Noise Assessment

Business Name	Jago's Pet Boutique & Spa
Business Address	68 Whalley Road, Clitheroe, Lancashire BB7 1EE
Date	11th January 2021

Overview

This report has been documented for the purpose of providing suitable and sufficient information to Ribble Valley Borough Council, in order to make a decision on whether the noise assessment and the acoustic reduction control properties implemented at the address are sufficient. Assessing the impact this may have on the health and quality of life for other businesses and residential property owners in the area.

Building Description

The property is a 3 storey mid terrace with a main front door opening directly onto the high street and a back door opening onto a rear private yard, both doors are UPVC and windows are double glazed. The walls are made of limestone approximately 200mm - 300mm thick at various points and are battened and covered with dual acoustic plaster board, each board is 15mm thick and all walls are double boarded. The property has a false ceiling installed on the original floor beams with 100mm insulation between the floorboards of the property above and the duel acoustic plaster board of the ceiling below, again the plaster boards are double boarded for better acoustic reduction. Research shows that acoustic plaster board can provide anything between 36-40db reduction per sheet.

Business Activities

The intended operating hours for Jago's Pet Boutique & Spa will be between the hours of 9am-5.30pm, 5 days a week. The maximum number of appointments per day will be between 4 and 5 depending on breed and size of the dogs. Due to the appointment system the maximum number of dogs in the premises at any one time will be 2-3, this will be for short periods of time and dogs will never be left unattended. Dogs will be groomed to the customers requirements, the primary noise from this activity will be from the dryer. Drying of a dog will be undertaken towards the rear of the property in an area which will have a small partition, drying will only last a maximum of 10-15 minutes per dog depending on the breed and size.

Sustained noise from dogs barking is of low risk as the owner of the business is an experienced dog handler and trainer. She has worked with dogs on a professional basis for 14 years gaining qualifications such as a Level 3 in Dog Grooming & Animal Care whilst also training in Dog Behaviour, Pet First Aid and Health and Safety. An individual dog bark is estimated between 80 & 90 db.

Dryer Specification

Double K Challenger Extreme Animal Dryer, 230v mains powered with two drying settings low and high. Both settings offer differing decibel levels in operation, this test was carried out using the higher noise producing setting.

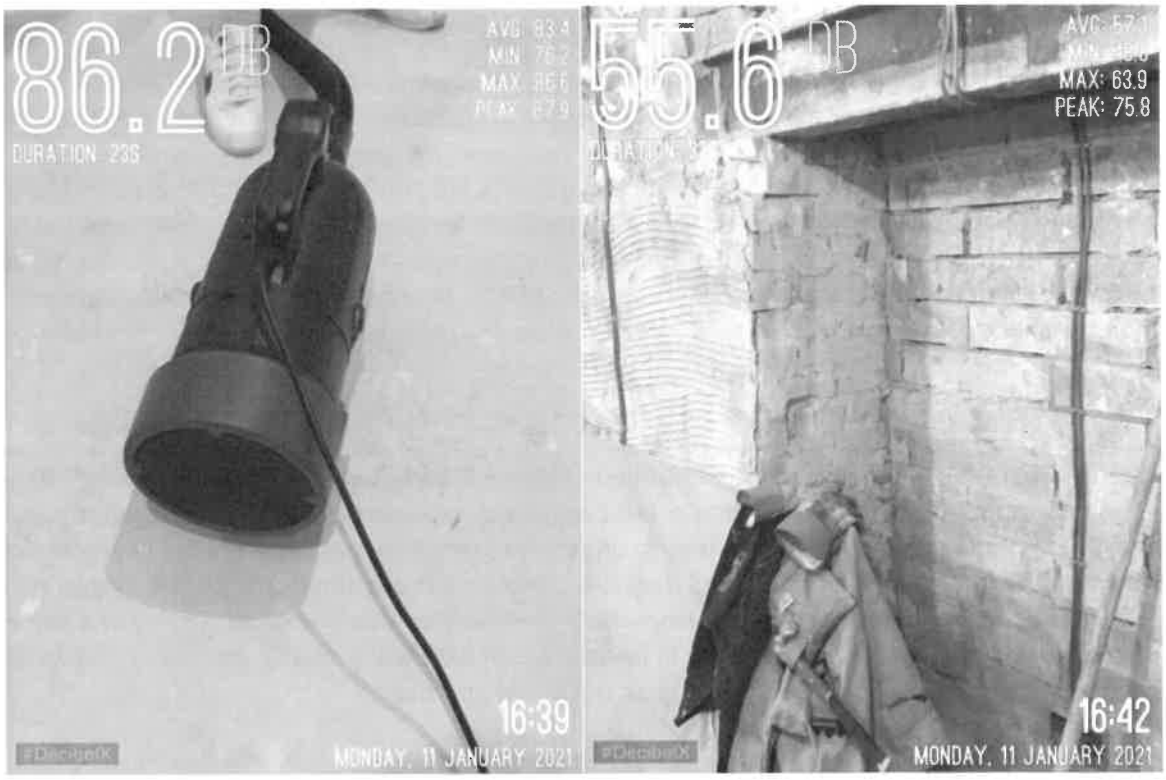
Testing Device and Software

Apple iPhone 7
Decibel x v9.2.1

The Test

All readings are in decibel format and are from two locations.

Location	1 meter from noise source	70 Whalley Road (adjoining property)
Duration	23 seconds	33 seconds
Average db	83.4db	57.1db
Minimum db	76.2db	48.8db
Maximum db	86.6db	63.9db



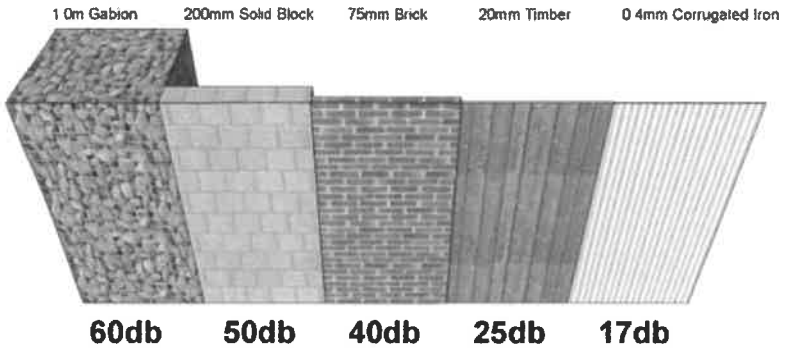
The meter readings taken from within the adjoining property (70 Whalley Road) are approximately 5 metres from the front door, a similar distance from which the readings were taken from within 68 Whalley Road. The noise generated from the local traffic could have contributed to the noise level, as this was taken at the time of 4.42pm on a normal working day. A further test can be undertaken to gain an alternative reading at a time when road noise is not additional factor, however the road is often busy with traffic during normal working hours.

Due to current refurbishment in the adjoining property the insulation and plaster board hasn't yet been fitted to the walls, this can be seen in the image above. The installation of both insulation and duel plaster boards will add more sound absorption benefit to the property.

Theory

Noise Source	Decibel Level
Dryer	86db
Dog Barking	90db
Combined	91.45db

Acoustic Material	Acoustic Value
Limestone 200mm thick	50db
Acoustic Plaster board 15mm thick	40db x 2
Combined	130db



At the time of research, there are no given values for limestone against the varying thickness. However, using the example above, the thickness of a 200mm solid block wall represents a decibel noise reduction value of 50db. This data shows in the table above, along with the 2 x 40db per sheet of acoustic plasterboard.

Summary

Using the theory above the overall noise reduction exceeds the potential noise generated. Given that a noise representative of a quiet library is approximately 40db, the significant noise reduction materials used in the building development is well within the permitted values. Please see below the permitted levels established by the World Health Organisation in the reference document "Guidelines for Community Noise"

Table 1: Guideline values for community noise in specific environments.

Specific environment	Critical health effect(s)	L_{Aeq} [dB(A)]	Time base [hours]	L_{Amax} fast [dB]
Outdoor living area	Serious annoyance, daytime and evening	55	16	-
	Moderate annoyance, daytime and evening	50	16	-
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16	
Inside bedrooms	Sleep disturbance, night-time	30	8	45
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60

This assessment demonstrates that the proposal would not present an unacceptable noise annoyance. Should you require any further information please do not hesitate to contact us.

Warm regards

Dean Williams (TECH IOSH)
Managing Director
Unicorn Solutions Limited