

Appendix 11.1

Noise Monitoring Data



Four Ashes

Monitoring point information

NMP 1 – Four Ashes Railway Bridge:

- Elevated approximately 2m above road surface, 5m from carriageway & 15m from train track.
- RTN is dominant noise source except when a train passes.
- The site was chosen as it represents noise levels experienced by houses in that vicinity.
- The location is safe and does not interfere with traffic flow therefore altering the noise climate.
- When there is no RTN there is light background noise from the industrial estate.

NMP 2 – Calf Heath Bridge:

- Level with road height, 3.5 – 4m from carriageway.
- RTN dominant noise source.
- Approximately 40m from houses
- Location was chosen as it represents the closest point to the residential receptors that was deemed safe to work at also it allowed the car to be off the road therefore preventing interference with the traffic flow

NMP 3 – Oakley Lees:

- Level with road height and approximately 2m from the road side.
- This location was chosen as it represented the original NMP 3 + 4 because the original NMP 3 was too dangerous to monitor at. Also the original NMP 3 was on the same road as NMP 1 + 2. Being as RTN was the primary noise source at these locations then the noise levels would be very similar.

NMP 4 – Deep More:

- Noise meter was 4m from carriageway facing the industrial estate.
- Very quiet location with very occasional, slow moving cars passing.
- Dominant noise source was background RTN from the M6 in still conditions and leaf rustle in breezy conditions.
- This location represents the original NMP 5 and 6 as the old NMP 6 is on private land next to someone's house and was therefore deemed to be an inappropriate location.
- The sewage station made little to no noise except for one occasion when running water was heard as a quite background noise.

Calibration				Weather Conditions			
Cal. Start (dB):	114.4	Battery Voltage Start (V):	6.1	Wind Speed (m/s):	0.1	Cloud cover (octas):	0
Cal. Finish (dB):	114.6	Battery Voltage Finish (V):	5.1	Wind Direction		Temp (°C)	8°C
Measurements							
Location	Start Time	Stop Time	LA _{max} (dB)	LA _{eq} (dB)	LA ₁₀ (dB)	LA ₉₀ (dB)	Comments
NMP 1	07.30	07.50	86.1	68.2	71.0	54.5	Constant RTN is major noise source, some bird song in rare absence of RTN. Lots of HGV's, trains at 07.32, 07.41 & 07.46
NMP 2	07.54	08.14	86.2	72.7	76.5	56.0	Constant RTN, HGV's. M [^] audible in absence of local RTN
NMP 3	08.24	08.44	95.9	73.0	77.5	52.5	Constant RTN, no HGV's M6 audible in absence of local RTN.
NMP 4	09.07	09.27	66.4	51.1	52.5	48.0	Background M6, leaf rustle in wind, some bird noise (pheasant)
NMP 1	09.33	09.53	95.1	68.4	69.5	47.0	Mixed traffic, HGV's less traffic than previous measurement period, freight train at 09.33, passenger trains at 09.33, 09.42, 09.49, and 09.52.
NMP 2	09.57	10.19	86.5	69.0	74.0	49.5	RTN major noise source. HGV's, M6 audible in absence of local RTN
NMP 3	10.22	10.44	88.9	66.2	65.0	46.0	Constant RTN but less than previous, M6 audible in absence of local RTN, No HGV's, some bird song.
NMP 4	10.49	11.09	73.6	51.2	53.0	47.0	Leaf rustle predominant noise source, M6 audible, occasional bird song. Cars at 10.56 and 11.04. Breezier than previous monitoring session.
NMP 1	11.17	11.37	85.4	65.0	67.5	48.5	Mixed RTN with HGV's. Bird song in absence of RTN. Trains at 11.29 and 11.33.
NMP 2	11.41	12.01	89.6	69.3	74.0	50.0	Mixed RTN with HGV's, M6 audible in absence of RTN, occasional dog barking in distance some noise from units across road perhaps construction.

Four Ashes Industrial Estate – 02/10/07

NMP 3	12.04	12.24	84.5	64.5	62.0	46.0	M6 audible, sporadic RTN, some bird song.
NMP 4	12.28	12.48	68.8	52.0	52.5	48.0	M6 audible, leaf rustle predominant noise source, running water noise from sewage works (not very loud), cars at 12.37, 12.44 and 12.46

Calibration				Weather Conditions			
Cal. Start (dB):	114.0	Battery Voltage Start (V):	5.7	Wind Speed (m/s):	0.3	Cloud cover (octas):	1
Cal. Finish (dB):	114.3	Battery Voltage Finish (V):	5.0	Wind Direction		Temp (°C)	18°C
Measurements							
Location	Start Time	Stop Time	LA _{max} (dB)	LA _{eq} (dB)	LA ₁₀ (dB)	LA ₉₀ (dB)	Comments
NMP 1	13.10	13.30	86.4	65.1	68.0	49.0	Mixed RTN/HGV's. In absence of RTN some vehicle noise from other side of tracks. Trains at 13.19, 13.23, 13.29
NMP 2	13.33	13.53	86.6	69.5	74.0	49.0	RTN, grinding/cutting noise from industrial unit, lorry left carrying rubble suggesting noise source is construction.
NMP 3	13.56	14.17	86.3	67.3	68.5	43.0	Intermittent RTN, distant M6 RTN, bird song, very occasional HGV.
NMP 4	14.21	14.41	58.3	47.4	51.0	42.0	Leaf rustle, background M6, background construction/operational noise from Four Ashes.
NMP 1	14.46	15.06	86.9	66.6	69.0	49.0	Light RTN, in absence construction/industrial noise. HGV's. Trains 14.53, 15.00 (freight), 15.05.
NMP 2	15.23	15.43	84.3	69.5	74.5	47.5	RTN, HGV's, background industrial noise, dogs barking, Maybe some fan noise without RTN, although unsure.
NMP 3	15.46	16.06	91.8	70.9	74.0	43.5	Light RTN, M6 audible with no RTN, occasional bird song.
NMP 4	16.11	16.31	68.1	48.2	50.0	43.5	Leaf rustle, engine noise (generator, pump or lawnmower), Background M6 RTN. Cars at 16.14, 16.24, 16.28
NMP 1	16.37	16.57	97.7	69.8	69.5	55.0	Predominant noise RTN, HGV's. Trains at 16.41, 16.43, 16.46, 16.51
NMP 2	17.00	17.20	85.1	71.9	76.5	54.0	RTN, HGV's. Some noise occasionally audible from industrial estate with no RTN, dog barking.

Four Ashes Industrial Estate – 04/10/07

NMP 3	17.23	17.43	90.5	72.6	77.0	49.5	Reasonably heavy RTN (no HGV's), bird song and M6 audible without RTN.
NMP 4	17.48	18.08	72.1	50.3	50.5	47.5	No leaf rustle, M6 predominant noise source along with other RTN contributions. Bird song. Cars 17.53 & 17.55.

Calibration				Weather Conditions			
Cal. Start (dB):	114.4	Battery Voltage Start (V):	6.1	Wind Speed (m/s):	0.1	Cloud cover (octas):	0
Cal. Finish (dB):	114.6	Battery Voltage Finish (V):	5.1	Wind Direction		Temp (°C)	8°C
Measurements							
Location	Start Time	Stop Time	LA _{max} (dB)	LA _{eq} (dB)	LA ₁₀ (dB)	LA ₉₀ (dB)	Comments
NMP 1	23.00	23.15	87.6	61.6	59.5	42.0	Background RTN M6, tonal fan noise from industrial estate, occasional passing traffic, trains at 23.00, 23.04.
NMP 2	23.21	23.36	87.7	62.4	54.0	46.5	Background RTN, fan noise from industrial estate.
NMP 3	23.40	23.55	89.6	62.8	53.0	44.0	Background, RTN, distant train noise, occasional passing traffic.
NMP 4	23.59	00.14	61.2	45.3	46.5	44.0	M6 RTN, some other RTN
NMP 1	00.20	00.35	86.9	64.7	57.5	41.0	Occasional RTN, background noise from industrial estate, freight train, 00.34
NMP 2	00.38	00.53	85.0	61.7	60.0	46.5	Background from industrial estate, occasional HGV's and RTN. Maybe fan noise, not sure.
NMP 3	00.57	01.12	85.4	55.2	47.0	41.5	Background RTN, M6 and industrial noise, perhaps fans?
NMP 4	01.16	01.31	72.5	47.8	47.0	43.0	Background RTN, occasional background train noise.

Calibration				Weather Conditions			
Cal. Start (dB):	114.0	Battery Voltage Start (V):	100%	Wind Speed (m/s):	0	Cloud cover (octas):	0
Cal. Finish (dB):	113.9	Battery Voltage Finish (V):	63%	Wind Direction	N/A	Temp (°C)	4°C
Measurements							
Location	Start Time	Stop Time	LA _{max} (dB)	LA _{eq} (dB)	LA ₁₀ (dB)	LA ₉₀ (dB)	Comments
NMP 1	07.50	08.10	79.7	61.6	65.1	47.2	Background RTN, light passing traffic (some HGV's), birdsong and some background fan noise in distance. Trains at 7.52, 56, 59, 08.07
NMP 2	08.13	08.33	87.5	70.2	74.1	53.2	Occasional RTN with HGV's, street sweeper on site was dominant noise source
NMP 3	08.36	08.56	87.2	65.3	62.5	49.2	Occasional passing traffic, background RTN M6, birdsong
NMP 4	08.59	09.19	70.5	51.1	52.3	48.1	RTN from M6 dominant although only in distance, birdsong, occasional passing cars one of which turned round near NMP, dog walker.
NMP 1	09.24	09.44	86.4	64.5	66.4	44.2	Light traffic, background RTN some HGV's. Trains at 09.27 x2, 30, 41
NMP 2	09.48	10.08	82.0	67.0	71.7	48.0	Light traffic including some HGV's, background RTN + fan noise, occasional distance construction noise.
NMP 3	10.10	10.30	86.9	67.4	67.1	45.3	Occasional traffic including 1 HGV, background RTN M6, some birdsong
NMP 4	10.34	10.54	69.7	45.1	45.9	42.4	Background RTN M6 dominant, birdsong
NMP 1	11.03	11.18	89.4	66.8	68.3	45.1	RTN dominant both distant and on road next to NMP. Trains at 11.03, 10, 15, 18.
NMP 2	11.23	11.38	82.1	66.8	71.5	46.6	Light RTN, construction noise in distance from site, dog's barking occasionally
NMP 3	11.42	11.57	86.9	66.9	67.1	42.5	Light traffic, background RTN M6

Four Ashes – Saturday 20th October 2007
Ben Paynter

NMP 4	12.00	12.15	76.4	49.0	46.9	38.4	RTN background, leaf rustle in breeze, cars at 12.07 + 10. some background model plane noise coming from site.
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