

ProPG: Planning and Noise – Professional Practice Guidance on Planning & Noise – New Residential Development, May 2017

Ever since PPG 24 Planning and Noise was repealed in 2012 with the introduction of the National Planning Policy Framework (NPPF), there has been no objective policy guidance provided by the English government on noise aspects of new residential planning applications.

Noise is still clearly a material issue to be considered in planning, as highlighted by the requirements of paragraph 123 of the NPPF. However, no objective policy guidance on assessing potential noise impact at residential developments is provided in the NPPF or subsequent policy documents.

Guidance on acceptable noise levels within residential properties is provided within British Standard 8233:2014 as previously noted.

The ProPG has been produced to provide practitioners with guidance on a recommended approach to the management of noise within the planning system in England. The IOA, the Chartered Institute of Environmental Health and the Association of Noise Consultants worked together to produce the guidance which encourages better acoustic design for new residential development and aims to protect people from the harmful effects of noise.

The new guidance emphasises the importance of *good acoustic design* in the planning process and describes what this may mean.

Good acoustic design describes the process of considering the environmental noise impacts on the proposed residential development from the early stages in a project.

Site layout, building massing, orientation and internal layouts can all be important to demonstrating good acoustic design. Noise needs to be considered in the context of the internal environmental quality (IEQ), to avoid trade-offs with other aspects of the internal environment such as day-lighting, sunlight, ventilation and thermal comfort.

Reading Borough Council – Core Strategy (January 2008 Revised January 2015)

“Environmental Protection

11.15 The effective protection of the environment is one of the Government’s four aims for sustainable development. The overall drive of National (PPS 1, PPS 23, PPG24), regional (RPG 9 and the South East Plan) and strategic planning policy (Berkshire Structure Plan) is to prevent harmful development, mitigate the impact of potentially polluting developments and ensure that developments that are sensitive to pollution are separated from sources of such pollution.”

No specific strategy is in place with respect to noise control measures or indeed policy, and the above reference to PPG24 is now out of date since the introduction of the NPPF.

Reading Borough Council does have a Sites and Detailed Policies Document which was adopted in October 2012 (Revised January 2015). The document does include Section 4.4 Safeguarding Amenity which refers to ensuring that new development creates a quality living environment for future residents.

DM4: Safeguarding Amenity

Development will not cause a significant detrimental impact to the living environment of existing or new residential properties, in terms of:

- Privacy and overlooking
- Access to sunlight and daylight
- Visual dominance and overbearing effects of a development
- Noise and disturbance
- Artificial lighting
- Vibration
- Dust and fumes
- Smell or
- Crime and safety.

Copies of the relevant parts of these strategies are attached as Appendix 6.

4. Noise Survey

Continuous noise measurements were undertaken at the Weston Homes Plc site known as 5-9 Berkeley Avenue, Reading, Berkshire, RG1 6EL from 4 separate locations across the site.

Noise monitoring station 1 was positioned at the northern boundary of the site fronting Berkeley Avenue from the 8th-13th September 2017 capturing 5 x 8 hour night time periods (23:00-07:00) and 4 x 16 hour daytime periods (07:00-23:00).



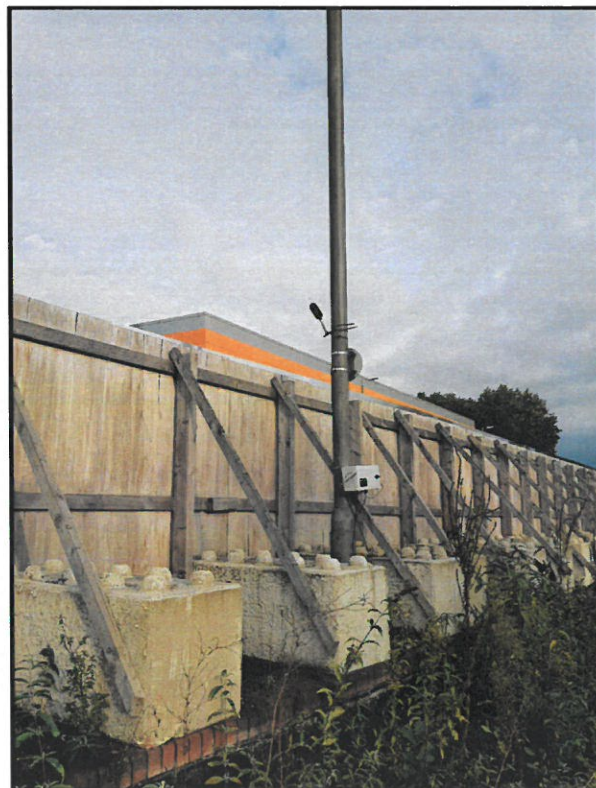
Noise monitoring station 2 was positioned on the north eastern boundary of the site fronting the River Kennet from the 13th-18th September 2017 capturing 5 x 8 hour night time periods (23:00-07:00).



Noise monitoring station 3 was positioned at the south eastern boundary of the site fronting the River Kennet from the 18th-21st September 2017 capturing 3 x 8 hour night time periods (23:00-07:00).



Noise monitoring station 4 was positioned at the western boundary of the site fronting the A33 from the 21st-25th September 2017 capturing 4 x 8 hour night time periods (23:00-07:00).



The noise survey was carried out using the Type 1 specification noise measurement equipment detailed in Table 3.

Table 3- Noise Monitoring Equipment

Equipment Description	Type Number	Manufacturer	Serial Number	Date Calibrated
Sound Level Meter	EM2010	Sonitus System	10.1.116.16	09-08-2016
Calibrator	1251	Norsonic	34436	10-07-2017
Sound Level Meter	NL-31	RION	00610337	22-03-2016
Calibrator	NC-74	RION	00410208	12/04/2017

As shown in Table 3, the sound level meters and calibrators had been calibrated within the previous year for the calibrators and within 2 years for the meters.

Monitoring Results

Results of the broadband measurement data are provided in Table 4 below. All data is given in Sound pressure levels in dB re 20uPa.

Table 4: Fixed Noise Measurement Results

Date	Noise monitoring positions	Measurement duration	L _{aeq} T dB	L ₉₀ dB	L ₁₀ dB
8-9/9/17 23:00-07:00	Fixed Monitoring Position 1	8 hours	58.6	47.3	65
9-10/9/17 23:00-07:00	Fixed Monitoring Position 1	8 hours	58.8	47	65.2
10-11/9/17 23:00-07:00	Fixed Monitoring Position 1	8 hours	59.7	51.7	65
11-12/9/17 23:00-07:00	Fixed Monitoring Position 1	8 hours	59.5	49.7	65.3
12-13/9/17 23:00-07:00	Fixed Monitoring Position 1	8 hours	61.9	54.3	67
Average for Position 1 (Night-time)			60	50.9	65.6
09/09/2017 07:00-23:00	Fixed Monitoring Position 1	16 hours	66.9	59.9	71.4
09/09/2017 07:00-23:00	Fixed Monitoring Position 1	16 hours	66.7	60	71.2
09/09/2017 07:00-23:00	Fixed Monitoring Position 1	16 hours	67.8	61.4	72
09/09/2017 07:00-23:00	Fixed Monitoring Position 1	16 hours	67.3	61	71.5
Average for Position 1 (Daytime)			67.4	60.6	71.5
13-14/9/17 23:00-07:00	Fixed Monitoring Position 2	8 hours	53.1	45.5	57.9
14-15/9/17 23:00-07:00	Fixed Monitoring Position 2	8 hours	53.1	46.1	57.8
15-16/9/17 23:00-07:00	Fixed Monitoring Position 2	8 hours	52	43.9	57.4
16-17/9/17 23:00-07:00	Fixed Monitoring Position 2	8 hours	51.7	42.7	57.2
17-18/9/17 23:00-07:00	Fixed Monitoring Position 2	8 hours	51.7	43.2	56.9
Average for Position 2 (Night-time)			52.4	44.5	57.5
18-19/9/17 23:00-07:00	Fixed Monitoring Position 3	8 hours	52.7	44.8	57.8
19-20/9/17 23:00-07:00	Fixed Monitoring Position 3	8 hours	53.2	46.3	57.7
20-21/9/17 23:00-07:00	Fixed Monitoring Position 3	8 hours	53.1	45.7	57.2
Average for Position 3 (Night-time)			53	45.6	57.6
21-22/9/17 23:00-07:00	Fixed Monitoring Position 4	8 hours	65.7	50.5	73
22-23/9/17 23:00-07:00	Fixed Monitoring Position 4	8 hours	64.7	49	72.5
23-24/9/17 23:00-07:00	Fixed Monitoring Position 4	8 hours	64.1	48.1	71.9
24-25/9/17 23:00-07:00	Fixed Monitoring Position 4	8 hours	65.2	51.2	72.2
Average for Position 4 (Night-time)			65	49.9	72.4

Table 5: Spot monitoring Noise Measurement Results

Date/Time	Noise monitoring positions	Measurement duration	$L_{\text{aeq}} T$ (dB)	L_{Amax}	$L_{\text{AF10}} T$ (dB)	$L_{\text{AF90}} T$ (dB)
08/09/17	Spot measurement 1	30min	60.2	64.4	61.8	58.5
08/09/17	Spot measurement 2	30min	60.6	62.6	61.8	59.5

Subjectively during the set up of the noise monitoring equipment, the visiting consultant noted that the dominant noise source was from vehicle movements on the A33.

The average L_{Amax} levels have been calculated for each fixed monitoring position as detailed in Table 6.

Table 6: Average L_{Amax} levels from each fixed monitoring position

Noise monitoring positions	Average L_{Amax} dB
Fixed Monitoring Position 1	75.9
Fixed Monitoring Position 2	68.9
Fixed Monitoring Position 3	75.3
Fixed Monitoring Position 4	82.3

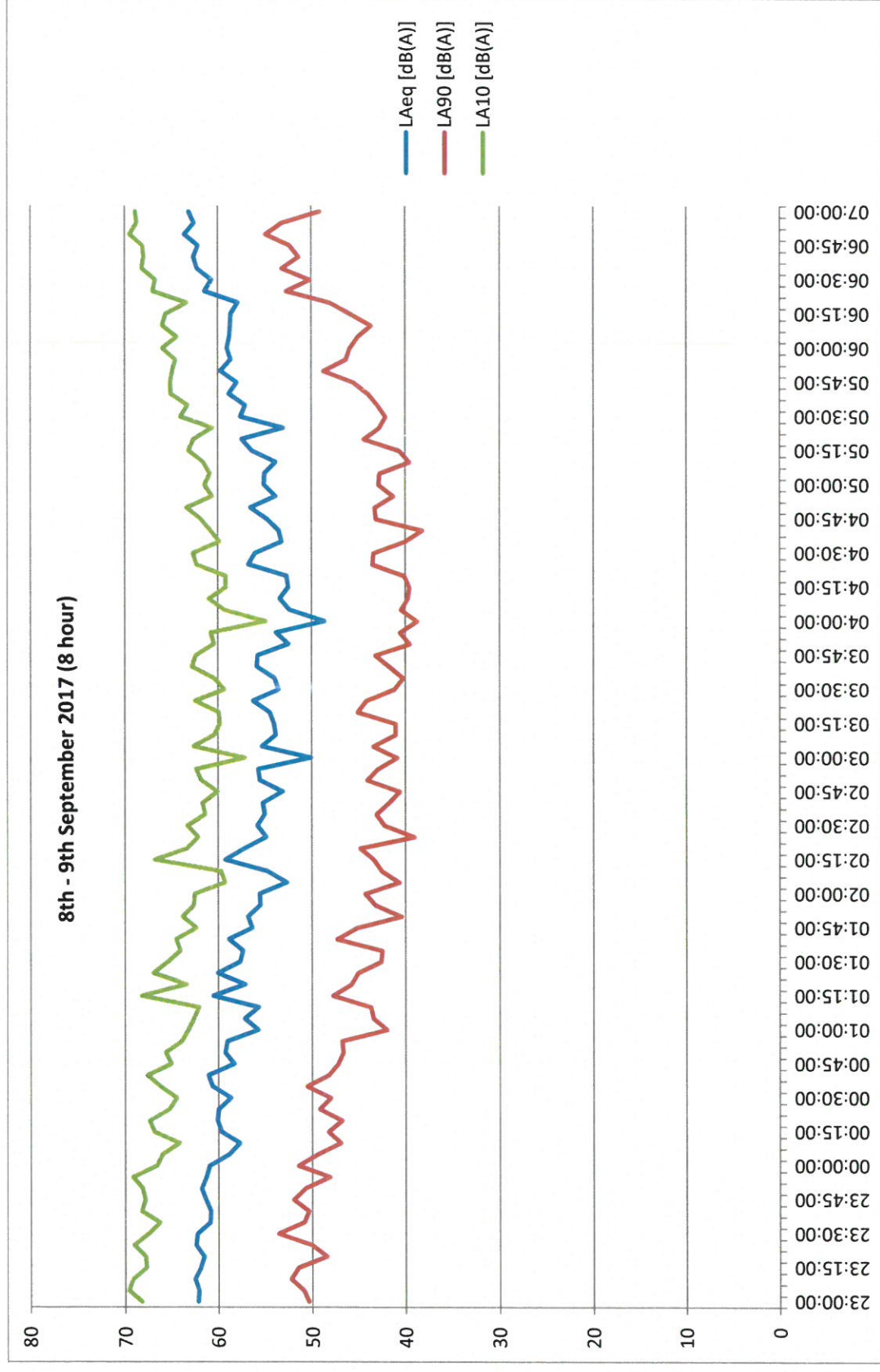
With respect to L_{Amax} noise levels, WHO guidance 1999 guidelines for community Noise recommends that 60dB L_{Amax} should not be exceeded more than 10-15 times a night to avoid sleep disturbance.

Due to the close proximity of the A33 and Berkeley Avenue, there was a continuous exceedance of the 60dB L_{Amax} level, and therefore mitigation measures will be required to achieve the internal noise levels as required by BS8233: 2014. This is discussed further in Section 5 – Design Criteria.

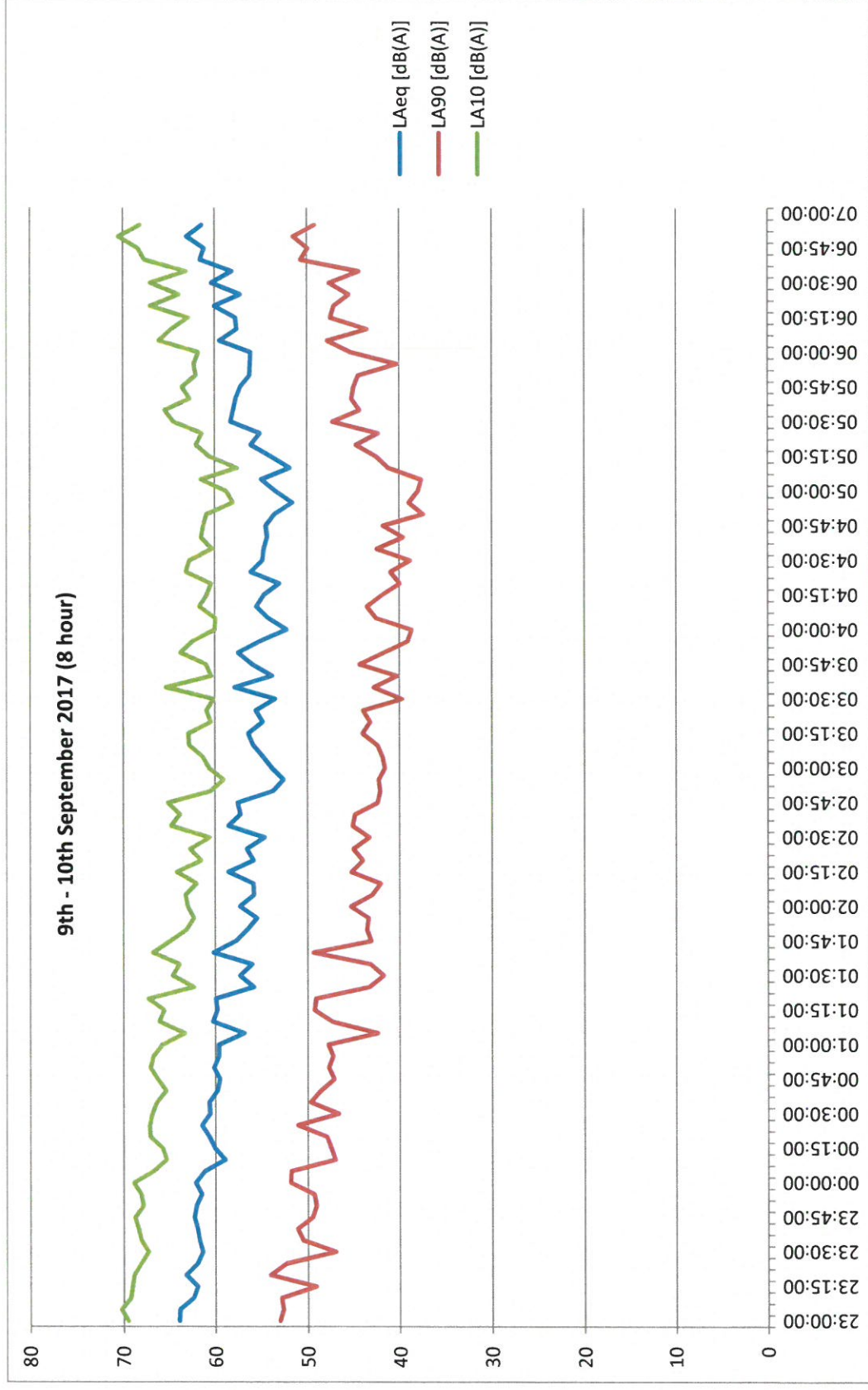
The data obtained during the fixed monitoring assessment has been graphically represented in Graphs 1-21.

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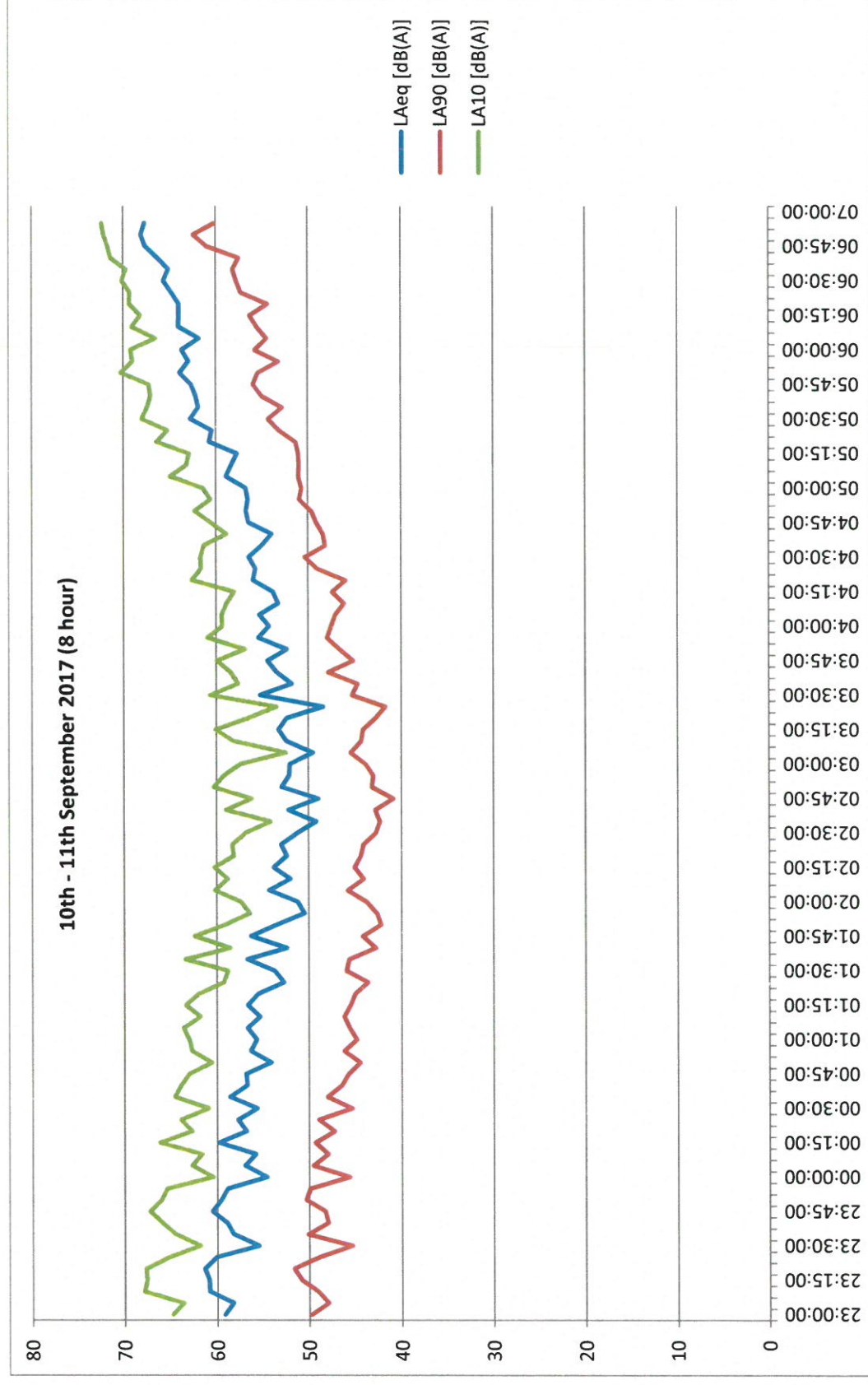
Graph 1: Graphical representation of the 8 hour noise monitoring period, 8th-9th September 2017



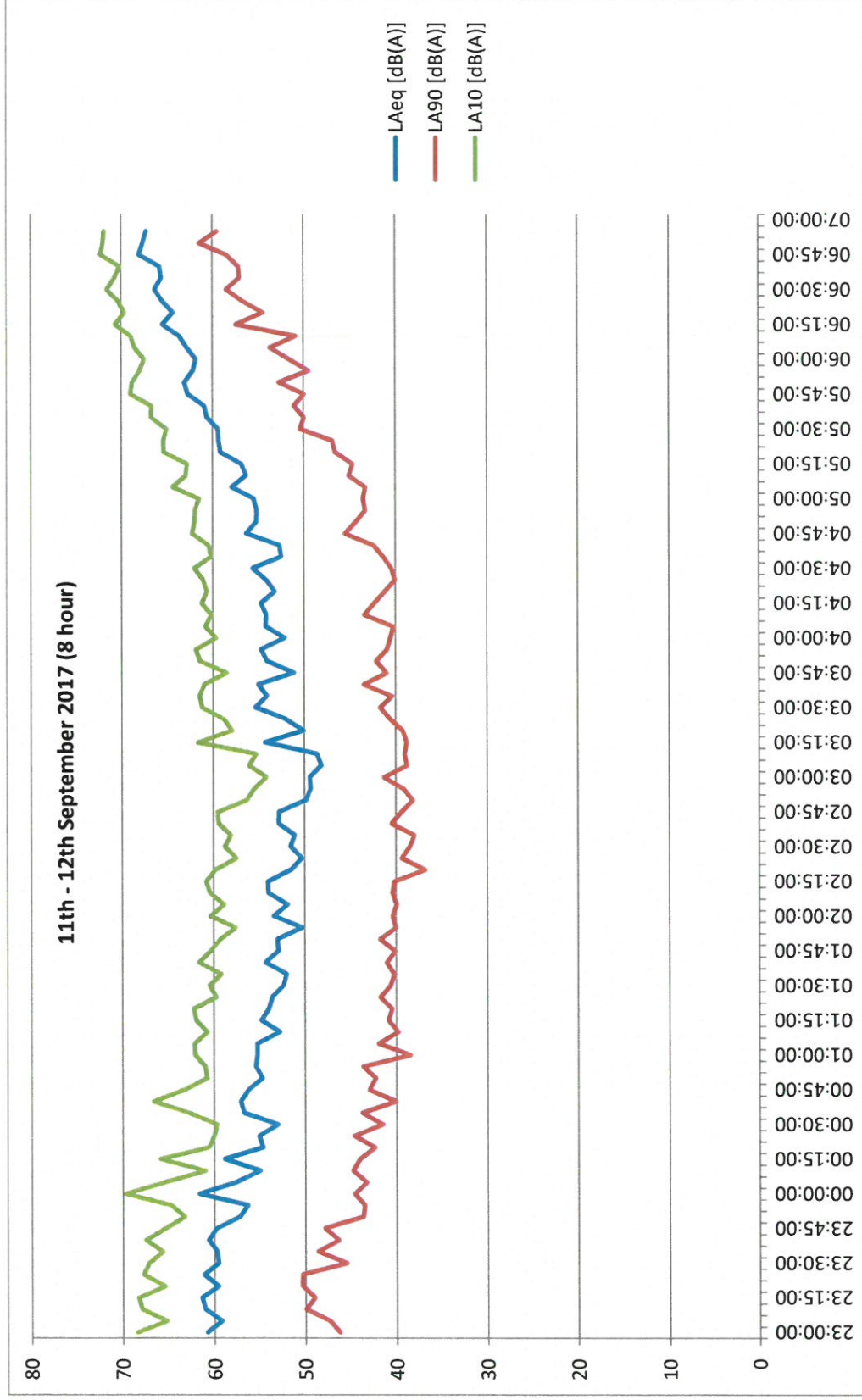
Graph 2: Graphical representation of the 8 hour noise monitoring period, 9th -10th September 2017



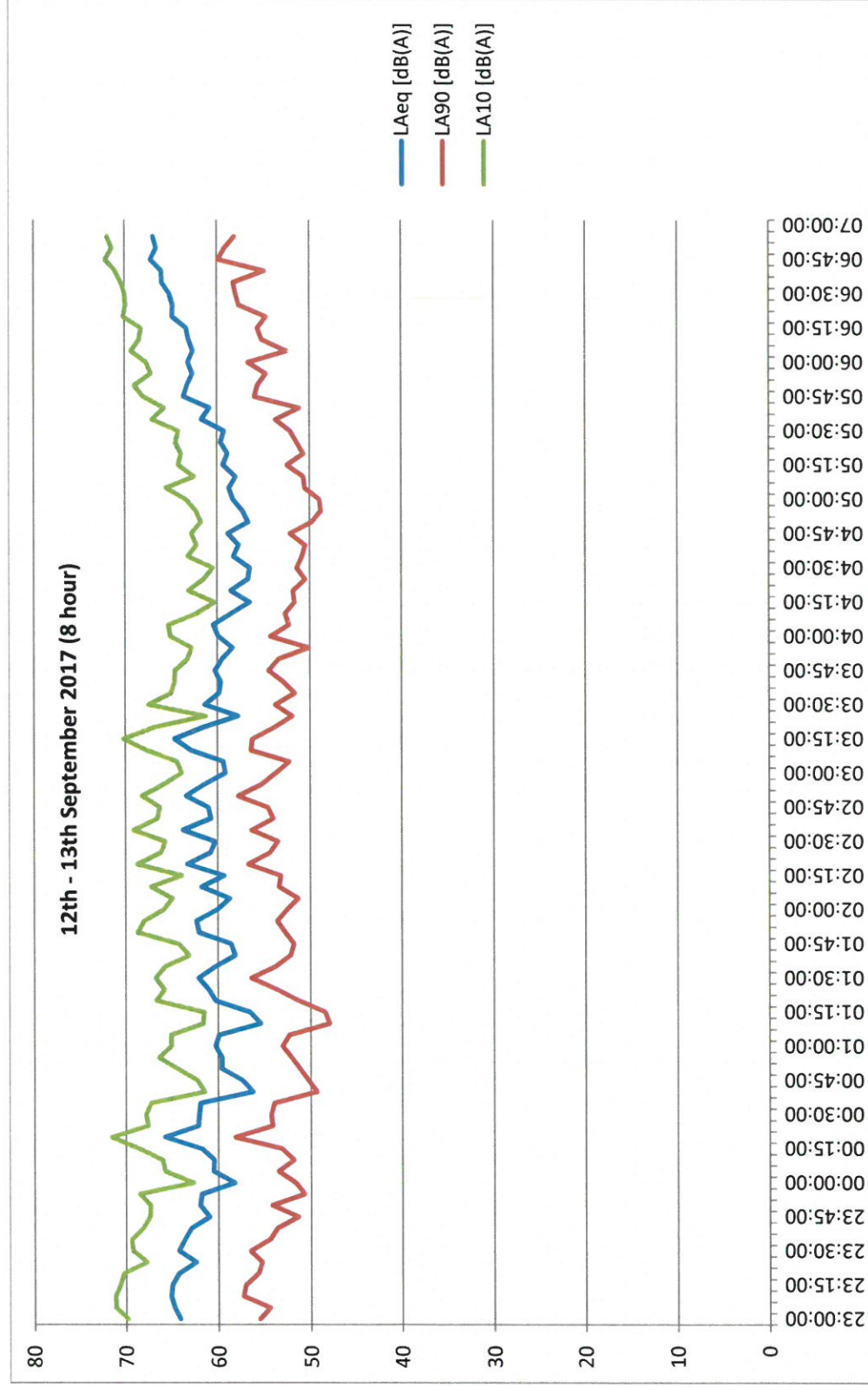
Graph 3: Graphical representation of the 8 hour noise monitoring period, 10th-11th September 2017



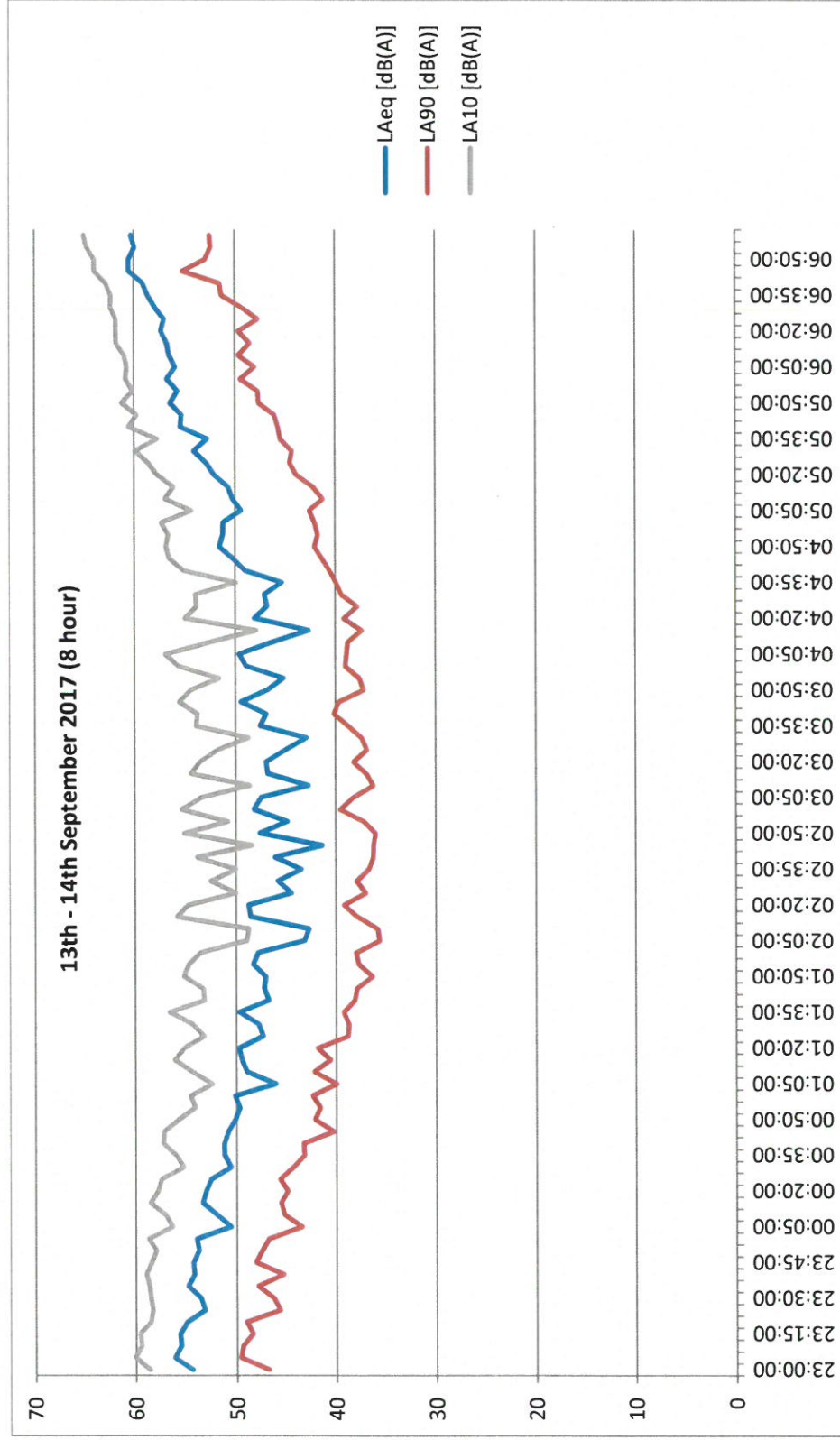
Graph 4: Graphical representation of the 8 hour noise monitoring period, 11th-12th September 2017



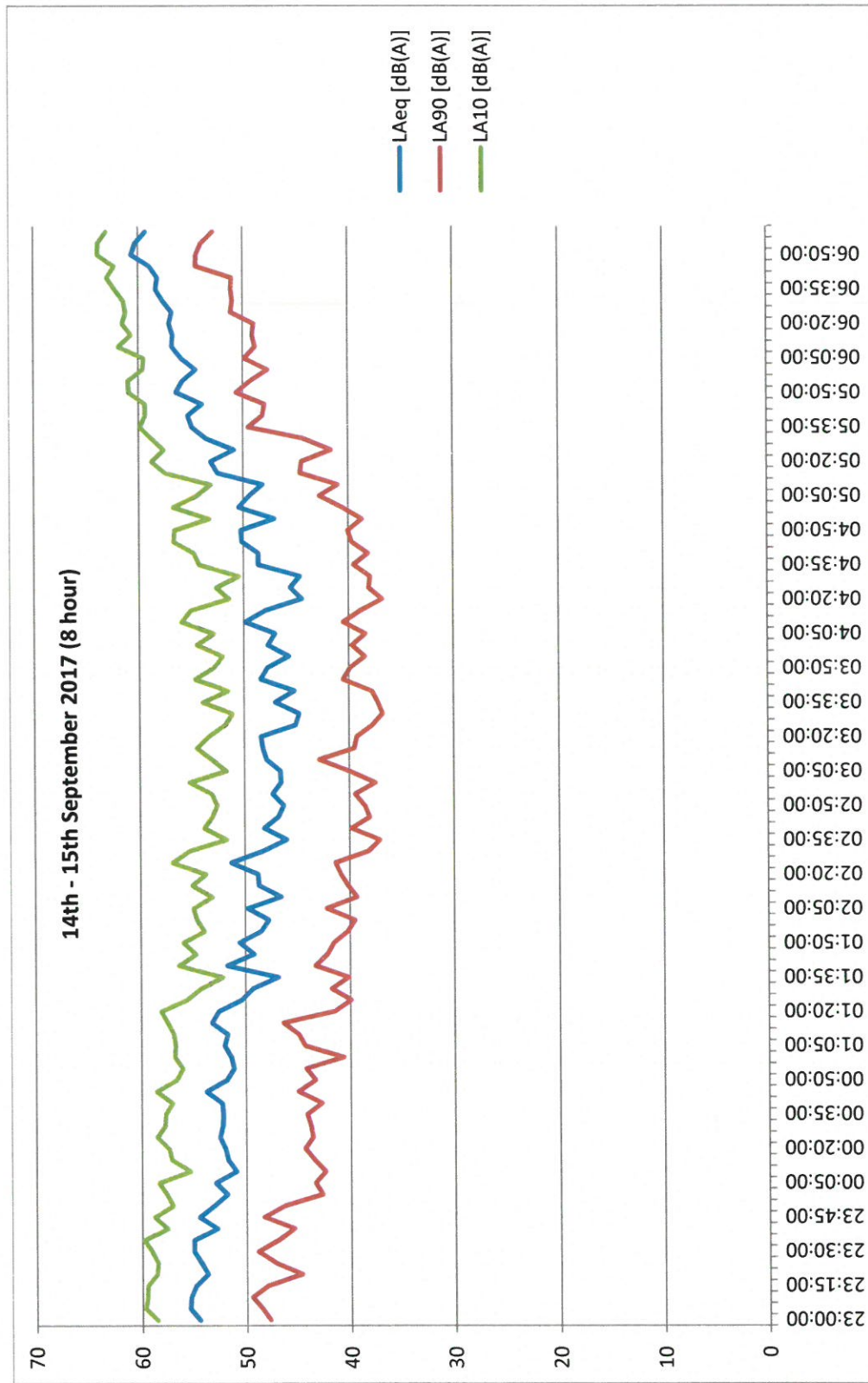
Graph 5: Graphical representation of the 8 hour noise monitoring period, 12th-13th September 2017



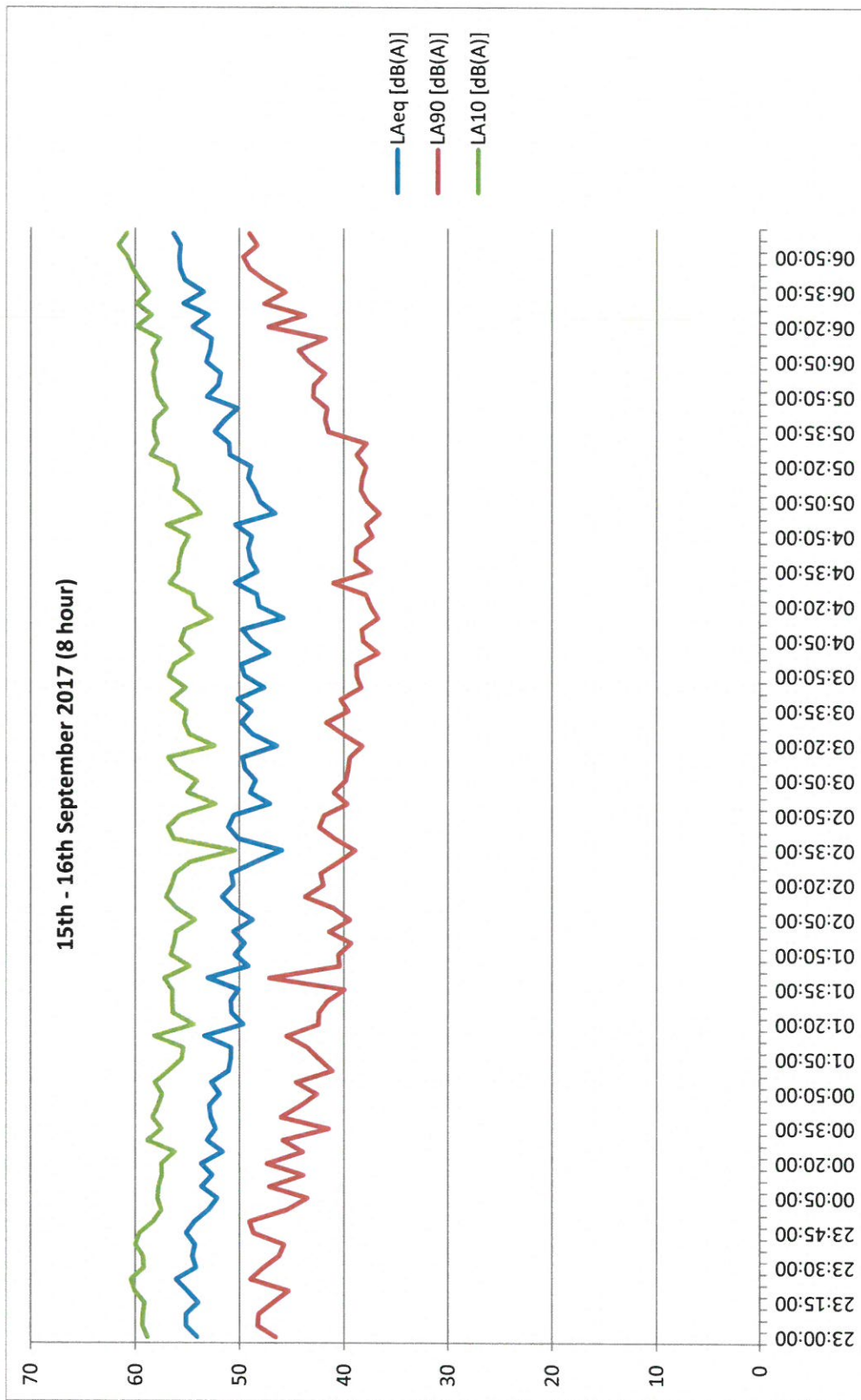
Graph 6: Graphical representation of the 8 hour noise monitoring period, 13th-14th September 2017



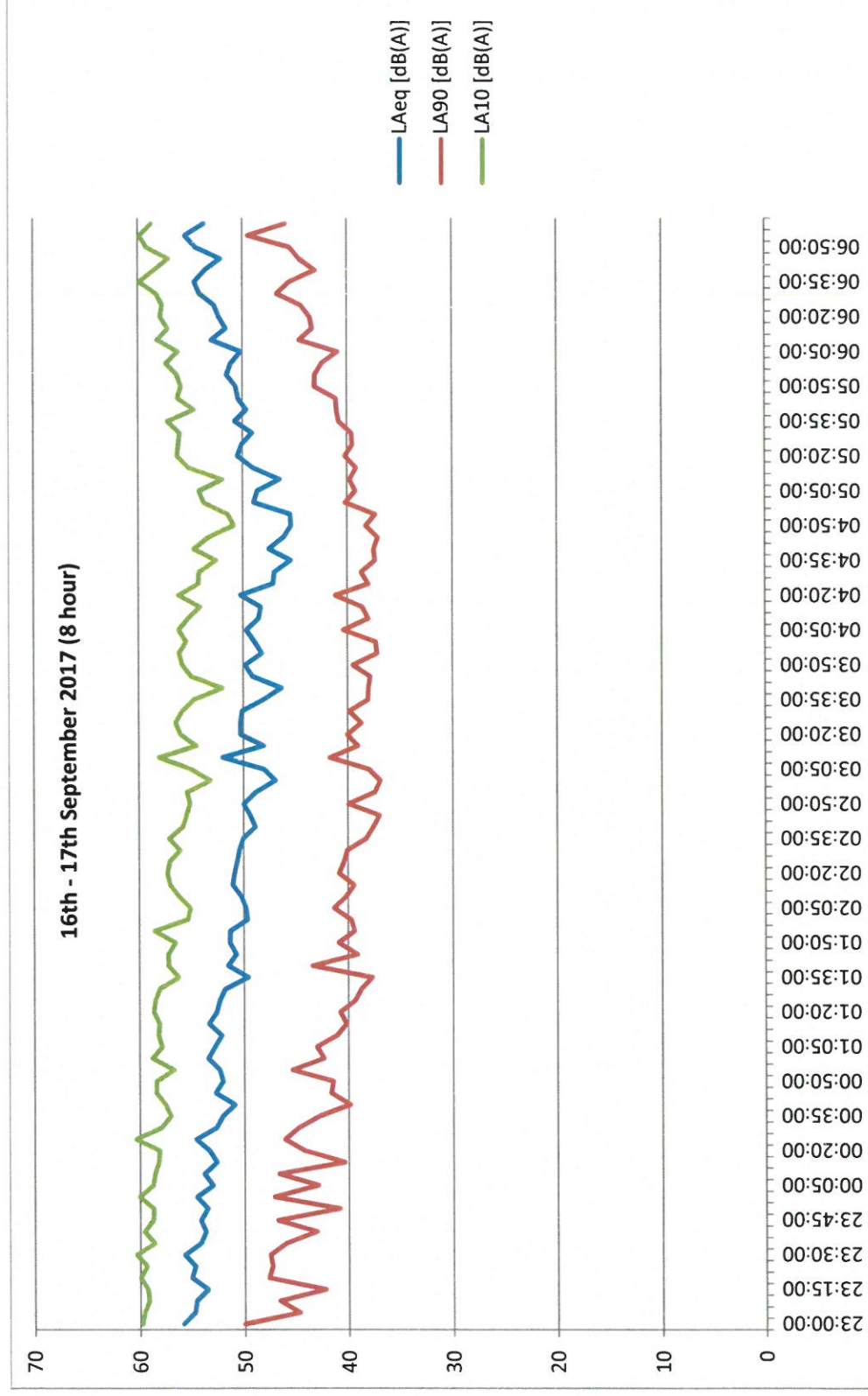
Graph 7: Graphical representation of the 8 hour noise monitoring period, 14th-15th September 2017



Graph 8: Graphical representation of the 8 hour noise monitoring period, 15th-16th September 2017



Graph 9: Graphical representation of the 8 hour noise monitoring period, 16th-17th September 2017



Graph 10: Graphical representation of the 8 hour noise monitoring period, 17th-18th September 2017

