there is not a simple relationship

between noise levels and the impact on those affected. This will depend on how

various factors combine in any particular situation. These factors include:

The source and absolute level of the noise together with the time of day

it occurs;

For non-continuous sources of noise, the number of noise events, and

the frequency and pattern of occurrence of the noise;

• The spectral content of the noise (i.e. whether or not the noise contains

particular high or low frequency content) and the general character of

the noise (i.e. whether or not the noise contains particular tonal

characteristics or other particular features);

The local acoustic character of the area.

2.13

In addition, further useful contextual guidance is provided in:

• British Standard 4142:2014 'Methods for Rating and Assessing

Industrial and Commercial Sound' (BS 4142);

British Standard 8233:2014 'Guidance on Sound Insulation and Noise

Reduction for Buildings' (BS 8233);

• World Health Organisation (WHO) Guidelines for Community Noise

(1999)

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BS 4142 states:

The significance of sound of an industrial and/or commercial nature depends

upon both the margin by which the rating level of the specific sound source

exceeds the background sound level and the context in which the sound

occurs'. Typically, the greater this difference, the greater the magnitude of the

impact. For example:

A difference of around +10 dB or more is likely to be an indication of a

significant adverse impact, depending on the context;

• A difference of around +5 dB is likely to be an indication of an adverse

impact, depending on the context;

The lower the rating level is relative to the measured background sound

level, the less likely it is that the specific sound source will have an

adverse impact or a significant adverse impact. Where the rating level

does not exceed the background sound level, this is an indication of the

specific sound source having a low impact, depending on the context

Adverse impacts include, but are not limited to, annoyance and sleep

disturbance. Not all adverse impacts will lead to complaints and not

every complaint is proof of an adverse impact. Where the initial estimate

of the impact needs to be modified due to the context, take all pertinent

,

factors into consideration, including the absolute level of sound. For a

given

difference between the rating level and the background sound level, the

magnitude of the overall impact might be greater for an acoustic

environment where the residual sound level is high than for an acoustic

environment where the residual sound level is low. 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.

#### 2.15

British Standard 8233:2014 'Guidance on Sound Insulation and Noise Reduction for Buildings' sets indoor ambient noise levels from residential dwellings (see table below).

Table 2.2 - Indoor Ambient Noise Levels in Dwellings (BS 8233): 2014

Activity	Location	Good Indoor Amb	oient Noise Levels
Resting	Living Room	35 dB LAeq (0700–2300)	-
Sleeping (daytime resting)	Bedroom	35 dB LAeq (0700–2300)	30 dB Laeq (2300–0700)

#### 2.16

With regard to sound attenuation through the building envelope, the 'weak points' in the building façade are generally considered to be the windows. The worked example (G.1) at Annex G of BS 8233 suggests that a partially opened window would provide sound attenuation of approximately 15 dB Rw. The Standard also suggests that "...standard insulating glass units have an insulation value of approximately 30 dB Rw" when closed.

#### 2.17

With respect to noise affecting external areas, i.e. gardens, BS 8233 states that ".. it is desirable that the steady noise level does not exceed 50 dB LAeq, and 55 dB LAeq should be regarded as the upper limit".

The World Health Organisation's Guidelines for Community Noise (1999) sets indoor ambient noise levels from residential dwellings (see table below).

Table 2.3 – Indoor Ambient Noise Levels in Dwellings (WHO 1999)

Activity	Location	Good Indoor Amb	pient Noise Levels
Resting	Living Room	35 dB LAeq (0700–2300)	-
Sleeping (daytime resting)	Bedroom	35 dB LAeq (0700–2300)	30 dB LAeq (2300–0700)

3.0 BASELINE NOISE SURVEY

3.1

The application site is 293 Roundhay Road (Appendix Two). The premises is

located in a detached building that stands on the junction of two busy highways:

Roundhay Road and Harehills Lane. The premises' access to the public is

situated on its south-eastern (front) façade. Directly outside this is an off-road

bus stop bay. It is anticipated that between the hours of 23:00 and 03:00 hours

when no buses are operating, this bay will be used by customers' and delivery

staff vehicles. The nearest noise-sensitive dwellings to this south-eastern

façade are the properties located above the Continental Supermarket at the Din

Building: 43 metres distance.

The premises' kitchen extraction system and its air conditioning fans are

located on the wall of its north-west façade. Also to the north-west is an

enclosed courtyard. It is anticipated that delivery staff vehicles may also use

this courtyard. The nearest noise-sensitive dwellings to this north-western

façade is 137 Harehills Lane: 15 metres distance.

3.2

In order to establish the 23:00-03:00 hours background noise levels at the

application site and its surrounding environs, a baseline noise survey was

undertaken on Sunday 11 September between these hours.

In order to establish the 21:00-23:00 hours noise levels associated with the

operation of restaurant/takeaway activities at the application site and its

surrounding environs, a noise survey was undertaken on Monday 12

September between these hours.

For the purpose of the assessment, four noise monitoring positions, MP1, MP2,

MP3 and MP4 were adopted in free field environments at over 1.5 metres above

ground and over 3 metres from any vertical reflective surface.

• MP1. Outside north-western façade of the Din Building. The monitoring

position was selected to assess evening noise levels associated with the

operation of the restaurant/takeaway's activities at 293 Roundhay Road,

and night time 'baseline' night time noise levels in the vicinity of these

dwellings.

MP2. Outside south-eastern gable-end façade of 137 Harehills Lane.

The monitoring position was selected to assess evening noise levels

associated with the operation of the restaurant/takeaway's activities at

293 Roundhay Road.

• MP3. Courtyard outside the north-western (rear) façade of 293

Roundhay Road. The monitoring position was selected to assess the

ambient noise level in the presence of noise associated with the

operation of the restaurant's air extraction and air conditioning systems.

Measurements conducted for the purposes of a BS4142+A1

assessment of the air extraction system. For the assessment, MP3 was

located 3 metres from the kitchen extraction flue's outlet terminal.

MP4. Rear of 219A Roundhay Road. The monitoring position was

selected to assess the residual and background noise levels in the

absence of noise (inaudible at this location) associated with the

operation of the restaurant's air extraction and air conditioning systems,

and to replicate the sound levels within the courtyard at the rear of 293

Roundhay road, where the courtyard's wall reduce the influence of road

traffic noise. Measurements conducted for the purposes of a

BS4142+A1 assessment of the air extraction system.

#### **3.3 Noise Assessment Measurements**

A series of hourly 15-minute noise measurements were undertaken using a Type 1 integrating sound level meter (Appendix Three). The measurement system calibration was verified immediately before the commencement of the measurement sessions and again at the end. Weather conditions throughout the survey were dry and clear with a maximum southerly wind speed of 2 metres per second: appropriate for monitoring. Measurements consisted of A—weighted parameters: LAeq and LA90.

#### 3.4 MP1

MP1. Evening (21:00-23:00 hours) Evening sound levels can be described as noisy. The dominant noise source was from road traffic travelling along Roundhay Road. Patrons were seen entering and leaving from the front of 293 Roundhay Road. They were not audible from the microphone location. None of the noise sources associated with 293 Roundhay Road, as identified in Paragraph 1.1, were audible at the microphone location.

Table 3.1 summaries evening noise levels at MP1, including average L<sub>Aeq</sub> / L<sub>A90</sub> values and the maximum L<sub>AMax</sub> value.

Table 3.1 – MP1: Evening Noise Measurements

Measurement Time	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Background Noise Level, dB L <sub>A90, 15 min</sub>	Measured Noise Level, dB L <sub>AMax, 15 min</sub>
20:00	70.3	55	78.5
21:00	69	55.1	80.5
22:00	67.6	54.6	81
23:00	68.9	54	77.8
Average	69	55	81

**MP1. Night Time (23:00-03:00 hours)** Night time sound levels can be described as moderate to moderately noisy. The dominant noise source was from road traffic travelling along Roundhay Road.

Table 3.2 summaries night time noise levels at MP1, including average  $L_{Aeq}$  /  $L_{A90}$  values and the maximum  $L_{AMax}$  value.

Table 3.2 – MP1: Night Time Baseline Noise Measurements

Measurement Time	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Background Noise Level, dB L <sub>A90, 15 min</sub>	Measured Noise Level, dB L <sub>AMax, 15 min</sub>
00:00	66.7	52.8	79
01:00	63.5	47.6	78.2
02:00	60.1	42	67.9
03:00	61	42.6	66
Average Background	63	46	79

MP2. Evening (21:00-23:00 hours) Evening sound levels can be described as noisy. The dominant noise source was from road traffic travelling along Roundhay Road and Harehills Lane. A small number of vehicles (four per hour) were seen entering and leaving the courtyard at the rear of 293 Roundhay Road. The sound of these vehicles was audible, but, in terms of measurement, it could not be differentiated from the sound of general road traffic. No amplified music playing at 293 Roundhay Road was audible. No cooking or kitchen-related noise was audible. No dining area-related noise was audible.

Table 3.3 summaries evening noise levels at MP2, including average  $L_{Aeq}$  /  $L_{A90}$  values and the maximum  $L_{AMax}$  value. Since noise from customer/staff vehicles (arriving, departing, music playing from within) could be differentiated from general sound, Table 3.4 summarises sound levels from these sources at 1 metre earlier in the day.

Table 3.3 – MP2: Evening Noise Measurements

Measurement Time	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Background Noise Level, dB L <sub>A90, 15 min</sub>	Measured Noise Level, dB L <sub>AMax, 15 min</sub>
20:00	68.3	53	81.1
21:00	67.7	53.4	77.6
22:00	68	52.5	79.9
23:00	67.1	53.1	80.4
Average	68	53	80.4

Table 3.4 Customer/Staff Vehicle-Related Noise Measurement

Noise Source	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Background Noise Level, dB L <sub>A90, 15 min</sub>	Measured Noise Level, dB L <sub>AMax, 15 min</sub>
Car Door Closing @ 1 m	66.9	41.7	79.4
Car Arriving @ 1	54.9	44.9	67.5
Car Departing @ 1 m	59.4	45.6	71.6
Music from Car @ 1 m	63.5	59.0	68.2

**MP2. Night Time (23:00-03:00 hours)** Evening sound levels can be described as noisy. The dominant noise source was from road traffic travelling along Roundhay Road and Harehills Lane.

Table 3.5 summaries night time noise levels at MP2, including average  $L_{Aeq}$  /  $L_{A90}$  values and the maximum  $L_{AMax}$  value.

Table 3.5 – MP2: Night Time Baseline Noise Measurements

Measurement Time	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Background Noise Level, dB L <sub>A90, 15 min</sub>	Measured Noise Level, dB L <sub>AMax, 15 min</sub>
00:00	62.1	50	77.4
01:00	61.4	50.6	76.8
02:00	58.3	51.5	68.2
03:00	58	49.3	66.6
Average Background	60	50	77

MP3. Evening (22:00 hours) The dominant noise source was from the kitchen extraction flue serving 293 Roundhay Road. The sound consisted of a steady, unceasing hum. There was no tonal element to the noise. The air conditioning units were inaudible. Noise from road traffic travelling along Roundhay Road and Harehills Lane was also significant.

**MP4. Evening (22:00 hours)** The dominant noise source was from road traffic travelling along Roundhay Road and Harehills Lane was also significant.

Table 3.6 summarises the evening ambient sound level at MP3 and the residual and background noise level at MP4.

Table 3.6 - MP3 & MP4: Evening Ambient, Residual and Background Noise Levels

Period	Period Ambient Noise, dB, L <sub>Aeq</sub>		Background Noise, dB, L <sub>A90, 15</sub>
Evening	57	55	50

#### 4.0 DISCUSSION

#### 4.1 Noise from Patrons in the Street

It is understood that, between 23:00 and 03:00 hours, Shimlas Leeds will focus on home deliveries; however, to illustrate an absolute worse-case scenario, it will be assumed that 10x customers will leave the premises together at 03:00 hours and walk past the nearest noise-sensitive dwelling, 137 Harehill Lane. The predicted noise impact of patrons talking is based upon "The Noise Manual" (Berger 2003), which cites the following sound level values:

- 1x Male 58/65dB, L<sub>Aeq</sub> (normal/raised);
- 1x Female 55/63dB L<sub>Aeq</sub> (normal/raised).

Assuming a 50:50 ratio between male and female patrons, each of these values have then been logarithmically multiplied by x5 (5x male, 5x female) to predict noise levels from patrons talking immediately outside number 137. Table 4.1 summaries the resulting sound level of twenty persons all either talking or shouting at once.

Table 4.1: Predicted Sound Level of 20 persons Talking or Shouting

Male/Female	SPL, Normal Voice, dB	SPL, Raised Voice, dB
Men	65	72
Women	62	70
Total	67	74

The long term and short term impacts are determined by calculating the change in current sound levels by the introduction of 10x persons. Table 4.2 summaries the impact values published by HS2 Phase 1 Environmental Statement).

Table 4.2 Table: 3.1 Impact from Changes in Sound Levels (Source: HS2 Phase 1 Environmental Statement)

Long Term Impact	Short Term Impact	Sound Level Change, dB, LAeq,T
Negligable	Negligable	=/>0 to <1
	Minor	=/>1 to <3
Minor	Moderate	=/>3 to <5
Moderate	Major	=/>5 to <10
Major		=/>10

The noise impact of patrons talking or shouting is assessed by comparing these sound levels with the current night time sound level, as measured. Table 4.3 summarises the change in the sound level resulting in 10x customers simultaneously talking and shouting outside 137 Harehills Lane at 03:00 hours. It suggests that 10x persons talking or shouting simultaneously would result in a Major noise impact at number 137.

Table 4.3 Predicted Sound Leve Change of 10x Persons

Existing SPL, dB	60	Existing SPL, dB	60
10x Customers		10x Customers	
Talking	67	Shouting	74
Change	7	Change	14

#### 4.2 Noise from Delivery Drivers

#### MP1

The equation

$$SPL2 = SPL1-20logr-8$$

(where SPL1 is the measured noise levels and r is the distance (m) between the noise source and the recipient)

describes the effect of distance in attenuating a noise.

Table 4.4 summarises the predicted noise level at Din Building arising from noise associated with delivery drivers. The prediction assumes that loud music

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is playing in the vehicle. Note, where the newly introduced noise level is =/<10 dB relative to the existing noise level, it will be inaudible, and thus the perceived change in noise level will be zero.

Table 4.4 MP1 Vehicle Noise. Predicted Sound Level Change

	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Sound Level at Din Buildings, dB	Existing Average Night Time Noise Level at MP1	Change in Noise Level, dB	Impact
Car Door Closing @ 1 m	66.9				
Car Arriving @ 1 m	54.9				
Car Departing @ 1 m	59.4				
Music from Car @ 1 m	63.5				
Total @ 1 m	69	28	63	0	Negligable

#### MP2

Table 4.5 summarises the predicted noise level at 137 Harehills Lane arising from noise associated with delivery drivers. The prediction assumes that loud music is playing in the vehicle.

Table 4.5 MP2 Vehicle Noise. Predicted Sound Level Change

Noise Source	Residual Noise Level, dB, L <sub>Aeq, 15 min</sub>	Sound Level at 137 Harehills Lane, dB	Existing Average Night Time Noise Level at MP1	Change in Noise Level, dB	Impact
Car Door Closing @ 1 m	66.9				
Car Arriving @ 1 m	54.9				
Car Departing @ 1 m	59.4				
Music from Car @ 1 m	63.5				
Total @ 1 m	69	38	60	0	Negligable

# 4.3 Recorded Music Coming from the Premises

No music was audible at MP1 or MP2.

# 4.4 Kitchen Extraction Ventilation System

Table 4.6 summarises the predicted Noise Rating at 137 Harehills Lane.

Table 4.6 MP2 BS4141+A1 noise impact

Specific Noise, dB, L <sub>Aeq</sub>	Background Noise, dB, L <sub>A90, 15</sub>	Rating, dB	Comments
53	50	3	Minor Adverse
	dB, L <sub>Aeq</sub>	dB, L <sub>Aeq</sub> dB, L <sub>A90,15</sub>	dB, L <sub>Aeq</sub> dB, L <sub>A90, 15</sub> Rating, dB

#### 4.5

# General activities of the business transmitting through the structure to the residents in the surrounding properties.

At MP3, 3 metres from the rear façade of 293 Roundhay Road, no noise from internal activities at the premises was audible. This being the case, it is predicted that between the hours of 23:00 and 03:00, no such noise will be audible at 137 Harehills Lane.

#### 5.0 CONCLUSION

### 5.1 Noise Impact of Patrons Leaving 293 Roundhay Road

The noise impact associated with 10x patrons leaving the premises en-masse is predicted to be major at 137 Harehills Lane. Other than signage advising patrons to leave the premises quietly, there are little or no noise attenuation options available to address this issue.

In mitigation, the predictions assume an absolute worse-case scenario, where ten persons leave the premises as one single group, where the group stands outside the nearest noise sensitive premises, and where each person within this ten-person group is either talking or shouting simultaneously.

Any significantly sized group of people shouting simultaneously suggests serious public disorder such as a mass brawl. Assuming, therefore, that the noise impact will be caused by patrons talking only, Table 5.1 summaries the predicted noise impact based upon a stepped rising scale of 2, 4, 6, 8 & 10 talking at once.

It suggests that a mixed group of ten or more persons talking together would result in a major short and long term adverse noise impact upon the occupiers of 137 Harehills Lane. It is impossible to predict whether groups of this size are likely to congregate outside this premises at 03:00 hours. It is thought likely that any late-night customers will have driven to the premises therefore the likelihood of large groups of customers leaving on foot will be very slight.

Table 5.1 Likely Impact of 2 to 10 persons talking simultaneously outside 137 Harehills Lane

Patrons	Talking SPL, dB	Night Time Baseline SPL, dB	Change, dB	Long Term Impact	Short Term Impact
10	67	60	7	Major	Major
8	66	60	6	Moderate	Major
6	65	60	5	Moderate	Major
4	64	60	4	Minimum	Moderate
2	63	60	3	Minimum	Moderate

#### **5.2 Noise from Vehicles**

No adverse impact is predicted.

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# **5.3 Noise from Recorded Music Coming from the Premises**

No adverse impact is predicted.

# 5.4 Kitchen Extraction Ventilation System

Minor adverse noise impact is predicted externally. Internal noise impact will be negligible.

5.5 General activities of the business transmitting through the structure to the residents in the surrounding properties.

No adverse impact is predicted.

# **6.0 RECOMMENDATIONS**

# 7.1 Noise from Patrons leaving the premises

Prominent signage should advise customers to leave the premises quietly

Appendix 1
Glossary of Acoustic Terms

Sound Pressure Level (Lp)

The basic unit of sound measurement is the sound pressure level. As the pressures to which the human ear responds can range from 20 µPa to 200 Pa, a linear measurement of sound levels would involve many orders of magnitude. Consequently, the pressures are converted to a logarithmic scale

and expressed in decibels (dB) as follows:

 $L_p = 20 \log_{10}(p/p_0)$ 

Where  $L_p$  = sound pressure level in dB; p = rms sound pressure in Pa; and p0 = reference sound pressure (20  $\mu$ Pa).

A-weighting Network

A frequency filtering system in a sound level meter, which approximates under defined conditions the frequency response of the human ear. The A-weighted sound pressure level, expressed in dB(A), has been shown to correlate well

with subjective response to noise.

Equivalent continuous A-weighted sound pressure level, LAeq, T

The A-weighted 'equivalent continuous noise level' which is an average of the total sound energy measured over a specified period of time. In other words, L<sub>Aeq</sub> is the level if a continuous noise which has the same total (A-weighted) energy as the real fluctuating noise, measured over the same time period. L<sub>Aeq</sub> is increasing being used as the preferred parameter for all forms of

environmental noise.

LA90. T

The A-weighted sound pressure level of the residual noise in decibels exceeded 90% of a given time interval, T. L<sub>A90</sub> is typically taken as representative of background noise.

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#### L<sub>A max</sub>

The maximum A-weighted noise level recorded during the measurement period.

#### Hz

The unit of frequency. The number of cycles (in the context of acoustics, the number of complete sound waves generated) per second.

Appendix 2
Location Plan showing 293 Roundhay Road and the Nearest NoiseSensitive Dwellings



293 Roundhay Road

**Din Buildings** 

137 Harehills Lane

Appendix 3
Equipment Used

Noise measurements were undertaken using a precision grade sound level

meter:

Norsonic Nor145 Model integrating sound level meter.

Serial Number 14529307

Certificate Number U35939/U35940

Last Laboratory Calibrated 07/10/20

B & K 4230 Model calibrator

Serial Number 724157

Last Laboratory Calibrated 13/2/20

The Sound Level Meter was calibrated before and after both measurement periods, with no significant change in calibration. All calibrations took place at

the measurement position.

The SLM met the requirements of BS EN 60651: 1994 and BS EN 60804:

2001 IEC 60804: 2000. It was capable of simultaneously measuring Leq and

Ln values. Batteries for the SLM and calibrator were checked prior to all

measurements.

# Appendix 4 References

West Yorkshire Planning Consultation Guidance (Condensed Version) Noise & Vibration (2016) [Online]. Available at:

PLN 82 Noise Design Advice leeds version.pdf [Accessed 13 September 2022];



#### **Highways Supporting Statement**

#### Proposed Extension to Operating Hours - 293 Roundhay Road

#### 16th September 2022

#### <u>Introduction</u>

Andrew Moseley Associates (AMA) have been commissioned to prepare a Highways Supporting Statement (HSS) in relation to proposals to extend the operational hours of 293 Roundhay Road, Leeds. This HSS will review the potential highways and traffic impacts associated with these proposals.

#### Site Location, Existing Operation and Proposals

The site is located at 293 Roundhay Road in Harehills, approximately 2.7km northeast of Leeds city centre. The site is bound to the north by commercial uses; to the east by Roundhay Road; to the south by Harehills Lane; and to the west by residential development.

The site is currently occupied by Shimlas Restaurant, which is frequented by dine-in customers as well as offering a collection service, and a delivery service through Uber Eats.

Planning permission was granted in 2018 for the change of use of the site from a bank to a restaurant / café and hot food takeaway (18/00776/FU). Condition 5 of the permission restricts the opening hours of the premises to 10:00-23:00 Monday to Sunday and bank holidays. Condition 6 restricts the hours for the use of loading, unloading and deliveries (including waste) to 08:00-10:00, in the interests of amenity and highway safety.

Vehicular access to the site is taken from Harehills Lane, in the form of a priority junction. Pedestrian access to the restaurant is taken from Roundhay Road. A car park and service yard are provided to the rear of the site.

The proposals are to extend the existing operating hours of the site (for serving food and drink) to 03:00 Monday to Saturday and to 02:30 on Sundays. No changes are proposed to the use of the site, or external operations. Music will not be played outside the hours of 11:00 and 00:00.

#### Access by Sustainable Modes - Walking, Cycling and Public Transport

The site is considered to be highly sustainable, situated within an existing commercial area in the suburb of Harehills. Substantial footways are provided along Roundhay Road, providing high capacity for pedestrian movements. Controlled, staged crossings are provided across the junctions within the immediate vicinity of the site, ensuring safe permeability of the local area for pedestrians. Beyond the immediate commercial area and uses, surrounding the site, there is a large catchment of residential uses, providing the opportunity for many customers to travel to the site on foot.

A shared bus / cycle lane is provided along the site frontage on Roundhay Road, which goes on to take the form of advisory cycle lanes to the north of the site, provided on both sides of the carriageway. Cycle crossing facilities are provided over Roundhay Road immediately north of the site. Beyond the immediate commercial area and uses, surrounding the site, there is a large catchment of residential areas and cycling provides a feasible option for food delivery to serve these.

A bus stop is located on the site frontage onto Roundhay Road and is provided with an off-carriageway layby, shelter and seating. Additional stops are provided to the north and south on Roundhay Road, to the east on Easterly Road and to the west on Harehills Lane. The relevant services calling at these stops are summarised in **Table 1** below.



**Table 1 Local Bus Services** 

No.	Route	Frequency		
		Mon-Fri	Sat	Sun
12	White Rose Centre – Leeds – Harehills – Roundhay	15 mins	15 mins	30 mins
	Park - Chapeltown			
13	Middleton – Leeds – Harehills - Gledhow	30 mins	30 mins	Hourly
13A	Middleton - Leeds - Harehills - Chapeltown	30 mins	30 mins	Hourly
49	Bramley - Kirkstall - Hyde Park - Leeds - Harehills	15 mins	20 mins	30 mins
	- Seacroft			
50	Horsforth - Kirkstall - Hyde Park - Leeds -	24 mins	24 mins	Hourly
	Harehills – Seacroft			
50A	Horsforth – Kirkstall – Hyde Park – Leeds –	24 mins	24 mins	Hourly
	Harehills – Seacroft			
91	Pudsey – Bramley – Kirkstall – Headingley – Chapel	30 mins	30 mins	30 mins
	Allerton – Harehills – Halton Moor			
X98	Leeds - Oakwood - Collingham - Wetherby	Hourly	Hourly	-
X99	Leeds – Oakwood – Collingham – Wetherby	Hourly	Hourly	Hourly

Given that set out above, it is considered that the development site is in a highly sustainable location, where journeys can be undertaken on foot or by cycle. Those journeys slightly longer in nature can be undertaken by public transport.

#### **Highway Considerations**

A number of objections have been received from local residents, Councillors and from Leeds City Council's (LCC) Environmental Protection Team. Consideration is given to each of the highway-related objections below.

#### **Additional Vehicle Movements**

A number of concerns have been raised with regard to the increase in vehicle movements to and from the site as a result of the proposed extension to the operating hours. These concerns primarily relate to noise disturbance from customers and delivery drivers, as well as the impact on the nearby road junction of Harehills Lane and Roundhay Road.

In order to understand the impact of the proposals, a review of the TRICS trip rate database has been undertaken. Consideration has been given to both restaurant and take away uses, and the traffic they generate between 23:00 and 03:00. None of the surveys undertaken within TRICS go beyond 01:00, however, the trip rates and associated trip generation of the development for the available hours is summarised in **Table 2** below.

Table 2 Trip Rates and Trip Generation

	Trip Rate		Trips (290sqm)			
	Arrivals	Departures	Arrivals	Departures		
	Restaurant					
23:00-00:00	0.265	0.505	1	1		
00:00-01:00	0.211	0.211	1	1		
	Take Away					
23:00-00:00	0.138	0	0	0		
00:00-01:00	-	-	-	-		

It can be seen that in the extended hours that the restaurant will be open, it is likely to generate just two vehicle movements per hour. It is not considered that this level of vehicle movements would result in a notable increase in vehicle-associated noise, particularly given the busy nature of the surrounding road network.



Furthermore, as part of the original planning permission, loading, unloading and deliveries (including waste) is restricted to 08:00-10:00. Therefore, the proposals will not result in any increase to noise associated with deliveries and servicing of the site.

#### **Highway Safety**

Concerns have been raised around highway safety, both for vehicles and pedestrians. It has been cited that the site is located next to a busy junction and the proposals will increase the risk of road traffic and pedestrian accidents.

Personal Injury Collision (PIC) data has been requested from LCC, however, at the time of writing this has yet to be received. A review of the Crash Map database has been undertaken in the meantime.

This shows that a high number of PICs have been recorded at the junction of Harehills Lane and Roundhay Road within the latest five-year period. However, no incidents have been recorded at the site frontage onto Roundhay Road within this period.

Just two incidents have been classified as 'serious' in severity at the Harehills Lane / Roundhay Road junction, with the remainder classified as 'slight'. Only four of the recorded incidents involved pedestrians, and these also occurred at the junction of Harehills Lane and Roundhay Road – three of these incidents were recorded as 'slight' in severity.

Full conclusions will be drawn once the detailed PIC data has been received, but at this stage it does not appear that there is a pattern to the road safety record that could be attributed to the site.

Furthermore, as noted above, the proposed extension to the operating hours is expected to have a minimal impact in terms of trip generation. As such, it is not expected that the proposals will worsen the existing safety record to a material extent.

#### **Parking**

A number of concerns have been raised in relation to parking, including allegations of indiscriminate parking by customers on the footway and on local streets.

The site has a car park to the rear, which has capacity to accommodate ten vehicles. It is not considered that a high number of customers will be visiting the site within the extended opening hours and therefore this level of provision should be sufficient to accommodate demand. Given the minimal number of dine-in customers during these times, delivery drivers will be able to make use of the car park when collecting orders.

The site has been shown to be in a highly sustainable location, where customers, and delivery personnel, will not be reliant on the private car. The extended operating hours are also at a time when other local businesses are not operational, and therefore any publicly available parking is likely to have spare capacity.

Furthermore, the above trip generation exercise has demonstrated that the site will generate a minimal level of vehicle movements during the extended operating hours, and therefore it is not expected that demand for parking will notably change from the existing situation.

#### **Summary and Conclusions**

It is considered that the information contained in this Statement provides sufficient detail to demonstrate that the impact of the proposals will not be detrimental to the local highway network, nor will the highway impact lead to significant changes to existing noise levels, safety records, or parking demand.



The extension to the operating hours will not result in a notable increase in vehicle trips to and from the site. As such, the concerns relating to increased noise disturbance, indiscriminate parking and road safety are unsubstantiated and are not sufficient reasons to refuse the proposed extension to operating hours.