



Report No. DJB/7417/B

Page 1 of 30

**for
ERI MTP Limited
1 Bartholomew Lane
London
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**NOISE IMPACT ASSESSMENT REPORT
FOR
MIRA TECHNOLOGY PARK
SOUTH SITE**

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NOISE IMPACT ASSESSMENT REPORT
FOR
MIRA TECHNOLOGY PARK
SOUTH SITE

1. INTRODUCTION

This report presents an assessment of the likely noise level impact associated with proposed development at MIRA Technology Park South Site. This report considers the proposals as set out on drawing 21092-SGP-XX-00-DR-A-111010 Rev M.

The assessments utilise baseline noise level results from a measurement survey carried out from Friday 25 February to Tuesday 1 March 2022. Details of the measurements and results have been reported separately in AIRO Report No. DJB/7417 dated 11 May 2022 (ref 1).

Assessments have been carried out in general accordance with the process outlined in IEMA document Guidelines for Environmental Noise Impact Assessment (ref 2), and with particular reference to BS 4142:2014 (ref 3), BS 5228-1:2009 (ref 4) and LA-111 (ref 5) of Design Manual for Roads and Bridges.

2. DESCRIPTION OF THE DEVELOPMENT SITE, SURROUNDING AREA AND STUDY AREA

The proposed site comprises an irregular, broadly rectangular, area of about 59ha of land to the north west of Nuneaton and around 500m north-east of the village centre of Caldecote. The existing site consists of farm land bordered by the A5 (Watling Street) to the north and the A444 (Weddington Lane) to the south. Farmland lies to the north-west and south-east of the proposed development with the existing MIRA Technology Park to the north beyond the A5.

The south-eastern boundary is formed by the parish boundary with Weddington and there is a track leading up from Weddington Lane to Elms Farm. Part of the former

railway line borders the site along the north-eastern edge and contains a cycleway and footpath which forms the Weddington Walk and is part of the NCN 52 cycle path to Nuneaton.

In addition to the site itself, road network changes are proposed that introduce a link through the site between Watling Street (A5) and Weddington Lane (A444) and also a re-alignment of a portion of Atherstone Road (A444)

Residential premises are scattered along Weddington Lane, with two properties (No 17 & 18) adjacent to the site on the southern boundary and three further dwellings (Nos 15, 16 and the School House) and the local village hall located close to the western corner. A housing estate is located to the east of the proposed site beyond Weddington Walk.

The study area for the assessments given in this report centres on the proposed development site and extends to include the nearest residential properties along Weddington Lane, and the proposed Atherstone Road re-alignment, where the greatest noise level changes may be anticipated.

A satellite view of the area to be used for the proposed development and surrounding area overlaid with the proposed development layout is provided in Figure 1 of Section 6.

3. NOISE LEVEL UNITS

3.1 A-Weighted Equivalent Continuous Sound Level - $L_{Aeq,T}$

Noise levels quoted in this report are, in the main, A-weighted Equivalent Continuous Sound Levels or $L_{Aeq,T}$ in dB.

As its name suggests, the $L_{Aeq,T}$ is a measure of the acoustic energy of a fluctuating noise climate over a given period, T , expressed as the single continuous noise level having the same energy as the time varying signal.

The 'A' within the descriptor means A-weighted, an internationally agreed frequency response generally similar to that of the human ear so that A-weighted sound levels in dB correspond reasonably well with what is heard.

For assessment purposes, the day is typically divided into a 16-hour daytime period (07:00 to 23:00) and an 8-hour night-time period (23:00 to 07:00). The period values may be derived from the logarithmic average of the relevant hourly values.

3.2 A-Weighted Percentile Noise Levels - L_{An}

Percentile noise levels are a statistical representation of the time varying level. The value is the noise level L exceeded for $n\%$ of the period T .

In the UK, road traffic noise levels are generally expressed in terms of the noise level that is exceeded for 10% of the time period (usually 18 hours) and the value is normally taken as the arithmetic average of the 18-hourly values between 06:00 and 24:00. The descriptor for this is $L_{A10,18h}$. This index has been selected because it has been shown to correlate well with the public's average dissatisfaction with traffic noise.

To measure background environmental noise levels the statistical index L_{A90} is commonly preferred. The L_{A90} is the Sound Pressure Level that is exceeded for 90% of the measurement period. The L_{A90} therefore discriminates against short duration peaks of noise and is consequently considered to provide a better representation of typical minimum noise levels compared with, for example, the L_{Aeq} .

3.3 Maximum Noise Level - L_{AFmax} , L_{ASmax}

In some circumstances it is useful to quantify the maximum level of fluctuating noise and a commonly used descriptor is L_{Amax} . The L_{Amax} represents the maximum reading given by a sound level meter for a given event or period of time and is usually qualified by F for 'Fast' or S for 'Slow' according to the response time setting of the meter.

4. PLANNING POLICY AND ASSESSMENT GUIDANCE DOCUMENTS

4.1 National Planning Policy Framework & Noise Policy Statement for England

Local Authorities are encouraged by guidance issued by the Government to use their powers of development control to ensure that an appropriate noise environment exists depending on the type of development.

The National Planning Policy Framework (NPPF, ref 6), originally published in 2012 and revised most recently in July 2021, provides current national planning policies for England, including those related to noise.

With reference to noise the NPPF says in section 174:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of ... noise pollution ...”

It goes on to say in section 185:

“Planning policies and decisions should also ensure that new development is appropriate for its location...” and “In doing so they should:

- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life⁶⁵;*
- b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; ...”*

Reference 65 in the NPPF is to the Noise Policy Statement for England (NPSE) published in March 2010 (ref 7). The NPSE sets out the following aims:

“Noise Policy 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 impact on health and quality of life;*
- mitigate and minimise adverse impact on health and quality of life; and*
- where possible, contribute to the improvement of health and quality of life.”*

The NPPF and NPSE do not provide any guidance regarding absolute noise levels nor changes in noise level that should be considered acceptable or otherwise. It clearly sets out, as stated above, that potential noise impacts should be considered and where adverse impacts are identified they should be mitigated such that significant adverse impacts on health and quality of life are avoided.

4.2 North Warwickshire Local Plan

The North Warwickshire Local Plan was adopted in September 2021 and supports the southern extension of the MIRA Technology Park as an opportunity to broaden the range of higher skilled employment generating uses in the Borough. Policy LP39 of the Local Plan allocates approximately 42 hectares of land for the proposed development. It is clear therefore that, in principle, the planning authority support development of the area.

4.3 ProPG: Planning and Noise

ProPG: Planning and Noise (ProPG) (ref 8) was jointly published in May 2017 by the Institute of Acoustics, the Association of Noise Consultants and the Chartered Institute of Environmental Health to provide practitioners with guidance on a recommended approach to the management of noise within the planning system in England. It encourages better acoustic design for new residential development and aims to protect people from the harmful effects of noise.

The scope of ProPG is restricted to new residential development that will be exposed predominantly to airborne noise from transport sources.

The scope of the document is therefore not applicable in this case. However, in relation to noise from industrial and commercial developments it says that consideration should be given to carrying out an assessment in accordance with BS 4142:2014.

4.4 Guidelines for Environmental Noise Impact Assessment

The current edition, version 1.2, of Guidelines for Environmental Noise Impact Assessment was published by IEMA in November 2014 (ref 2).

The guidelines address the key principles of noise impact assessment and are applicable to all development proposals where noise effects are likely to occur.

The document provides a methodology that utilises consideration of a number of factors including the changes in noise level at sensitive receptors and the change in absolute level. The effects are described in terms of the Magnitude/Scale of Change and Importance/Sensitivity of Receptor and ultimately the degree of effect, ranging from 'None' through to 'Very Substantial'.

Where the Magnitude/Scale of Change is determined to be 'Negligible' this leads to the Degree of Effect being 'None' in all four categories of Importance/Sensitivity of Receptor.

4.5 BS 4142:2014

BS 4142:2014 (Methods for rating and assessing industrial and commercial sound) (ref 3) provides a rating methodology that uses outdoor sound levels 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 assessment methodology results in a likely noise impact being determined, by comparing the sound level at the assessment location due to the source being investigated with the prevailing background noise level.

4.6 BS 5228-1:2009

BS 5228-1:2009 (Code of practice for noise and vibration control on construction and open sites – Part 1: Noise) (ref 4) sets out recommendations for basic methods of noise control relating to construction sites, including sites where demolition, remediation, ground treatment or related civil engineering works are being carried out, and open sites, where work activities/operations generate significant noise levels.

Annex E of BS 5228-1 provides guidance in relation to the significance of noise effects and provides example noise level thresholds of potential significant effect at dwellings.

4.7 Design Manual for Roads and Bridges: LA-111 Noise and Vibration

Design Manual for Roads and Bridges includes all current standards, advice notes and other documents relating to the design, assessment and operation of trunk roads, including motorways.

LA-111: Noise and vibration (ref 5) applies to projects involving construction, improvement and maintenance of motorways and trunk roads. It sets out methods of identifying both temporary and permanent noise impacts associated with the construction phase and operational phase respectively.

Whilst not strictly applicable in this case, in relation to the site proposals themselves, the approach set out in LA-111 provides a good assessment methodology in relation to the noise from road traffic whilst also following a similar

structure and process to that described in IEMA's Guidelines for Environmental Noise Impact Assessment.

5. **CONSULTATION**

It is understood that the planning authority has been consulted from an early stage regarding the proposed development. As stated earlier, the current North Warwickshire Local Plan includes an allocation of land for the development.

AIRO contacted the Environmental Health Officer (EHO) at North Warwickshire Borough Council prior to carrying out the measurement survey of existing noise levels to agree the generalised approach and assessment methodology.

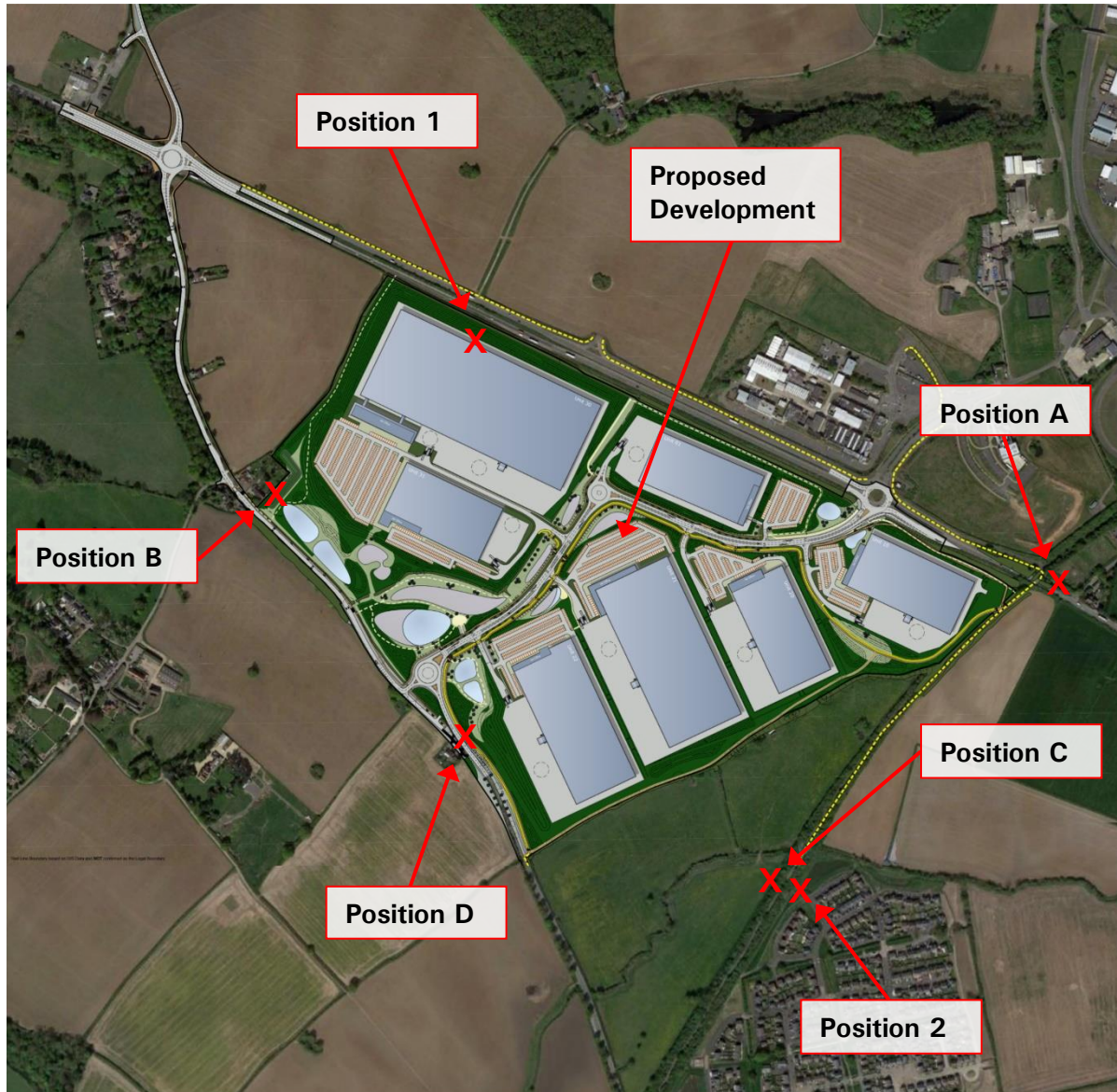
Additionally, the North Warwickshire Borough Council EHO was met at the proposed site during the measurement survey of the existing noise levels. The EHO agreed with the measurement positions utilised.

6. **EXISTING NOISE LEVELS**

A noise level survey was carried out from Friday 25 February to Tuesday 1 March 2022 to establish the existing noise levels at noise sensitive locations close to the proposed development site. The details and results of the survey have been reported in AIRO Report No. DJB/7417 dated 11 May 2022 (ref 1).

For convenience a site plan showing the measurement locations is provided in Figure 1 and the result summaries are provided in Tables 1 to 6.

Figure 1 – Satellite View with Proposed Development Layout Overlaid to Show Context of Baseline Noise Measurement Positions



Satellite Imagery: Google Earth

Table 1 – Measured Environmental Noise Levels at Position A (Wood Lane)

Date	Noise Level in dB					
	Daytime (07:00 – 23:00)			Night-time (23:00 – 07:00)		
	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$
Fri 25/2/22	67 ⁽¹⁾	95 ⁽¹⁾	43 ⁽¹⁾	63	81	34
Sat 26/2/22	68	97	39	60	89	31
Sun 27/2/22	66	92	37	64	85	30
Mon 28/2/22	70	100	43	65	87	34
Tues 1/3/22	70 ⁽²⁾	88 ⁽²⁾	51 ⁽²⁾	--	--	--
Range ⁽³⁾	66 to 70	92 to 100	37 to 43	60 to 65	85 to 89	30 to 34

Table 1 Notes:

- (1) Shortened time period of 6 hours (17:00 - 23:00 hours)
- (2) Shortened time period of 7 hours (07:00 - 14:00 hours)
- (3) Daytime Friday 25/2/22 and daytime Tuesday 1/3/22 not included

Table 2 – Measured Environmental Noise Levels at Position B (Garden boundary of 16 Weddington Lane)

Date	Noise Level in dB					
	Daytime (07:00 – 23:00)			Night-time (23:00 – 07:00)		
	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$
Fri 25/2/22	59 ⁽¹⁾	76 ⁽¹⁾	40 ⁽¹⁾	54	75	30
Sat 26/2/22	61	82	42	53	78	33
Sun 27/2/22	60	86	37	55	72	29
Mon 28/2/22	62	81	41	53	72	34
Tues 1/3/22	58 ⁽²⁾	74 ⁽²⁾	50 ⁽²⁾	--	--	--
Range ⁽³⁾	60 to 62	81 to 86	37 to 42	53 to 55	72 to 78	29 to 34

Table 2 Notes:

- (1) Shortened time period of 6 hours (17:00 - 23:00 hours)
- (2) Shortened time period of 7 hours (07:00 - 14:00 hours)
- (3) Daytime Friday 25/2/22 and daytime Tuesday 1/3/22 not included

**Table 3 – Measured Environmental Noise Levels at Position C
(Weddington Walk)**

Date	Noise Level in dB					
	Daytime (07:00 – 23:00)			Night-time (23:00 – 07:00)		
	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$
Fri 25/2/22	48 ⁽¹⁾	69 ⁽¹⁾	35 ⁽¹⁾	44	77	27
Sat 26/2/22	46	72	31	42	74	26
Sun 27/2/22	43	74	30	43	79	25
Mon 28/2/22	48	80	37	46	70	31
Tues 1/3/22	49 ⁽²⁾	78 ⁽²⁾	40 ⁽²⁾	--	--	--
Range ⁽³⁾	43 to 48	72 to 80	30 to 37	42 to 46	70 to 79	25 to 31

Table 3 Notes:

- (1) Shortened time period of 7 hours (16:00 - 23:00 hours)
- (2) Shortened time period of 6 hours (07:00 - 13:00 hours)
- (3) Daytime Friday 25/2/22 and daytime Tuesday 1/3/22 not included

**Table 4 – Measured Environmental Noise Levels at Position D
(Opposite 18 Weddington Lane)**

Date	Noise Level in dB					
	Daytime (07:00 – 23:00)			Night-time (23:00 – 07:00)		
	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$	L_{Aeq}	L_{AFmax}	Lowest $L_{A90,1h}$
Fri 25/2/22	64 ⁽¹⁾	82 ⁽¹⁾	39 ⁽¹⁾	58	81	31
Sat 26/2/22	65	91	38	56	86	31
Sun 27/2/22	64	91	35	58	80	28
Mon 28/2/22	66	85	43	60	81	35
Tues 1/3/22	66 ⁽²⁾	83 ⁽²⁾	49 ⁽²⁾	--	--	--
Range ⁽³⁾	64 to 66	85 to 91	35 to 43	56 to 60	80 to 86	28 to 35

Table 4 Notes:

- (1) Shortened time period of 6 hours (17:00 - 23:00 hours)
- (2) Shortened time period of 7 hours (07:00 - 14:00 hours)
- (3) Daytime Friday 25/2/22 and daytime Tuesday 1/3/22 not included

**Table 5 – Noise Levels Measured at Position 1 on 1 March 2022
(Watling Street (A5))**

Time Period	Free-field Noise Levels (dB)			
	L_{Aeq}	L_{A10}	L_{A90}	$L_{AFmax}^{(3)}$
10:28 - 10:48	65	68	56	75
11:43 - 12:03	64	67	57	82
12:52 - 13:12	66	69	58	80
3-hour	--	68		--
18-hour (06:00 to 00:00)	--	67 ⁽¹⁾		--
Daytime (07:00 to 23:00)	65 ⁽²⁾	--		--

Table 5 Notes:

- (1) The 18 hour L_{A10} value has been calculated by applying the -1 dB correction factor to the 3 hour L_{A10} value as set out in CRTN.
- (2) The daytime L_{Aeq} has been calculated using
Daytime L_{Aeq} = 18-hour L_{A10} – 2dB, as set out in BS 8233:2014 that further states that this is generally correct with a 95% confidence interval of ± 2 dB for moderate and heavy traffic flows.
- (3) The highest L_{AFmax} values were all attributed to vehicle pass bys.

**Table 6 – Noise Levels Measured at Position 2 on 1 March 2022
(East of Weddington Walk)**

Time Period	Free-field Noise Levels (dB)			
	L_{Aeq}	L_{A10}	L_{A90}	L_{AFmax}
11:09 - 11:29	49	51	45	62
13:34 - 13:54	48	51	45	63

7. MODELLING OF EXISTING AND FUTURE NOISE LEVELS

A computer model was created using proprietary software, NoiseMap Five, to calculate the noise levels likely to be present across the proposed site, and at the nearby residential properties of interest. NoiseMap Five implements noise level calculations in accordance with Calculation of Road Traffic Noise (CRTN) (ref 9).

CRTN calculates noise levels at locations of interest using various factors that determine the resultant noise level. The main determinants of road traffic noise are the distance between the road traffic and the receiver location and also the traffic flow itself.

In addition it is necessary to consider:-

- a) the traffic composition expressed as the percentage of heavy vehicles
- b) the mean traffic speed
- c) the road gradient
- d) the type of road surface and texture
- e) the nature of the ground cover between the road and the calculation point
- f) the nature of any intervening obstructions, such as buildings or topographical features, which cause a limited angle of view of the road
- g) the shielding effect of any such intervening obstruction
- h) the shielding effects of any purpose built noise barriers or cuttings forming part of the road design
- i) any reflections from relevant surfaces
- j) the additive effects of noise from more than one road or section of road.

The basic noise level from each section of the road is calculated, the appropriate corrections for the propagation path and other relevant factors are applied and the combined noise level from all relevant sections of road is determined at each required calculation point.

The software calculates values for a number of different indices. Primarily it calculates $L_{10,18h}$ values but also calculates $L_{eq,16h}$, L_d , L_e , L_n , L_{den} based on established algorithms.

The model was built using the information available at the time, including (but not limited to) topographical data for the development site (TOPO-30080-1.1-.dxf), Ordnance Survey map data (X-002-17059-OS Map-em-1.1-.dxf), traffic data supplied by the traffic engineers and a masterplan drawing for the development supplied by Stephen George and Partners.

The existing situation was firstly modelled and validated against the noise levels measured at the site. Generally a good agreement between the measured and model calculated noise levels was achieved, with three of the four longer term measurement positions according well. The calculated noise levels for Position B were approximately 3 dB lower than measured, whilst the values calculated by the model for Positions 1 and 2 were approximately 2 dB higher and 4 dB lower respectively. This was deemed acceptable given that the impact assessments mainly use the change in noise level between scenarios rather than absolute level.

The model was then modified to incorporate the do minimum traffic flows for the year of opening (2024) and future assessment year (2039).

The existing model was then further modified, and new separate models created, to reflect the development proposals with the buildings and new link road as shown on the masterplan, together with the do something (with development) traffic flows. Additionally, proposed landscaping bunds were also incorporated in line with the Landscape Architect information supplied to us.

The three bunds to the north of the proposed link road, and closest to Weddington Lane were modelled with highest points over local ground of 2.5 to 3 metres (including the bund closest to 16 Weddington Lane being modelled with a highest point of 2.5 metres over local ground). To the south of the new link road, closer to 17 and 18 Weddington Lane, 3 more bunds were modelled with the top of the bunds being 2 metres over local ground for the one proposed between the old and new road alignments, 2.5 to 3.5 metres over local ground for the one on the site side of Weddington Lane and up to 5 metres over local ground for the large bund opposite 17 and 18 Weddington Lane.

It should be noted that noise level predictions over larger distances, typically greater than 300 m, are subject to increasing tolerances.

Appendix A provides tabulations of the noise level results for each of the noise models created.

8. NOISE IMPACT ASSESSMENT: CONSTRUCTION

8.1 Construction Phase: Assessment Methodology

Construction activities likely to give rise to high levels of noise include demolition of existing buildings, ground works and piling for the new development. The noise impact at dwellings located near to the development site due to construction activities can be assessed using BS 5228-1(ref 4), which covers a broad range of construction activities and scenarios. The type of equipment, number required, location of activity and duration of operation are needed to rigorously assess the noise impact at the closest noise sensitive locations. The detailed planning of such processes is generally carried out at a later stage than the development planning application.

BS 5228 provides a number of assessment methodologies that can be selected based on the particular circumstances of the proposals being considered. The most

appropriate approach in this case is considered to be the method provided in item E.3.2 of BS 5228-1. This states that a significant effect would be deemed to have occurred if the total L_{Aeq} noise level, inclusive of both construction noise and also the prevailing ambient (existing non-construction) noise levels, exceeds a threshold value dependent on the difference between the ambient and construction noise levels.

Accordingly, from the existing noise level data, the noise level due to construction which represents the onset of significant environmental noise effects can be identified. This can then be imposed as a limit through planning controls open to the local authority to ensure acceptable environmental noise limits are achieved.

It is assumed that construction works will only be carried out during the weekday daytimes (07:00 to 19:00) and potentially Saturday mornings (07:00 to 13:00). If other times are required these would need to be assessed separately and appropriate noise level limits imposed.

8.2 Construction Phase: Noise Impact Assessment

Table 7 provides the threshold noise levels appropriate to the development proposals that if exceeded would potentially give rise to a significant noise impact at the nearby dwellings. As such they represent the recommended upper limit construction noise levels. The threshold noise levels given are for four zones that reflect the differing existing noise levels around the site. The noise level threshold location for zones A, B and C is outside the dwellings themselves (behind the zone line) whilst for Zone D it is at the site boundary opposite 17 and 18 Weddington Lane. Figure 2 provides a site plan that indicates the location of each zone.

Table 7 – Threshold of Significant Effect at Dwellings / Recommended Upper Limit Construction Noise Levels				
Time Period	Threshold Noise Value, $L_{Aeq,T}$ in dB			
	Zone A	Zone B	Zone C	Zone D
Weekday (07:00 – 19:00)	75	65	65	75
Saturday (07:00 – 13:00)	75	65	65	70

Figure 2 – Recommended Upper Limit Construction Noise Level Zones



Although it is reasonably likely that construction activities will be audible at the nearby dwellings, if the threshold values given above are not exceeded a significant effect would not be present.

Accordingly, control measures are proposed in Section 8.3 to secure this outcome.

In relation to potential increases in noise levels associated with additional construction road traffic on the A5 or Weddington Lane, for a 1 dB increase in noise level the existing volume of traffic would need to grow by 25 percent. The traffic data supplied to us indicates that there are currently in excess of 28000 vehicles each day using the A5 close to the development site and therefore some

7000 construction movements along the A5 would be needed to trigger a 1 dB increase. Similarly, the traffic data indicates that there are more than 9800 vehicles using Weddington Lane each day which would mean to trigger a 1 dB increase there would need to be at least 2450 additional vehicle movements each day.

Vehicle movements associated with construction activity are likely to be substantially less than 7000 movements along the A5 and 2450 movements along Weddington Lane each day. It is recommended that movements are ideally restricted to along the A5 whenever possible. This being the case the noise impact associated with construction traffic could be described as minor or even negligible.

8.3 Construction Phase: Mitigation

It is inevitable that the process of constructing a significant new development could give rise to some temporary noise impacts. Site management and mitigation measures during the construction period are usually set out in a Construction Environmental Management Plan (CEMP) to reduce, or where possible, eliminate construction impacts. These measures would take the form of constraints on the contractor in connection with access to the site including designated haul routes, working hours and methods. These would be discussed in more detail with the planning authority before work begins on site.

The site management and mitigation measures to reduce the exposure to noise that would be an integral part of the CEMP are likely to include the following:

- Where noisy tasks are to be undertaken affecting residential or other occupied buildings, the occupiers would be given advance notice explaining the reason for the works, the expected time and duration, and the procedures for minimising the noise.
- Where work has to be undertaken during either the evening or night-time periods, the Contractor would advise and consult with the relevant Local Authority in accordance with an agreed procedure.
- All plant and equipment associated with the construction works would be properly maintained, provided with effective silencers and operated in such a manner as to avoid causing any excessive noise emission. Where plant has been designed to operate with engine covers to reduce noise, these would be used and remain closed while the plant is in operation. The noise emitted by each item of plant in normal use would not exceed the levels quoted in BS 5228. Unless otherwise directed by senior construction management, items of plant in intermittent use would be shut down during idle periods.

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- Static plant would be located in areas as far as possible from sensitive receptors, including inhabited buildings, and would be screened where practicable. Plant known to emit noise predominantly in one direction would, when possible, be screened or orientated so that the noise is directed away from noise sensitive areas.
 - Any compressors brought on to site would be silenced or sound reduced models fitted with acoustic enclosures. The doors to such enclosures should be kept closed during operation.
 - Care would be taken when erecting or striking scaffolds to avoid impact noise from banging steel. All operatives undertaking such activities should be instructed on the importance of handling the scaffolds to reduce noise to a minimum.
 - Audible warning systems, such as vehicle reversing sirens, would normally be switched to as low a setting as is compatible with safety requirements. Where possible, the latest low volume, broadband warning systems, audible only immediately to the rear of vehicle or plant item, would be employed.
 - With site compounds, where possible and beneficial, site buildings would be situated to provide additional screening between the works and occupied premises.
 - Where appropriate, the stockpiling of site materials, soil or spoil would be located where it can provide some additional screening provided that any plant associated with this would not in itself generate nuisance and provided that prevailing wind conditions would not increase the potential for nuisance due to dust.
 - The transport of materials on or off site by road would take place during the normal daytime working period and where possible would also be routed away from sensitive receptors. Deliveries would be programmed to arrive during daytime hours where possible. Care would be taken when unloading vehicles to minimise noise. Delivery vehicles would be routed so as to minimize disturbance to local residents and would be prohibited from waiting on the highway or within the site with their engines running.
 - Contractor vehicles would be prohibited from travelling on minor roads through the urban area.
 - Site personnel would be informed of the agreement with the Local Authority regarding the need to minimize noise to the neighbouring community as well

as about the health hazards of exposure to excessive noise. Their training would include advice relating to the proper use and maintenance of tools and equipment, the positioning of machinery on site to reduce noise emissions to neighbouring communities, and the avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment. This would be critical if works have to be undertaken during early morning, evening or night-time.

It is recommended that a CEMP is required by a suitable Planning Condition and is subject to the approval of the local authority. It is recommended that the CEMP or a separate condition requires construction noise levels to be not more than the threshold values in Table 7 at appropriate assessment locations. For zones A, B and C this is 1 metre from the façade of any residential dwelling behind the line denoting the zone, and for zone D at the site boundary.

A suitable programme of noise monitoring during construction could form part of the CEMP if considered appropriate.

9. NOISE IMPACT ASSESSMENT: OPERATIONAL PHASE

9.1 Operational Phase: Assessment Methodology

During the operational phase there will be essentially two categories of noise that may impact nearby noise sensitive locations, such as residential properties. Firstly, noise generated on the development site itself and secondly noise associated with potentially increased traffic flows on the surrounding roads.

Noise from the development site itself will be industrial or commercial in nature and therefore assessment using the methods described in BS 4142:2014 (Methods for rating and assessing industrial and commercial sound) (ref 3) is appropriate.

The methodology considers the source noise levels produced by the proposed development or activities, applies adjustment factors for particular noise characteristics and operation time then calculates the overall noise levels likely to be received at the nearby location of interest. The noise levels due to the proposed development are then compared with the prevailing background noise levels, calculating the excess over the background level.

It says that:

- "a) Typically, the greater this difference, the greater the magnitude of the impact.*
- b) A difference of around + 10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.*
- c) A difference of around + 5 dB is likely to be an indication of an adverse impact, depending on the context.*
- d) 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."*

It is not possible to determine operational noise levels for the proposed development as the noise levels likely to be produced are currently unknown (specific activities, air handling plant locations etc.). Therefore, the reverse approach has been adopted such that working from the assumption that the development can be controlled to result in a negligible noise impact an upper threshold noise level can be calculated based on the existing noise environment, that the cumulative noise emissions of the development should not exceed.

Consideration is sometimes given to using a threshold target of 5 dB or 10 dB below background for development noise levels. At 5 dB below prevailing background noise levels the cumulative noise levels at nearby properties could increase by up to 1 dB with the introduction of development operational noise. In this case the development noise levels would be below the level that BS 4142 says is an indication of low impact.

To achieve a negligible noise impact, where there is no measurable increase in overall noise level and no adverse 'creep' in background levels, development noise levels at the nearby noise sensitive locations should be at least 10 dB below the prevailing background noise level. This would be significantly below the upper limit BS 4142 describes as a *low impact*.

The assessments set out in this report use the more robust 10 dB below background noise levels target for proposed development operational noise levels.

With regard to assessing whether or not there is a potential noise impact associated with increased road traffic due to operation of the development, and if there is a potential impact the likely significance, reference to the scoping methodology set out in LA-111 (ref 5) of DMRB is appropriate.

The LA-111 scoping assessment methodology includes questions that lead to a determination of whether or not further assessment is required, and by extension whether or not there is the potential for significant noise impact. Questions 1) and 2) are the only ones directly applicable for the proposed development and can be summarised as follows:

- 1) is the project likely to cause a change in receiver noise levels of 1 dB LA_{10,18hr} in the do-minimum opening year (DMOY) compared to the do-something opening year (DSOY)?
- 2) is the project likely to cause a change in receiver noise levels of 3 dB LA_{10,18hr} in the do-something future year (DSFY) compared to the do-minimum opening year (DMOY)?

The two questions essentially consider the short term (temporary) and long term (permanent) noise impacts associated with the operational phase of the development. The 'opening year' for the proposed development has been defined as 2024. The 'future year' is set by LA-111 as 15 years after opening, and is therefore set as 2039.

Whilst the LA-111 questions themselves do not directly reference night-time levels consideration of the impact at night is clearly useful when considering the overall impact of any traffic noise increases. The magnitude of change tables and assessment tables set out later in LA-111 reference L_{night} values. The assessments in this report therefore cover both daytime and night-time time periods.

LA-111 references CRTN as the calculation method to be used to determine the receptor noise levels. It defines L_{night} values as being derived from $L_{A10,18h}$ values using an established conversion method published by the Transport Research Laboratory. The proprietary noise modelling software used, NoiseMap Five, implements CRTN and also the recommended L_{night} conversion formulae. It may be noted that the calculated L_{night} values accord reasonably well with the levels measured during the survey.

Consideration is also given to the change in noise level between the do-minimum scenario in the year of opening and the future assessment year. This provides some context to any potential impact of the development in relation to the changes that would be expected in the absence of the development.

The noise level changes for each property are classified into category tables that summarise the noise level changes in the short term and also the long term, with the largest magnitude of change for a given property determining the change in noise level category it is placed in.

The magnitude of change for short term and long term is set out as follows:

Table 8 – Magnitude of Change: Short Term	
Noise Level Change, $L_{A10,18h}$ or L_{night}	Magnitude of Impact
Greater than or equal to 5.0	Major
3.0 – 4.9	Moderate
1.0 – 2.9	Minor
Less than 1.0	Negligible

Table 9 – Magnitude of Change: Long Term	
Noise Level Change, $L_{A10,18h}$ or L_{night}	Magnitude of Impact
Greater than or equal to 10.0	Major
5.0 – 9.9	Moderate
3.0 – 4.9	Minor
0.1 – 2.9	Negligible

Finally, the initial assessment of significance effect on noise sensitive buildings is determined using the corresponding terms as presented in Table 10.

Table 10 – Initial Assessment of Operational Noise Significance	
Significance	Short Term Magnitude of Change
Significant	Major
Significant	Moderate
Not Significant	Minor
Not Significant	Negligible

LA-111 also sets out the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL), as shown in Table 11.

Table 11 – Operational Noise LOAELs and SOAELs for all receptors

Time Period	LOAEL	SOAEL
Day (06:00-24:00)	55dB $L_{A10,18h}$ facade	68dB $L_{A10,18h}$ facade
Night (23:00-07:00)	40dB $L_{night,outside}$ (free-field)	55dB $L_{night,outside}$ (free-field)

If the absolute noise levels for the with development (do something) scenario are above the SOAEL a noise level change in the short term of 1.0 dB or more results in a likely significant effect.

9.2 Operational Phase: Noise Impact Assessment

With regard to noise from the development itself, noise levels should be designed to be no more than 10 dB lower than the prevailing background noise levels. In the year of opening, 2024, the prevailing noise levels are unlikely to be significantly different to the existing situation.

Analysis of the $L_{A10,18h}$ and L_{night} noise model results shows that for the majority of locations noise levels will continue to be primarily determined by road traffic using whichever is the closest of Weddington Lane or Watling Street (A5). When the development is due to open, road traffic noise levels in these areas are generally expected to be within approximately 2 dB of those measured during the survey. For the gardens of 15 and 16 Weddington Lane (i.e. close to Position B of the measurement survey) road traffic noise levels are expected to reduce by approximately 1 dB due to the reduction in nearby road traffic on Weddington Lane.

The properties close to survey measurement position 2 on the housing estate (accessed via Lower Farm Way, to the east of Weddington Walk) are calculated to be 1 dB less than existing levels due to the screening of the A5 introduced by the development buildings.

Whilst there is no direct conversion factor between $L_{A10,18h}$ and L_{A90} background noise levels, given that the expected changes from the measured levels are small, it is reasonable to use the changes as a guide to how the L_{A90} noise levels may vary.

Maximum noise levels, which are recognised as significant in relation to sleep disturbance, will likely continue to be determined by single vehicle passbys on whichever road is the closest, either Weddington Lane or Watling Street. The shielding provided by the development buildings is not expected to significantly change the maximum noise levels at nearby properties. As such, with frequent

vehicle passbys already occurring, typical L_{AFmax} levels are unlikely to significantly change and therefore there is unlikely to be a significant adverse impact in relation to sleep disturbance caused by L_{AFmax} road noise levels.

The recommended upper limit threshold noise levels at receiver locations is therefore set out in Table 12. The referenced zones are presented in Figure 3.

Table 12 – Recommended Upper Limit Development Noise Levels				
Time Period	Threshold Noise Value, $L_{Aeq,T}$ in dB			
	Zone A	Zone B	Zone C	Zone D
Weekdays (07:00 – 19:00)	41	41	28	39
Weekday Evenings (19:00 – 23:00)	33	31	24	29
Weekday Nights (23:00 – 07:00)	24	21	16	21
Saturday Daytime (07:00 – 19:00)	37	37	25	33
Saturday Evenings (19:00 – 23:00)	29	33	20	28
Sunday Daytime (07:00 – 19:00)	31	30	22	28
Sunday Evenings (19:00 – 23:00)	27	28	19	25
Sat / Sun Nights (23:00 – 07:00)	20	20	14	18

Figure 3 – Recommended Upper Limit Development Noise Level Zones



It is understood that the development site may be split into smaller parcels or phases, for which detailed design will be carried out separately. The cumulative nature of the noise emissions from the entire site must be considered at each design stage to ensure that once the development is completed the combined noise levels produced do not exceed the thresholds.

It should be noted that the development recommended upper limit threshold noise levels may not be achievable at all times for all areas of the development. Whilst weekday daytime and evening periods as well as Saturday daytime periods should be achievable, operation during night-time periods as well as Saturday evenings, Sunday daytimes and Sunday evenings may need to be restricted to inside the

buildings (provided that suitable building envelope and plant emission mitigation is in place) with no activity externally (i.e. no deliveries etc. during these hours).

To achieve the levels set out above mitigation measures will need to be incorporated within the detailed design for each phase. Section 9.3 sets out details of measures that should be included to minimise the overall noise impact.

With development noise minimised, the impact will primarily be determined by the noise level changes associated with the increased road traffic noise levels.

Tables 12 and 13 provide the short term and long-term noise impact categorisations respectively, based on the calculated road traffic noise level results from the computer noise model.

Table 12 – Short-term 'LA-111' Noise Impact Category Table					
Project/Option: MIRA Technology Park South Site					
Scenario/Comparison: 2024 Do-Minimum (DMOY) Vs 2024 Do-Something (DSOY)					
Change in Noise Level dB(A)		No. of Receiver Locations for Given Scenario			
		Daytime		Night-time	
		Number of dwellings	Number of other noise sensitive receptors	Number of dwellings	Number of other noise sensitive receptors
Increase in noise level, $L_{A10,18h} / L_{night}$	> 5.0	0	0	0	0
	3.0 – 4.9	0	0	0	0
	1.0 – 2.9	1	0	0	0
	< 1.0	9	0	11	0
No Change	0	0	0	0	0
Decrease in noise level, $L_{A10,18h} / L_{night}$	< 1.0	4	0	8 +	
	1.0 – 2.9	19 +	1	14 +	1
	3.0 – 4.9	0	0	0	0
	> 5.0	0	1	0	1

Table 13 – Long-term 'LA-111' Noise Impact Category Table					
Project/Option: MIRA Technology Park South Site					
Scenario/Comparison: 2039 Do-Something (DSFY) Vs 2024 Do-Minimum (DMOY)					
Change in Noise Level dB(A)		No. of Receiver Locations for Given Scenario			
		Daytime		Night-time	
		Number of dwellings	Number of other noise sensitive receptors	Number of dwellings	Number of other noise sensitive receptors
Increase in noise level, $L_{A10,18h} / L_{night}$	> 10.0	0	0	0	0
	5.0 – 9.9	0	0	0	0
	3.0 – 4.9	0	0	0	0
	< 3.0	13	0	13	0
No Change	0	0	0	0	0
Decrease in noise level, $L_{A10,18h} / L_{night}$	< 3.0	20 +	1	20 +	1
	3.0 – 4.9	0	0	0	0
	5.0 – 9.9	0	0	0	0
	> 10.0	0	1	0	1

Based on the category table values the worst case noise level changes in the short term (i.e. increases) are less than 1 dB during the daytime, with the largest increase being 1.0 dB. During the night-time the short term increases are all less than 1 dB, with the largest increase being 0.9 dB. A number of properties are categorized as having beneficial noise level changes, with the majority having noise level changes of up to -2 dB. The exception to this is the Royal Redgate property that is calculated to have a much larger beneficial noise level change, mainly due to the A444 moving further away.

Overall, the worst case magnitude of impact in the short term, based on the calculated change in noise level category tables, can therefore be described as 'minor' for the majority of properties.

The initial assessment of operational noise significance, over the short term, can therefore be described as 'Not significant'.

Consideration of the absolute noise levels in the do something scenarios reveals that for some of the locations, over the short term and where 1.0 dB or greater

changes are calculated, the SOAEL threshold will be exceeded. LA-111 says that in this situation the conclusion should be a 'likely significant effect'.

In the longer term, based on the category table values, the changes during the daytime range between -1.6 dB to +1.4 dB. As with the short term the exception to this is Royal Redgate that has a much larger beneficial change in noise level. For the night-time period over the longer term the changes generally range between -2.5 dB and +1.2 dB, again with Royal Redgate being calculated to have a much larger beneficial change.

The magnitude of impact in the long term for the majority of properties, based on the calculated change in noise levels, can therefore be described as 'Negligible'.

Given that there are likely to be some changes to the landscaping and setting of the area together with some local development activity noise at times, a conclusion of 'likely significant effect' is considered appropriate over the short term even though there will be only relatively small changes to the overall noise levels. Over the longer term the impact is likely to lessen towards a 'negligible' noise impact.

To minimise the noise impact to the nearby noise sensitive locations the detailed design of the development should incorporate noise mitigation measures wherever possible. Section 9.3 sets out details of measures that should be included to minimise the overall noise impact.

9.3 Operational Phase: Mitigation

In relation to the operational phase, the site management and mitigation measures to reduce noise emissions could include the following:

- Appropriate placement and selection of any noise emitting plant and / or equipment such that significant noise producing plant, equipment or activities are sited as far from dwellings as possible and exploit the shielding potential of the proposed buildings themselves.
- Selection of the quietest of otherwise comparable options for particular items of plant.
- Avoidance of major roof top plant where possible.
- Enclosure of noise producing plant in appropriate buildings or rooms with relevant intake or extract terminations fitted with suitable noise attenuation.

-
- Canopied noise barrier screens to delivery vehicle standing areas and to turning circles with direct lines of sight to dwellings.
 - Landscaping bunds and / or acoustic fencing between car parking areas and nearby dwellings.
 - Car parking and other external activities managed such that in evenings and at night only areas furthest away from dwellings are used.

In relation to operational noise, it is recommended that any planning permission is subject to appropriate conditions to limit noise emissions from the development such that the values in Table 12 are not exceeded 1 metre in front of the nearest noise sensitive building facade.

10. **CONCLUSIONS**

This report has presented a noise impact assessment for the scheme proposals for MIRA Technology Park South Site.

The assessments identify potential noise impacts associated with construction activity and propose upper noise level limits to keep any associated noise impact at nearby dwellings to below the levels that BS 5228-1 identifies as potentially giving rise to a significant noise impact.

In the short term, the operational phase of the development is identified as likely to have a significant effect, whilst over the longer term the impact is likely to reduce towards a negligible impact.

Development noise level limits and mitigation measures have been proposed that should be considered during the detailed design phase to minimise potential noise impacts.

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APPENDIX A**Calculated Noise Levels**



NoiseMap Results: L10,18 hour

		Scenario Results					Comparisons			
Receiver ID	Receiver Name	Floor	Existing	DMOY 2024DN	DSOY 2024DS	DMFY 2039DN	DSFY 2039DS	DSOY-DMOY 2024DS-2024DN Short Term	DSFY-DMOY 2039DS-2024DN Long Term	DMFY-DMOY 2039DN-2024DN
			L10,18h (2005) [18hr]	L10,18h (2005) [18hr]	L10,18h (2005) [18hr]	L10,18h (2005) [18hr]	L10,18h (2005) [18hr]			
101	Royal Redgate - E facing	0	58.6	58.7	60.0	59.1	60.4	1.3	1.7	0.4
101	Royal Redgate - E facing	1	60.5	60.5	62.0	61.0	62.4	1.5	1.9	0.5
102	Royal Redgate - A5 facing	0	68.2	68.3	64.5	68.7	64.9	-3.8	-3.4	0.4
102	Royal Redgate - A5 facing	1	70.1	70.2	66.6	70.6	67.0	-3.6	-3.2	0.4
103	Royal Redgate - Atherstone Rd facing	0	72.3	72.4	58.6	72.8	59.0	-13.8	-13.4	0.4
103	Royal Redgate - Atherstone Rd facing	1	73.2	73.3	60.9	73.7	61.3	-12.4	-12.0	0.4
104	Rookwood (2 storey res.) - facing north	0	65.3	65.4	66.3	65.8	66.7	0.9	1.3	0.4
104	Rookwood (2 storey res.) - facing north	1	67.5	67.5	68.5	68.0	68.9	1.0	1.4	0.5
105	Rookwood (2 storey res.) - Weddington Lane facing	0	64.9	65.0	65.4	65.4	65.8	0.4	0.8	0.4
105	Rookwood (2 storey res.) - Weddington Lane facing	1	67.4	67.4	67.9	67.9	68.3	0.5	0.9	0.5
106	Rookwood - South	0	62.6	62.7	62.2	63.1	62.6	-0.5	-0.1	0.4
106	Rookwood - South	1	64.6	64.7	64.1	65.1	64.5	-0.6	-0.2	0.4
107	Rookwood - West	0	57.9	58.0	58.6	58.5	59.0	0.6	1.0	0.5
107	Rookwood - West	1	60.1	60.2	60.9	60.7	61.3	0.7	1.1	0.5
108	Park View - North (A5) facing	0	58.2	58.3	58.7	58.7	59.2	0.4	0.9	0.4
108	Park View - North (A5) facing	1	60.3	60.4	60.8	60.8	61.2	0.4	0.8	0.4
109	Park View - Weddington Lane facing	0	54.3	54.4	55.0	54.8	55.5	0.6	1.1	0.4
109	Park View - Weddington Lane facing	1	56.4	56.4	57.1	56.8	57.5	0.7	1.1	0.4
110	The Shades - North (A5) facing	0	58.2	58.3	58.9	58.7	59.3	0.6	1.0	0.4
110	The Shades - North (A5) facing	1	60.3	60.4	61.0	60.8	61.4	0.6	1.0	0.4
111	The Shades - Weddington Lane facing	0	60.2	60.3	60.2	60.7	60.6	-0.1	0.3	0.4
111	The Shades - Weddington Lane facing	1	62.2	62.3	62.1	62.7	62.5	-0.2	0.2	0.4
112	The Shades - South	0	56.8	56.9	56.2	57.3	56.6	-0.7	-0.3	0.4
112	The Shades - South	1	58.8	58.8	58.1	59.2	58.5	-0.7	-0.3	0.4
113	Woodside - North (A5) facing	0	55.8	55.9	56.3	56.3	56.7	0.4	0.8	0.4
113	Woodside - North (A5) facing	1	58.2	58.3	58.6	58.7	59.1	0.3	0.8	0.4
114	Woodside - Weddington Lane facing	0	59.7	59.7	59.5	60.2	60.0	-0.2	0.3	0.5
114	Woodside - Weddington Lane facing	1	61.7	61.7	61.5	62.1	61.9	-0.2	0.2	0.4
115	Woodside - South	0	57.0	57.0	56.2	57.4	56.6	-0.8	-0.4	0.4
115	Woodside - South	1	59.0	59.0	58.1	59.4	58.6	-0.9	-0.4	0.4
116	Highlands - North facing	0	54.7	54.8	54.7	55.2	55.1	-0.1	0.3	0.4
116	Highlands - North facing	1	57.2	57.3	57.2	57.7	57.6	-0.1	0.3	0.4
117	Highlands - east facing	0	57.5	57.6	57.4	58.0	57.8	-0.2	0.2	0.4
117	Highlands - east facing	1	59.8	59.9	59.6	60.3	60.0	-0.3	0.1	0.4
118	Highlands - east 2	0	57.8	57.8	57.3	58.3	57.7	-0.5	-0.1	0.5
118	Highlands - east 2	1	60.1	60.1	59.5	60.6	60.0	-0.6	-0.1	0.5
119	Highlands - south	0	54.3	54.3	53.1	54.8	53.5	-1.2	-0.8	0.5
119	Highlands - south	1	56.7	56.7	55.5	57.1	56.0	-1.2	-0.7	0.4
120	Timberlea - north facing	0	52.7	52.7	52.7	53.2	53.1	0.0	0.4	0.5
120	Timberlea - north facing	1	55.0	55.0	55.0	55.4	55.5	0.0	0.5	0.4
121	Timberlea - east facing	0	54.5	54.6	53.7	55.0	54.2	-0.9	-0.4	0.4
121	Timberlea - east facing	1	57.0	57.0	56.3	57.4	56.7	-0.7	-0.3	0.4
122	Southview - east facing	0	54.7	54.8	54.0	55.2	54.4	-0.8	-0.4	0.4
122	Southview - east facing	1	57.2	57.2	56.5	57.6	56.9	-0.7	-0.3	0.4
123	Southview - east facing	0	54.2	54.3	53.4	54.7	53.8	-0.9	-0.5	0.4
123	Southview - east facing	1	56.7	56.7	55.9	57.1	56.3	-0.8	-0.4	0.4
124	Southview - east facing	0	55.1	55.1	54.3	55.5	54.8	-0.8	-0.3	0.4
124	Southview - east facing	1	57.4	57.4	56.7	57.8	57.1	-0.7	-0.3	0.4
125	Southview - north facing	0	51.4	51.5	51.1	51.8	51.6	-0.4	0.1	0.3
125	Southview - north facing	1	54.4	54.5	54.3	54.9	54.7	-0.2	0.2	0.4

126 Southview - north facing	0	51.0	51.1	51.0	51.5	51.5	-0.1	0.4	0.4
126 Southview - north facing	1	54.6	54.7	54.5	55.1	55.0	-0.2	0.3	0.4
127 Keepers Gate - east facing	0	55.1	55.2	54.3	55.6	54.7	-0.9	-0.5	0.4
127 Keepers Gate - east facing	1	57.4	57.4	56.5	57.9	57.0	-0.9	-0.4	0.5
128 Keepers Gate - north facing	0	53.3	53.4	52.9	53.8	53.3	-0.5	-0.1	0.4
128 Keepers Gate - north facing	1	55.7	55.7	55.3	56.1	55.7	-0.4	0.0	0.4
129 Keepers Gate - south	0	52.8	52.9	51.4	53.3	51.8	-1.5	-1.1	0.4
129 Keepers Gate - south	1	55.0	55.0	53.5	55.5	53.9	-1.5	-1.1	0.5
130 The Trees - North facing	0	55.6	55.7	54.7	56.1	55.1	-1.0	-0.6	0.4
130 The Trees - North facing	1	57.8	57.9	56.9	58.3	57.3	-1.0	-0.6	0.4
131 The Trees - East facing	0	58.6	58.6	57.1	59.1	57.6	-1.5	-1.0	0.5
131 The Trees - East facing	1	60.8	60.8	59.3	61.3	59.7	-1.5	-1.1	0.5
132 Trees - south	0	56.9	56.9	55.2	57.4	55.6	-1.7	-1.3	0.5
132 Trees - south	1	58.9	58.9	57.2	59.4	57.6	-1.7	-1.3	0.5
133 Ingledene - North facing	0	62.0	62.1	61.0	62.5	61.5	-1.1	-0.6	0.4
133 Ingledene - North facing	1	64.4	64.4	63.3	64.9	63.7	-1.1	-0.7	0.5
134 Ingledene - East facing	0	56.7	56.8	57.1	57.1	57.5	0.3	0.7	0.5
134 Ingledene - East facing	1	58.7	58.7	59.0	59.1	59.5	0.3	0.8	0.4
135 Ingeldene - West facing	0	64.5	64.5	62.8	65.0	63.2	-1.7	-1.3	0.5
135 Ingeldene - West facing	1	67.0	67.0	65.2	67.5	65.6	-1.8	-1.4	0.5
136 Ingledene - south	0	61.0	61.0	59.3	61.5	59.7	-1.7	-1.3	0.5
136 Ingledene - south	1	63.2	63.2	61.6	63.7	62.0	-1.6	-1.2	0.5
137 Homeland - North facing	0	62.6	62.6	60.9	63.1	61.3	-1.7	-1.3	0.5
137 Homeland - North facing	1	64.7	64.7	63.0	65.2	63.4	-1.7	-1.3	0.5
138 Homeland - East facing	0	56.0	56.0	54.8	56.5	55.3	-1.2	-0.7	0.5
138 Homeland - East facing	1	57.9	58.0	56.8	58.4	57.2	-1.2	-0.8	0.4
139 Homeland - West facing	0	64.7	64.7	62.9	65.2	63.3	-1.8	-1.4	0.5
139 Homeland - West facing	1	67.0	67.0	65.1	67.5	65.5	-1.9	-1.5	0.5
140 Homeland - south	0	60.1	60.1	58.3	60.6	58.7	-1.8	-1.4	0.5
140 Homeland - south	1	62.3	62.3	60.4	62.8	60.8	-1.9	-1.5	0.5
141 School Hse - North West facing	0	62.6	62.6	60.8	63.1	61.2	-1.8	-1.4	0.5
141 School Hse - North West facing	1	64.7	64.7	62.9	65.2	63.3	-1.8	-1.4	0.5
142 School Hse / Caldecote Village Hall - north east	0	54.0	54.1	52.5	54.5	53.0	-1.6	-1.1	0.4
142 School Hse / Caldecote Village Hall - north east	1	56.2	56.3	54.8	56.7	55.2	-1.5	-1.1	0.4
143 Caldecote Village Hall - South east	0	61.3	61.4	59.4	61.9	59.8	-2.0	-1.6	0.5
143 Caldecote Village Hall - South east	1	63.4	63.5	61.5	64.0	61.9	-2.0	-1.6	0.5
144 School Hse / Caldecote Village Hall - South west facing	0	69.0	69.1	67.2	69.6	67.6	-1.9	-1.5	0.5
144 School Hse / Caldecote Village Hall - South west facing	1	70.8	70.9	69.0	71.4	69.4	-1.9	-1.5	0.5
145 15 Weddington Lane - North west facing	0	62.2	62.3	60.4	62.8	60.8	-1.9	-1.5	0.5
145 15 Weddington Lane - North west facing	1	64.4	64.5	62.6	65.0	63.0	-1.9	-1.5	0.5
146 15 & 16 Weddington Lane - North east	0	50.1	50.2	48.8	50.6	49.2	-1.4	-1.0	0.4
146 15 & 16 Weddington Lane - North east	1	52.0	52.1	50.9	52.5	51.3	-1.2	-0.8	0.4
147 16 Weddington Lane - South East	0	61.6	61.7	59.8	62.2	60.2	-1.9	-1.5	0.5
147 16 Weddington Lane - South East	1	63.7	63.8	61.9	64.3	62.3	-1.9	-1.5	0.5
148 15 & 16 Weddington Lane - South West facing	0	66.8	66.8	65.0	67.3	65.4	-1.8	-1.4	0.5
148 15 & 16 Weddington Lane - South West facing	1	69.0	69.1	67.2	69.6	67.6	-1.9	-1.5	0.5
149 17 & 18 Weddington Lane - North East	0	64.9	65.0	64.3	65.4	64.7	-0.7	-0.3	0.4
149 17 & 18 Weddington Lane - North East	1	67.1	67.2	66.7	67.6	67.1	-0.5	-0.1	0.4
150 18 Weddington Lane - South east	0	60.4	60.5	61.1	60.9	61.5	0.6	1.0	0.4
150 18 Weddington Lane - South east	1	62.6	62.7	63.5	63.1	63.9	0.8	1.2	0.4
151 17 Weddington Lane - North West	0	60.9	61.0	59.6	61.4	60.0	-1.4	-1.0	0.4
151 17 Weddington Lane - North West	1	63.2	63.3	62.3	63.7	62.7	-1.0	-0.6	0.4
152 Nuneaton Estate 1 - North West	0	47.7	47.8	46.8	48.2	47.2	-1.0	-0.6	0.4
152 Nuneaton Estate 1 - North West	1	49.2	49.3	48.4	49.7	48.8	-0.9	-0.5	0.4
153 Nuneaton Estate 2 - North west	0	46.0	46.1	45.1	46.4	45.5	-1.0	-0.6	0.3
153 Nuneaton Estate 2 - North west	1	47.6	47.7	46.8	48.1	47.2	-0.9	-0.5	0.4
154 Lindley House Cottages off A5 - south	0	77.8	77.9	78.3	78.3	78.7	0.4	0.8	0.4
154 Lindley House Cottages off A5 - south	1	78.8	78.9	79.3	79.3	79.7	0.4	0.8	0.4
155 Lindley House Cottages - west	0	71.3	71.4	71.8	71.8	72.2	0.4	0.8	0.4

155 Lindley House Cottages - west	1	73.4	73.5	73.9	73.9	74.3	0.4	0.8	0.4
156 Rowden Lodge - South West facing	0	50.2	50.3	50.5	50.6	50.9	0.2	0.6	0.3
156 Rowden Lodge - South West facing	1	51.5	51.6	51.8	51.9	52.2	0.2	0.6	0.3
157 Rowden Lodge - South East facing	0	49.9	50.0	50.2	50.3	50.7	0.2	0.7	0.3
157 Rowden Lodge - South East facing	1	51.2	51.3	51.5	51.6	52.0	0.2	0.7	0.3
158 Fyves Court - N facing	0	63.0	63.0	63.6	63.5	64.0	0.6	1.0	0.5
158 Fyves Court - N facing	1	65.2	65.3	65.8	65.8	66.2	0.5	0.9	0.5
159 Fyves Court - E facing	0	60.4	60.4	60.8	60.9	61.2	0.4	0.8	0.5
159 Fyves Court - E facing	1	62.5	62.6	63.0	63.0	63.4	0.4	0.8	0.4
161 Glebe Farm - E	0	51.9	52.0	52.5	52.4	52.9	0.5	0.9	0.4
161 Glebe Farm - E	1	53.8	53.9	54.3	54.3	54.8	0.4	0.9	0.4
160 Glebe Farm - S	0	52.0	52.1	52.6	52.5	53.1	0.5	1.0	0.4
160 Glebe Farm - S	1	53.9	54.0	54.4	54.4	54.9	0.4	0.9	0.4
162 Lodge Farm - South	0	47.8	47.9	48.3	48.2	48.8	0.4	0.9	0.3
162 Lodge Farm - South	1	49.7	49.8	50.2	50.2	50.7	0.4	0.9	0.4
163 Lodge Farm - West	0	48.2	48.3	48.6	48.7	49.1	0.3	0.8	0.4
163 Lodge Farm - West	1	50.2	50.3	50.6	50.7	51.1	0.3	0.8	0.4
901 Posn A - Off Wood Lane	0	70.8	70.9	71.3	71.3	71.7	0.4	0.8	0.4
902 Posn B - Boundary to Garden of No. 16 Weddington Lane	0	59.1	59.1	56.8	59.6	57.2	-2.3	-1.9	0.5
903 Posn C - West of Weddington Walk	0	47.8	47.9	46.7	48.3	47.1	-1.2	-0.8	0.4
904 Posn D - Opp. No. 18 Weddington Lane	0	66.7	66.8	72.9	67.2	73.3	6.1	6.5	0.4
905 Posn - Attended by A5	0	68.6	68.7	68.9	69.0	69.3	0.2	0.6	0.3
906 Attended Posn 2 - Near Pond	0	46.9	47.0	46.4	47.4	46.8	-0.6	-0.2	0.4



NoiseMap Results: Night

		Scenario Results					Comparisons			
Receiver ID	Receiver Name	Floor	Existing	DMOY 2024DN	DSOY 2024DS	DMFY 2039DN	DSFY 2039DS	DSOY-DMOY 2024DS-2024DN	DSFY-DMOY 2039DS-2024DN	DMFY-DMOY 2039DN-2024DN
			Night (2005) [18hr]	Night (2005) [18hr]	Night (2005) [18hr]	Night (2005) [18hr]	Night (2005) [18hr]	Short Term	Long Term	
101	Royal Redgate - E facing	0	49.0	49.1	50.2	49.4	50.6	1.1	1.5	0.3
101	Royal Redgate - E facing	1	50.7	50.7	52.0	51.1	52.4	1.3	1.7	0.4
102	Royal Redgate - A5 facing	0	57.6	57.7	54.3	58.1	54.6	-3.4	-3.1	0.4
102	Royal Redgate - A5 facing	1	59.3	59.4	56.2	59.8	56.5	-3.2	-2.9	0.4
103	Royal Redgate - Atherstone Rd facing	0	61.3	61.4	49.0	61.8	49.3	-12.4	-12.1	0.4
103	Royal Redgate - Atherstone Rd facing	1	62.1	62.2	51.0	62.6	51.4	-11.2	-10.8	0.4
104	Rookwood (2 storey res.) - facing north	0	55.0	55.1	55.9	55.5	56.3	0.8	1.2	0.4
104	Rookwood (2 storey res.) - facing north	1	57.0	57.0	57.9	57.4	58.2	0.9	1.2	0.4
105	Rookwood (2 storey res.) - Weddington Lane facing	0	54.6	54.7	55.1	55.1	55.5	0.4	0.8	0.4
105	Rookwood (2 storey res.) - Weddington Lane facing	1	56.9	56.9	57.3	57.3	57.7	0.4	0.8	0.4
106	Rookwood - South	0	52.6	52.7	52.2	53.0	52.6	-0.5	-0.1	0.3
106	Rookwood - South	1	54.4	54.5	53.9	54.8	54.3	-0.6	-0.2	0.3
107	Rookwood - West	0	48.3	48.4	49.0	48.9	49.3	0.6	0.9	0.5
107	Rookwood - West	1	50.3	50.4	51.0	50.9	51.4	0.6	1.0	0.5
108	Park View - North (A5) facing	0	48.6	48.7	49.1	49.1	49.5	0.4	0.8	0.4
108	Park View - North (A5) facing	1	50.5	50.6	50.9	50.9	51.3	0.3	0.7	0.3
109	Park View - Weddington Lane facing	0	45.1	45.2	45.7	45.5	46.2	0.5	1.0	0.3
109	Park View - Weddington Lane facing	1	47.0	47.0	47.6	47.3	48.0	0.6	1.0	0.3
110	The Shades - North (A5) facing	0	48.6	48.7	49.2	49.1	49.6	0.5	0.9	0.4
110	The Shades - North (A5) facing	1	50.5	50.6	51.1	50.9	51.5	0.5	0.9	0.3
111	The Shades - Weddington Lane facing	0	50.4	50.5	50.4	50.9	50.8	-0.1	0.3	0.4
111	The Shades - Weddington Lane facing	1	52.2	52.3	52.1	52.7	52.5	-0.2	0.2	0.4
112	The Shades - South	0	47.3	47.4	46.8	47.8	47.2	-0.6	-0.2	0.4
112	The Shades - South	1	49.1	49.1	48.5	49.5	48.9	-0.6	-0.2	0.4
113	Woodside - North (A5) facing	0	46.4	46.5	46.9	46.9	47.3	0.4	0.8	0.4
113	Woodside - North (A5) facing	1	48.6	48.7	49.0	49.1	49.4	0.3	0.7	0.4
114	Woodside - Weddington Lane facing	0	50.0	50.0	49.8	50.4	50.2	-0.2	0.2	0.4
114	Woodside - Weddington Lane facing	1	51.8	51.8	51.6	52.1	51.9	-0.2	0.1	0.3
115	Woodside - South	0	47.5	47.5	46.8	47.9	47.2	-0.7	-0.3	0.4
115	Woodside - South	1	49.3	49.3	48.5	49.7	49.0	-0.8	-0.3	0.4
116	Highlands - North facing	0	45.5	45.5	45.5	45.9	45.8	0.0	0.3	0.4
116	Highlands - North facing	1	47.7	47.8	47.7	48.2	48.1	-0.1	0.3	0.4
117	Highlands - east facing	0	48.0	48.1	47.9	48.4	48.2	-0.2	0.1	0.3
117	Highlands - east facing	1	50.0	50.1	49.9	50.5	50.2	-0.2	0.1	0.4
118	Highlands - east 2	0	48.2	48.2	47.8	48.7	48.2	-0.4	0.0	0.5
118	Highlands - east 2	1	50.3	50.3	49.8	50.8	50.2	-0.5	-0.1	0.5
119	Highlands - south	0	45.1	45.1	44.0	45.5	44.4	-1.1	-0.7	0.4
119	Highlands - south	1	47.3	47.3	46.2	47.6	46.6	-1.1	-0.7	0.3
120	Timberlea - north facing	0	43.7	43.7	43.7	44.1	44.0	0.0	0.3	0.4
120	Timberlea - north facing	1	45.7	45.7	45.7	46.1	46.2	0.0	0.5	0.4
121	Timberlea - east facing	0	45.3	45.4	44.6	45.7	45.0	-0.8	-0.4	0.3
121	Timberlea - east facing	1	47.5	47.5	46.9	47.9	47.3	-0.6	-0.2	0.4
122	Southview - east facing	0	45.5	45.5	44.8	45.9	45.2	-0.7	-0.3	0.4
122	Southview - east facing	1	47.7	47.7	47.1	48.1	47.4	-0.6	-0.3	0.4
123	Southview - east facing	0	45.0	45.1	44.3	45.5	44.6	-0.8	-0.5	0.4
123	Southview - east facing	1	47.3	47.3	46.5	47.6	46.9	-0.8	-0.4	0.3
124	Southview - east facing	0	45.8	45.8	45.1	46.2	45.5	-0.7	-0.3	0.4
124	Southview - east facing	1	47.9	47.9	47.3	48.2	47.6	-0.6	-0.3	0.3
125	Southview - north facing	0	42.5	42.6	42.2	42.8	42.7	-0.4	0.1	0.2
125	Southview - north facing	1	45.2	45.3	45.1	45.6	45.5	-0.2	0.2	0.3

126 Southview - north facing	0	42.1	42.2	42.1	42.6	42.6	-0.1	0.4	0.4
126 Southview - north facing	1	45.4	45.5	45.3	45.8	45.7	-0.2	0.2	0.3
127 Keepers Gate - east facing	0	45.8	45.9	45.1	46.3	45.5	-0.8	-0.4	0.4
127 Keepers Gate - east facing	1	47.9	47.9	47.1	48.3	47.5	-0.8	-0.4	0.4
128 Keepers Gate - north facing	0	44.2	44.3	43.8	44.6	44.2	-0.5	-0.1	0.3
128 Keepers Gate - north facing	1	46.4	46.4	46.0	46.7	46.4	-0.4	0.0	0.3
129 Keepers Gate - south	0	43.7	43.8	42.5	44.2	42.8	-1.3	-1.0	0.4
129 Keepers Gate - south	1	45.7	45.7	44.4	46.2	44.7	-1.3	-1.0	0.5
130 The Trees - North facing	0	46.3	46.4	45.5	46.7	45.8	-0.9	-0.6	0.3
130 The Trees - North facing	1	48.2	48.3	47.4	48.7	47.8	-0.9	-0.5	0.4
131 The Trees - East facing	0	49.0	49.0	47.6	49.4	48.1	-1.4	-0.9	0.4
131 The Trees - East facing	1	50.9	50.9	49.6	51.4	50.0	-1.3	-0.9	0.5
132 Trees - south	0	47.4	47.4	45.9	47.9	46.3	-1.5	-1.1	0.5
132 Trees - south	1	49.2	49.2	47.7	49.7	48.1	-1.5	-1.1	0.5
133 Ingledene - North facing	0	52.0	52.1	51.1	52.5	51.6	-1.0	-0.5	0.4
133 Ingledene - North facing	1	54.2	54.2	53.2	54.6	53.6	-1.0	-0.6	0.4
134 Ingledene - East facing	0	47.3	47.3	47.6	47.6	48.0	0.3	0.7	0.3
134 Ingledene - East facing	1	49.1	49.1	49.3	49.4	49.8	0.2	0.7	0.3
135 Ingeldene - West facing	0	54.3	54.3	52.7	54.7	53.1	-1.6	-1.2	0.4
135 Ingeldene - West facing	1	56.5	56.5	54.9	57.0	55.3	-1.6	-1.2	0.5
136 Ingledene - south	0	51.1	51.1	49.6	51.6	50.0	-1.5	-1.1	0.5
136 Ingledene - south	1	53.1	53.1	51.7	53.6	52.0	-1.4	-1.1	0.5
137 Homeland - North facing	0	52.6	52.6	51.0	53.0	51.4	-1.6	-1.2	0.4
137 Homeland - North facing	1	54.5	54.5	52.9	54.9	53.3	-1.6	-1.2	0.4
138 Homeland - East facing	0	46.6	46.6	45.5	47.1	46.0	-1.1	-0.6	0.5
138 Homeland - East facing	1	48.3	48.4	47.3	48.8	47.7	-1.1	-0.7	0.4
139 Homeland - West facing	0	54.5	54.5	52.8	54.9	53.2	-1.7	-1.3	0.4
139 Homeland - West facing	1	56.5	56.5	54.8	57.0	55.2	-1.7	-1.3	0.5
140 Homeland - south	0	50.3	50.3	48.7	50.8	49.1	-1.6	-1.2	0.5
140 Homeland - south	1	52.3	52.3	50.6	52.7	50.9	-1.7	-1.4	0.4
141 School Hse - North West facing	0	52.6	52.6	50.9	53.0	51.3	-1.7	-1.3	0.4
141 School Hse - North West facing	1	54.5	54.5	52.8	54.9	53.2	-1.7	-1.3	0.4
142 School Hse / Caldecote Village Hall - north east	0	44.8	44.9	43.5	45.3	43.9	-1.4	-1.0	0.4
142 School Hse / Caldecote Village Hall - north east	1	46.8	46.9	45.5	47.3	45.9	-1.4	-1.0	0.4
143 Caldecote Village Hall - South east	0	51.4	51.5	49.7	51.9	50.0	-1.8	-1.5	0.4
143 Caldecote Village Hall - South east	1	53.3	53.4	51.6	53.8	51.9	-1.8	-1.5	0.4
144 School Hse / Caldecote Village Hall - South west facing	0	58.3	58.4	56.7	58.9	57.1	-1.7	-1.3	0.5
144 School Hse / Caldecote Village Hall - South west facing	1	60.0	60.0	58.3	60.5	58.7	-1.7	-1.3	0.5
145 15 Weddington Lane - North west facing	0	52.2	52.3	50.6	52.7	50.9	-1.7	-1.4	0.4
145 15 Weddington Lane - North west facing	1	54.2	54.3	52.6	54.7	52.9	-1.7	-1.4	0.4
146 15 & 16 Weddington Lane - North east	0	41.3	41.4	40.1	41.8	40.5	-1.3	-0.9	0.4
146 15 & 16 Weddington Lane - North east	1	43.0	43.1	42.0	43.5	42.4	-1.1	-0.7	0.4
147 16 Weddington Lane - South East	0	51.7	51.8	50.0	52.2	50.4	-1.8	-1.4	0.4
147 16 Weddington Lane - South East	1	53.6	53.6	51.9	54.1	52.3	-1.7	-1.3	0.5
148 15 & 16 Weddington Lane - South West facing	0	56.4	56.4	54.7	56.8	55.1	-1.7	-1.3	0.4
148 15 & 16 Weddington Lane - South West facing	1	58.3	58.4	56.7	58.9	57.1	-1.7	-1.3	0.5
149 17 & 18 Weddington Lane - North East	0	54.6	54.7	54.1	55.1	54.5	-0.6	-0.2	0.4
149 17 & 18 Weddington Lane - North East	1	56.6	56.7	56.3	57.1	56.6	-0.4	-0.1	0.4
150 18 Weddington Lane - South east	0	50.6	50.7	51.2	51.0	51.6	0.5	0.9	0.3
150 18 Weddington Lane - South east	1	52.6	52.7	53.4	53.0	53.7	0.7	1.0	0.3
151 17 Weddington Lane - North West	0	51.0	51.1	49.9	51.5	50.2	-1.2	-0.9	0.4
151 17 Weddington Lane - North West	1	53.1	53.2	52.3	53.6	52.7	-0.9	-0.5	0.4
152 Nuneaton Estate 1 - North West	0	39.2	39.3	38.3	39.6	38.7	-1.0	-0.6	0.3
152 Nuneaton Estate 1 - North West	1	40.5	40.6	39.8	41.0	40.1	-0.8	-0.5	0.4
153 Nuneaton Estate 2 - North west	0	37.6	37.7	36.8	38.0	37.2	-0.9	-0.5	0.3
153 Nuneaton Estate 2 - North west	1	39.1	39.2	38.3	39.5	38.7	-0.9	-0.5	0.3
154 Lindley House Cottages off A5 - south	0	66.3	66.3	66.7	66.7	67.1	0.4	0.8	0.4
154 Lindley House Cottages off A5 - south	1	67.2	67.2	67.6	67.6	68.0	0.4	0.8	0.4
155 Lindley House Cottages - west	0	60.4	60.5	60.9	60.9	61.2	0.4	0.7	0.4

155 Lindley House Cottages - west	1	62.3	62.4	62.7	62.7	63.1	0.3	0.7	0.3
156 Rowden Lodge - South West facing	0	41.4	41.5	41.7	41.8	42.0	0.2	0.5	0.3
156 Rowden Lodge - South West facing	1	42.6	42.7	42.8	42.9	43.2	0.1	0.5	0.2
157 Rowden Lodge - South East facing	0	41.1	41.2	41.4	41.5	41.9	0.2	0.7	0.3
157 Rowden Lodge - South East facing	1	42.3	42.4	42.6	42.7	43.0	0.2	0.6	0.3
158 Fyves Court - N facing	0	52.9	52.9	53.5	53.4	53.8	0.6	0.9	0.5
158 Fyves Court - N facing	1	54.9	55.0	55.5	55.5	55.8	0.5	0.8	0.5
159 Fyves Court - E facing	0	50.6	50.6	50.9	51.0	51.3	0.3	0.7	0.4
159 Fyves Court - E facing	1	52.5	52.6	52.9	52.9	53.3	0.3	0.7	0.3
161 Glebe Farm - E	0	42.9	43.0	43.5	43.4	43.8	0.5	0.8	0.4
161 Glebe Farm - E	1	44.6	44.7	45.1	45.1	45.5	0.4	0.8	0.4
160 Glebe Farm - S	0	43.0	43.1	43.6	43.5	44.0	0.5	0.9	0.4
160 Glebe Farm - S	1	44.7	44.8	45.2	45.2	45.6	0.4	0.8	0.4
162 Lodge Farm - South	0	39.3	39.3	39.7	39.6	40.1	0.4	0.8	0.3
162 Lodge Farm - South	1	41.0	41.0	41.4	41.4	41.9	0.4	0.9	0.4
163 Lodge Farm - West	0	39.6	39.7	40.0	40.1	40.4	0.3	0.7	0.4
163 Lodge Farm - West	1	41.4	41.5	41.8	41.9	42.2	0.3	0.7	0.4
901 Posn A - Off Wood Lane	0	60.0	60.0	60.4	60.4	60.8	0.4	0.8	0.4
902 Posn B - Boundary to Garden of No. 16 Weddington Lane	0	49.4	49.4	47.3	49.9	47.7	-2.1	-1.7	0.5
903 Posn C - West of Weddington Walk	0	39.3	39.3	38.3	39.7	38.6	-1.0	-0.7	0.4
904 Posn D - Opp. No. 18 Weddington Lane	0	56.3	56.4	61.8	56.7	62.2	5.4	5.8	0.3
905 Posn - Attended by A5	0	58.0	58.1	58.2	58.3	58.6	0.1	0.5	0.2
906 Attended Posn 2 - Near Pond	0	38.4	38.5	38.0	38.9	38.3	-0.5	-0.2	0.4