

Savills

MCDONALD'S, HAVANT #1410

Noise Impact Assessment

Report No. 14-0167-93 R02





Noise Impact Assessment

Savills

MCDONALD'S, HAVANT #1410

Report No.: 14-0167-93 R02

Date: 03 July 2024

Prepared by:

Jim Smith MEng(Hons) MIOA

Checked by:

Diego Cordes BSc (Hons) MSc AMIOA



Managing Director: Peter Rogers BSc(Hons) MSc CEng FIOA FRSA

Registered Offices: Unit G Meadow View, Winchester Road, Upham, SO32 1HJ
T +44 (0)1962 858800 E sa@sustainableacoustics.co.uk W www.sustainableacoustics.co.uk
Registered in England • Company No 08149321 • VAT Registration No 180557205



CONTENTS

0	NON-TECHNICAL SUMMARY	5
1	INTRODUCTION.....	6
2	THE AREA & CHARACTER.....	6
3	NOISE SURVEYS.....	8
4	NATIONAL NOISE PLANNING GUIDANCE & ASSESSMENT CRITERIA	9
5	SUBJECTIVE OBSERVATIONS – NOVEMEBR 2023 SURVEY 10	
6	RESULTS.....	11
7	ASSESSMENT.....	13
8	MITIGATION.....	16
9	NOISE IMPACT ASSESSMENT SUMMARY	17
10	CONCLUSION	18
	APPENDIX A ACOUSTIC SPOT MEASUREMENTS AND OBSERVATIONS.....	I
	APPENDIX B POLICIES AND STANDARDS.....	IV
	APPENDIX C PREMISES NOISE MANAGEMENT PLAN	XI
	APPENDIX D PLANT NOISE LEVELS.....	XIV
	APPENDIX E COD NOISE LEVELS	XVII
	APPENDIX F MCDONALD’S GUIDANCE ON ANTI-SOCIAL BEHAVIOUR	XXII



TABLES

Table 1: The equipment used during the survey between 22 nd – 23 rd November 2023.....	9
Table 2: Projected customer counts during potential opening hours of store .	11
Table 3: Measurements used to approximate noise at window per vehicle – screening omitted	14
Table 4: Calculation of change in estimated ambient noise with additional customer vehicles.....	14
Table 5: Noise Significance Impact Thresholds for extending hours of operation of the drive thru	17

FIGURES

Figure 1: Map of local area with context.....	6
Figure 2: Map of local area with distances to residential properties.....	7
Figure 3: Attended measurement positions.....	8
Figure 4: 15 minute time history at logging position – November 2023, prior to plant refurbishment	12



0 NON-TECHNICAL SUMMARY

- 0.0 This report is a revision of its predecessor 14-0167-93 R01, the initial noise impact assessment completed in January 2024 which determined sufficiently high levels of noise from the kitchen extract. It is understood that mitigation plans have since been put in place. Details of the measurements concerning the newly proposed plant noise are documented in Acoustic Associates SW Ltd report “8001 – Plant Noise Assessment”.
- 0.1 The McDonald’s located at Larchwood Avenue, Havant (#1410), has permission to operate 06:00 - 23:00, 7 days a week, and is investigating the possibility of extending the operational hours of the drive-thru to operate 24/7.
- 0.2 A noise impact investigation was completed between 22:00 - 07:00 on 22nd – 23rd November 2023 to investigate the existing noise climate with and without the normal operation of the store.
- 0.3 The McDonald’s is located on Larchwood Avenue, Havant, PO9 3QW. Road traffic noise is the primary contributor to the noise climate around the site. The closest residential properties are circa 55 meters away, to the east.
- 0.4 An assessment of the potential noise impact due to the extension of operating hours was undertaken for the four principal noise sources. The significance of each was assessed with national planning and noise policy regarding the Noise Policy Statement for England 2010, and therefore the National Planning Policy Framework:

Effect Threshold	Subjective / Objective Assessment levels in-front of residential façades			
	People	Vehicles	COD	Roof Plant
Significant observable adverse effect (SOAEL)				
Lowest observable adverse effect level (LOAEL)				✓
No observable effect level (NOEL)	✓	✓	✓	✓

Table 0: Noise Significance Impact Thresholds for extending hours of operation of the drive thru and in store eating services (in green after mitigation)

- 0.5 During the initial assessment, it was found that, whilst no new plant noise was anticipated, the previous plant noise was significant. New equipment to replace the old has since been proposed.
- 0.6 The assessment showed that the noise impact would not be likely to cause an observable adverse effect once mitigation was applied. It is therefore considered that anticipated noise would meet the aspiration set out by Paragraph 191 of the NPPF and the Noise Policy Statement for England; however, a proactive outline mitigation strategy is provided in this report.
- 0.7 A Premises Noise Management Plan is also proposed and set out in Appendix C. Such a Plan establishes good practice proactively and will reduce the risk of associated noise impact on the quality of amenity to a minimum. The impact on residents can be expected to be reduced overall by allowing this application, and any increased impact from vehicle noise in the area will be balanced against the benefits.



1 INTRODUCTION

- 1.1 Sustainable Acoustics Ltd is an independent acoustic consultancy who were commissioned to carry out a noise impact assessment, as part of the planning application for the proposed extension of hours of McDonald's (#1410) Larchwood Avenue, Havant PO9 3QW. The application is being reassessed in this updated report, following planned mitigation to plant as reported by Acoustic Associates SW Ltd in May 2024 respectively.
- 1.2 It is understood that the restaurant and drive-thru currently operate between 06:00 – 23:00, 7 days a week, and it is currently sought to investigate the viability of applying for 24/7 operation of the drive-thru only.
- 1.3 An overnight noise survey was undertaken between 22:00 - 07:00 between 22nd – 23rd November 2023. The noise survey established the existing activity around the site during operational hours, as well as the night and early-morning periods when the store is currently closed to inform an assessment of the likely noise impact during the proposed additional hours.
- 1.4 The assessment has been completed with regard for national policy on noise, relevant to England (NPSE), which specifies the approach to be taken to achieve the requirements of the National Planning Policy Framework (NPPF).

2 THE AREA & CHARACTER

- 2.1 McDonald's Havant [#1410] is located at Larchwood Avenue, Havant PO9 3QW. It is understood that the restaurant and drive-thru currently operate between 06:00 – 23:00. The store is located within a commercial area immediately adjacent to a residential area, with some industrial/commercial in the vicinity, as shown in Figure 1.



Figure 1: Map of local area with context



- 2.2 The closest residential properties are the houses to the immediate East on Willowdene Close.
- 2.3 The A3(M) is approximately 325m due west. Though this is the busiest road in the vicinity, and a constant source of background noise, giving the area a busier subjective quality, though it does not necessarily draw particular focus as it is due to its distance from the store.
- 2.4 There is a busy roundabout approximately 170m to the north-east, which connects Larchwood Avenue to the busy main road Purbrook Way as well as the B2150. Traffic noise from local roads is a primary contributor of both continuous and discrete noise at the site; generally controlling maximum levels and influencing ambient levels.
- 2.5 Two major retailers are in close proximity: an ASDA 100m to the south-west and a B&Q, 200m north. There is another fast-food outlet in immediate proximity (KFC) to the south-west. The B&Q is closed at night; the KFC closes at the same time as McDonald's (23:00) and the ASDA is open 24 hours 4 days a week.
- 2.6 During the survey in November 2023, prior to mitigation, plant noise was clearly audible at positions monitored. McDonald's plant was subjectively more noticeable than that of KFC.
- 2.7 Figure 2 shows the store surroundings in more detail, showing the distances from possible noise sources to the closest properties:

Roof Plant: 85m from closest noise-sensitive receiver
COD: 105m from closest noise-sensitive receiver
Drive-thru: 55m from closest noise-sensitive receiver
Parking Space (closest): 70m from closest noise-sensitive receiver*

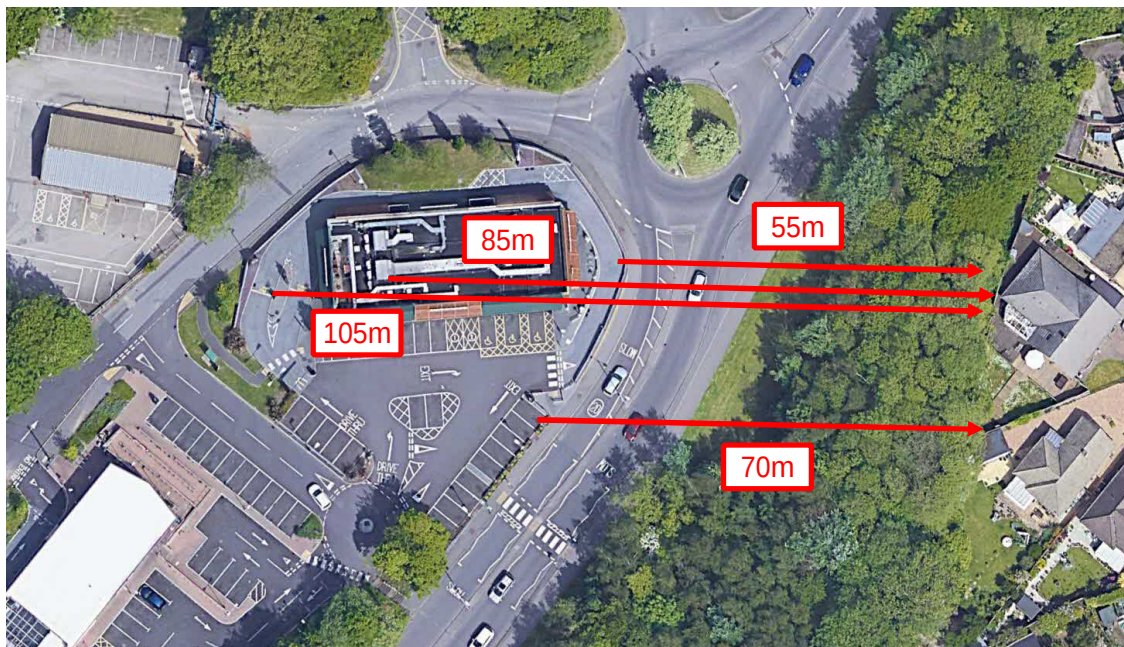


Figure 2: Map of local area with distances to residential properties

- 2.8 The operation has a drive-thru as well as a small sized car park with approximately 20 spaces, located around the perimeter. The entrance and exit for both drive-thru and car park are accessed via Larchwood Avenue (which branches at the roundabout).

- 2.9 It is understood that there have been no complaints regarding plant noise or any other noise source from the current operation of the restaurant. It is also understood that the store has had no problem with anti-social behaviour, however, McDonald's takes a proactive approach on this, as set out in Appendix F.

3 NOISE SURVEYS

- 3.1 Attended survey: Attended surveys was undertaken at the site between 22:00 and 07:00 on 22nd - 23rd November 2023 to capture the opening periods of the store, as well the periods of time immediately prior, where the store was closed. The attended measurements were carried out at a number of positions; chosen to measure and establish the typical noise levels for activities associated with the McDonald's operation, as well as the ambient noise levels in the area. Observations were also made during the attended measurements, which were at suitable positions to have a view of those arriving and leaving the restaurant. Observations and measurements made during the attended survey are summarised in Appendix A.
- 3.2 Unattended survey: Monitoring was also undertaken at a fixed position at first floor level on the boundary of the site to capture representative ambient and background noise levels at a position the same elevation as the residential facades overnight between 22nd and 23rd November 2023. This position logged noise levels in 1-minute and 15-minute periods over the survey, covering the attended measurements and also the intervening hours in the night.
- 3.3 Conditions: The weather was cool, between 6 - 10°C, and dry for the duration of the survey. Winds were light, southerly and below 5 m/s for the duration of the survey; they are not considered likely to have affected the results as the sources are in close proximity to the measurement positions.
- 3.4 Locations: Measurement positions are shown at Figure 3. Attended measurements were taken between 1.2 to 1.5m above the ground and at least 3m from a reflective surface.

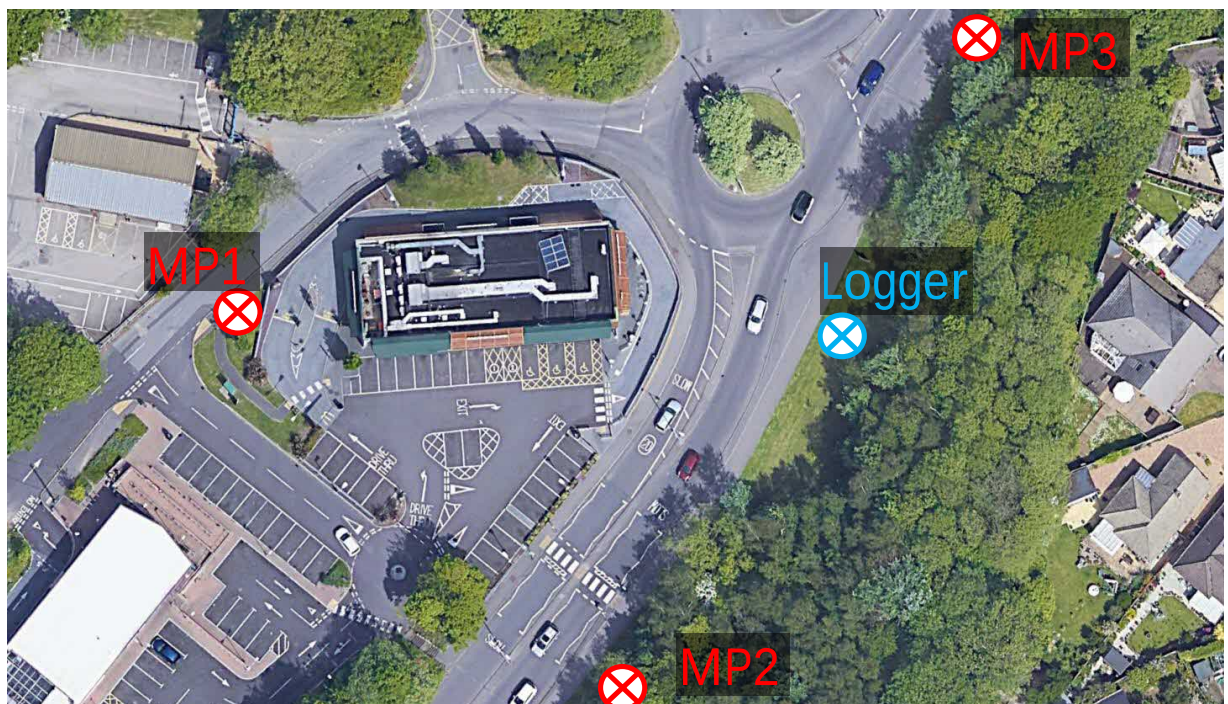


Figure 3: Attended measurement positions



MP1 – Drive thru ordering point. Chosen to measure contribution from vehicles ordering at the drive thru, including sound level of intercom (COD).

MP2 – Chosen to establish the rate at which noise from the main road diminishes further from the source.

MP3 – Chosen to examine how background for residents changes moving closer to the noise source.

Logger - To establish late night / early morning background noise at closest residential properties.

3.5 Equipment: The following equipment was used in the surveys.

Equipment	Type	Serial Number
Unattended Monitoring:		
Svantek Class 1 Sound and Vibration Analyser	958A	34551
Microphone	7052E	74075
Preamplifier	SV 12L	33541
Svantek SV36 (94 and 114 dB)	SV36	83721
Attended Measurements:		
Rion Class 1 sound level meter	NA-28	00170246
Preamplifier	NH-23	60254
Microphone	UC-59	00299
Rion Calibrator (with NA28 94dB)	NC-74	34773049

Table 1: The equipment used during the survey between 22nd – 23rd November 2023

3.6 All equipment is within regularly traceable calibration and the meters were calibrated using field calibrators before and after the survey periods, without significant drift observed.

4 NATIONAL NOISE PLANNING GUIDANCE & ASSESSMENT CRITERIA

4.1 The Assessment criteria used in this report is based on the following local and national policies, and national and international standards:

- Havant Borough Core Strategy
- BS EN ISO 4142:2012 – Methods for rating and assessing industrial and commercial sound
- The National Planning Policy Framework (NPPF) and Noise Policy Statement England (NPSE)

Full detail of the relevant policies and standards can be found in Appendix B



5 SUBJECTIVE OBSERVATIONS – NOVEMEBR 2023 SURVEY

5.1 Ambient Noise / Area Comments (noise not associated with store)

The store is located next to a busy supermarket. Whilst noise from supermarket customer's vehicles (on Larchwood Road) continues in the late evening and early morning hours, the dominant noise source during these hours is traffic from the main roads (Purbrook Way), with background noise influenced by the more distant traffic of the A3. Activity on suburban residential roads was light during the start of the attended survey, though picked up steeply after 06:00.

One petrol station customer was playing music from the car at a high level late at night.

The other "quick-service" food outlet (KFC) adjacent did not have any obvious activity or noise all night.

Some high aircraft movements were noted in the morning portion of the survey. Also observed in the morning was some noise from speaking voices of passers-by.

5.2 People

Only one customer arrived by foot during the early morning survey. It was observed that people in the car park walked to and from their cars quietly, and no antisocial behaviour was witnessed at any point during the attended part of the survey.

5.3 Vehicles

It was observed that customers had a strong preference for using the drive-thru facilities at this store, as opposed to the car park; (8 drive-thru customers in the final evening hour, 14 in the first morning hour; as opposed to 1 and 2 car park customers for the same respective periods).

Noises from cars using the store were audible as discrete events when on site, but at greater distances became difficult to distinguish from the continuous sound of passing cars and buses on the main roundabout. Vehicle noise was a combination of idling vehicles in traffic and accelerating/braking as the vehicles entered/left the store.

2 delivery vehicles were observed in the evening.

5.4 COD/Store Noise

During the attended part of the survey, it was observed that the noise levels from the COD were audible over the background noise at the ordering points. Customers appeared to have no problem hearing the member of staff through the COD and replied in a normal voice.

5.5 Plant

Plant at this store has since been proposed to be replaced with significantly mitigated noise levels.

During the November 2023 survey, plant noise from McDonald's was the dominant influence on background noise at positions around the store and was audible further away at MP1 and MP2. It became more difficult to discern later into the survey as background noise rose after 06:00.



6 RESULTS

6.1 Attended survey noise levels (positions MP1 to MP3)

Appendix A summarises the attended measurements, which highlights the noise levels due to the operation of the McDonald's.

6.2 Customer Counts

Predicted customer counts for the proposed extended operating hours have been received from the store. The counts are separated hour-by-hour and are exclusively estimates for the drive-thru only.

The customer counts received divide the anticipated customers by hour and by day. To anticipate the worst-case, the numbers assumed in Table 2 below and used following calculations have been taken for the busiest day (Friday); where data was missing, a worst-case assumption has been made.

Hour	Drive-Thru	Car Park	On Foot
23:00 – 00:00	45	n/a	n/a
00:00 – 01:00	20	n/a	n/a
01:00 – 02:00	12	n/a	n/a
02:00 – 03:00	12*	n/a	n/a
03:00 – 04:00	12*	n/a	n/a
04:00 – 05:00	12*	n/a	n/a
05:00 – 06:00	12	n/a	n/a

*no data received, assumed worst case

Table 2: Projected customer counts during potential opening hours of store

6.3 Unattended survey

The variation of ambient noise levels (L_{Amax} , L_{Aeq} , L_{A90}) between 21:00 22nd November 2023 and 07:00 on the 23rd November 2023 are shown in 15 minute intervals in Figure 4.

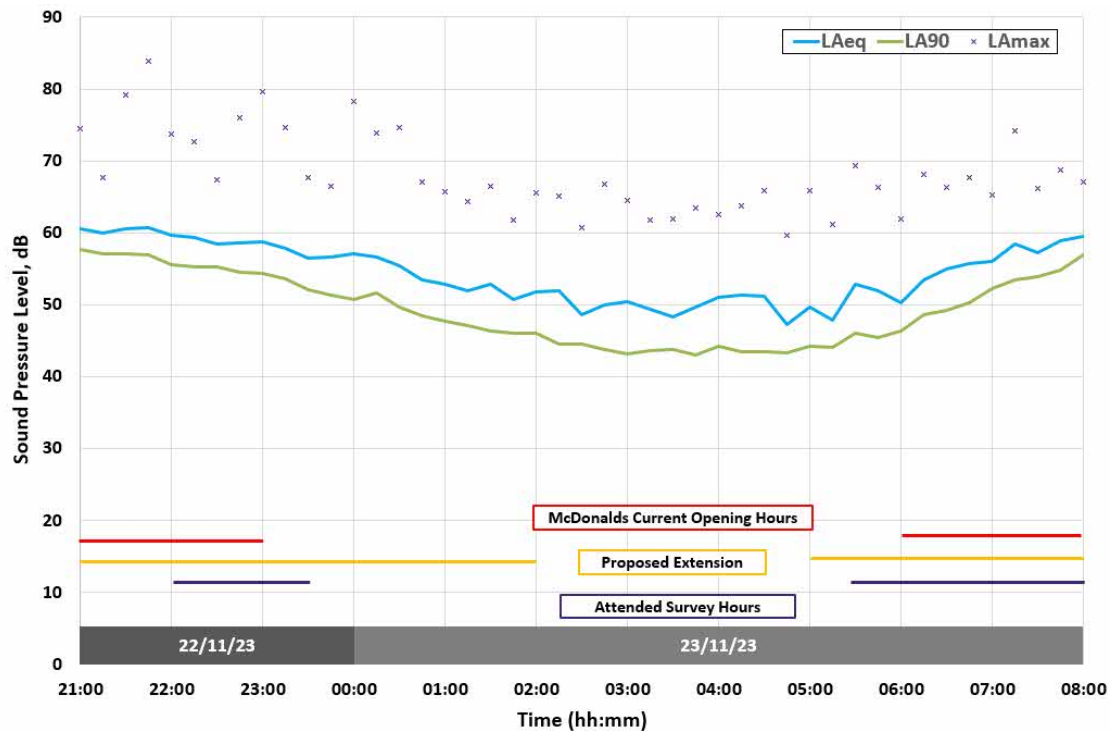


Figure 4: 15 minute time history at logging position – November 2023, prior to plant refurbishment



7 ASSESSMENT

7.1 People / ASB

- 7.1.1 Subjectively, no significant noise from people was observed during the site visit; no pedestrians were seen moving through the car park.
- 7.1.2 With no evidence otherwise, people noise at this site between the proposed extended hours of 24/7 operation is hypothetical; no parameter or standard has been identified to assess people noise as anything other than negligible in context.
- 7.1.3 It is considered that the best way to deal with people noise, should it become an issue in the future, is via the antisocial behaviour policy protocol as outlined in Appendix E; which should be implemented in full to mitigate the noise.

7.2 Vehicles – Effect on Ambient Noise

- 7.2.1 To assess potential noise from the additional opening hours of McDonald's, the noise from vehicles passing by the closest point of the McDonald's store to the residential properties will be added to the existing ambient noise level to establish the worst-case predicted increase in ambient noise level due to the operation of McDonald's. This study will consider both the Drive-Thru and the Car Park.
- 7.2.2 Note that this is not a BS4142 assessment, but it is considered an effective way to assess the impact that additional vehicle movements may have at nearby residential receptors. This is supported by the approach taken in environmental statements, and guidance by IEMA and the Calculation of Road Traffic Noise (CRTN). BS 4142 is not aimed at accurately assessing impact for this type of noise, even though it now includes noise from vehicles around commercial sites. This is because the standard aims to assess noise from fixed plant and in this case the vehicles are not operating around the site but passing through it as diverted traffic. The difference in ambient noise level created by the number of vehicles is therefore considered a more robust approach to understand the impact of this type of noise.
- 7.2.3 Car Park / Drive-Thru split: Of the vehicles arriving, approximately half use the drive-thru.
- 7.2.4 Deliveries: During the survey, 2 delivery mopeds were observed. It is understood the store runs delivery with Uber Eats. Uber Eats do use motorised scooters, but limit vehicles to engine sizes of 50CC. From previous surveys, scooters were found to have similar maximum noise levels to those of petrol cars. Calculations are done assuming delivery vehicles have much the same acoustic properties as customer cars, though if motorbikes with larger engines are to be used as delivery vehicles, further assessment may be required.
- 7.2.5 Noise levels from individual cars passing have been measured at other McDonald's stores, measured as 62 - 66 dB(A) at a distance of 7 m perpendicular to direction of travel.
- 7.2.6 Noise level at receiver: In order to undertake propagation calculations, those measurements are implemented together with the following assumptions, as summarised in the table below:



Previously Measured, at other sites

Measured level of vehicle during movement over a few seconds at McDonald's Car Park, dB (L_{Amax})	66
Distance from vehicle at the instant the L_{Amax} was measured, m	7
Estimate of Sound Power of moving source, dB (L_{Aw})	91

Calculations for Havant #1410

Closest distance to residential window from drive-thru, m	55
Instantaneous level of passing vehicle at residential window, dB (L_{Amax})	48
Approximate total duration of a typical vehicle movement on McD premises (excluding idling), seconds	10

Table 3: Measurements used to approximate noise at window per vehicle – screening omitted

The calculations for change in ambient noise level is given below in Table 4. The levels have been calculated using a logarithmic average for the noise levels over every hour by considering each of the 3,600 seconds in the period based on the data in Table 3. As a worst-case calculation, the effect of screening has been omitted in these calculations – there was some screening on site between the drive-thru and the residential, and this will lower the estimated change further.

	Existing Ambient Noise Levels at receiver, dB(A)	Anticipated worst-case Drive Thru vehicle numbers	Estimated contribution from additional vehicles alone, over the hour, $L_{Aeq, 1hour}$	Estimated Change to Ambient Noise Level <u>from vehicles alone</u> , dB(A)
23:00 – 00:00	58.9	45	38.4	58.9 (+0.0)
00:00 – 01:00	50.8	20	35.6	50.9 (+0.1)
01:00 – 02:00	48.6	12	33.3	48.7 (+0.1)
02:00 – 03:00	48.3	12	33.3	48.4 (+0.1)
03:00 – 04:00	47.2	12	33.3	47.4 (+0.2)
04:00 – 05:00	50.3	12	33.3	50.4 (+0.1)
05:00 – 06:00	54.9	12	33.3	54.9 (+0.0)

Table 4: Calculation of change in estimated ambient noise with additional customer vehicles.

- 7.2.7 It is generally considered that the minimum perceivable change in ambient noise level is 3 dB. It is noted that this is the case for steady state, anonymous sources. Using 3 dB as a useful benchmark against which to assess the predicted change in ambient noise levels, the change in noise level shown in Table 4 is not likely to be perceivable for the worst-case scenario.
- 7.2.8 It is worth noting that measurements road traffic noise already governs a large component of the area's soundscape. Noise from vehicles driving past the residential properties would not change the acoustic character of the area.



- 7.2.9 It is considered that vehicles entering and leaving the site would have no impact on health or quality of life – this is classified as a No Observable Effect Level or ‘NOEL’.
- 7.3 Vehicles – Maximum Noise
- 7.3.1 Car doors being slammed would normally be another noise source to assess where hours are extended – however, in this case, the proposal is for the drive-thru only, and so maximum noise from car doors is omitted from this assessment.
- 7.3.2 Other instances of maximum noise from vehicles are not considered to fall beyond what is already assessed in the previous section, unless it was a maximum in the form of over-revving of the engine or a car horn, for example. Despite originating from a vehicle – these types of noise are considered separately under ASB in Section 7.1 – this is because these types of “vehicle noise” are better attributed to humans, as they are not essential for normal driving on the road.
- 7.4 COD
- 7.4.1 The COD noise levels were measured during the attended part of the survey, as shown in Appendix A. During the attended part of the survey, the COD was perceived as being of a moderate – loud volume during the measurements taken. It was observed that customers had no problem in hearing the member of staff through the COD and that they replied in a normal voice.
- 7.4.2 Based on noise levels measured close to the COD (~67 dB at ~2m at 23:26), levels at a worst-case closest distance of 105m would be expected to be below 35 dB $L_{Aeq,T}$ at receiver windows,
- 7.4.3 COD levels within the residential will likely be below background noise levels at properties to the east during proposed extended hours, and also be significantly lower than 30dB $L_{Aeq,T}$ within properties (the recommended maximum ambient noise level for bedrooms during the night in BS 8233).
- 7.4.4 Speech can sometimes be audible even below background level, as voices are easily discernible to the human ear. As such, it is considered that the COD noise should be capped at the level it is to ensure a No Observable Effect Level or ‘NOEL’ can be achieved.
- 7.4.5 Measurements of different stores were taken in order to identify noise levels for each level setting of the COD, as shown in Appendix D. Recommended settings for daytime and night time hours have been made based on current settings to ensure there is no impact at residential whilst still allowing voice to be discernible.
- 7.5 Plant
- 7.5.1 Previously, as documented in the initial report 14-0167-93 R01, the plant was clearly audible at positions around the store and car park, especially during lulls in traffic and on the roof, plant noise was very loud. Data from the unattended meter did not show a clear cut-off time where plant noise ramped down and back up, suggesting that the kitchen extract plant was left to operate all night. A BS 4142 assessment was completed at the time, yielding a rating level of +9 dB
- 7.5.2 Sustainable Acoustics Ltd were issued a copy of the report completed by Acoustic Associates SW Ltd; who revisited the site in April 2024 to complete a noise impact assessment considering the revised plant at the store.
- 7.5.3 The only item of plant that was considered for mitigation was the new kitchen extract, which was recommended a 2.1m long discharge silencer and a full acoustic enclosure



Notwithstanding, it is understood that the new plant includes two Weatherite air handling units (type Y200) and five associated condenser units (Mitsubishi type ZM 250) replacing existing AHUs. The condensers serving the Manager's Room, Crew Room, Office and Door Air Curtain are also to be replaced as well as the toilet extract fan and an ASHP attached to a new hot water tank.

7.5.4 Acoustic Associates SW Ltd completed a BS 4142 Assessment using measured background data with plant switched off, and data of the new plant units. As such the background noise measured by AASW was lower than that measured by Sustainable Acoustics, and therefore a more stringent target to represent residual noise. The assessment considered a penalty to the rating level for distinctive noise, and the predictions were completed in accordance with the framework as set out in ISO 9613-2 Acoustics – Attenuation of sound during propagation outdoors – Part 2.

7.5.5 The result of the assessment was a rating level of -3 dB relative to background, and that the likely impact was low.

On review, Sustainable Acoustics see no reason to doubt the methodology used. It is recommended the "8001 – Plant Noise Assessment" is read in conjunction with this report.

7.5.6 The plant noise at the closest residential is therefore considered to be below the existing background and would normally be considered to be low, and a No Observable Adverse Effect Level (NOAEL).

8 MITIGATION

8.1 The proposed extension of hours of the restaurant is not expected to generate any additional impact, but would still be expected to result in a level of impact equivalent to a LOAEL when considering noise from vehicles, people, COD, and plant due to the existing noise from the plant.

8.2 Some additional proactive mitigation advice is given in this report, which is considered important to adhere to.

8.3 People: A premises noise management plan (Appendix B) is to be implemented, which embeds taking proactive best practice steps to further reduce the potential for noise impact on the residential properties. This is considered to be advisory to minimise the risk of noise from people, and in case of antisocial behaviour, and could be included as Informative to any permission.

8.4 Vehicles: Vehicle noise from cars moving through the drive-thru is not calculated to have a noticeable effect on the existing ambient noise levels, but it is important to ensure no antisocial use of vehicles takes place; this is also addressed in the noise management plan.

8.5 COD: COD noise levels are not expected to have any impact on residents; though it is recommended they are set to operate as low as practicably after 23:00 and before 07:00 as a good practice measure.

8.6 Plant: Mitigation to plant noise was instructed following the initial assessment as documented in this report's predecessor (14-0167-93 R02) and has been reassessed in Acoustic Associates SW Ltd's report "8001 – Plant Noise Assessment".

8.7 By implementing these mitigation recommendations any extension to the hours of operation is considered to result in an acceptable level of noise impact, which is considered to implement the aims of the national Noise Policy Statement for England (2012) and the NPPF aims to protect residential quality of life whilst balancing the burden on business.



9 NOISE IMPACT ASSESSMENT SUMMARY

- 9.1 Based on the assessments above the significance of the impact from noise from each source in turn is summarised below, assuming mitigation has been applied, with regard for the Noise Policy Statement for England 2010, and therefore the NPPF:

Effect Threshold	Subjective / Objective Assessment levels at 3m in-front of residential façades			
	People	Vehicles	COD	Roof Plant
Significant observable adverse effect (SOAEL)				
Lowest observable adverse effect level (LOAEL)				
No observable effect level (NOEL)	✓	✓	✓	✓

Table 5: Noise Significance Impact Thresholds for extending hours of operation of the drive thru

- 9.2 Best practice measures are recommended to keep noise impact at minimum, should an extension be granted.
- 9.3 Proactive mitigation recommendations have been made and it is considered that the evidence supports this application on noise grounds and the premises noise management plan delivers an overall enhancement to the existing quality of life of residents, as encouraged by the national policy.



10 CONCLUSION

- 10.1 A noise impact assessment has been completed by Sustainable Acoustics Ltd. at the McDonald's located at Larchwood Avenue, Havant, PO9 3QW, based on the possibility of extending the opening hours of the drive thru to operate 24/7
- 10.2 The assessment was completed using a combination of attended and unattended measurements: first, between 22:00 - 07:00 the 22nd – 23rd November 2023 by Sustainable Acoustics Ltd, and subsequently overnight on the 7th April by Acoustic Associates SW Ltd.
- 10.3 The assessment shows that the noise impact in terms of people, vehicle, COD, and plant noise would be considered to have no observable impact on residences (NOEL), and therefore be unlikely to cause any impact on the nearby amenity, with no additional mitigation needed.
- 10.4 Proactive mitigation is included to reduce potential impacts to as low as is practicable.
- 10.5 A premises noise management plan (PNMP) at Appendix C is proposed, which if implemented is extended to proactively minimise any potential risk of noise resulting from antisocial behaviour. This is a precautionary measure as no ASB was observed during the survey, and the risk of it considered to be very low. It is not necessary to add a condition in relation to this in our view.



APPENDIX A

Acoustic Spot Measurements and Observations



Time	Duration (mm:ss)	L _{Aeq}	L _{Amax}	L _{A90}	L _{eq}								Pos	Remarks	Customer Count
					63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz			
15:57	01:01	99	100	99	81	88	98	87	84	79	71	67	R		
22:00	15:00	72	94	66	67	65	62	58	61	55	47	39	3	Regular traffic on A3; though lulls noticeable. Hum from McD plant clear. Scream from car at 22:02 Lull at 22:14	
22:17	15:00	78	89	71	71	66	65	61	59	55	51	46	1	7 cars in CP; 4 in DT McD roof plant dominates M'bike in at 22:20 Queue for Drive-Thru, cars idling. Motorbike loud up road (not McD). 22:23. Motorbike on main road at 22:29 Manhole cover noisy when driven over Man singing loudly at outside COD – 22:12	DT : 8 CP : 1 Ped : 0
22:50	15:00	68	87	62	62	61	56	51	54	49	40	34	2	MCD plant dominates stil. A3 contributes to B/G noise – clear but not loud. Higher ground in this position. Few cars go past. Car horn at 22:05 No plant from ASDA audible	
23:08	15:00	70	84	69	63	59	64	52	49	43	36	31	1	McD plant continues – noisy. Traffic on A3 audible as previously. Occasional local traffic , quiet. Idling Car at KFC. Staff cleaning by back door. 23:16 Door clunk and music from car, 23:20 Staff leave 23:20	DT : 0 CP : 0 Ped : 0
23:26	00:50	67	75	65	63	58	56	52	50	43	36	34	P	On path at entrance to COD. Roof plant louder.	
05:28	15:00	70	77	67	62	58	63	52	51	45	38	33	1	Background very similar to night measurement with traffic on A3 and McD roof plant dominating. Van ticking over outside 5:32 Jet washer washing road at other end. Window cleaning van reversing out of car park – beeping 05:34	



Time	Duration (mm:ss)	L _{Aeq}	L _{Amax}	L _{A90}	L _{eq}								Pos	Remarks	Customer Count
					63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz			
05:46	15:00	73	90	66	68	65	62	60	61	56	48	40	3	Local traffic beoming more and more frequent, beginning to drown out McD. Very high plane passes 5:54 Voice of passerby 5:54 Occasional customers to ASDA petrol station, no noticeable noise	
06:05	00:50	85	94	74	83	65	65	64	63	60	55	49	1	COD Measurement	
06:06	15:00	71	80	68	65	60	65	54	54	48	41	37	2	Some staff voices	DT : 3 CP : 1 Ped : 1
06:24	15:00	70	86	66	64	59	57	55	57	52	41	36		Very similar, slight breeze	
06:41	15:00	74	92	69	67	61	64	58	59	53	48	41		Very much picking up now, lots of vehicles enter DT for breakfast rush Loud seagulls at 6:47 Loud order at 6:50 Gulls again, 6:53	DT : 11 CP : 1 Ped : 0
06:58	00:20	74	80	71	70	65	64	58	59	54	50	43		Isolated order noise	
06:58	00:45	79	86	75	72	67	64	58	59	55	53	44		Isolated gull noise	
06:59	01:19	77	86	73	71	61	64	59	60	56	49	42		Another COD order	



APPENDIX B

Policies and Standards



NATIONAL PLANNING POLICY FRAMEWORK

Current planning policy is based on the National Planning Policy Framework (NPPF), revised in December 2023, which supports a presumption in favour of sustainable development, unless the adverse impacts of that development would outweigh the benefits when assessed against the policies in the Framework, taken as a whole.

The noise implications of development are recognised at paragraph 191, where it is stated that planning policies and decisions should:

“mitigate and reduce to a minimum potential adverse impact from noise from new development – 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”

Noise Policy Statement for England

Paragraph 191 of the NPPF also refers to advice on adverse effects of noise given in the Noise Policy Statement for England¹ (NPSE). This document sets out a policy vision to:

“Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development”.

To achieve this vision the Statement sets the following three aims:

“Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

avoid significant adverse impacts on health and quality of life
mitigate and minimise adverse impacts on health and quality of life; and
where possible, contribute to the improvement of health and quality of life.

The following descriptive terms are implemented in the NPSE:

No observed effect level (NOEL): 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.

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.

National Planning Policy Guidance on Noise (July 2019)

This guidance is consistent with the policy within NPSE. The newly refreshed guidance says “Good acoustic design needs to be considered early in the planning process to ensure that the most appropriate and cost-effective solutions are identified from the outset”.

¹ Department for Environment, Food and Rural Affairs, Noise Policy Statement for England, London, 2010



It also says noise can override other planning concerns, where justified, “although it is important to look at noise in the context of the wider characteristics of a development proposal”.

It makes clear that “As noise is a complex technical issue, it may be appropriate to seek experienced specialist assistance when applying this policy”.

The guidance provides the following “Noise Exposure Hierarchy Table”:

Response	Examples of outcomes	Increasing effect level	Action
NO OBSERVED EFFECT LEVEL			
Not present	No Effect	No Observed Effect	No specific measures required
NO OBSERVED ADVERSE EFFECT LEVEL			
Present and not intrusive	Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life.	No Observed Adverse Effect	No specific measures required
LOWEST OBSERVED ADVERSE EFFECT LEVEL			
Present and intrusive	Noise can be heard and causes small changes in behaviour, attitude or other physiological response, 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 small actual or perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
SIGNIFICANT OBSERVED ADVERSE EFFECT LEVEL			
Present and disruptive	The noise causes a material change in behaviour, attitude or other physiological response, 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
Present and very disruptive	Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

Local Policy – Havant Borough Core Strategy

The most recent publicly available guidance with specific noise policies is Havant Borough Core Strategy 2016. Relevant guidance specifically pertaining to noise is copied below:



Policy CS 16 High Quality Design

“Planning permission will be granted for development that is design to a high standard, which helps create places where people want to live, work and relax. All development should demonstrate that its design :

Responds to, draws inspiration from and respects local context and the development does not cause unacceptable ham to the amenity of neighbours through smell, the loss of privacy, outlook, noise or overlooking.”

Policy DM 10 Pollution

“Development that may cause pollution of water, air or soil or pollution through noise, smell, smoke, fumes, gases, steam, dust, vibration, light, heat, electromagnetic radiation and other pollutants will only be permitted where all of the following relevant criteria can be met:

1. The health and safety of existing and future users of the site, or nearby occupiers and residents is not put at risk.
2. National air quality standards or objectives would not be breached.
3. The water environment would not be detrimentally affected.
4. It would not lead to an unacceptable deterioration in the quality or potential yield of coastal, surface and ground water resources.
5. External lighting is of the minimum level of illumination and duration required for security and operational purposes.
6. External lighting would not interfere with safe navigation in either Chichester or Langstone Harbours and other coastal locations.”

British Standard BS 4142: 2014

The British Standard BS 4142: 2014, Methods for rating and assessing industrial and commercial sound is an update of the previous edition of the standard, and describes methods for rating and assessing sound of an industrial and/or commercial nature, to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident. The sound from the industrial/commercial source is rated by taking into account the sound level of the source, known as the specific sound level, and its characteristics, such as tonal, impulsive or intermittency of the source, and applying an appropriate correction to give the rating level of the sound source. To gain an initial estimate of the potential impacts of the sound source, it is compared to the background noise level, and the level by which the rating level exceeds the background noise level indicates the following potential impacts:

Difference	Assessment
Around 10 dB or more	Likely to be an indication of a significant adverse impact, depending on the context.
Around 5 dB	Likely to be an indication of an adverse impact, depending on the context.
0 dB or less	An indication of the specific sound source having a low impact, depending on the context.

The standard states that “where an initial estimate of the impact needs to be modified due to the context, take all pertinent factors into consideration, including the following:



- 1) The absolute level of the sound
- 2) The character and level of the residual sound compared to the character and level of the specific sound
- 3) The sensitivity of the receptor”.

The standard also requires an indication of the uncertainty of the assessment made.

British Standard BS 8233: 2014

The British Standard BS 8233: 2014, Guidance on Sound insulation and noise reduction for buildings provides additional guidance on noise levels from sources without specific character in the built environment, based on the recommendations of the World Health Organisation. The criteria desirable levels of steady state, “anonymous” noise in unoccupied spaces within dwellings, from sources such as road traffic, mechanical services and other continuously running plant, are tabulated below:

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq, 16 \text{ hour}}$	-
Dining	Dining room/area	40 dB $L_{Aeq, 16 \text{ hour}}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq, 16 \text{ hour}}$	30 dB $L_{Aeq, 8 \text{ hour}}$

It is noted, however that where development is considered necessary or desirable, despite external noise level above WHO guidelines, the above target levels may be relaxed by up to 5 dB.

The standard also recommends that for traditional external amenity areas, such as gardens, it is desirable that external noise levels do not exceed 50 dB $L_{Aeq, T}$, and that 55 dB $L_{Aeq, T}$ would be acceptable in noisier environments. However, it is recognised that these values may not be achievable in all areas where development is desirable, and in such locations, development should be designed to achieve the lowest practicable levels.

ProPG

Professional Practice Guidance on Planning & Noise: New Residential Development, published May 2017 by a Working Group of the Institute of Acoustics, Association of Noise Consultants and Chartered Institute of Environmental Health to provide guidance on the approach to the management of noise within the planning system in England. Whilst it is not an official government code of practice, it is endorsed by the appropriate professional bodies and reflects the NPSE, NPPF and Planning Practice Guidance. It is restricted primarily to the consideration of new residential development that will be exposed to transportation noise sources.

ProPG advocates consideration of noise at an early stage and good acoustic design to produce sustainable development. Design target noise levels are based on BS 8233: 2014 with additional guidance on individual noise events at night, how windows and ventilation should be assessed and how the assessment should be considered where target noise levels may be difficult to achieve.

The criteria for the ProPG Stage 1: Initial Site Risk Assessment are reproduced overleaf.



Note also that Appendix A para A.19: “A site should be regarded as high risk where the $L_{Amax, f}$ exceeds or is likely to exceed 80 dB more than 20 times per night.”

As an additional note to the final comment at the bottom of Figure 1; NOTE 4 in Figure 2 with ProPG guidance gives the following advice in relation to maximum noise levels: “In most circumstances in noise-sensitive rooms at night (e.g. bedrooms) good acoustic design can be used so that individual noise events do not normally exceed 45dB $L_{Amax, F}$ more than 10 times a night.”

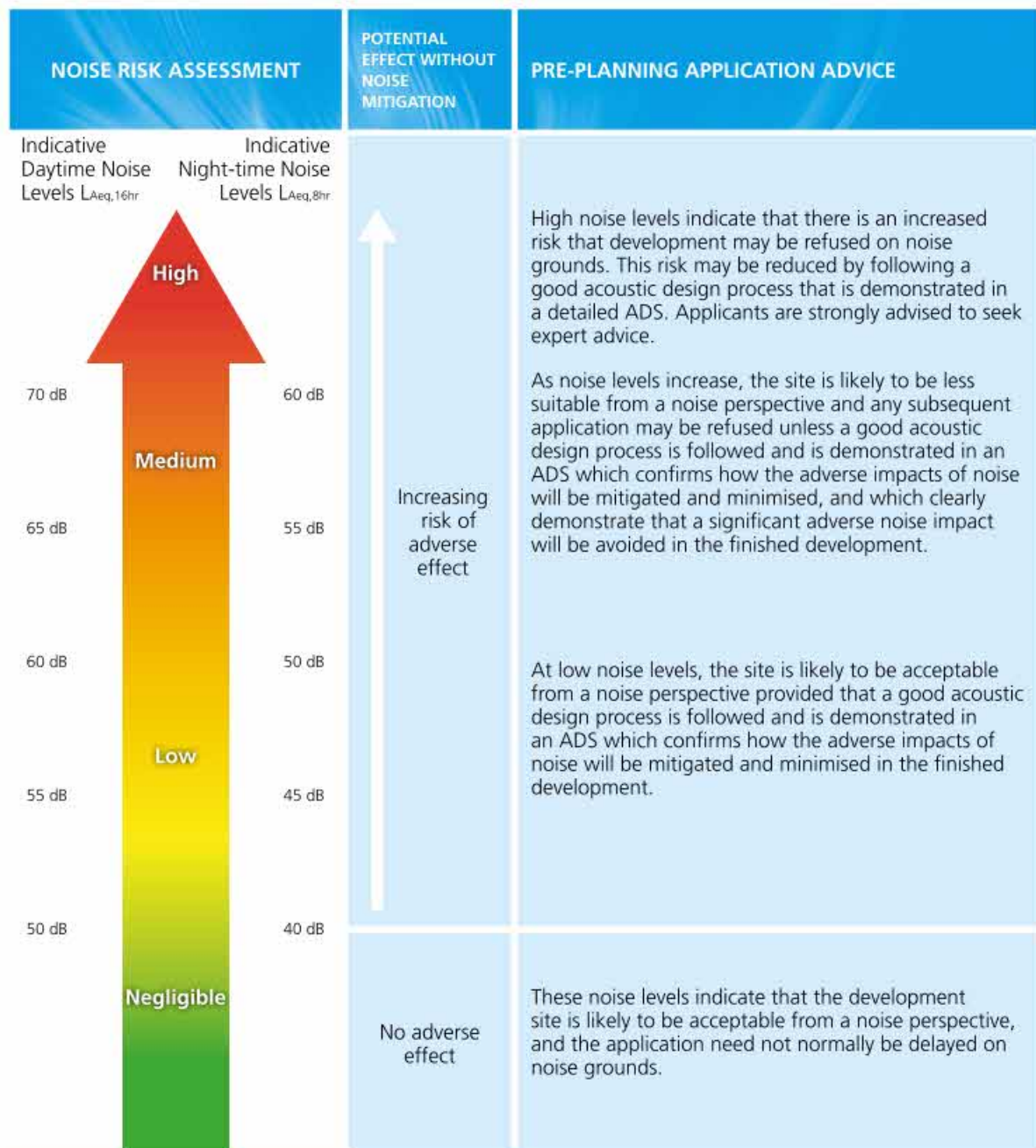


Figure 1 Notes:

- Indicative noise levels should be assessed without inclusion of the acoustic effect of any scheme specific noise mitigation measures.
- Indicative noise levels are the combined free-field noise level from all sources of transport noise and may also include industrial/commercial noise where this is present but is "not dominant".
- $L_{Aeq,16hr}$ is for daytime 0700 – 2300, $L_{Aeq,8hr}$ is for night-time 2300 – 0700.
- An indication that there may be more than 10 noise events at night (2300 – 0700) with $L_{Amax,F} > 60$ dB means the site should not be regarded as negligible risk.

Figure 1. Stage 1– Initial Site Noise Risk Assessment



APPENDIX C

Premises Noise Management Plan



PREMISES NOISE MANAGEMENT PLAN (PNMP) : HAVANT #1410

The following measures must be implemented between 11pm and 7am, as part of a proactive management effort to minimise the noise impact caused to nearby residents, created by the operation of the premises, and its customers when inside or in the vicinity of the premises.

These measures include :

Noise Source	Control measure
1. Minimising Vehicle and antisocial behaviour Noise (e.g. Loud music)	Staff shall be vigilant for vehicles that arrive and have either loud music playing, or where the car is being driven deliberately to create noise by revving of the engine or other stunts. Observational records should be made of registration plates in the Incident log where possible, and CCTV footage used to provide evidence of culprits whom regularly cause antisocial behaviour. Where these are substantial examples then these should be supplied to the authorities with a copy of the noise log. Drivers should be encouraged to switch engines off when not in use. <u>NOTE: No deliveries or waste collections should occur before 08:00 or after 20:00, and no deliveries should occur on Sundays or Bank Holidays according to previous planning documents.</u> <u>Members of the management team, who are properly trained are required to quickly and safely challenge those creating unreasonable noise levels and request them to adjust their behaviour, to minimise noise and respect their neighbours. Information on those causing antisocial behaviour (ASB), should it continue, will be recorded as an incident and reported, when required to statutory authorities thereby and minimising and preventing the disturbance caused to neighbours as far as possible. For further information on McDonald's National Policy on ASB see the McDonald's Guidance for Managing Anti-Social Behaviour.</u>
2. People Noise	Signs shall be prominently displayed that ask customers that come into the premises to leave quietly in order to respect our neighbours. At the drive thru, signs should request that customers keep noise to a minimum or may risk not being served. We will work in partnership with the police and other statutory authorities to address any nuisance or crime and disorder that generates noise outside the restaurant within the licence, which could include SIA guarding (Security Industry Authority) on a risk assessment basis to achieve, where it is expected to be necessary to control noise. Customers that are seen to be disregarding the notices and/or loitering outside during night-time/early morning hours making noise should be encouraged to come inside if they are eating, rather than be outside, or move on. Where this becomes confrontational an ASB trained Manager will attend and have the power to bar the person. <u>Gatherings of people in the car park who are not waiting to be served, should be challenged by the Manager, notified that they are on CCTV and recorded in the Incident log. Although rare, where there is evidence of antisocial behaviour, of which significant levels of noise are part, information will be made available to the authorities. A phone number will be made available to residents to contact the store, to report evidence of ASB within the boundary of the premises.</u>
3. Intercom (COD) and other Noise	The intercom system should be set up such that it reduces in noise level after 23:00 and before 07:00 such that it is barely audible at the closest residential properties. For this store, COD settings of 10 for night-time are suggested.

Approved Plan for Store No. : _____, Authorising person : _____, Signature _____

The cover features a photograph of a McDonald's restaurant at night, with its illuminated signage and interior visible. The image is framed by a large, stylized graphic element consisting of a thick yellow wavy line and a thinner white wavy line that sweep across the top and left sides. The background is a solid dark green. In the bottom left corner is the McDonald's Golden Arches logo, and in the bottom right corner is the title "McDonald's Incident Book" in a white sans-serif font. A small copyright notice is located at the very bottom left.

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

Name/s.....

Telephone Number/s.....

Email/s.....

Work Address.....

[illegible]



APPENDIX D

Plant noise levels



Extract system - Variation of output sound levels with extract speeds

The noise level variation for different speeds has been measured at other McDonald's stores. The noise levels measured for the extract duct and the fan are shown below in Tables C1 and C2.

Speed (Hz)	Noise level measured dB(A)	Calculated sound power level (SWL)
25	63 - 64 *	71 - 72
30	67	75
35	70 - 71	78 - 79
40	73 - 75 *	81 - 83
45	76 - 79	84 - 87

Table C1. Noise levels at different speeds for the kitchen extract duct.

* Calculated level based on other measurements for that store.

Speed (Hz)	Noise level measured dB(A)	Calculated sound power level (SWL)
25	64 - 67 *	72 - 75
30	67 - 69	75 - 77
35	69 - 71	77 - 79
40	71.5 * – 73	80 - 81
45	74 – 75	82 - 83

Table C2. Noise levels at different speeds for the kitchen extract fan.

* Calculated level based on other measurements for that store.

Table C1 shows that the noise levels for the extract duct measured at different stores provide steps of 3 to 4 dB(A) per each 5 Hz setting variation. Table C2 shows that the noise levels for the extract fan measured at different stores provide steps of typically 2dB(A) per 5Hz speed variation. It is likely that this is partially due to contribution from the extract duct noise. Therefore, the main output difference is from the extract duct rather than from the fan.

It was also possible to calculate the frequency spectrum trend for different speeds as shown in Figure C1 below. Note that for 25Hz and 40 Hz the frequency spectrum was only measured at one store, whereas for the rest of speeds the trend shows the logarithmic average of the different stores.

It is clear that for 30 Hz to 45 Hz settings, there is a trend showing possible tonality around 250 Hz. The spectral shape between 30 Hz, 40 Hz and 45 Hz settings is almost identical other than shifted up for the higher speed settings. However, the measurement for the speed setting of 25 Hz shows a different shape, where the possible tonality has shifted down to the 125 Hz octave band. Not many systems allow the 25 Hz setting, and therefore this data will be revised when there are more opportunities to measure other stores at the speed setting of 25 Hz.

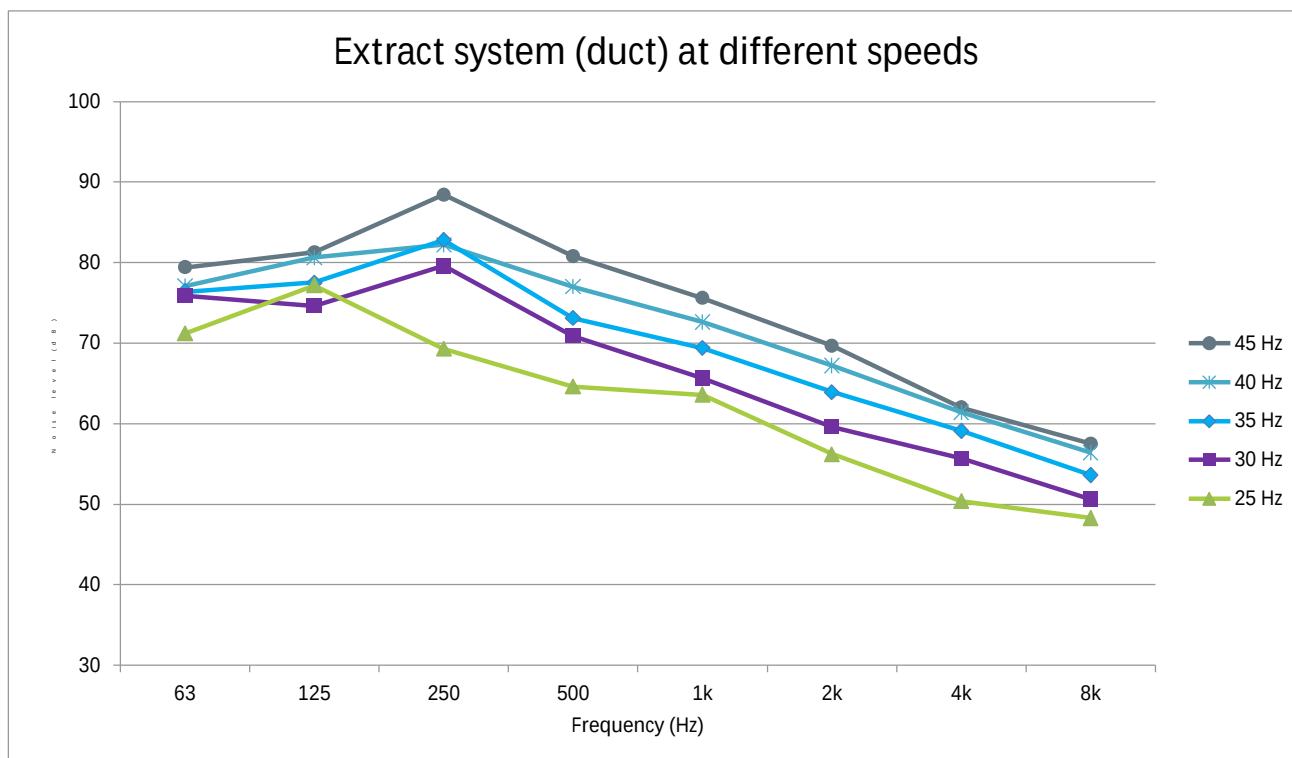


Figure C1. Frequency spectra for different speeds for the kitchen extract (duct).



APPENDIX E

COD Noise Levels



1 Sound Levels of COD

The Communications Operating Device (COD) systems have been measured at a number of stores for different levels, in order to indicate noise levels for different settings, study variability between stores and provide an average noise level per level setting in order to provide guidance to the COD system management based on measured ambient noise levels and distance to nearest residents.

The measured noise levels at three McDonald's stores (North Cheam, Wandsworth Road and Maidstone) are shown below in Figures D1 – D3. All the systems were 3M although the COD was an older version at Wandsworth Road (Figure D5) rather than the latest one that can be found at most stores as it was at North Cheam and Maidstone.

Subjectively there was a noticeable difference between the main 3 levels measured, and when the systems were set at level 8 it was just audible above the ambient noise levels. North Cheam was the quietest and therefore the noise levels measured were less affected by road traffic noise in the area. At Wandsworth Road there was fairly constant traffic at all times and the roof plant was clearly audible. At Maidstone the measurements for settings 18 and 13 were affected by a van engine on the other lane of the store drive thru service. This is clearly visible in Figure D4.

When taking the average of the levels measured at the three stores, it is possible to determine that the reduction in noise level is between 6-7 dB per 5 levels of the COD system. Figure D6 shows that the average noise level against McDonald's COD system settings as a best fit a linear trend. Therefore, using this data it is possible to determine what settings each store needs to operate at in a given background noise level, in order to achieve adequate levels which are not excessively audible at the nearest residential property. The overall noise levels for every setting from 6 to 20 have been calculated and shown in Table D1.

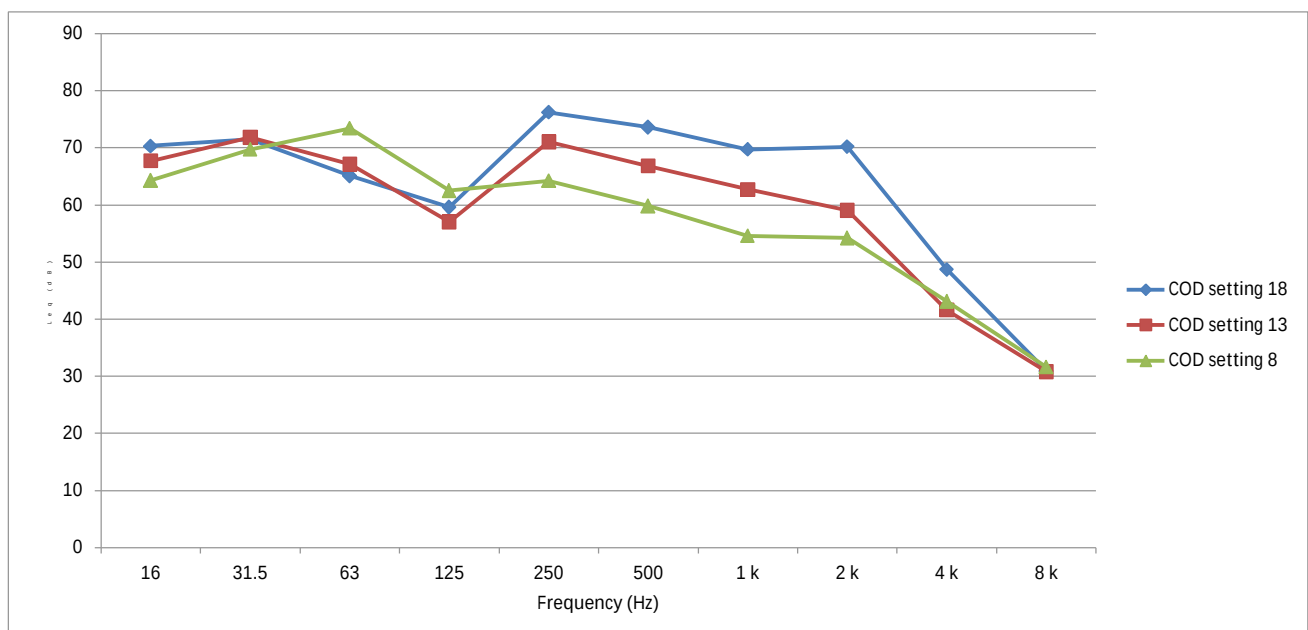


Figure D1. Measurements at 1m from COD - North Cheam

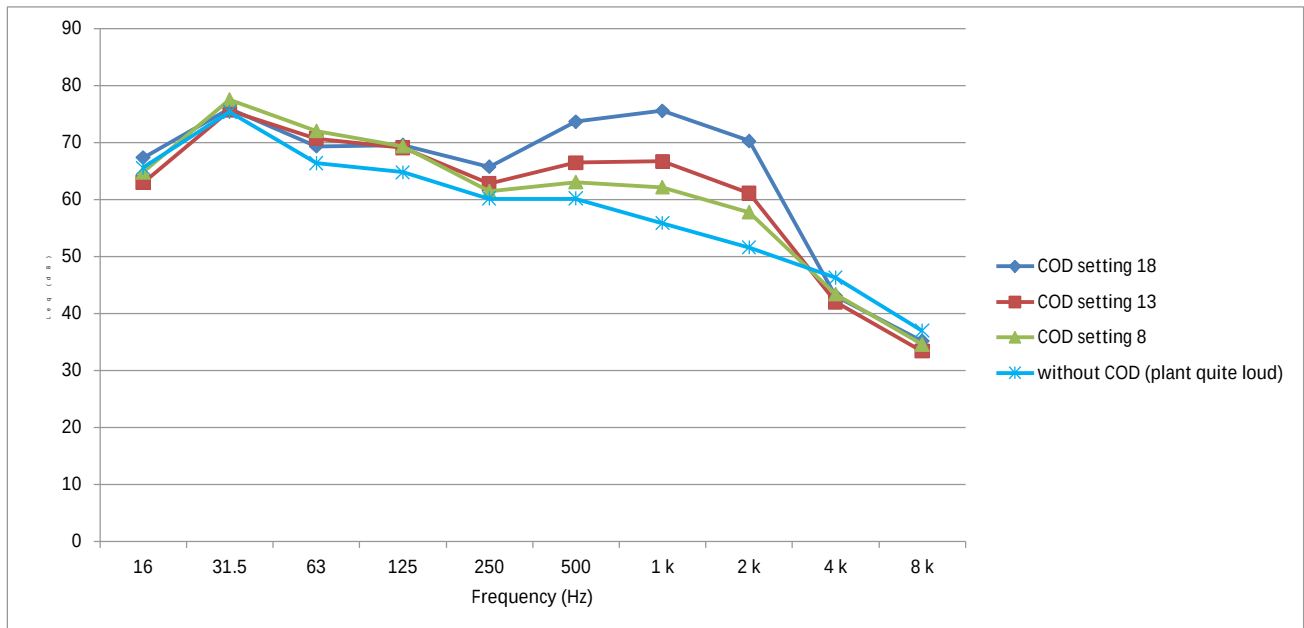


Figure D2. Measurements at 1m from COD - Wandsworth Road

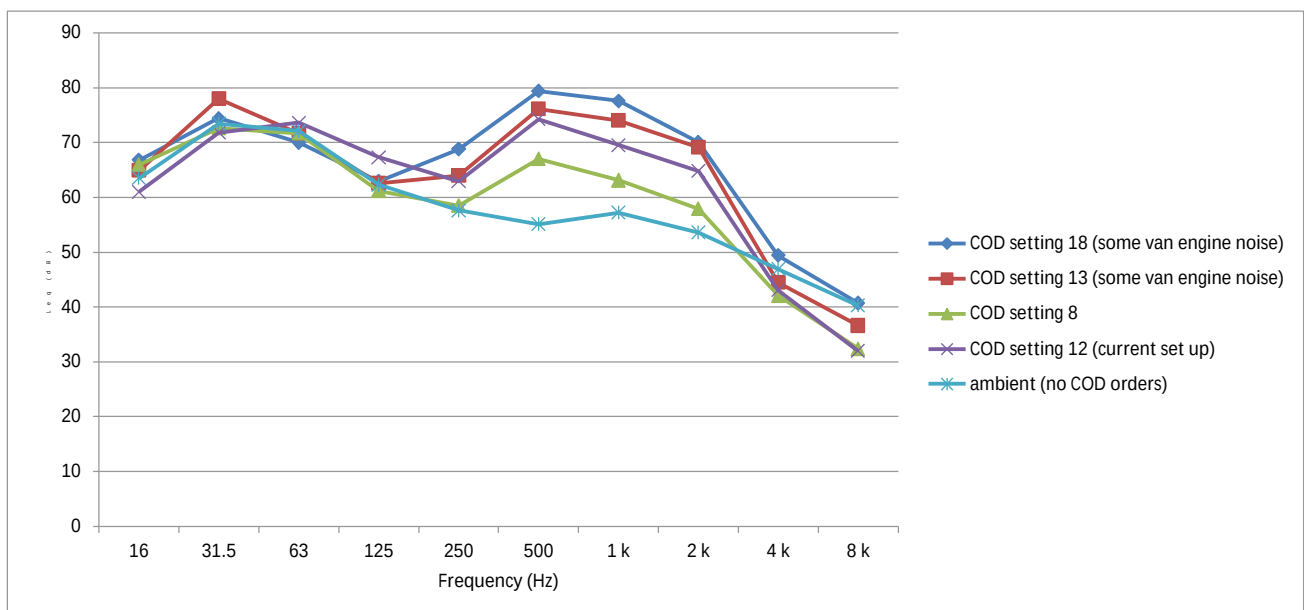


Figure D3. Measurements at 1m from COD - Maidstone

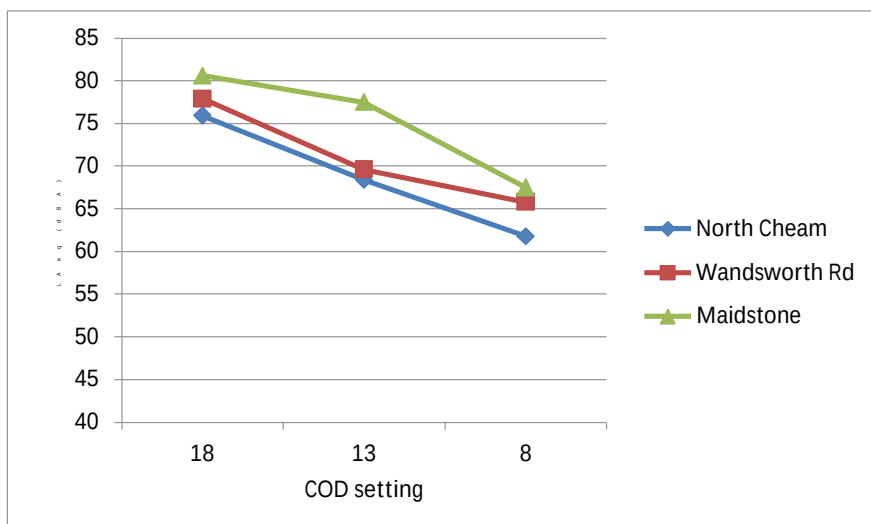


Figure D4. Measurements at 1m from COD – Overalls (dBA) for the 3 stores



Figure D5. Photo of COD system at Wandsworth Road

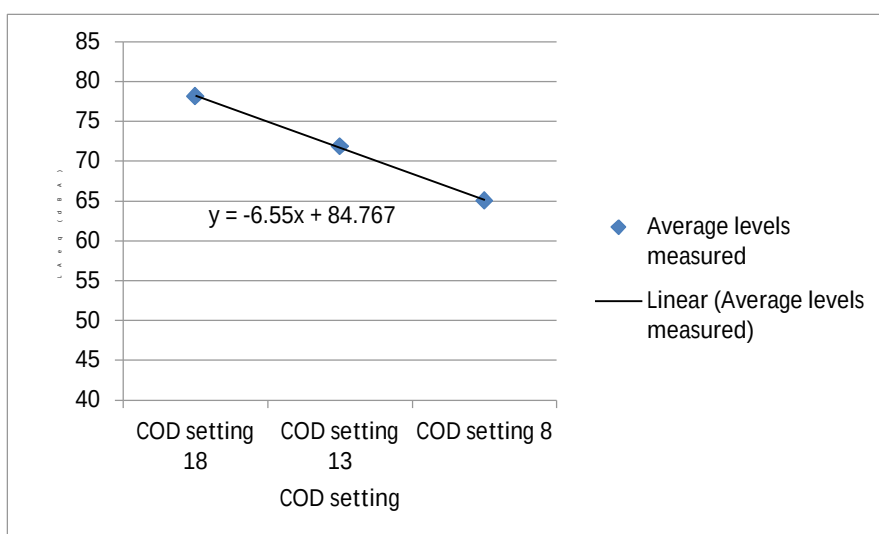


Figure D6. Linear regression fitting average levels from 3 stores



COD setting	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Noise level at 1m from COD (dBA)	62.4	63.7	65.0	66.3	67.6	68.9	70.2	71.5	72.8	74.1	75.4	76.7	78.0	79.3	80.6

Table D1. Noise levels for COD settings 6 to 20 – measured (bold) and calculated based on difference measured and linear regression.

2 Assessment of required COD Levels against ambient noise

Subjectively, when the COD was set to level 8, it was perceived as not loud enough for Wandsworth Road and Maidstone and slightly more audible at North Cheam. The overall ambient noise levels for Wandsworth Road and Maidstone when the COD was not in use were 61 dBA for both stores. This means that a difference of 4dBA is not enough for the COD to be at a workable level. When the setting was 13, it was clearly audible at all stores and at Maidstone, the COD system was set up to 12, which was also subjectively clearly audible. This means that a difference between the COD level and ambient noise levels of 10dBA is more than enough, and 8dBA a reasonable difference for the COD to be at a workable level. Table D2 shows the noise levels for each COD setting at distances with the residential properties between 10 and 60 meters and what the maximum ambient noise levels can be at the COD for the setting to be at a workable noise level.

COD setting	Noise level at 1m from COD (dBA)	Noise levels from the COD at different distances (m)												Max ambient noise level required (dBA)
		10	15	20	25	30	35	40	45	50	55	60		
20	80.6	61	57	55	53	51	50	49	48	47	46	45	72.6	
19	79.3	59	55	53	51	49	48	47	46	45	44	43	71.3	
18	78.0	58	54	52	50	48	47	46	45	44	43	42	70.0	
17	76.7	57	53	51	49	47	46	45	44	43	42	41	68.7	
16	75.4	55	51	49	47	45	44	43	42	41	40	39	67.4	
15	74.1	54	50	48	46	44	43	42	41	40	39	38	66.1	
14	72.8	53	49	47	45	43	42	41	40	39	38	37	64.8	
13	71.5	52	48	46	44	42	41	40	39	38	37	36	63.5	
12	70.2	50	46	44	42	40	39	38	37	36	35	34	62.2	
11	68.9	49	45	43	41	39	38	37	36	35	34	33	60.9	
10	67.6	48	44	42	40	38	37	36	35	34	33	32	59.6	
9	66.3	46	42	40	38	36	35	34	33	32	31	30	58.3	
8	65.0	45	41	39	37	35	34	33	32	31	30	29	57.0	
7	63.7	44	40	38	36	34	33	32	31	30	29	28	55.7	
6	62.4	42	38	36	34	32	31	30	29	28	27	26	54.4	

Table D2. Calculated COD noise levels at distances between 10 and 60m for COD settings 6-20 and correspondent maximum ambient noise level required for the setting to be workable.



APPENDIX F

McDonald's Guidance on Anti-Social Behaviour



McDonald's has launched national Guidance for Managing Anti-Social Behaviour, aimed to reduce the risk of ASB happening at McDonald's premises and to help store managers to know how to best manage Anti-Social Behaviour (ASB) if this happens and to do so safely and effectively.

The Guide defines ASB as "behaviour likely to cause harassment, alarm or distress to one or more persons". The methods and tools described in the Guide have been summarised below:

All restaurants should have a CCTV system installed that complies with McD minimum standards so it can be used for the purposes of monitoring as well as identification and able to do so in low light.

Body worn cameras (BWC) are not recommended and at restaurants belonging to McOpCo are not permitted to managers or employees.

Detecting and preventing ASB:

Loitering: groups of people hanging around can increase the risk of ASB and therefore if an individual or a group is perceived to be loitering, it is recommended to approach them in a safely and effective way (method described on the Guide) in order to dismiss the groups or individuals.

Drug misuse: a list of indications is provided so staff can identify possible problems and for the management team to deal with the problem. A list of tactics that can be implemented to prevent the issue is also provided.

Staff Safe AV: alarm system that helps raise an alert to a monitoring station so an operator can connect to see and hear what is happening. The system consists of a control panel and six activation buttons (3 mobile units, 1 for staff working outside, 1 on the control panel) and is capable of announcements by pressing the control panel activation button, there will be an announcement to tell customers that the premises are externally monitored. The system is also capable of recordings, and these recordings are kept at the Call Centre anytime an audio activation is made. These recordings can be useful as evidence for the Police. An external speaker could be fitted when the restaurant is in a non-residential area, if approved by a Licensing Officer or the Local Authority. This would allow to make announcements from inside the premises to inform individuals or groups outside.

Use of tools such as classical music, stop free WiFi service and power to charging points inside:

Playing classical music inside the store, groups of teenagers will tend not to want to stay at the premises and therefore they will leave as soon as they finish eating.

It is suggested that some individuals or groups might stay longer than necessary at the restaurant to use the free WiFi and charging points. Although it is desirable for customers to enjoy their stay, it is also desirable to deter loitering that could lead to ASB in or around the premises. Therefore, by temporary suspension of the WiFi and charging points facilities, groups are likely to willingly mobilise.

Partnership with Police and other forces is encouraged and provides a proactive commitment to trying to manage ASB. Radio Links help the Franchisees and Managers build relationships with the Police and other businesses including Shop Watch, Pub Watch and Retail Radio Links initiatives. The restaurant management team should attempt to deal with issues in the restaurant, however, if there is a persistent problem, the option of using guarding policy should be assessed for the required time.

Reporting and tracking incidents allows issues to be identified and create plan actions to address them. The process of reporting is explained in detail on the Guide for both crime and ASB.



As a last resource, it is possible to ban specific people that have caused an issue. This should only be applied when all other resources to stop the problem have not been effective and should always be done with support of an external partner, ideally the local Police.

Note: the use of a mosquito devices was identified as one commercially available way to disperse groups of young people, however, this is not recommended as it introduces another noise source that could cause annoyance to other in the vicinity, especially children or animals with more sensitivity to high frequency.

Two main step guides are also provided in the document:

ASB Incident Management: 5 Step Method for Managers

1. Approach and ask for the behaviour to stop, explain that if the behaviour does not change they will need to leave the premises
2. If the behaviour continues, explain that they need to leave the premises. Dialog should be kept at a minimum. If they do not leave, explain that further action will be taken.
3. If they have not left, ask again and explain that the assistance button is going to be used, which would take CCTV footage and pass it to the police and it could result in a ban from the restaurant and other prosecution from the police. If they still not leaving, Staff Safe takes over and there is no more dialog between the member of staff and the person or group.
4. Staff Safe Operator will contact the police and will stop the dialog with the person or group
5. It is likely that the person or group leave before the police arrives, however, an overview together with the incident log book and CCTV footage should be provided to the Police. If an individual results to be banned from the restaurant, it is crucial to enforce it at all times.

ASB Incident Management: 7 Point Plan – Post ASB Incidents Actions

1. All incidents should be recorded in the Incident Log
2. Shift Manager should take a picture from CCTV footage of the individual and attach it to the Incident Log
3. Monthly review of the Incident Log at Manager's meeting. Banning letters should be given to the Police.
4. The Police is encouraged to issue the Banning Letter through a home visit
5. Reasons for banning:
Instant Ban: due to aggressive, abusive, threatening behaviour or damage to property
Yellow Card: issued for less significant incidents, three yellow cards would result on a Ban.
6. Monthly review of Incident Log and Banning Letters, preferably with the Police.
7. Advise other McDonald's in the area of banned individuals.