

Lower Thames Crossing
6.3 Environmental Statement
Appendices
Appendix 12.5 – Baseline Noise
Survey Information

APFP Regulation 5(2)(a)

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Prescribed Forms and Procedure)
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Lower Thames Crossing

Appendix 12.5 Baseline Noise Survey Information

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1 Short-term three-hour survey locations

1.1 A-NML 01 Bligh Way Park

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 01 – Bligh Way Park
Monitoring location description	
<i>Bligh Way Park, Albatross Avenue, Rochester, ME2 2XR.</i>	
Ordnance Survey grid reference	X = 570961 Y = 169056
Survey position description	
<i>Monitoring location on the western boundary of Bligh Way Park. Monitoring location adjacent to the motorway. Motorway elevated on top of embankment behind fencing of Bligh Way Park.</i>	
Local authority area	Medway Council – Kent
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Road traffic noise from M2 motorway directly to the west dominates the noise environment. Some noise from distant aircraft.</i>	
Measurement start	16/07/2018 - 10:15
Measurement stop	16/07/2018 - 13:15



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 01					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCRT18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	0%					
	Road surfaces	Dry					
Additional survey notes							
No rain, no wind, no cloud, sunny, 26°C at survey start. Dry conditions prior to survey.							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 01		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 01	Hour 1	10:15 – 11:15	57.8	60.3	61.9
	Hour 2	11:15 – 12:15	57.6	60.3	61.9
	Hour 3	12:15 – 13:15	58.0	60.6	62.2
	Measured 3hr L _{A10} (CRTN shortened method)				62.0
	Calculated 18hr L _{A10} (CRTN shortened method)				61.0

1.2 A-NML 02 Squires Close

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 02 – Squires Close
Monitoring location description	
<i>Squires Close, Rochester, ME2 2TZ.</i>	
Ordnance Survey grid reference	X = 570803 Y = 169310
Survey position description	
<i>Monitoring location on amenity grassland in Squires Close.</i>	
Local authority area	Medway Council – Kent
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Noise environment dominated by road traffic noise from M2 motorway. Some aircraft noise.</i>	
Measurement start	20/06/2018 - 10:00
Measurement stop	20/06/2018 - 13:00

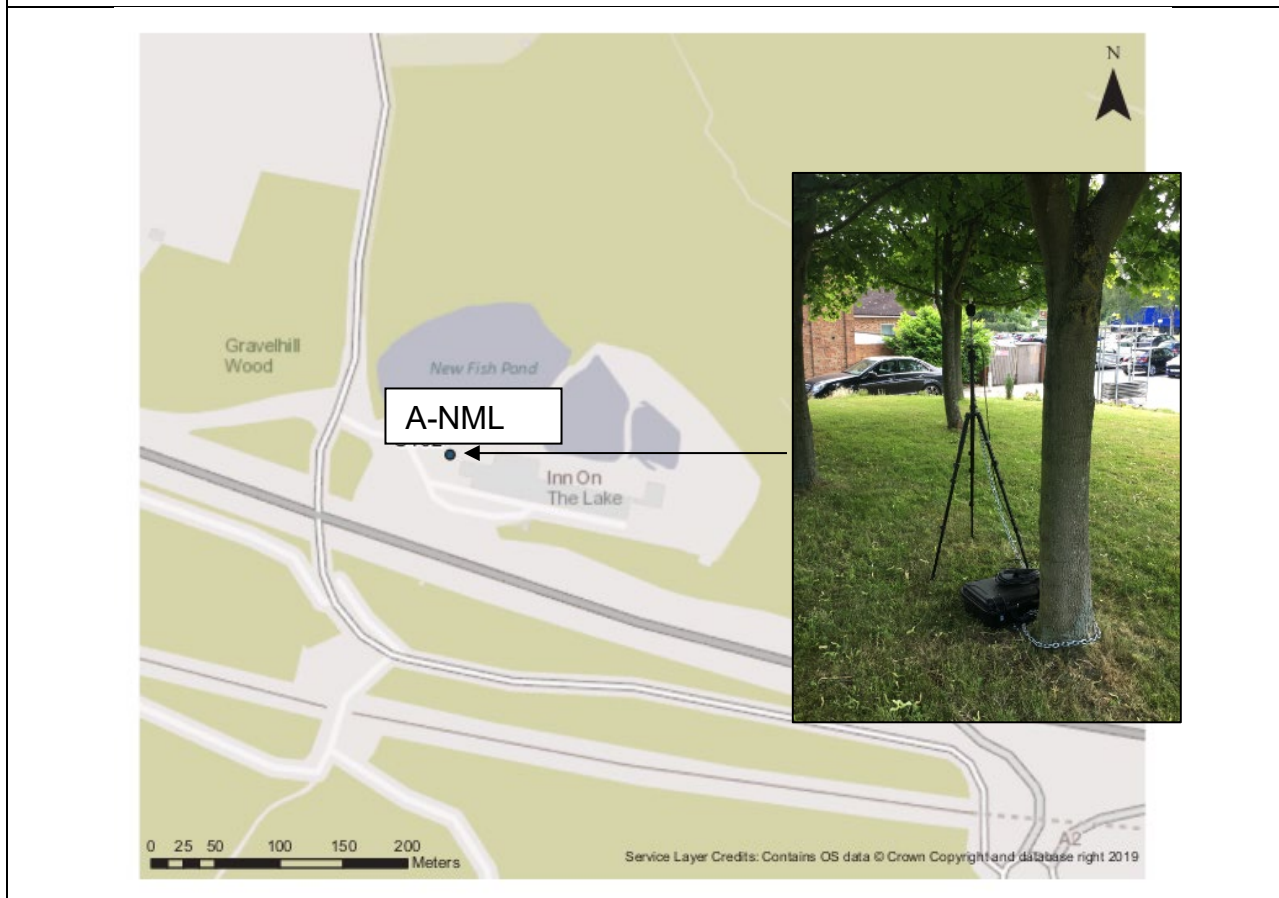


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 02				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		50				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	10%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, no cloud, 25°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 02		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 02	Hour 1	10:00 – 11:00	61.5	63.8	65.2
	Hour 2	11:00 – 12:00	61.4	63.7	65.1
	Hour 3	12:00 – 13:00	61.2	63.4	64.8
	Measured 3hr L _{A10} (CRTN shortened method)				65.1
	Calculated 18hr L _{A10} (CRTN shortened method)				64.1

1.3 A-NML 03 The Inn on the Lake

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 03 – Inn on the Lake
Monitoring location description	
<i>Inn on the Lake, Watling Street, Shorne, Gravesend, DA12 3HB.</i>	
Ordnance Survey grid reference	X= 567462 Y = 169882
Survey position description	
<i>Monitoring location on lawn outside the Inn on the Lake hotel.</i>	
Local authority area	Gravesham Borough Council – Kent
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Noise environment completely dominated by A2/M2 motorway road traffic noise. Some aircraft noise at times. Some noise from vehicles using the access road to get to and from the hotel.</i>	
Measurement start	19/06/2018 - 10:00
Measurement stop	19/06/2018 - 13:00

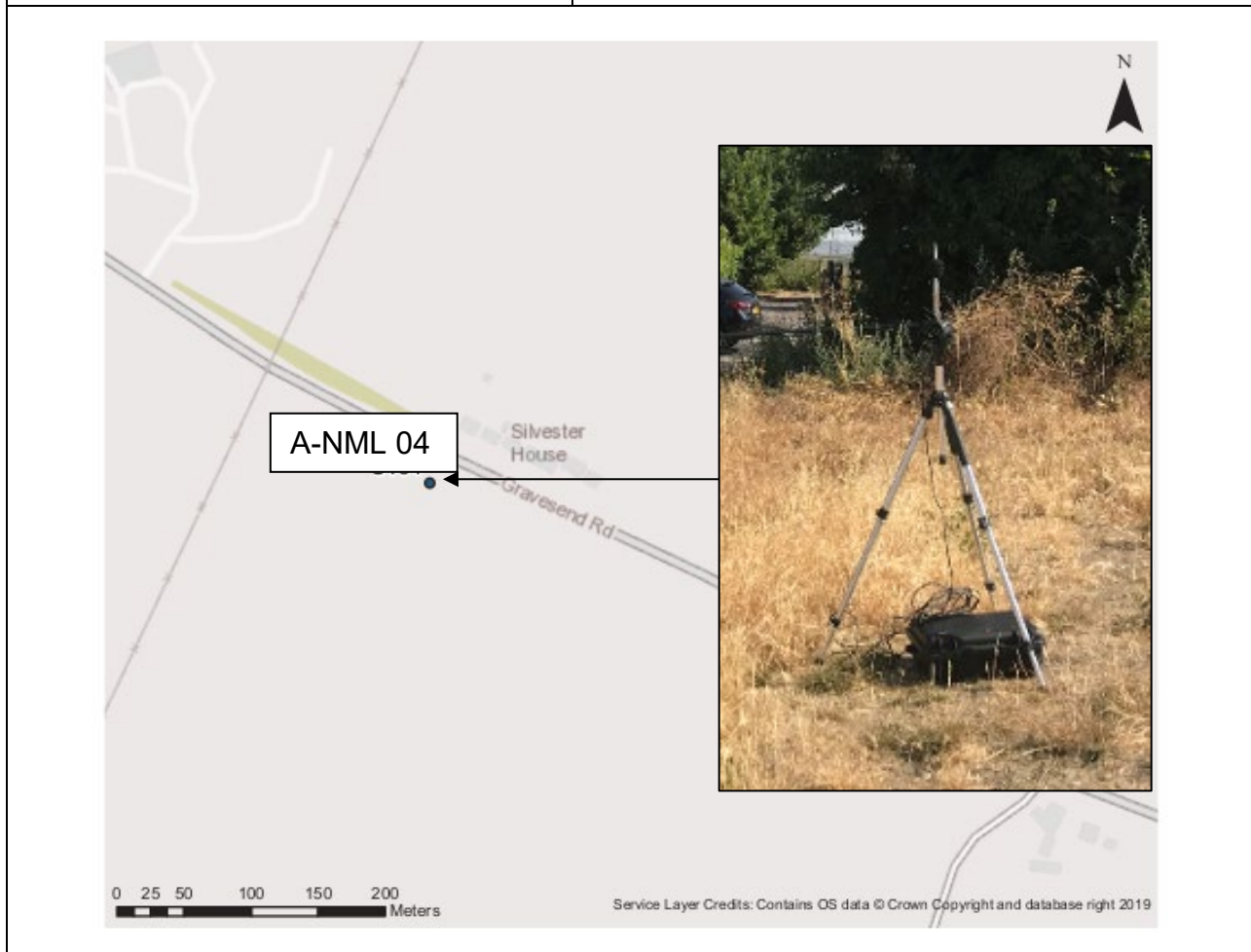


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 03					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		110					
Output level range lower		60					
Calibrator serial number		35183003					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, sunny conditions, patchy cloud, 25°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 03		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 03	Hour 1	10:00 – 11:00	65.7	67.9	69.2
	Hour 2	11:00 – 12:00	66.0	68.7	70.0
	Hour 3	12:00 – 13:00	65.9	68.4	69.8
	Measured 3hr L _{A10} (CRTN shortened method)				69.7
	Calculated 18hr L _{A10} (CRTN shortened method)				68.7

1.4 A-NML 04 Gravesend Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 04 – Gravesend Road
Monitoring location description	
<i>Gravesend Road, Shorne, Gravesend, DA12 3JL.</i>	
Ordnance Survey grid reference	X= 568726 Y = 172041
Survey position description	
<i>Monitoring location on public footpath opposite cottages on Gravesend Road (A226).</i>	
Local authority area	Gravesend Borough Council – Kent
Survey technician reference (initials)	CW/JW
Description of noise climate	
<i>Monitoring location completely dominated by road traffic noise from Gravesend Road (A226). Birdsong noises present at times. Some noise from breezes through vegetation at times.</i>	
Measurement start	17/07/2018 - 10:00
Measurement stop	17/07/2018 - 13:00

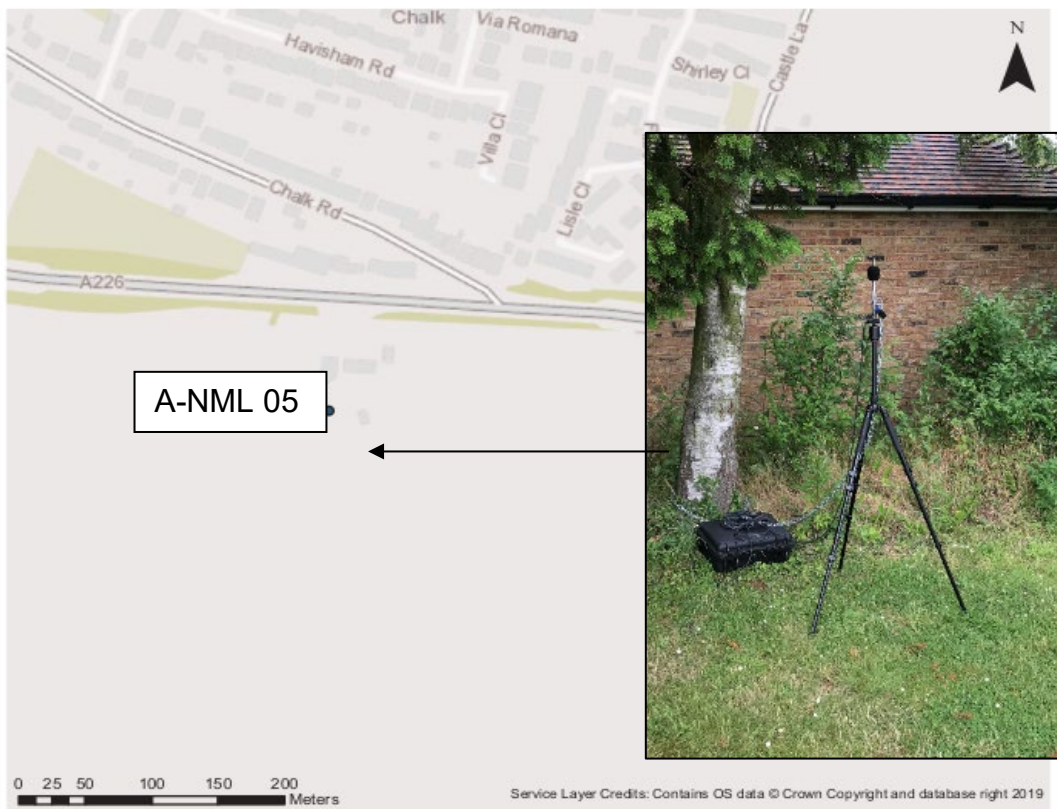


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 04					
Noise meter serial number (Microphone serial number)		11039 (233310)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		30					
Calibrator serial number		35183003					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During		0	Prior		0
	Cloud cover	0%					
	Road surfaces	Dry					
Additional survey notes							
<p><i>No rain, no wind – however some breezes at times <5ms⁻¹, sunny conditions, no cloud cover, 18°C at survey start. Dry conditions prior to survey.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 04		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 04	Hour 1	10:00 – 11:00	48.5	58.7	62.3
	Hour 2	11:00 – 12:00	49.2	58.9	62.3
	Hour 3	12:00 – 13:00	48.7	58.8	62.3
	Measured 3hr L _{A10} (CRTN shortened method)				62.3
	Calculated 18hr L _{A10} (CRTN shortened method)				61.3

1.5 A-NML 05 Polperro

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 05 – Polperro
Monitoring location description	
<i>Polperro, Rochester Road, Gravesend, DA12 4TD.</i>	
Ordnance Survey grid reference	X= 567443 Y = 172690
Survey position description	
<i>Monitoring location in garden of property owner (Polperro).</i>	
Local authority area	Gravesham Borough Council – Kent
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from Rochester Road (A226). Some aircraft noise at times. Noise environment subjectively noted by the surveyor as tranquil during most of the monitoring period.</i>	
Measurement start	19/06/2018 - 13:40
Measurement stop	19/06/2018 - 16:40

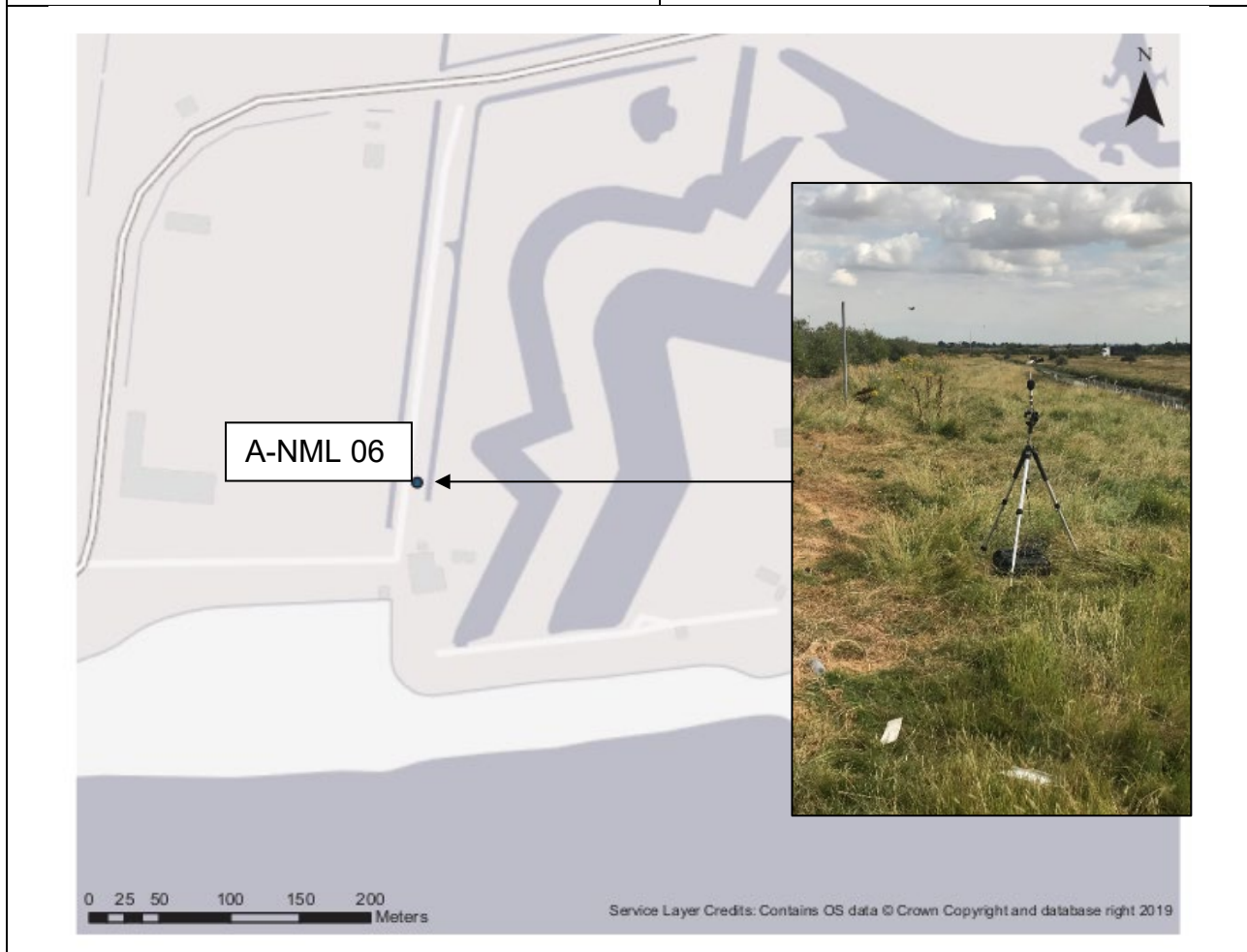


Equipment details, survey specifics and location description								
Monitoring location reference				A-NML 05				
Noise meter serial number (Microphone serial number)				11035 (226402)				
Noise meter type				ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)				09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting				A				
Time weighting				F				
Output level range upper				90				
Output level range lower				30				
Calibrator serial number				35183003				
Calibrator type				RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)				16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start				94				
Field calibration level end				94				
Field calibration variance				0				
Field calibration drift				No significant drift observed				
Anemometer serial number								
Anemometer type								
Measured weather parameters	Wind speed (m/s ⁻¹)		Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)							
	Rainfall (mm/hr)		During	0	Prior	0		
	Cloud cover		50%					
	Road surfaces		Dry					
Additional survey notes								
<p><i>It was noted that the owner was in the process of upgrading property with building works. Works were not commencing when setting up or collecting meter. No rain, no wind, sunny conditions, patchy cloud, 25°C at survey start. Dry conditions prior to survey.</i></p>								

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 05		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 05	Hour 1	13:40 – 14:40	42.1	46.7	47.7
	Hour 2	14:40 – 15:40	44.8	57.0	56.8
	Hour 3	15:40 – 16:40	44.6	53.6	54.8
	Measured 3hr L _{A10} (CRTN shortened method)				54.1
	Calculated 18hr L _{A10} (CRTN shortened method)				53.1

1.6 A-NML 06 Worlds End Pub

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 06 – Worlds End Pub
Monitoring location description	
<i>The Worlds End, Fort Road, Tilbury, RM18 7NR.</i>	
Ordnance Survey grid reference	X = 564799 Y = 175338
Survey position description	
<i>Monitoring location on public footpath near the Worlds End Pub, Tilbury.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	CW/JW
Description of noise climate	
<i>Commercial and factory noises from units to the west. Birdsong noises present at times. Some noise from aircraft passing overhead. Background road traffic noise also present.</i>	
Measurement start	18/07/2018 - 10:00
Measurement stop	18/07/2018 - 13:00

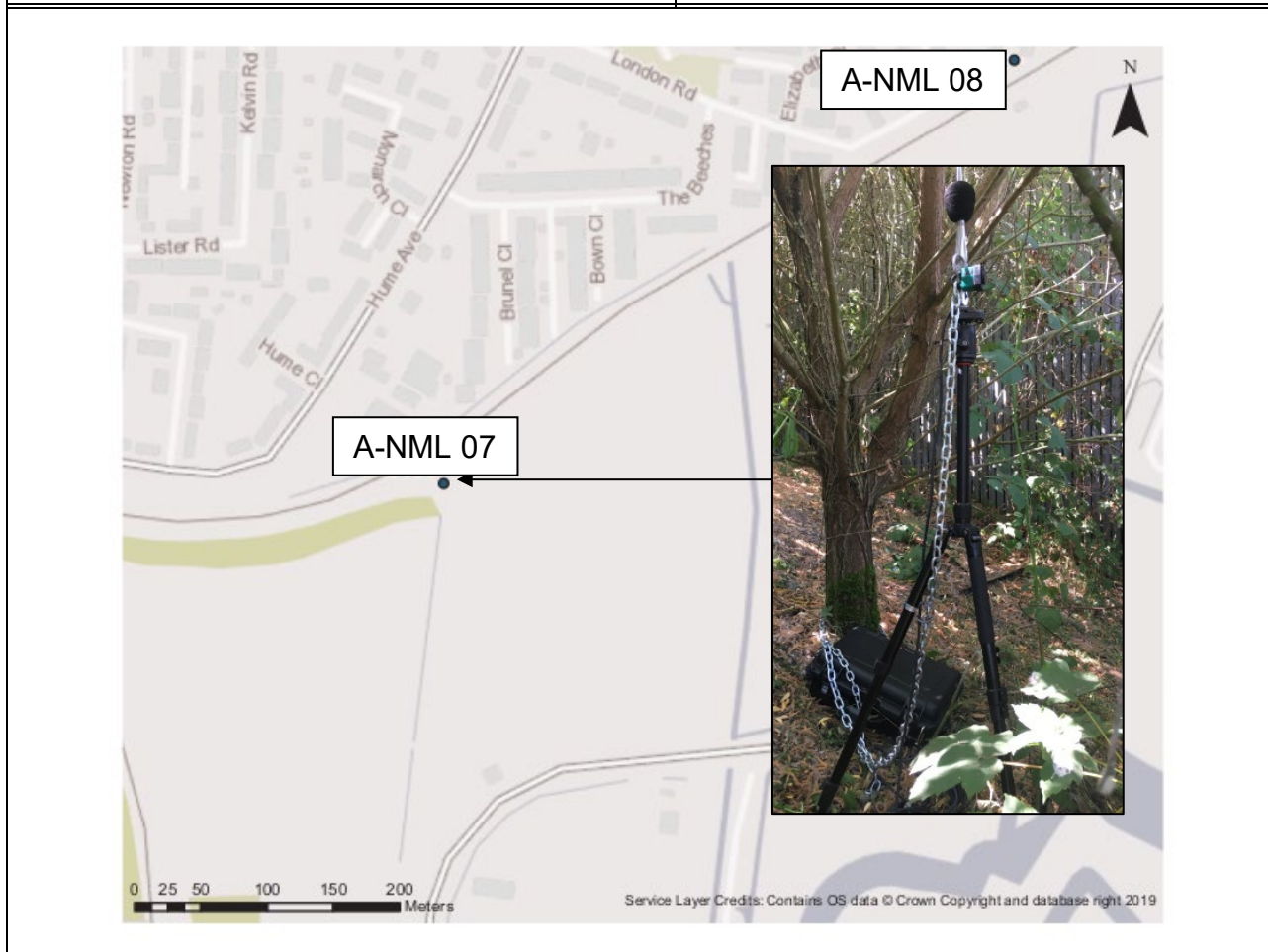


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 06					
Noise meter serial number (Microphone serial number)		11039 (233310)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		30					
Calibrator serial number		35183003					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, roughly 50% cloud cover, 19°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 06		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 06	Hour 1	10:00 – 11:00	38.5	44.9	44.8
	Hour 2	11:00 – 12:00	36.8	40.4	42.1
	Hour 3	12:00 – 13:00	38.2	42.9	44.8
	Measured 3hr L _{A10} (CRTN shortened method)				44.1
	Calculated 18hr L _{A10} (CRTN shortened method)				43.1

1.7 A-NML 07 Brunel Close

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 07 – Brunel Close
Monitoring location description	
<i>Brunel Close, Tilbury, Upminster, RM18 8EJ.</i>	
Ordnance Survey grid reference	X = 564596 Y = 175834
Survey position description	
<i>Monitoring location on public footpath south of the railway line at Brunel Close.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Noise climate of monitoring location considered by surveyor to be representative of residential receptors on Brunel Close. Primary noise from rail traffic from railway branch line. No noise was noted from car storage area nearby to the south. Some aircraft noise. Light industrial noise just perceptible from Tilbury Port.</i>	
Measurement start	17/07/2018 – 11:00
Measurement stop	17/07/2018 – 14:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 07					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		30					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, patchy cloud, 23°C at survey start. Dry conditions prior to survey</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 07		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 07	Hour 1	11:00 – 12:00	42.8	53.3	49.9
	Hour 2	12:00 – 13:00	43.9	54.3	49.9
	Hour 3	13:00 – 14:00	43.4	53.3	50.6
	Measured 3hr L _{A10} (CRTN shortened method)				50.1
	Calculated 18hr L _{A10} (CRTN shortened method)				49.1

1.8 A-NML 08 London Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 08 – London Road
Monitoring location description	
118 London Road, Tilbury, RM18 8DW.	
Ordnance Survey grid reference	X = 565027 Y = 176152
Survey position description	
Monitoring location on London Road, Tilbury. The meter was located in-between the residential properties on London Road to the north, and the Tilbury Loop rail lines to the south.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	CH/JW
Description of noise climate	
Rail traffic noise from the railway to the south, with some distant road traffic noise also being present. Some distant industrial noises from Tilbury Docks also present. Some bird noise at times. Local road traffic noise from London Road, including refuse lorry at 10:24 to 10:30 and 10:12 to 10:22. Some residential based noises from London Road.	
Measurement start	17/07/2019 - 10:00
Measurement stop	17/07/2019 - 13:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 08					
Noise meter serial number (Microphone serial number)	11036 (226284)						
Noise meter type	ACOEM 01db FUSION						
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)						
Frequency weighting	A						
Time weighting	F						
Output level range upper	90						
Output level range lower	30						
Calibrator serial number	34936367						
Calibrator type	RION NC-74						
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)						
Field calibration level start	94						
Field calibration level end	94						
Field calibration variance	0						
Field calibration drift	No significant drift observed						
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	10%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, 10% cloud cover, 23°C. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 08		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 08	Hour 1	10:00 – 11:00	40.8	58.6	51.4
	Hour 2	11:00 – 12:00	42.5	61.3	54.0
	Hour 3	12:00 – 13:00	42.3	59.7	53.2
	Measured 3hr L _{A10} (CRTN shortened method)				53.0
	Calculated 18hr L _{A10} (CRTN shortened method)				52.0

1.9 A-NML 09 Princess Margaret Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 09 – Princess Margaret Road
Monitoring location description	
<i>Princess Margaret Road, East Tilbury, Tilbury, RM18 8RP.</i>	
Ordnance Survey grid reference	X= 568838 Y = 176944
Survey position description	
<i>Monitoring location on public footpath 200 opposite Parish Church of St Catherine - Princess Margaret Road.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/CW
Description of noise climate	
<i>Occasional road traffic noise from Princess Margaret Road. Birdsong noise present at times. Some noise from breezes through vegetation.</i>	
Measurement start	17/07/2018 - 13:50
Measurement stop	17/07/2018 - 16:50

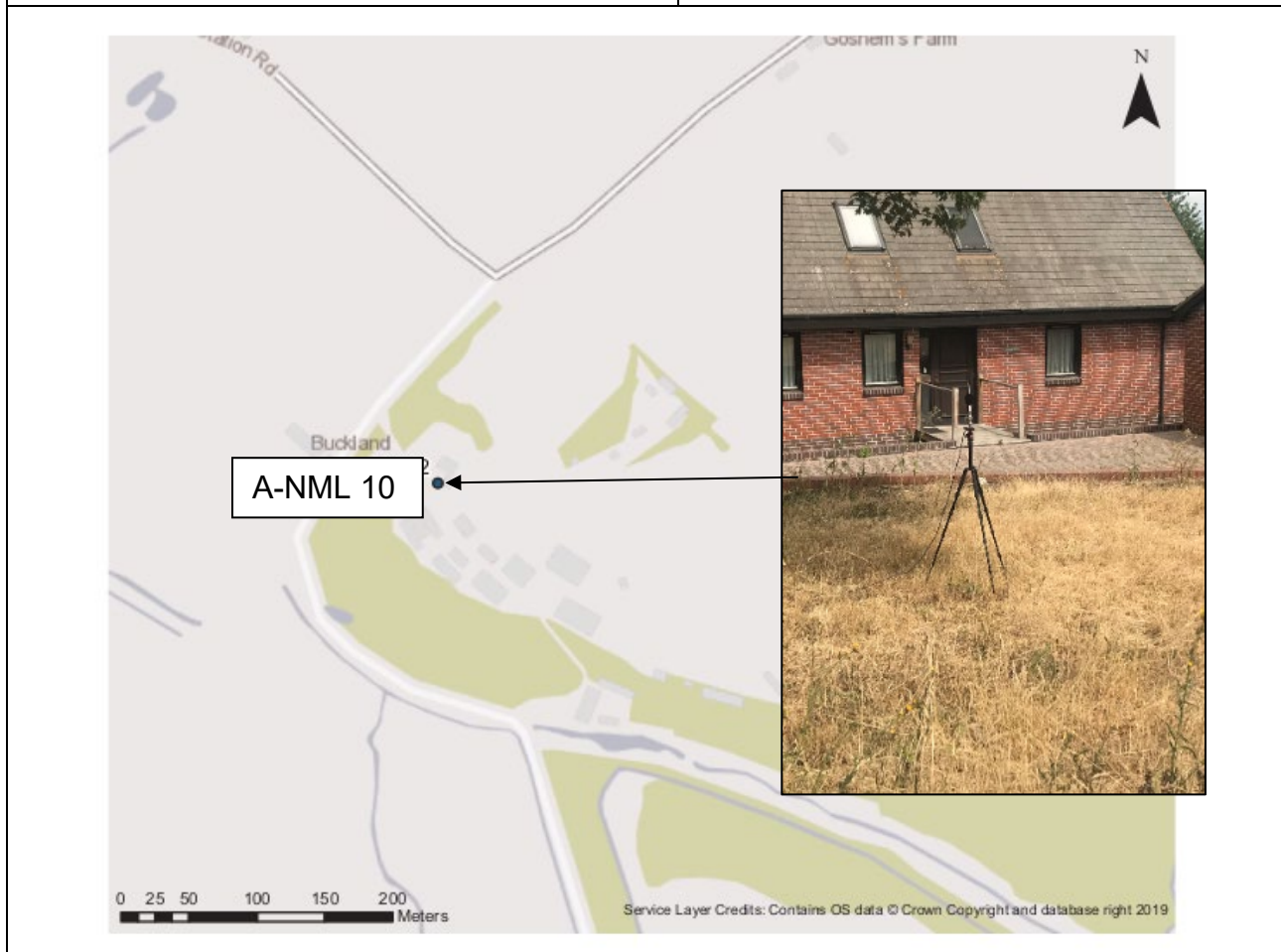


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 09				
Noise meter serial number (Microphone serial number)		11039 (233310)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		30				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	0%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind for most of the survey – however some breeze at times <5 m/s⁻¹, sunny conditions, no cloud cover, 17°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 09		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 09	Hour 1	13:50 – 14:50	37.2	44.8	47.7
	Hour 2	14:50 – 15:50	36.7	48.7	51.0
	Hour 3	15:50 – 16:50	40.6	46.3	48.7
	Measured 3hr L _{A10} (CRTN shortened method)				48.9
	Calculated 18hr L _{A10} (CRTN shortened method)				47.9

1.10 A-NML 10 Norrsken (Near Station Road)

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 10 – Norrsken
Monitoring location description	
Norrsken, Station Road, East Tilbury, Tilbury, RM18 8QR.	
Ordnance Survey grid reference	X= 567539 Y = 177218
Survey position description	
Monitoring location on Norrsken property off Station Road, East Tilbury.	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	CW/JW
Description of noise climate	
Background road traffic noise was audible during survey. Birdsong noises present at times. Some noise aircraft passing overhead.	
Measurement start	18/07/2018 - 13:40
Measurement stop	18/07/2018 - 16:40

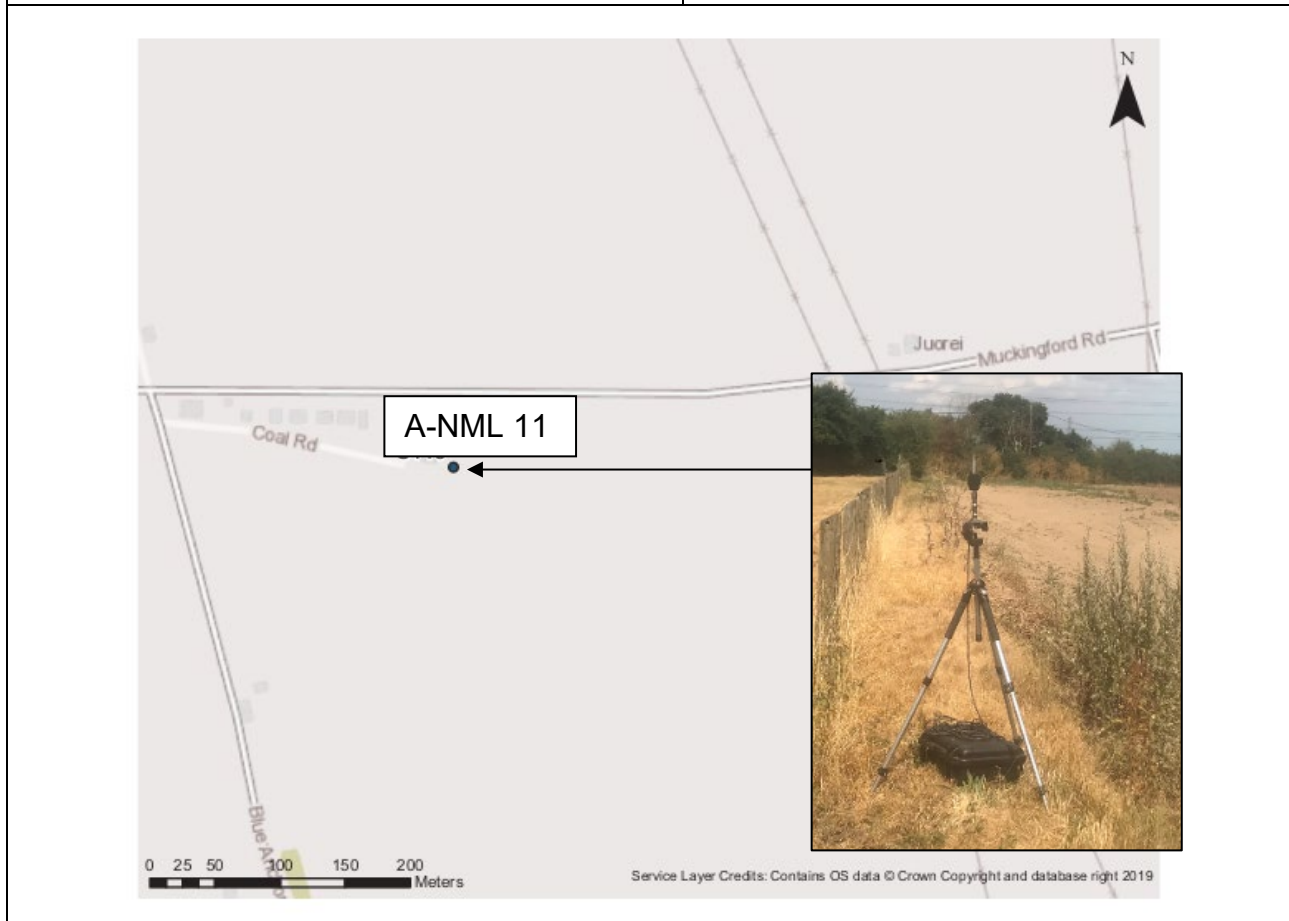


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 10				
Noise meter serial number (Microphone serial number)		11036 (226284)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		90				
Output level range lower		20				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, roughly 50% cloud cover, 19°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 10		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 10	Hour 1	13:40 – 14:40	36.5	47.7	48.0
	Hour 2	14:40 – 15:40	34.1	48.0	47.3
	Hour 3	15:40 – 16:40	34.5	43.3	43.6
	Measured 3hr L _{A10} (CRTN shortened method)				46.7
	Calculated 18hr L _{A10} (CRTN shortened method)				45.7

1.11 A-NML 11 Muckingford Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 11 – Muckingford Road
Monitoring location description	
<i>Muckingford Road, West Tilbury, Tilbury, RM18 8TS.</i>	
Ordnance Survey grid reference	X= 566228 Y = 178596
Survey position description	
<i>Monitoring location on public footpath off Muckingford Road, West Tilbury.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	CW
Description of noise climate	
<i>Background road traffic noise from Muckingford Road. Birdsong noises present at times. Some noise from aircraft passing overhead. Occasional noise from farmyard equipment passing noise equipment.</i>	
Measurement start	18/07/2018 - 14:00
Measurement stop	18/07/2018 - 17:00



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 11				
Noise meter serial number (Microphone serial number)		11039 (233310)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		90				
Output level range lower		20				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, roughly 50% cloud cover, 19°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 11		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 11	Hour 1	14:00 – 15:00	41.1	52.2	53.8
	Hour 2	15:00 – 16:00	39.6	48.7	50.9
	Hour 3	16:00 – 17:00	41.1	51.3	52.3
	Measured 3hr L _{A10} (CRTN shortened method)				52.3
	Calculated 18hr L _{A10} (CRTN shortened method)				51.3

1.12 A-NML 12 High House

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML12 – High House
Monitoring location description	
<i>High House, High House Lane, West Tilbury, Tilbury, RM18 8TL.</i>	
Ordnance Survey grid reference	X = 565699 Y = 179214
Survey position description	
<i>Monitoring location on public footpath 64 just north of High House Farm, High House Lane.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Background road traffic barely perceivable. Surveyor subjectively noted the noise environment to be quiet at times. Noise and activity from quarry, some HGV movements on quarry access road next to survey location. Distant noise from aircraft and farm machinery.</i>	
Measurement start	22/07/2019 – 13:45
Measurement stop	22/07/2019 – 16:45

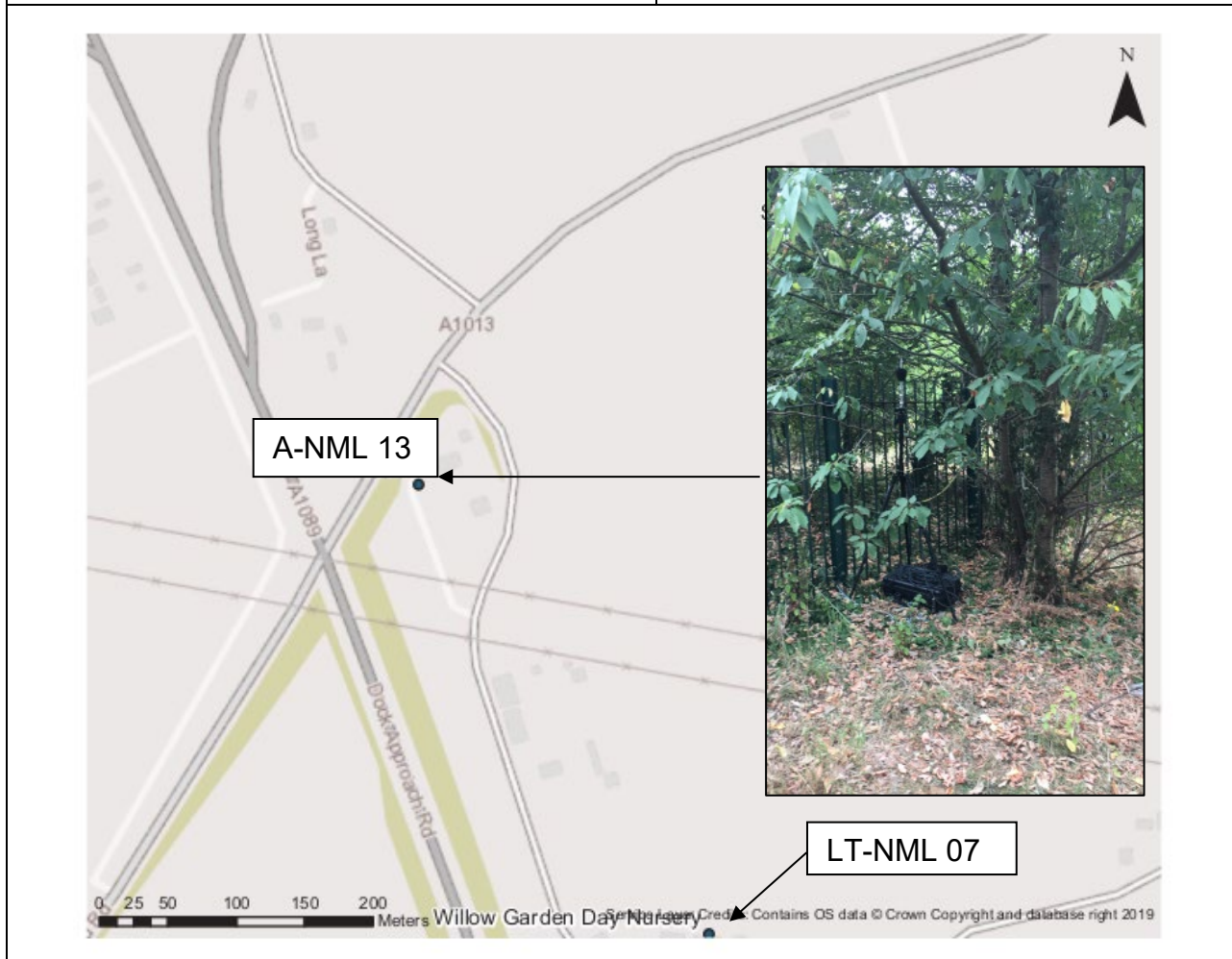


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 12				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		30				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	60%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, sunny with patchy cloud, 23°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 12		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 12	Hour 1	13:45 – 14:45	37.7	49.4	50.5
	Hour 2	14:45 – 15:45	36.7	47.0	47.9
	Hour 3	15:45 – 16:45	35.2	45.9	47.6
	Measured 3hr L _{A10} (CRTN shortened method)				49.0
	Calculated 18hr L _{A10} (CRTN shortened method)				48.0

1.13 A-NML 13 Heath Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 13 – Heath Road
Monitoring location description	
<i>Heath Road, Orsett, Grays, RM16 3AP.</i>	
Ordnance Survey grid reference	X = 563732 Y = 180299
Survey position description	
<i>Measurement location on Heath Road.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from the Stanford Road (A1013) and Dock Approach Road (A1089). Some aircraft noise at times.</i>	
Measurement start	19/07/2018 - 10:40
Measurement stop	19/07/2018 - 13:40

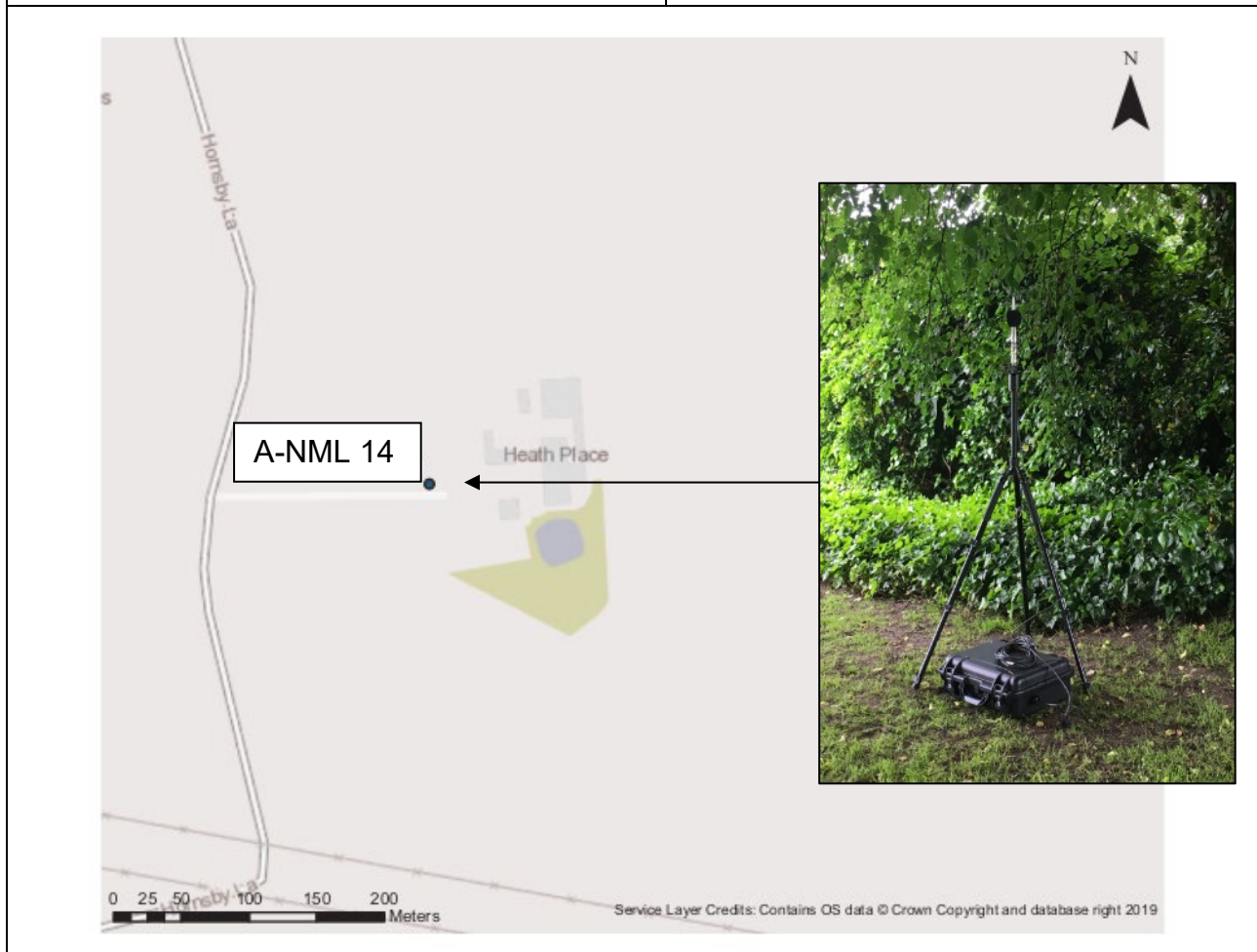


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 13					
Noise meter serial number (Microphone serial number)		10696 (141115)					
Noise meter type		ACOEM 01db CUBE					
Laboratory calibration date (due) Certificate number (issuer)		03/07/2018 (03/07/2020) 03861/2 (University of Salford)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		70					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCRT18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, patchy cloud - sunny at times, 20°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 13		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 13	Hour 1	10:40 – 11:40	55.8	58.6	60.5
	Hour 2	11:40 – 12:40	57.5	61.0	63.1
	Hour 3	12:40 – 13:40	56.6	59.7	61.7
	Measured 3hr L _{A10} (CRTN shortened method)				62.1
	Calculated 18hr L _{A10} (CRTN shortened method)				61.1

1.14 A-NML 14 Heath Place

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 14 – Heath Place
Monitoring location description	
<i>Heath Place Farm, Hornsby Lane, Orsett, Grays, RM16 3AU.</i>	
Ordnance Survey grid reference	X= 564567 Y = 180366
Survey position description	
<i>Monitoring location in garden of property owner (Heath Place Farm).</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from the north (A13). Some aircraft noise at times. Some noise from birdsong.</i>	
Measurement start	04/06/2018 - 13:00
Measurement stop	04/06/2018 - 16:00

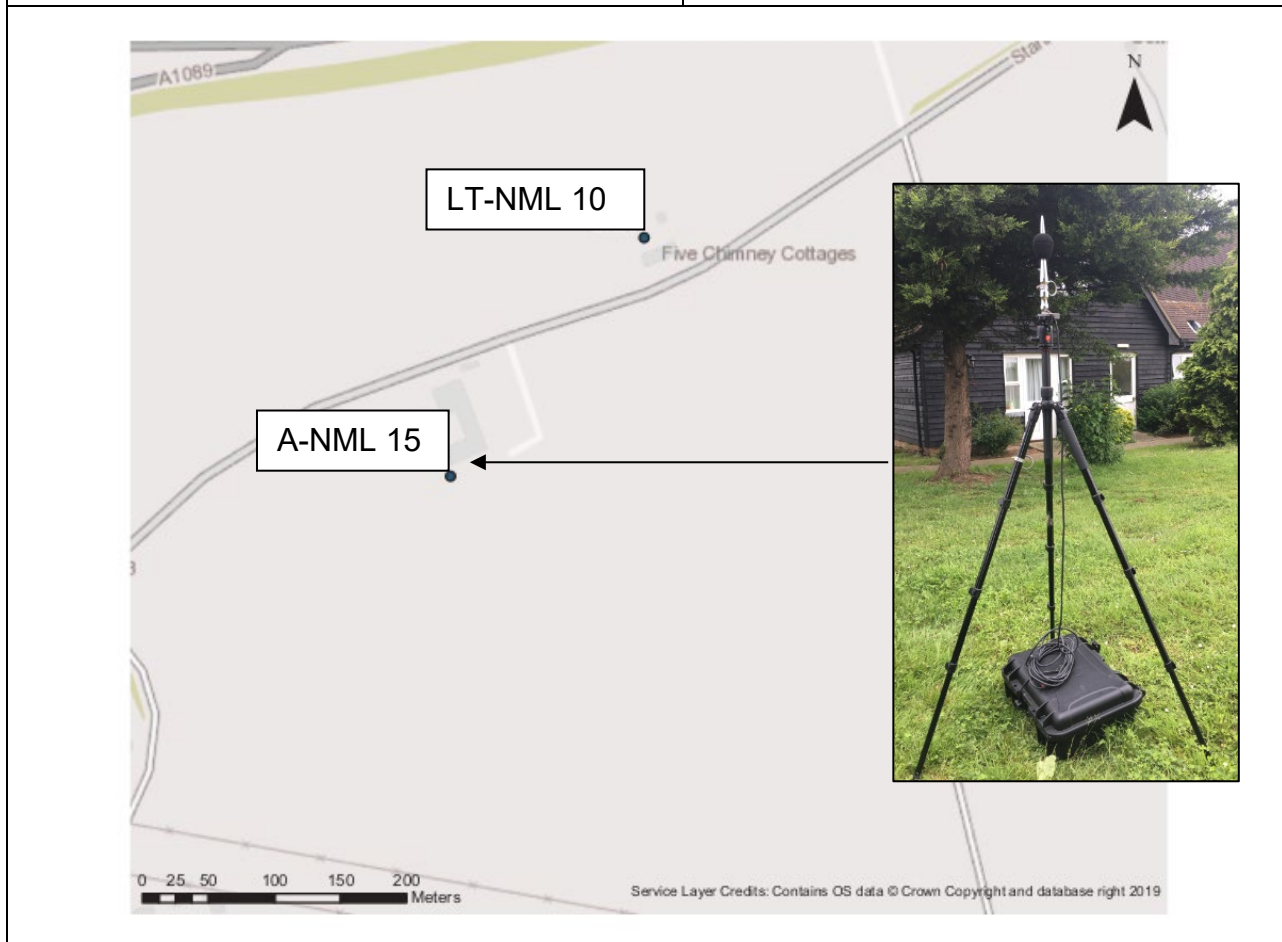


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 14				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		40				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, sunny conditions at times, patchy cloud, 26°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 14		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 14	Hour 1	13:00 – 14:00	48.4	51.3	53.1
	Hour 2	14:00 – 15:00	48.8	52.6	54.7
	Hour 3	15:00 – 16:00	49.5	52.5	54.5
	Measured 3hr L _{A10} (CRTN shortened method)				54.1
	Calculated 18hr L _{A10} (CRTN shortened method)				55.1

1.15 A-NML 15 The Whitecroft

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 15 – The Whitecroft
Monitoring location description	
<i>Whitecroft Nursing Home, Stanford Road, Orsett, Grays, RM16 3JL.</i>	
Ordnance Survey grid reference	X = 564026 Y = 180485
Survey position description	
<i>Monitoring location directly next to Whitecroft Nursing Home.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from the north (A13) and from the west (A1013). Light aircraft noise, vehicle noise from car movements in car park dropping off residents, deliveries etc (not frequent, but present) Some aircraft noise at times.</i>	
Measurement start	05/06/2018 - 13:30
Measurement stop	05/06/2018 - 16:30



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 15				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		70				
Output level range lower		40				
Calibrator serial number		35183003				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	100%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, slight breeze however <5ms⁻¹, overcast, 12°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 15		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 15	Hour 1	13:30 – 14:30	52.6	55.2	56.8
	Hour 2	14:30 – 15:30	53.3	55.6	57.1
	Hour 3	15:30 – 16:30	52.1	55.0	56.7
	Measured 3hr L _{A10} (CRTN shortened method)				56.9
	Calculated 18hr L _{A10} (CRTN shortened method)				55.9

1.16 A-NML 16 Fairfield Avenue

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 16 – Fairfield Avenue
Monitoring location description	
<i>29 Fairfield Avenue, Orsett, Grays, RM16 2LS.</i>	
Ordnance Survey grid reference	X = 562546 Y = 180534
Survey position description	
<i>Monitoring location on public footpath directly adjacent to number 29 Fairfield Avenue, Orsett.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MH
Description of noise climate	
<i>Distant road traffic noise emanating from the A13. Road traffic noise from vehicles using Fairfield Avenue and vehicles requiring access to Grey Goose Farm. Some distant aircraft noise and some birdsong present during survey.</i>	
Measurement start	18/12/2019 - 11:15
Measurement stop	18/12/2019 - 14:15

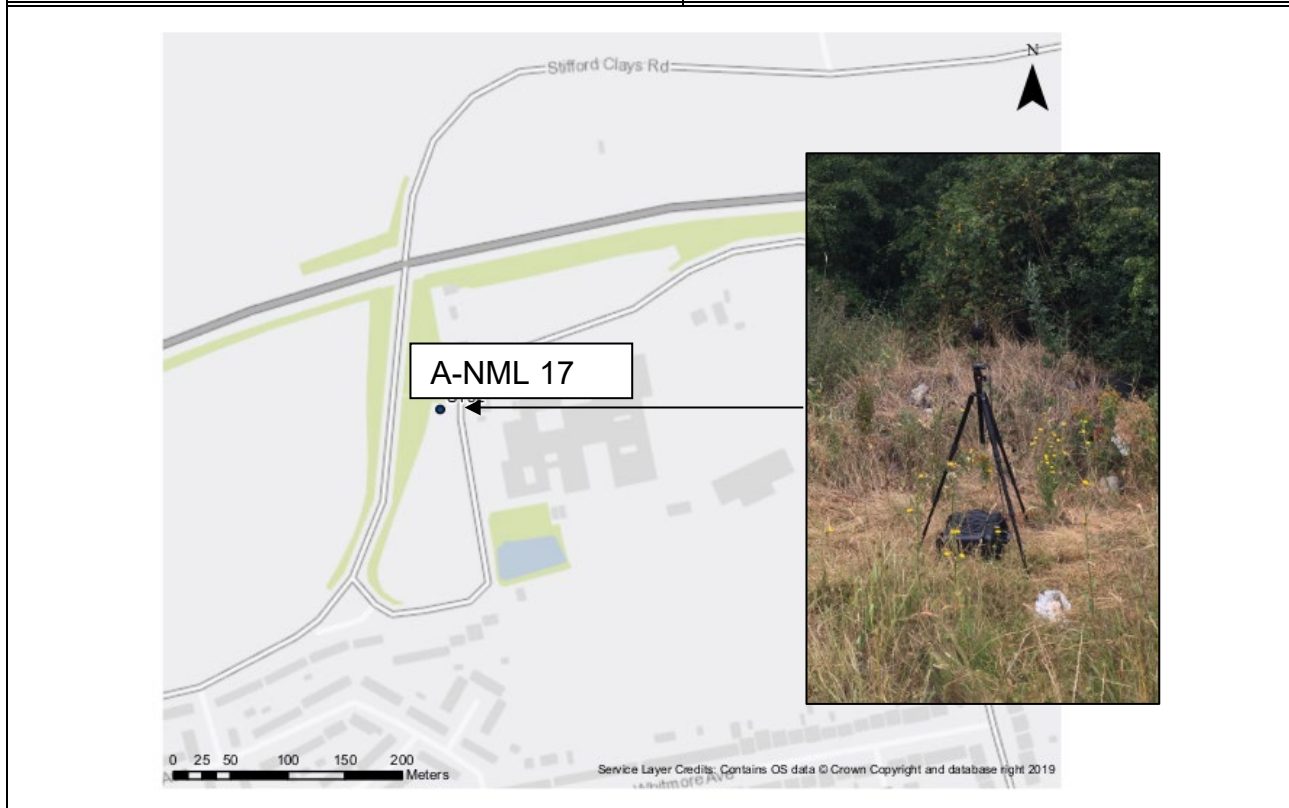


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 16					
Noise meter serial number (Microphone serial number)		11037 (233364)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number		2427918					
Anemometer type		Kestrel 5000 Environmental Meter					
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.	0	m/s ⁻¹	Gust	0.5	m/s ⁻¹
	Wind direction (origin)	n/a					
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain during survey, no wind, patchy cloud 50% cover, 10.1°C. Dry conditions prior to survey start.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 16		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML16	Hour 1	11:15 – 12:15	48.6	52.4	52.3
	Hour 2	12:15 – 13:15	47.8	51.4	51.0
	Hour 3	13:15 – 14:15	49.4	52.1	52.5
	Measured 3hr L _{A10} (CRTN shortened method)				52.1
	Calculated 18hr L _{A10} (CRTN shortened method)				51.1

1.17 A-NML 17 Stifford Clays Road (Near William Edwards School)

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 17 – Stifford Clays Road (William Edwards School)
Monitoring location description	
<i>near Stifford Clays Road, Grays, RM16 3NJ,</i>	
Ordnance Survey grid reference	X = 561832 Y = 180899
Survey position description	
<i>Monitoring location adjacent to Stifford Clays Road, Grays. Survey location just to the west of the William Edwards School, and to the south of the A13.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Dominated by road traffic noise from the A13. Some road traffic noise from Stifford Clays Road. Some distant aircraft noise. Some bird noise at times. Some noise from wind blowing through vegetation. School ended at 15:00 pm with slight increase in traffic as a result.</i>	
Measurement start	18/07/2019 - 14:00
Measurement stop	18/07/2019 - 17:00

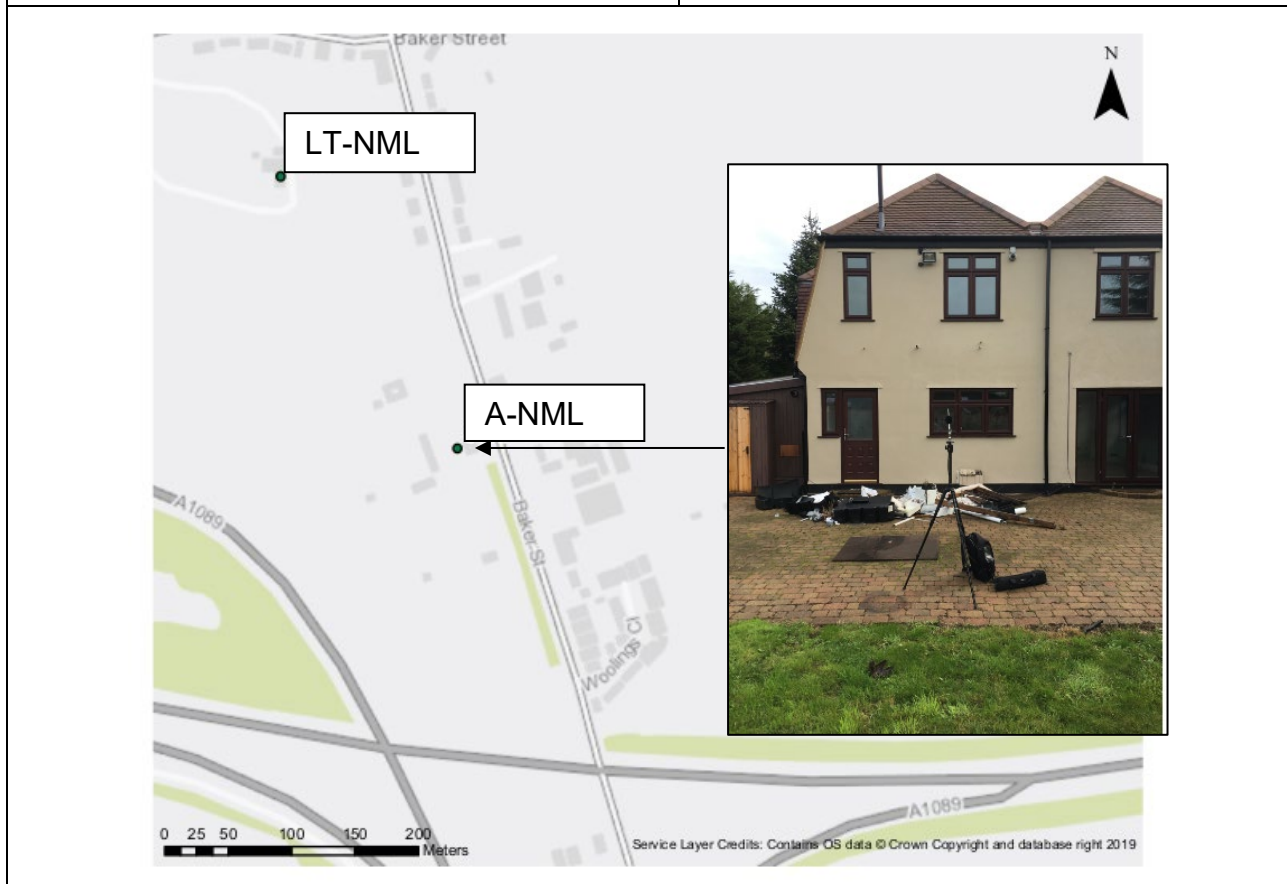


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 17					
Noise meter serial number (Microphone serial number)		11036 (226284)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	90%					
	Road surfaces	Slightly damp at start then dry throughout					
Additional survey notes							
<p><i>Dry throughout the entire survey, except brief period of rain at the start of the measurement period, slight breezes at times <5ms⁻¹, 90% cloud cover, 22°C. Some rain three hours prior to survey start.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 17		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 17	Hour 1	14:00 – 15:00	60.1	62.1	63.5
	Hour 2	15:00 – 16:00	59.3	61.1	62.5
	Hour 3	16:00 – 17:00	58.9	61.0	62.3
	Measured 3hr L _{A10} (CRTN shortened method)				62.9
	Calculated 18hr L _{A10} (CRTN shortened method)				61.9

1.18 A-NML 18 Baker Street

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 18 – Fieldhouse Farm
Monitoring location description	
<i>Fieldhouse Farm, Baker Street, Orsett, Grays, RM16 3LJ.</i>	
Ordnance Survey grid reference	X = 563450 Y = 181071
Survey position description	
<i>Monitoring location in residential back garden of Fieldhouse Farm, Orsett.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MA
Description of noise climate	
<i>Road traffic noise from vehicles using the A13 dominates the noise environment at this location, with some road traffic noise emanating from the slip road (A1089). Some distant aircraft noise noticeable as monitoring location above flight path, however, noise environment completely dominated by road traffic from A13 and slip road.</i>	
Measurement start	25/10/2019 - 10:00
Measurement stop	25/10/2019 - 13:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 18					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number		2427918					
Anemometer type		Kestrel 5000 Environmental Meter					
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.	0	m/s ⁻¹	Gust	0	m/s ⁻¹
	Wind direction (origin)	n/a					
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	90%					
	Road surfaces	Slightly damp to dry					
Additional survey notes							
No rain during survey, no wind, overcast 90% cloud cover, 15°C. Slightly damp road prior to survey start.							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 18		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 18	Hour 1	10:00 – 11:00	62.3	64.0	65.2
	Hour 2	11:00 – 12:00	62.0	64.0	65.4
	Hour 3	12:00 – 13:00	64.1	65.8	67.1
	Measured 3hr L _{A10} (CRTN shortened method)				66.4
	Calculated 18hr L _{A10} (CRTN shortened method)				65.4

1.19 A-NML 19 Welling Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 19 – Welling Road
Monitoring location description	
<i>near Welling Mews, Welling Road, Orsett, Grays, RM16 3AZ,</i>	
Ordnance Survey grid reference	X = 565677 Y = 181082
Survey position description	
<i>Monitoring location adjacent to Welling Road, Orsett. Representative noise measurements for the residential properties on Annabell Avenue to the north, and Welling Mews, to the east.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Dominated by road traffic noise from Welling Road. Some distant aircraft noise. Some bird noise at times. Some noise from wind blowing through vegetation.</i>	
Measurement start	17/07/2019 - 14:00
Measurement stop	17/07/2019 - 17:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 19					
Noise meter serial number (Microphone serial number)		11036 (226284)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		30					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	60%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, 60% cloud cover, 23°C. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 19		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 19	Hour 1	14:00 – 15:00	42.7	54.6	58.6
	Hour 2	15:00 – 16:00	41.4	56.1	61.0
	Hour 3	16:00 – 17:00	42.7	56.0	60.8
	Measured 3hr L _{A10} (CRTN shortened method)				60.3
	Calculated 18hr L _{A10} (CRTN shortened method)				59.3

1.20 A-NML 20 Stifford Clays Road (Near Baker Street)

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 20 – Stifford Clays Road – Near Baker Street
Monitoring location description	
6 Stifford Clays Road, Orsett, Grays, RM16 3LX.	
Ordnance Survey grid reference	X = 563244 Y = 181413
Survey position description	
Monitoring location on highway verge directly opposite to number 6 Stifford Clays Road, Orsett.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/VG
Description of noise climate	
Distant road traffic noise emanating from the A13. Road traffic noise from vehicles Stifford Clays Road. Some birdsong present during survey.	
Measurement start	23/01/2020 - 10:15
Measurement stop	23/01/2020 - 13:15



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 20					
Noise meter serial number (Microphone serial number)		11037 (233364)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		100					
Output level range lower		30					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number		2427918					
Anemometer type		Kestrel 5000 Environmental Meter					
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.	0	m/s ⁻¹	Gust	1.0	m/s ⁻¹
	Wind direction (origin)	n/a					
	Rainfall (mm/hr)	During	0	Prior	<0.5		
	Cloud cover	100%					
	Road surfaces	Dry/Slightly damp					
Additional survey notes							
<i>No rain during survey, no wind, cloud 100% cover, 8°C. Dry surfaces to slightly damp prior to survey start, however not road not saturated.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 20		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 20	Hour 1	10:15 – 11:15	46.5	70.2	74.6
	Hour 2	11:15 – 12:15	45.5	69.6	74.3
	Hour 3	12:15 – 13:15	43.5	69.6	74.2
	Measured 3hr L _{A10} (CRTN shortened method)				74.3
	Calculated 18hr L _{A10} (CRTN shortened method)				73.3

1.21 A-NML 21 Hall Lane Farm

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 21 – Hall Lane Farm
Monitoring location description	
<i>South Ockendon Hall, Hall Farm, Hall Lane, South Ockendon, RM15 6SJ.</i>	
Ordnance Survey grid reference	X = 560202 Y = 183148
Survey position description	
<i>Monitoring location on Hall Lane, South Ockendon.</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from the west (M25 motorway) not noticeable. Vehicle noise from car movements using Hall Lane for access to the farm and other surrounding land. Some aircraft noise.</i>	
Measurement start	05/06/2018 - 14:00
Measurement stop	05/06/2018 - 17:00

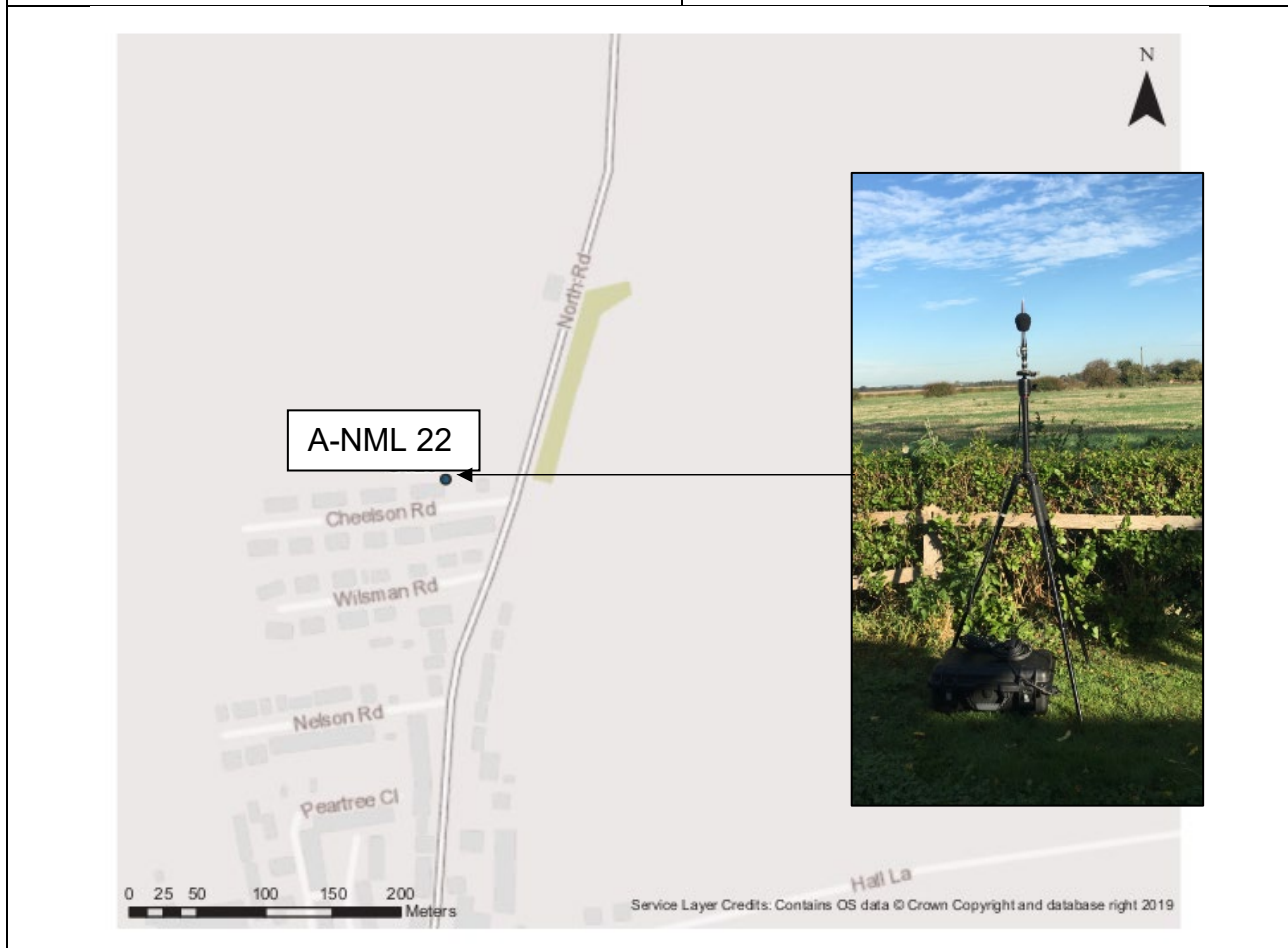


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 21					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		30					
Calibrator serial number		35183003					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	40%					
	Road surfaces	Dry					
Additional survey notes							
<p><i>No rain, somewhat breezy conditions however <5ms, some cloud cover, 25°C at survey start. Dry conditions prior to survey.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 21		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 21	Hour 1	14:00 – 15:00	43.1	49.7	51.7
	Hour 2	15:00 – 16:00	43.1	48.0	50.7
	Hour 3	16:00 – 17:00	43.3	48.0	50.3
	Measured 3hr L _{A10} (CRTN shortened method)				50.9
	Calculated 18hr L _{A10} (CRTN shortened method)				51.9

1.22 A-NML 22 Cheelson Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 22 – 4 Cheelson Road
Monitoring location description	
4 Cheelson Road, South Ockendon, RM15 6QD.	
Ordnance Survey grid reference	X = 559472 Y = 183392
Survey position description	
Monitoring location in back garden of Number 4 Cheelson Road South Ockendon.	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from North Road to the east (B186). Some distant background road traffic noise from the north (M25 Motorway). Some aircraft noise, including noise from helicopters at times.	
Measurement start	19/10/2018 - 10:15
Measurement stop	19/10/2018 - 13:15



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 22				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		70				
Output level range lower		40				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	30%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, patchy cloud, 11°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 22		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 22	Hour 1	10:15 – 11:15	45.8	51.7	53.6
	Hour 2	11:15 – 12:15	44.6	50.0	52.4
	Hour 3	12:15 – 13:15	47.3	51.6	53.1
	Measured 3hr L _{A10} (CRTN shortened method)				53.1
	Calculated 18hr L _{A10} (CRTN shortened method)				54.1

1.23 A-NML 23 Red Croft Forge

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 23 – Red Croft Forge
Monitoring location description	
<i>Red Croft Forge, North Road, South Ockendon RM15 6SR</i>	
Ordnance Survey grid reference	X = 559532 Y = 184055
Survey position description	
<i>Monitoring location directly south of residential property at Redcroft Forge blacksmiths</i>	
Local authority area	Thurrock Council – Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Background road traffic noise from North Road to the east (B186) dominates the noise environment. Some aircraft noise, including noise from helicopters at times. Some background noise from metal working in blacksmith shed north of the residential dwellings.</i>	
Measurement start	21/11/2018 - 10:00
Measurement stop	21/11/2018 - 13:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 23					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	0%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, clear conditions, 4°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 23		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 23	Hour 1	10:00 – 11:00	53.2	59.9	62.7
	Hour 2	11:00 – 12:00	53.2	60.3	63.1
	Hour 3	12:00 – 13:00	53.2	59.8	62.5
	Measured 3hr L _{A10} (CRTN shortened method)				62.7
	Calculated 18hr L _{A10} (CRTN shortened method)				61.7

1.24 A-NML 24 Fen Farm Cottages

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 24 – Fen Farm Cottages
Monitoring location description	
<i>Fen Farm Cottages, Fen Lane, North Ockendon, Upminster, RM14 3RH.</i>	
Ordnance Survey grid reference	X = 561177 Y = 184920
Survey position description	
<i>Monitoring location in residential back garden of Fen Farm Cottages.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Road traffic noise from Fen Lane. Some noise from distant aircraft.</i>	
Measurement start	19/10/2018 - 14:00
Measurement stop	19/10/2018 - 17:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 24					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		30					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCRT18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	20%					
	Road surfaces	Dry					
Additional survey notes							
<p><i>No rain, no wind – however some breezes at times <5ms⁻¹, sunny with patchy cloud, 15°C at survey start. Dry conditions prior to survey.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 24		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 24	Hour 1	14:00 – 15:00	38.6	48.2	48.6
	Hour 2	15:00 – 16:00	39.2	46.7	49.5
	Hour 3	16:00 – 17:00	38.3	49.4	49.8
	Measured 3hr L _{A10} (CRTN shortened method)				49.4
	Calculated 18hr L _{A10} (CRTN shortened method)				48.4

1.25 A-NML 25 Cranham Place


Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 25 – Cranham Place
Monitoring location description	
<i>Cranham Place, Ockendon Road, Upminster, RM14 3QJ.</i>	
Ordnance Survey grid reference	X = 558461 Y = 185176
Survey position description	
<i>Monitoring location directly north of residential property at Cranham Place.</i>	
Local authority area	London Borough of Havering
Survey technician reference (initials)	JW/JH
Description of noise climate	
<i>Background road traffic noise from M25 motorway directly to the west dominates the noise environment. No other noise sources noted during survey.</i>	
Measurement start	21/11/2018 - 13:15
Measurement stop	21/11/2018 - 16:15



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 25					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	50%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, patchy cloud, 6°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 25		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 25	Hour 1	13:15 – 14:15	61.9	63.3	64.2
	Hour 2	14:15 – 15:15	61.7	62.9	63.8
	Hour 3	15:15 – 16:15	62.1	63.3	64.0
	Measured 3hr L _{A10} (CRTN shortened method)				64.0
	Calculated 18hr L _{A10} (CRTN shortened method)				63.0

1.26 A-NML 26 St Mary's Lane

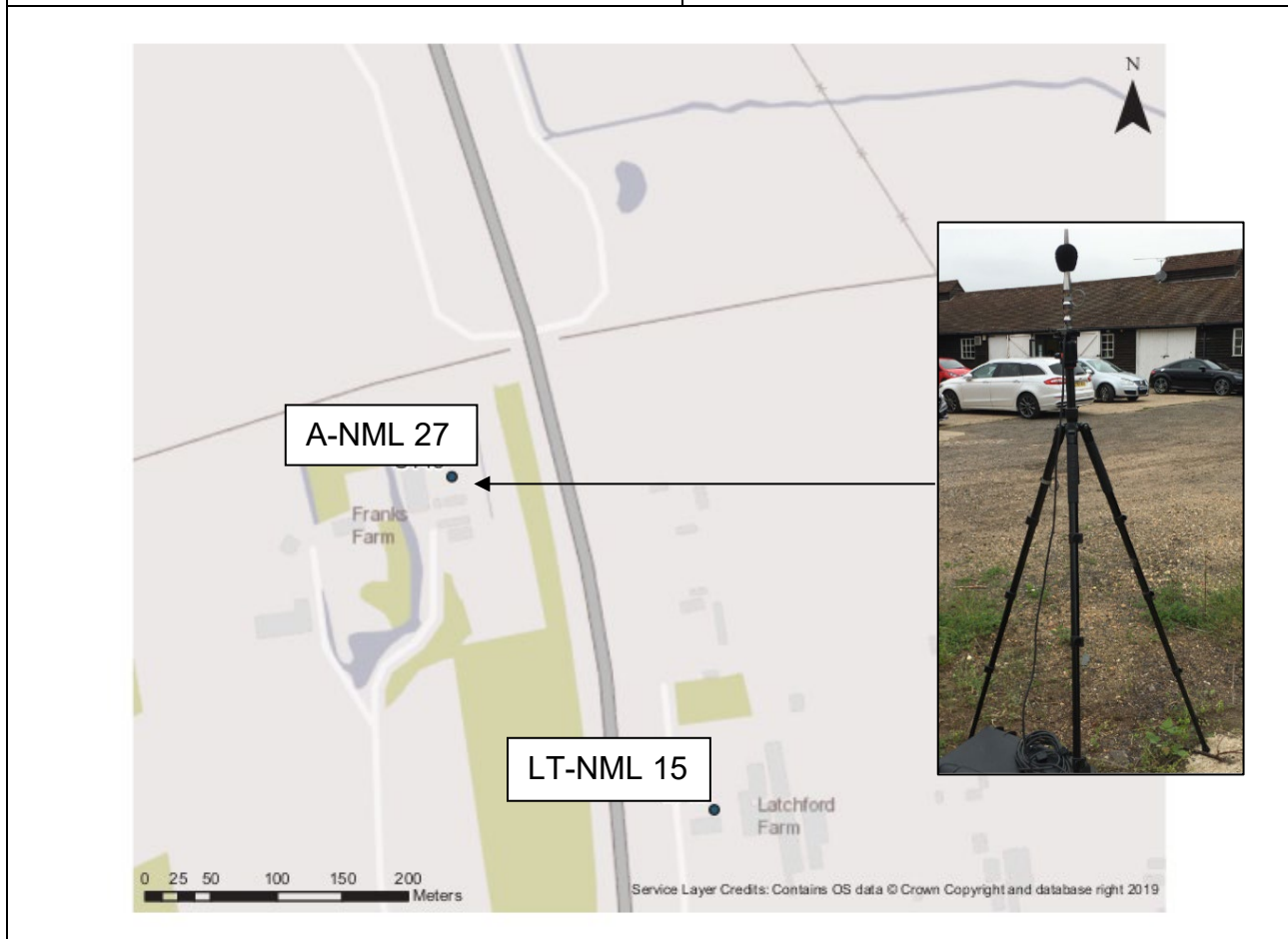
Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 26 – St Marys Lane
Monitoring location description	
<i>St Marys Lane, Upminster, RM14 3NU.</i>	
Ordnance Survey grid reference	X = 558648 Y = 186982
Survey position description	
<i>Monitoring location on Bridleway 289, south of St Marys Lane.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Dominated by road traffic noise. Road traffic noise from St Marys Lane (B187). Background road traffic from M25 motorway. Distant noise from aircraft.</i>	
Measurement start	22/07/2019 - 10:00
Measurement stop	22/07/2019 - 13:00
	

Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 26				
Noise meter serial number (Microphone serial number)	11035 (226402)					
Noise meter type	ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting	A					
Time weighting	F					
Output level range upper	90					
Output level range lower	50					
Calibrator serial number	34936367					
Calibrator type	RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start	94					
Field calibration level end	94					
Field calibration variance	0					
Field calibration drift	No significant drift observed					
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, however some breezes at times <5ms⁻¹. Sunny with patchy cloud, 21°C at survey start. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 26		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 26	Hour 1	10:00 – 11:00	54.9	64.4	66.9
	Hour 2	11:00 – 12:00	54.9	62.3	65.9
	Hour 3	12:00 – 13:00	54.8	62.0	65.8
	Measured 3hr L _{A10} (CRTN shortened method)				66.2
	Calculated 18hr L _{A10} (CRTN shortened method)				65.2

1.27 A-NML 27 In Fitness In Health

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 27 – In Fitness & in Health
Monitoring location description	
<i>In Fitness & in Health, Franks Farm, St. Marys Lane, Upminster, RM14 3NU.</i>	
Ordnance Survey grid reference	X = 558729 Y = 187439
Survey position description	
<i>Monitoring location in car park in front of gym, Upminster.</i>	
Local authority area	London Borough of Havering
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Road traffic noise from M25 motorway directly to the east dominates the noise environment. Some noise from distant aircraft, some noise from birdsong, some noise from vehicle movements in car park (not frequent, but present).</i>	
Measurement start	05/06/2018 - 10:00
Measurement stop	05/06/2018 - 13:00

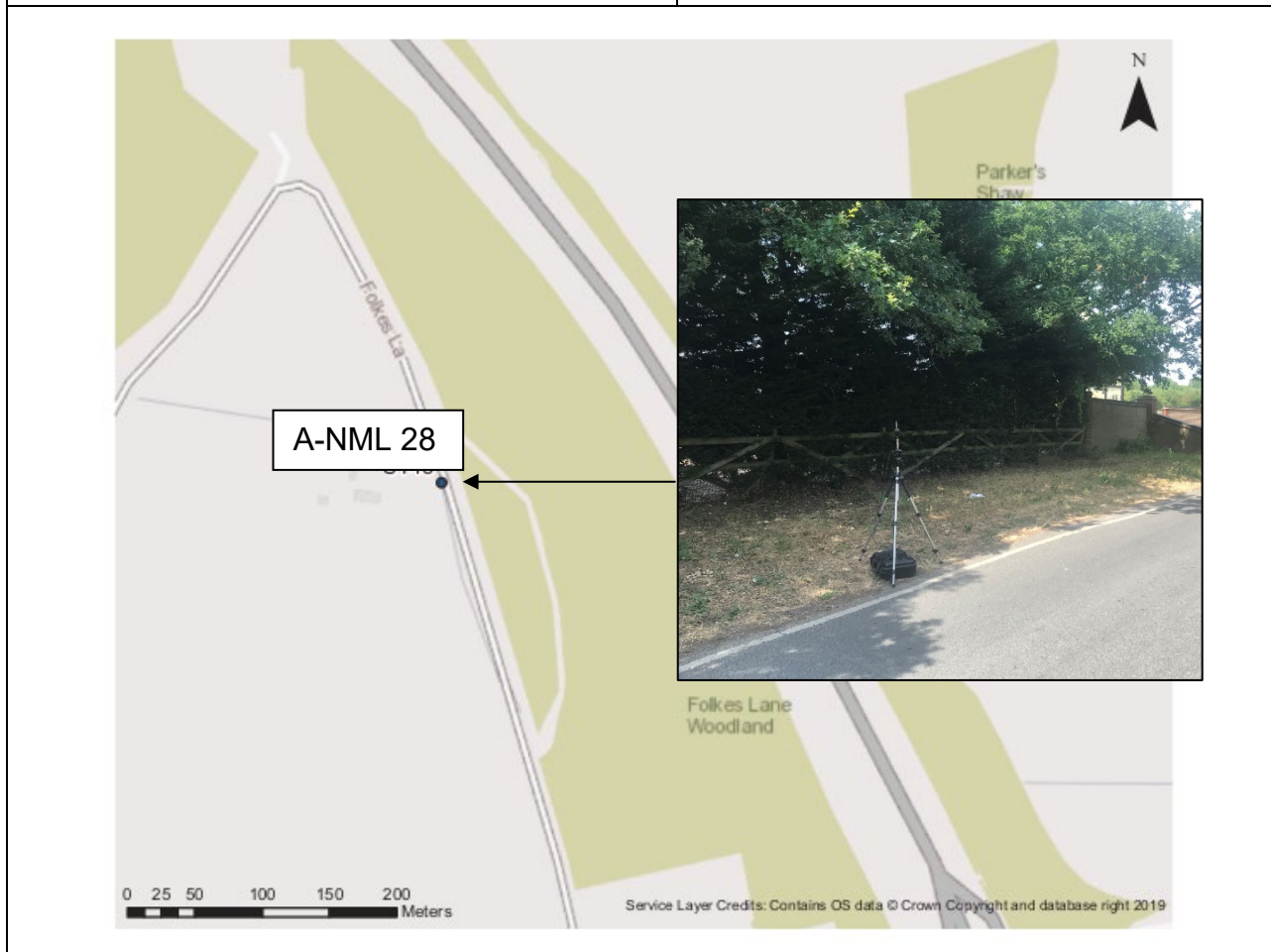


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 27					
Noise meter serial number (Microphone serial number)	11035 (226402)						
Noise meter type	ACOEM 01db FUSION						
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)						
Frequency weighting	A						
Time weighting	F						
Output level range upper	80						
Output level range lower	50						
Calibrator serial number	35183003						
Calibrator type	RION NC-74						
Laboratory calibration date (due) Certificate number (issuer)	16/11/2017 (16/11/2018) 03516/2 (University of Salford)						
Field calibration level start	94						
Field calibration level end	94						
Field calibration variance	0						
Field calibration drift	No significant drift observed						
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, overcast, 12°C at survey start. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 27		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 27	Hour 1	10:00 – 11:00	62.8	65.1	66.6
	Hour 2	11:00 – 12:00	61.6	64.5	66.2
	Hour 3	12:00 – 13:00	62.3	65.1	66.8
	Measured 3hr L _{A10} (CRTN shortened method)				66.6
	Calculated 18hr L _{A10} (CRTN shortened method)				65.6

1.28 A-NML 28 Folkes Lane

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 28 – Folkes Lane
Monitoring location description	
<i>Folkes Lane, Upminster, RM14 1TH.</i>	
Ordnance Survey grid reference	X= 557860 Y = 189283
Survey position description	
<i>Monitoring location on Folkes Lane.</i>	
Local authority area	London Borough of Havering
Survey technician reference (initials)	CW/JW
Description of noise climate	
<i>Completely dominated by road traffic noise from the M25 motorway to the east of the monitoring location. Occasion noise from vehicles passing on Folkes Lane. Occasion noise from overhead aircraft.</i>	
Measurement start	19/07/2018 - 10:00
Measurement stop	19/07/2018 - 13:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 28					
Noise meter serial number (Microphone serial number)		11039 (233310)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		50					
Calibrator serial number		35183003					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		16/11/2017 (16/11/2018) 03516/2 (University of Salford)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s-1)	Avg.		m/s-1	Gust		m/s-1
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
No rain, no wind, sunny conditions, overcast conditions, 20°C at survey start. Dry conditions prior to survey.							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 28		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 28	Hour 1	10:00 – 11:00	57.8	63.1	63.6
	Hour 2	11:00 – 12:00	58.1	62.9	63.0
	Hour 3	12:00 – 13:00	56.5	62.4	62.8
	Measured 3hr L _{A10} (CRTN shortened method)				63.2
	Calculated 18hr L _{A10} (CRTN shortened method)				62.2

1.29 A-NML 29 Watling Street

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 29 – Watling Street
Monitoring location description	
<i>Watling Street, Gravesend, DA11 7NU.</i>	
Ordnance Survey grid reference	X = 564639 Y = 171104
Survey position description	
<i>Monitoring location on the public footpath just south of Watling Street (Roman Road), Gravesend. Public footpath 117.</i>	
Local authority area	Gravesham Borough Council
Survey technician reference (initials)	JW/MS
Description of noise climate	
<i>Background road traffic noise from the south (A2). Road traffic noise dominated noise environment at this location and time. Vehicle noise from car movements using Watling Street. Some aircraft noise. Some noise from vegetation rustle. Some distant rail noise from HS1 at times.</i>	
Measurement start	06/06/2019 - 10:00
Measurement stop	06/06/2019 - 13:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 29					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)	South					
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	10%					
	Road surfaces	Dry					
Additional survey notes							
<p><i>No rain, no wind, but at times some slight southerly breezes <5ms⁻¹, minimal cloud cover, 16°C, sunny conditions. Dry conditions prior to survey.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 29		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 29	Hour 1	10:00 – 11:00	57.9	61.5	63.7
	Hour 2	11:00 – 12:00	58.9	62.8	64.8
	Hour 3	12:00 – 13:00	57.0	61.6	63.9
	Measured 3hr L _{A10} (CRTN shortened method)				64.2
	Calculated 18hr L _{A10} (CRTN shortened method)				63.2

1.30 A-NML 30 Hog Lane

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 30 – Hog Lane
Monitoring location description	
<i>Hog Lane, Gravesend, DA13 9QP.</i>	
Ordnance Survey grid reference	X = 563031 Y = 171824
Survey position description	
<i>Monitoring location adjacent to Hog Lane, Gravesend. Public Bridleway 0328/NU48/1</i>	
Local authority area	Gravesham Borough Council
Survey technician reference (initials)	JW/MS
Description of noise climate	
<i>Background road traffic noise from the south (A2). Road traffic noise dominated noise environment at this location and time. Vehicle noise from car movements using Hog Lane. Some aircraft noise. Some noise from vegetation rustle. Some distant rail noise from HS1 at times.</i>	
Measurement start	06/06/2019 - 14:00
Measurement stop	06/06/2019 - 17:00

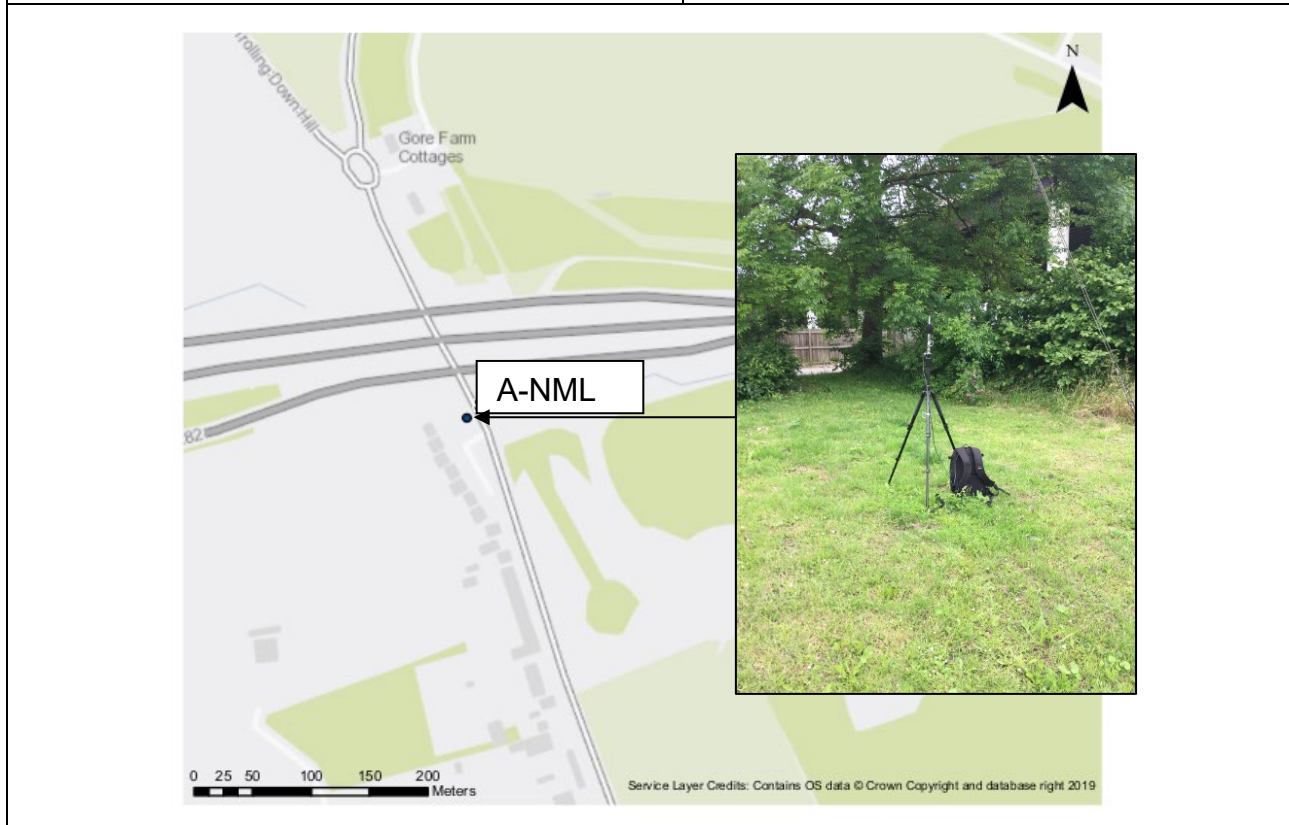


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 30					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		19/06/2018 (19/06/2019) TCR18/1534 (ANV Measurement Systems)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)	South					
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	10%					
	Road surfaces	Dry					
Additional survey notes							
<p><i>No rain, no wind, but at times some slight southerly breezes <5ms⁻¹, minimal cloud cover, 16°C, sunny conditions. Dry conditions prior to survey.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 30		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 30	Hour 1	14:00 – 15:00	62.9	64.8	66.0
	Hour 2	15:00 – 16:00	62.2	64.3	65.6
	Hour 3	16:00 – 17:00	61.4	63.6	65.0
	Measured 3hr L _{A10} (CRTN shortened method)				65.6
	Calculated 18hr L _{A10} (CRTN shortened method)				64.6

1.31 A-NML 31 Littledale

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 31 – Littledale
Monitoring location description	
<i>Littledale, Green Street Green Road, Lane End, Dartford, DA2 7HU.</i>	
Ordnance Survey grid reference	X = 556434 Y = 172150
Survey position description	
<i>Monitoring location adjacent to Littledale, Dartford, DA2 7HU. Meter located on amenity grassland in between Littledale and Green Street Green Road (B260).</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Road traffic noise from vehicles using Green Street Green Road (B260) dominates the noise environment at this location, with some road traffic noise emanating from the flyover (A2). Some distant aircraft noise just noticeable, however, noise environment completely dominated by road traffic from Green Street Green Road (B260).</i>	
Measurement start	19/06/2019 - 10:10
Measurement stop	19/06/2019 - 13:10



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 31					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		100					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, overcast 100% cloud cover, 16°C, cloudy and humid conditions. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 31		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 31	Hour 1	10:10 – 11:10	64.0	70.7	73.9
	Hour 2	11:10 – 12:10	63.7	71.0	73.9
	Hour 3	12:10 – 13:10	64.3	71.0	74.1
	Measured 3hr L _{A10} (CRTN shortened method)				74.0
	Calculated 18hr L _{A10} (CRTN shortened method)				73.0

1.32 A-NML 32 Darenth Country Park

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 32 – Darenth Country Park
Monitoring location description	
<i>Darenth Country Park, Dartford, DA2 6LZ.</i>	
Ordnance Survey grid reference	X = 557143 Y = 172331
Survey position description	
<i>Monitoring location just off footpath in Darenth Country Park, north of the A2. The meter was located immediately south west of Arrow Riding Centre, Darenth Park Ave, Dartford DA2 6LZ.</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the A2 dominated the noise environment at this location. Some noise from breezes through vegetation at times, some noise from birdsong at times. Some noise from dog walkers passing meter.</i>	
Measurement start	20/06/2019 - 10:00
Measurement stop	20/06/2019 - 13:00

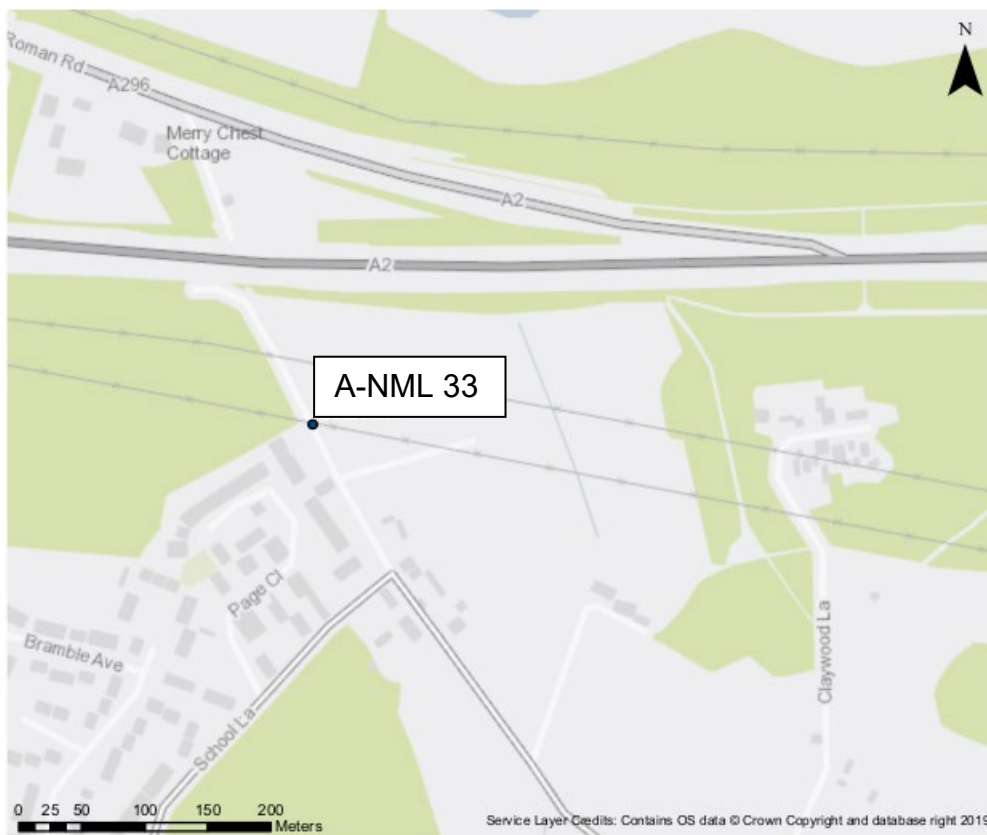


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 32					
Noise meter serial number (Microphone serial number)		11037 (233364)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, slight breezes at times <5ms⁻¹, 100% cloud cover, 19°C. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 32		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 32	Hour 1	10:00 – 11:00	61.1	62.5	63.6
	Hour 2	11:00 – 12:00	60.9	62.4	63.4
	Hour 3	12:00 – 13:00	62.0	63.4	64.3
	Measured 3hr L _{A10} (CRTN shortened method)				63.9
	Calculated 18hr L _{A10} (CRTN shortened method)				62.9

1.33 A-NML 33 Sandy Lane

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 33 – Sandy Lane
Monitoring location description	
<i>Sandy Lane, Bean, Dartford, DA2 8AF.</i>	
Ordnance Survey grid reference	X = 559434 Y = 172541
Survey position description	
<i>Monitoring location on Sandy Lane, south of the A2. The meter was located immediately north east of the residential buildings on Page Close.</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the A2 dominated the noise environment at this location. Some noise from breezes through vegetation at times, some noise from birdsong at times. Some noise from pedestrians passing meter.</i>	
Measurement start	18/06/2019 - 10:15
Measurement stop	18/06/2019 - 13:15

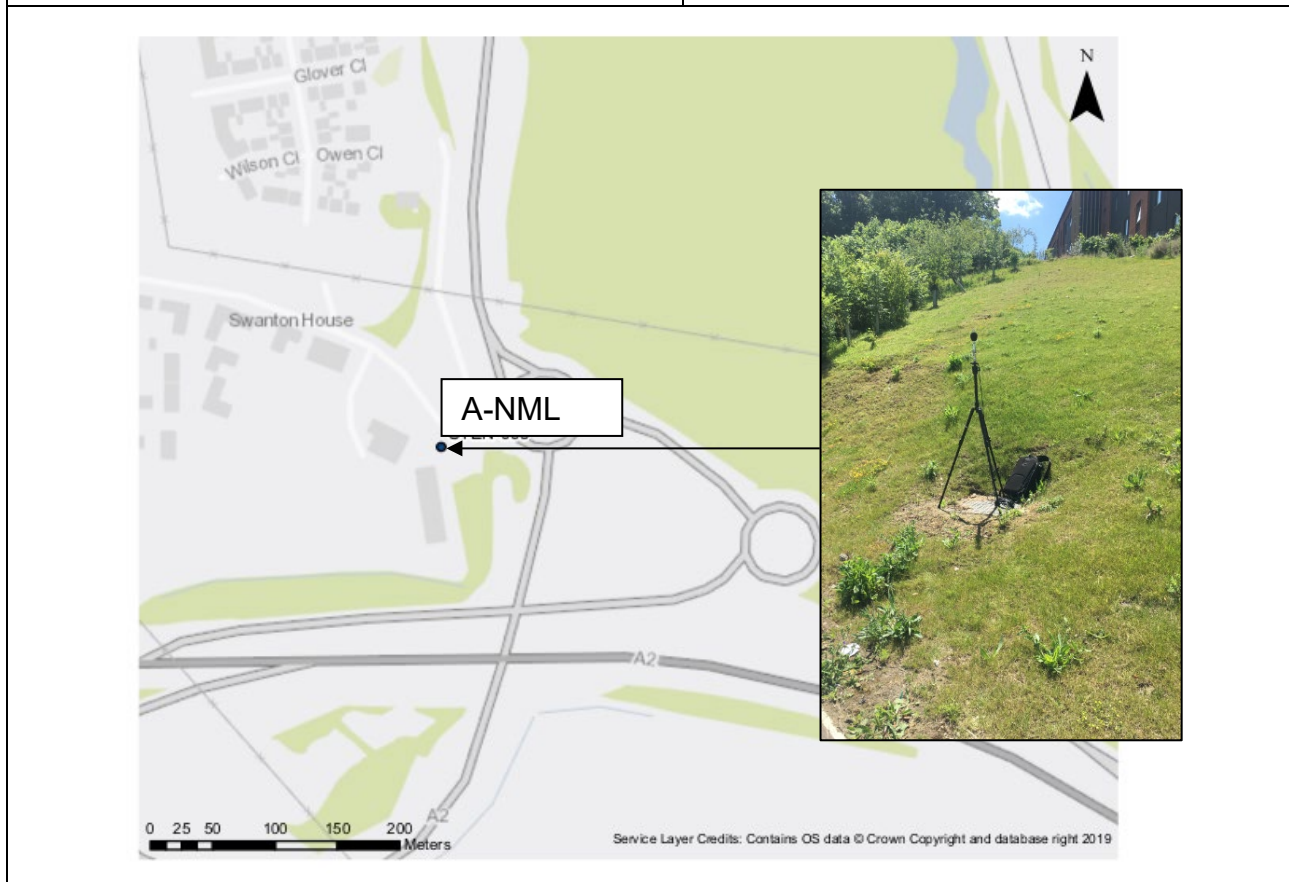


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 33					
Noise meter serial number (Microphone serial number)		11037 (233364)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	<0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry to slightly damp towards end					
Additional survey notes							
<p><i>Dry throughout the entire survey, except brief period of rain at the end of the measurement period, slight breezes at times <5ms⁻¹, 100% cloud cover, 19°C. Dry conditions prior to survey. No photo taken of survey location.</i></p>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 33		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 33	Hour 1	10:15 – 11:15	58.4	60.4	61.7
	Hour 2	11:15 – 12:15	57.7	59.5	60.7
	Hour 3	12:15 – 13:15	58.4	60.4	61.4
	Measured 3hr L _{A10} (CRTN shortened method)				61.4
	Calculated 18hr L _{A10} (CRTN shortened method)				60.4

1.34 A-NML 34 Ackers Drive

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 34 – Ackers Drive
Monitoring location description	
<i>Ackers Drive, Swanscombe, DA10 1AZ.</i>	
Ordnance Survey grid reference	X = 561188 Y = 172864
Survey position description	
<i>Monitoring location adjacent to Ackers Lane, Swanscombe, DA10 1AZ. Meter located at the bottom of embankment just north of Spring River hotel.</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	JW/LW
Description of noise climate	
<i>Road traffic noise from car movements using Ackers Drive and surrounding road infrastructure (i.e. the adjacent roundabout and the A2260 nearby). Background road traffic noise from the south just noticeable (A2). Majority of the road traffic noise emanating from A2 screened by landscape topography at survey location. Some aircraft noise.</i>	
Measurement start	17/06/2019 - 12:40
Measurement stop	17/06/2019 - 15:40



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 34					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	0%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, no cloud cover, 21°C, sunny conditions. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 34		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 34	Hour 1	12:40 – 13:40	52.2	60.3	63.6
	Hour 2	13:40 – 14:40	53.0	62.1	63.0
	Hour 3	14:40 – 15:40	53.2	59.0	62.4
	Measured 3hr L _{A10} (CRTN shortened method)				63.0
	Calculated 18hr L _{A10} (CRTN shortened method)				62.0

1.35 A-NML 35 Queens Gardens

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 35 – Queens Gardens
Monitoring location description	
<i>Queens Garden, Dartford, DA2 6HZ.</i>	
Ordnance Survey grid reference	X = 555807 Y = 173151
Survey position description	
<i>Monitoring location on amenity grassland near Queens Gardens, Dartford. The meter was located immediately to the west of 22 Queens Gardens, Dartford, DA2 6HY. The meter was in an area surrounded by residential properties.</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the A282 dominated the noise environment at this location. Some noise from local activities of residents moving cars and idling engines, some noise from birdsong at times.</i>	
Measurement start	19/06/2019 - 14:00
Measurement stop	19/06/2019 - 17:00



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 35				
Noise meter serial number (Microphone serial number)		11037 (233364)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		50				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	100%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, slight breezes at times <5ms⁻¹, 100% cloud cover, 19°C. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 35		
Monitoring data					
STNML	Time period (T)		LA90,T	LAeq,T	LA10,T
A-NML 35	Hour 1	14:00 – 15:00	55.4	56.8	57.8
	Hour 2	15:00 – 16:00	53.0	55.2	56.3
	Hour 3	16:00 – 17:00	55.6	57.3	58.3
	Measured 3hr LA10 (CRTN shortened method)				59.7
	Calculated 18hr LA10 (CRTN shortened method)				58.7

1.36 A-NML 36 Wayville Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 36 – Wayville Road
Monitoring location description	
Wayville Road, Dartford, DA1 1RL.	
Ordnance Survey grid reference	X = 555640 Y = 173559
Survey position description	
Monitoring location near 25 Wayville Road, Dartford. The meter was located immediately to the south of 25 Wayville Road on the footpath. The meter was in an area surrounded by residential properties.	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	CH/JW
Description of noise climate	
Road traffic noise from vehicles using the A282 dominated the noise environment at this location. Some noise from local activities involving residents such as moving cars and maintenance works. Some noise from local road traffic on Wayville Road present at times.	
Measurement start	19/06/2019 - 10:05
Measurement stop	19/06/2019 - 13:05

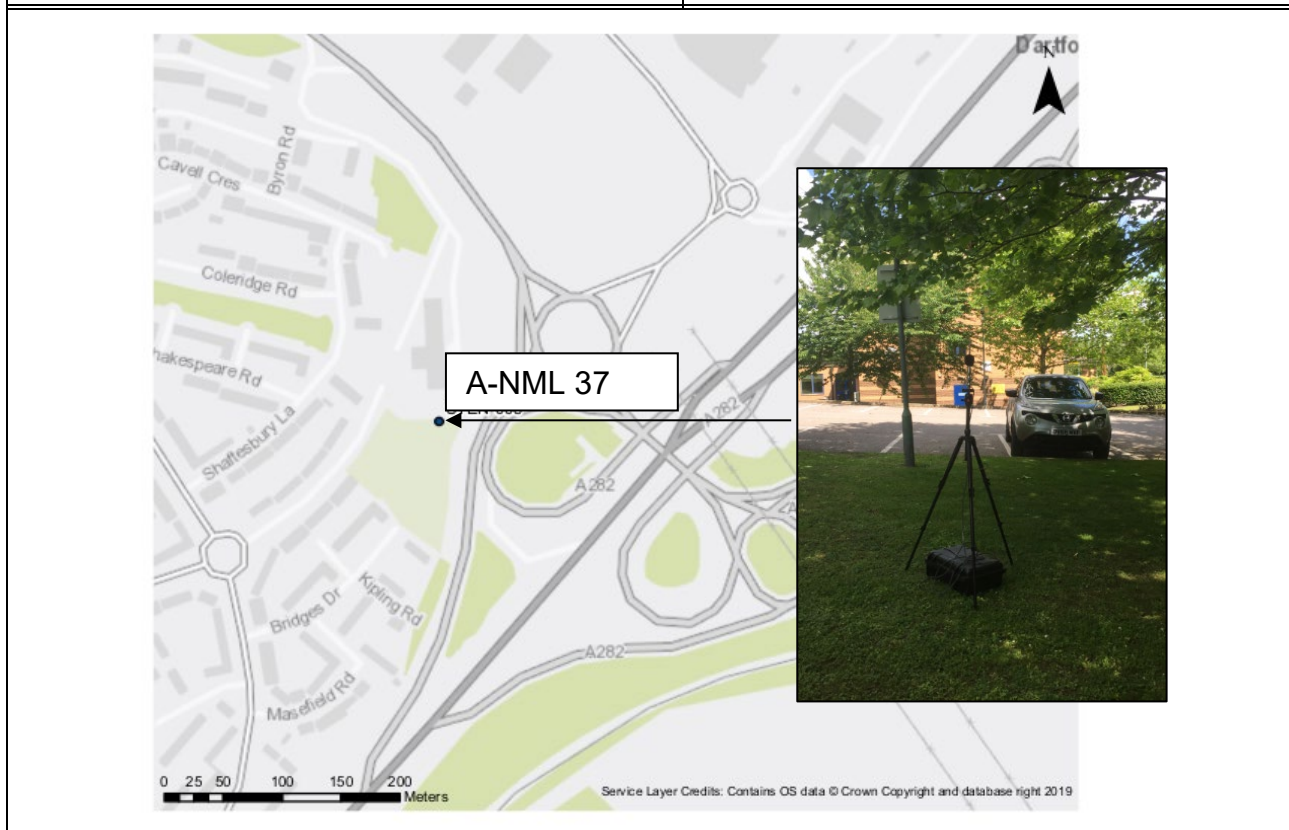


Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 36				
Noise meter serial number (Microphone serial number)		11037 (233364)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		70				
Output level range lower		50				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	100%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, 100% cloud cover, 18°C. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 36		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 36	Hour 1	10:05 – 11:05	57.5	59.2	60.3
	Hour 2	11:05 – 12:05	57.7	59.6	60.8
	Hour 3	12:05 – 13:05	57.3	59.0	60.0
	Measured 3hr L _{A10} (CRTN shortened method)				60.4
	Calculated 18hr L _{A10} (CRTN shortened method)				59.4

1.37 A-NML 37 Holiday Inn Express Dartford

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 37 – Holiday Inn Express Dartford London
Monitoring location description	
<i>Holiday Inn Express Dartford London, University Way, Dartford, DA1 5PA.</i>	
Ordnance Survey grid reference	X = 555708 Y = 175087
Survey position description	
<i>Monitoring location in car park of Holiday Inn, Dartford. The meter was located immediately to the south of the main hotel building complex. The meter was in an area surrounded by trees, with extensive road infrastructure directly to the east.</i>	
Local authority area	Dartford Borough Council
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the A282 and A206 dominated the noise environment at this location. Some noise from users of the hotel such as moving cars and shutting car doors etc. Some noise birdsong at times. Some noise from wind moving through vegetation.</i>	
Measurement start	21/06/2019 - 11:30
Measurement stop	21/06/2019 - 14:30



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 37				
Noise meter serial number (Microphone serial number)		11037 (233364)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1153 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		50				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, 50% cloud cover, 18°C. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 37		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 37	Hour 1	11:30 – 12:30	55.8	59.1	60.7
	Hour 2	12:30 – 13:30	56.2	59.0	60.6
	Hour 3	13:30 – 14:30	56.0	58.9	60.4
	Measured 3hr L _{A10} (CRTN shortened method)				60.6
	Calculated 18hr L _{A10} (CRTN shortened method)				59.6

1.38 A-NML 38 Back Lane


Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 38 – Back Lane
Monitoring location description	
<i>Back Lane, Purfleet, RM19 1NU.</i>	
Ordnance Survey grid reference	X = 557443 Y = 179073
Survey position description	
<i>Monitoring location on Back Lane, Grays. Meter located on land adjacent to slip road (A282), slightly east of the Thurrock Hotel.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MS
Description of noise climate	
<i>Road traffic noise from vehicles using the roundabout slip road dominates the noise environment at this location. Some distant aircraft noise just noticeable, however, noise environment completely dominated by road traffic from the adjacent slip road (A282).</i>	
Measurement start	26/06/2019 - 13:30
Measurement stop	26/06/2019 - 16:30



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 38					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		100					
Output level range lower		60					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	60%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, roughly 60% cloud cover - overcast, 19°C, cloudy and humid conditions. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 38		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 38	Hour 1	13:30 – 14:30	65.3	67.3	68.7
	Hour 2	14:30 – 15:30	65.3	67.6	69.0
	Hour 3	15:30 – 16:30	64.6	67.8	68.2
	Measured 3hr L _{A10} (CRTN shortened method)				68.7
	Calculated 18hr L _{A10} (CRTN shortened method)				67.7

1.39 A-NML 39 Davy Down Car Park

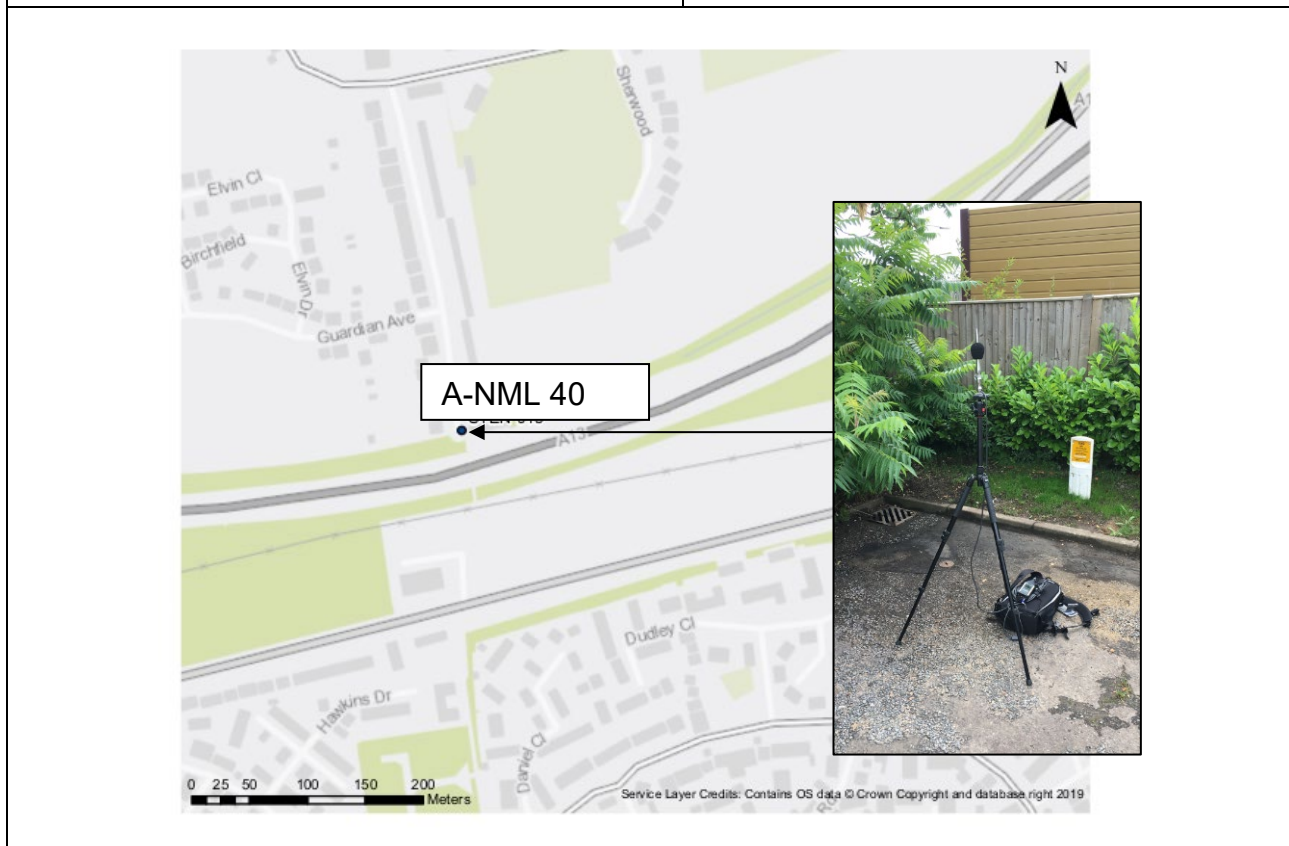
Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 39 – Davy Down Car Park
Monitoring location description	
<i>Davy Down Car Park, South Ockendon, Grays, RM16 5UL.</i>	
Ordnance Survey grid reference	X = 559294 Y = 179847
Survey position description	
<i>Monitoring location in Davy Down Car Park. The meter was located approximately 40m to the north of the A13.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the A13 to the south of the survey location characterised the ambient noise environment at this location. Some distant aircraft noise just noticeable, however, noise environment dominated by road traffic noise from motorway. Some bird noise at times. Some noise from users of the carpark such as moving cars and shutting car doors etc. Some noise from pedestrians walking dogs.</i>	
Measurement start	15/07/2019 - 14:00
Measurement stop	15/07/2019 - 17:00
	

Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 39					
Noise meter serial number (Microphone serial number)		11036 (226284)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		80					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, 100% cloud cover, 20°C. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 39		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 39	Hour 1	14:00 – 15:00	52.8	56.0	57.4
	Hour 2	15:00 – 16:00	52.6	55.4	57.0
	Hour 3	16:00 – 17:00	53.0	55.2	56.6
	Measured 3hr L _{A10} (CRTN shortened method)				57.1
	Calculated 18hr L _{A10} (CRTN shortened method)				56.1

1.40 A-NML 40 Clockhouse Lane

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 40 – Clockhouse Lane
Monitoring location description	
<i>Lydden Cottage, Clockhouse Lane, North Stifford, Grays, RM16 5UR.</i>	
Ordnance Survey grid reference	X = 560053 Y = 179866
Survey position description	
<i>Monitoring location on public roadway adjacent to Lydden Cottage, North Stifford, RM16 5UR. Meter adjacent to A13 placed at gap in acoustic fencing which follows the road east and west of footbridge at Clockhouse Lane (brown hoarding in photo) - Road speed 50mph.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Road traffic noise from vehicles using the A13 dominates the noise environment at this location. Some distant aircraft noise just noticeable, however, noise environment completely dominated by road traffic from the A13.</i>	
Measurement start	25/06/2019 - 11:30
Measurement stop	25/06/2019 - 14:30



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 40				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		40				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	100%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, 100% cloud cover, 22°C, humid conditions. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 40		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 40	Hour 1	11:30 – 12:30	55.6	60.3	62.6
	Hour 2	12:30 – 13:30	56.1	60.3	62.6
	Hour 3	13:30 – 14:30	56.6	60.5	62.6
	Measured 3hr L _{A10} (CRTN shortened method)				62.7
	Calculated 18hr L _{A10} (CRTN shortened method)				61.7

1.41 A-NML 41 Stifford Clays Road

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 41 – Stifford Clays Road
Monitoring location description	
<i>Stifford Clays Road, North Stifford, Grays, RM16 3NL.</i>	
Ordnance Survey grid reference	X = 560907 Y = 180557
Survey position description	
<i>Monitoring location on Stifford Clays Road, adjacent to the A13. At this location, the A13 was located at the bottom of an embankment.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MS
Description of noise climate	
<i>Road traffic noise from vehicles using the A13 dominated the noise environment at this location. No other noise sources were perceivable during the survey.</i>	
Measurement start	26/06/2019 - 10:00
Measurement stop	26/06/2019 - 13:00

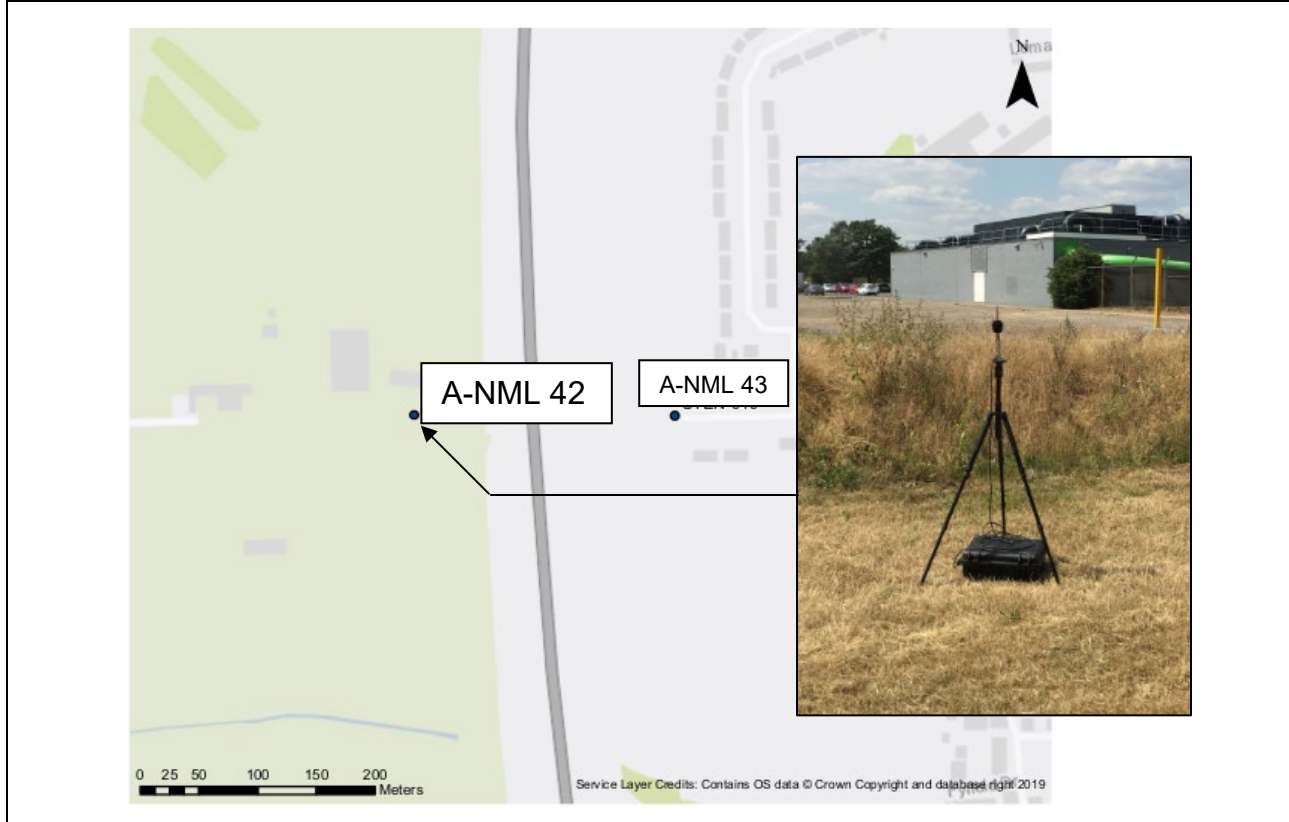


Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 41					
Noise meter serial number (Microphone serial number)		11035 (226402)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		90					
Output level range lower		60					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	100%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, 100% cloud cover, 17°C, humid conditions. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 41		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 41	Hour 1	10:00 – 11:00	74.3	77.9	79.9
	Hour 2	11:00 – 12:00	74.7	78.2	80.1
	Hour 3	12:00 – 13:00	75.2	78.4	80.2
	Measured 3hr L _{A10} (CRTN shortened method)				80.1
	Calculated 18hr L _{A10} (CRTN shortened method)				79.1

1.42 A-NML 42 Impulse Leisure Belhus Park

Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 42 – Impulse Leisure Belhus Park
Monitoring location description	
<i>Impulse Leisure, Belhus Park, Aveley, South Ockendon, RM15 4PX.</i>	
Ordnance Survey grid reference	X = 557366 Y = 181067
Survey position description	
<i>Monitoring location in car park south east of the leisure centre. The meter was in an open area, with the M25 motorway 85m to the east.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the M25 motorway characterises the ambient noise environment at this location. Some distant aircraft noise just noticeable, however, noise environment dominated by road traffic noise from motorway. Some bird noise at times. Some noise from users of the carpark such as moving cars and shutting car doors etc. Some noise from crickets in grass.</i>	
Measurement start	16/07/2019 - 14:00
Measurement stop	16/07/2019 - 17:00



Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 42					
Noise meter serial number (Microphone serial number)		11036 (226284)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		70					
Output level range lower		50					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	40%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, no wind, 40% cloud cover, 26°C. Dry conditions prior to survey.</i>							

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 42		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 42	Hour 1	14:00 – 15:00	54.9	57.3	58.9
	Hour 2	15:00 – 16:00	54.9	57.1	58.7
	Hour 3	16:00 – 17:00	54.9	57.1	58.3
	Measured 3hr L _{A10} (CRTN shortened method)				58.7
	Calculated 18hr L _{A10} (CRTN shortened method)				57.7

1.43 A-NML 43 Gatehope Drive


Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 43 – Gatehope Drive
Monitoring location description	
<i>Gatehope Drive, South Ockendon, RM15 5JR.</i>	
Ordnance Survey grid reference	X = 557586 Y = 181065
Survey position description	
<i>Monitoring location just off Gatehope Drive, South Ockendon. Meter located on the 'Oak and Ash Plantation' public amenity space, approximately 100m east of the M25 motorway.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MS
Description of noise climate	
<i>Road traffic noise from vehicles using the M25 motorway characterises the ambient noise environment at this location. Some distant aircraft noise just noticeable, however, noise environment dominated by road traffic noise from motorway. Some bird noise at times.</i>	
Measurement start	27/06/2019 - 12:45
Measurement stop	27/06/2019 - 15:45



Equipment details, survey specifics and location description						
Monitoring location reference		A-NML 43				
Noise meter serial number (Microphone serial number)		11035 (226402)				
Noise meter type		ACOEM 01db FUSION				
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)				
Frequency weighting		A				
Time weighting		F				
Output level range upper		80				
Output level range lower		50				
Calibrator serial number		34936367				
Calibrator type		RION NC-74				
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)				
Field calibration level start		94				
Field calibration level end		94				
Field calibration variance		0				
Field calibration drift		No significant drift observed				
Anemometer serial number						
Anemometer type						
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust	m/s ⁻¹
	Wind direction (origin)					
	Rainfall (mm/hr)	During	0	Prior	0	
	Cloud cover	50%				
	Road surfaces	Dry				
Additional survey notes						
<i>No rain, no wind, roughly 50% cloud cover – sunny majority of survey, 19°C, humid conditions. Dry conditions prior to survey.</i>						

Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 43		
Monitoring data					
STNML	Time period (T)		LA90,T	LAeq,T	LA10,T
A-NML 43	Hour 1	12:45 – 13:45	52.3	54.0	54.7
	Hour 2	13:45 – 14:45	52.7	54.8	56.5
	Hour 3	14:45 – 15:45	52.9	54.8	55.6
	Measured 3hr LA10 (CRTN shortened method)				55.7
	Calculated 18hr LA10 (CRTN shortened method)				54.7

1.44 A-NML 44 Dennises Lane


Equipment details, survey specifics and location description	
Monitoring location reference	A-NML 44 – Dennises Lane
Monitoring location description	
<i>Dennises Lane, South Ockendon, Upminster, RM14 2XH.</i>	
Ordnance Survey grid reference	X = 558034 Y = 184106
Survey position description	
<i>Monitoring location on public footpath 259, close by to Pea Lane Fishery. The meter was roadside on Dennises Lane, with the M25 motorway 160m to the east.</i>	
Local authority area	London Borough of Havering
Survey technician reference (initials)	CH/JW
Description of noise climate	
<i>Road traffic noise from vehicles using the M25 motorway and road traffic noise from local roads such as Pea Lane and Dennises Lane. Some distant aircraft noise. Some bird noise at times. Some noise from wind blowing through vegetation.</i>	
Measurement start	16/07/2019 - 10:10
Measurement stop	16/07/2019 - 13:10
	

Equipment details, survey specifics and location description							
Monitoring location reference		A-NML 44					
Noise meter serial number (Microphone serial number)		11036 (226284)					
Noise meter type		ACOEM 01db FUSION					
Laboratory calibration date (due) Certificate number (issuer)		09/02/2018 (09/02/2020) UCRT18/1151 (ANV Measurement Systems)					
Frequency weighting		A					
Time weighting		F					
Output level range upper		100					
Output level range lower		40					
Calibrator serial number		34936367					
Calibrator type		RION NC-74					
Laboratory calibration date (due) Certificate number (issuer)		12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)					
Field calibration level start		94					
Field calibration level end		94					
Field calibration variance		0					
Field calibration drift		No significant drift observed					
Anemometer serial number							
Anemometer type							
Measured weather parameters	Wind speed (m/s ⁻¹)	Avg.		m/s ⁻¹	Gust		m/s ⁻¹
	Wind direction (origin)						
	Rainfall (mm/hr)	During	0	Prior	0		
	Cloud cover	30%					
	Road surfaces	Dry					
Additional survey notes							
<i>No rain, 30% cloud cover, 25°C. Dry conditions prior to survey.</i>							

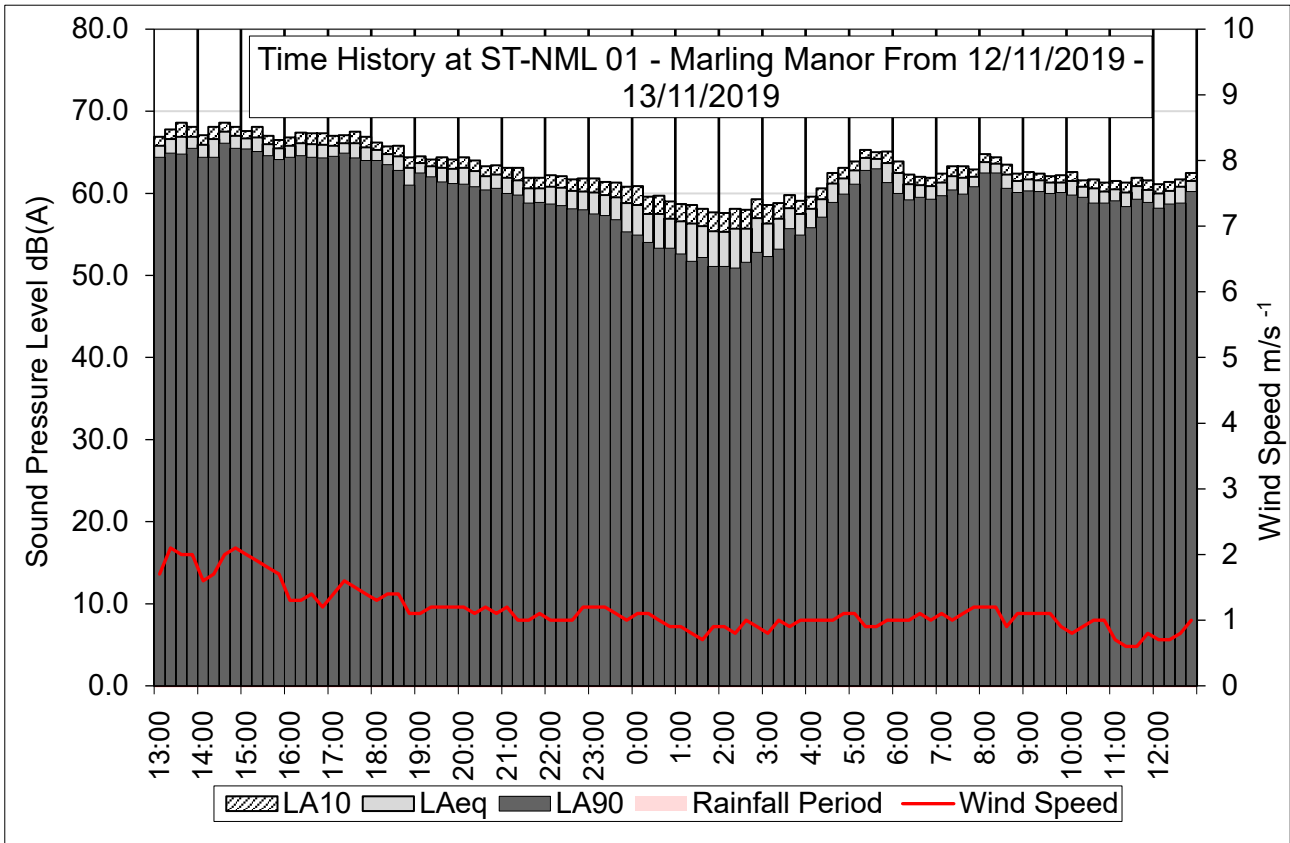
Equipment details, survey specifics and location description					
Monitoring location reference			A-NML 44		
Monitoring data					
STNML	Time period (T)		L _{A90,T}	L _{Aeq,T}	L _{A10,T}
A-NML 44	Hour 1	10:10 – 11:10	55.5	64.1	66.6
	Hour 2	11:10 – 12:10	54.6	64.1	67.7
	Hour 3	12:10 – 13:10	55.6	65.8	68.2
	Measured 3hr L _{A10} (CRTN shortened method)				67.6
	Calculated 18hr L _{A10} (CRTN shortened method)				66.6

2 Short Term 24 Hours Survey Locations

2.1 ST-NML 01 Marling Manor

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 01 – Marling Manor
Monitoring location description	
<i>Marling Manor, Watling Street, Gravesend, DA12 5UD.</i>	
Ordnance Survey grid reference	X= 566280 Y= 170408
Survey position description	
<i>Monitoring location in residential garden of Marling Manor, Gravesend.</i>	
Local authority area	Gravesham Borough Council - Kent
Survey technician reference (initials)	JW/MA
Description of noise climate	
<i>Background road traffic noise from the A2 to the south, dominates the noise environment at this location. No other noticeable noise sources during site visit by surveyor.</i>	
Measurement start	12/11/2019 - 13:00
Measurement stop	13/11/2019 - 13:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 01
Noise meter serial number (Microphone serial number)	11110 (260893)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	19/12/2017 (19/12/2019) 03556/3 (University of Salford)
Frequency weighting	nooA
Time weighting	F
Output level range upper	80
Output level range lower	40
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, slight breezes at times <5ms⁻¹, 40% cloud cover, 8°C at survey start. Weather data obtained from LT-NML 01 - Puckle Hill House - location (OS Grid Reference X = 569129 Y= 169883).</i></p>	



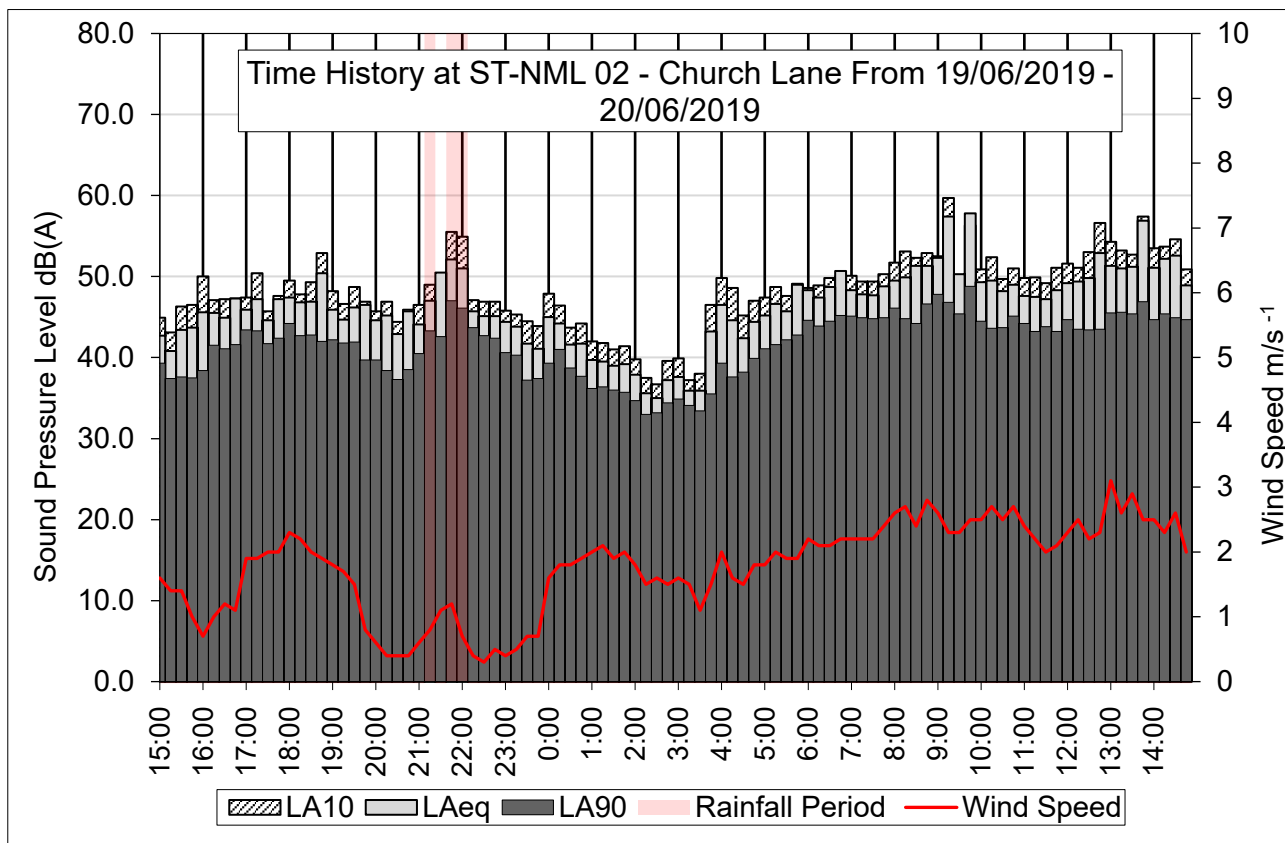
		Time period (T)	LA90,T	LAeq,T	LA10,T
ST-NML 01 - Marling Manor		Weekday 12 hour (07:00 – 19:00)	62.1	64.3	64.8
		Weekday 16 hour (07:00 – 23:00)	61.6	63.9	64.4
		Weekday 18 hour (06:00 – 0:00)	61.2	63.6	64.1
		Weekday evening (19:00 – 23:00)	60.1	62.0	63.1
		Night (23:00 – 07:00)	56.0	59.8	60.7

2.2 ST-NML 02 Church Lane

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 02 – Church Lane
Monitoring location description	
25 Church Lane, Gravesend, DA12 2NL.	
Ordnance Survey grid reference	X= 568368 Y= 172945
Survey position description	
Monitoring location in residential back garden on Church Lane, Gravesend.	
Local authority area	Gravesend Borough Council - Kent
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from Gravesend Road (A226) to the south, Lower Higham Road to the north. Some noise from aircraft. Some noises from farmyard animals. Distant rail noise. Mechanic fixing car in driveway on collection of equipment - little to no noise generated from mechanic whilst surveyor on site.	
Measurement start	19/06/2019 - 15:00
Measurement stop	20/06/2019 - 15:00



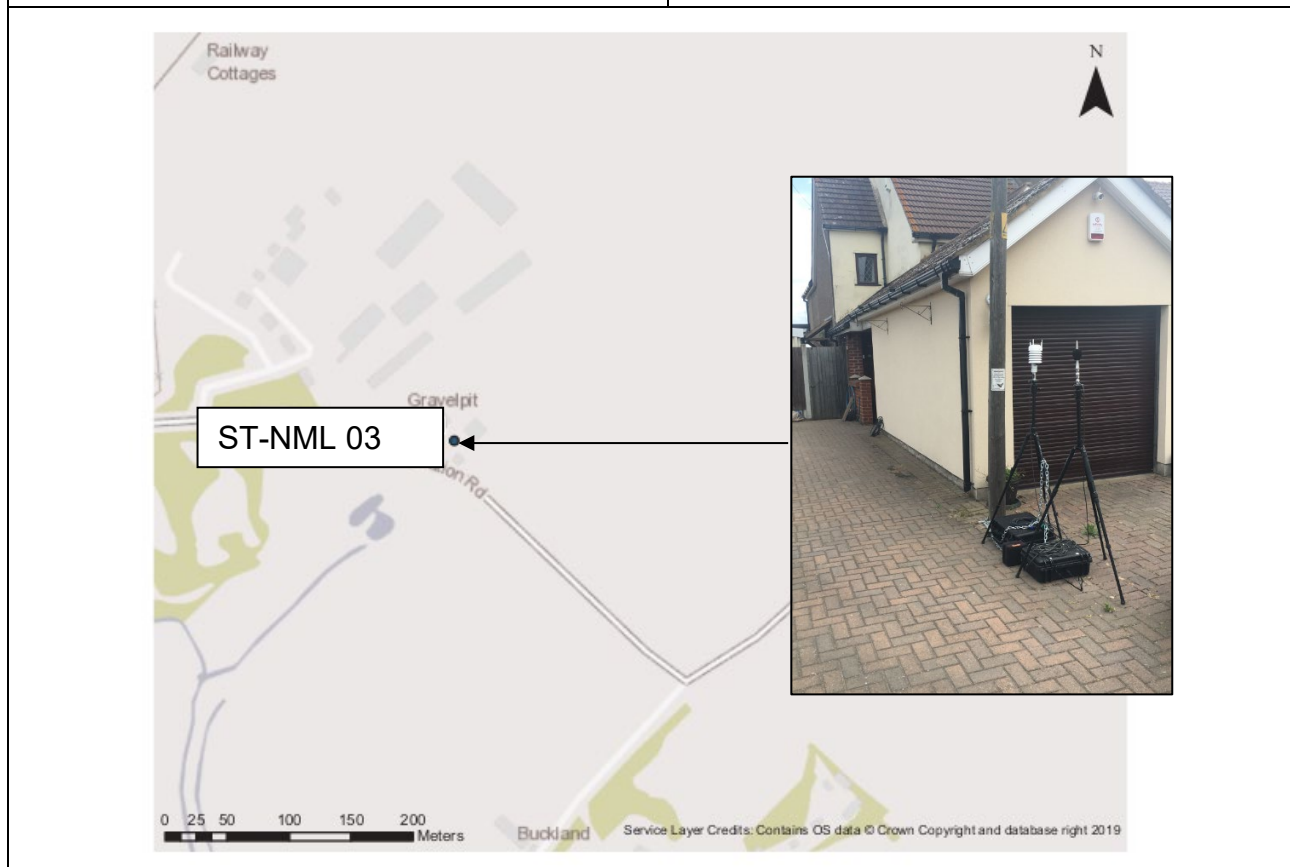
Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 02
Noise meter serial number (Microphone serial number)	11035 (226402)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, no wind, overcast conditions, 18°C at survey start. Slightly humid. Weather data obtained from LT-NML 04 - Church Lane - location (OS Grid Reference X = 568250 Y= 172551).</i></p>	



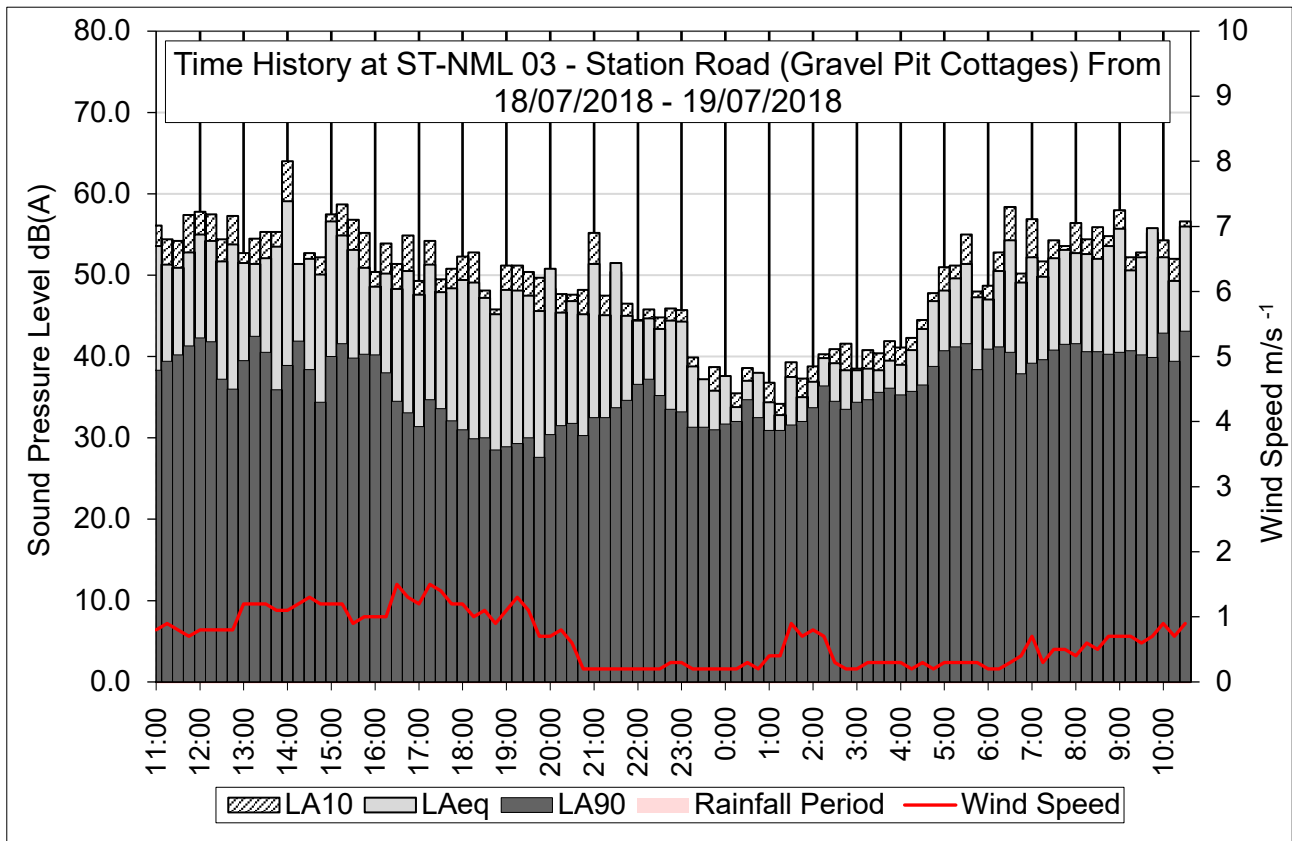
	Time period (T)	$L_{A90,T}$	$L_{Aeq,T}$	$L_{A10,T}$
ST-NML 02 - Church Lane	Weekday 12 hour (07:00 – 19:00)	43.7	50.4	50.8
	Weekday 16 hour (07:00 – 23:00)	43.1	49.8	49.9
	Weekday 18 hour (06:00 – 00:00)	42.9	49.5	49.6
	Weekday evening (19:00 – 23:00)	40.9	46.0	46.8
	Night (23:00 – 07:00)	38.5	44.4	44.5

2.3 ST-NML 03 Station Road (Gravel Pit Cottages)

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 03 – Station Road – Gravel Pit Cottages
Monitoring location description	
1 Gravel Pit Cottages, Station Road, East Tilbury, Essex RM18 8QR.	
Ordnance Survey grid reference	X= 567399 Y= 177564
Survey position description	
Monitoring location on driveway adjacent to south-western façade of residential cottages on Station Road, East Tilbury.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
Road traffic noise from Station Road - some HGV road traffic noise from Station Road due to the industrial compound to the north. Some noise from aircraft. Some industrial based noises from the north.	
Measurement start	18/07/2018 - 11:00
Measurement stop	19/07/2018 - 10:45




Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 03
Noise meter serial number (Microphone serial number)	10695 (224214)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	03/07/2018 (03/07/2020) 03861/2 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	20
Calibrator serial number	35183003
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	16/11/2017 (16/11/2018) 03516/2 (University of Salford)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>No rain at survey start, no wind, patchy clouds, 22°C at survey start. Weather data obtained from this location ST-NML 03 Station Road (Gravel Pit Cottages) (OS Grid Reference X = 567399 Y= 177564). Essex County Council and Thurrock Council - summer school term ends on 20 July 2018 / summer holidays commence on 23 July 2018.</i>	

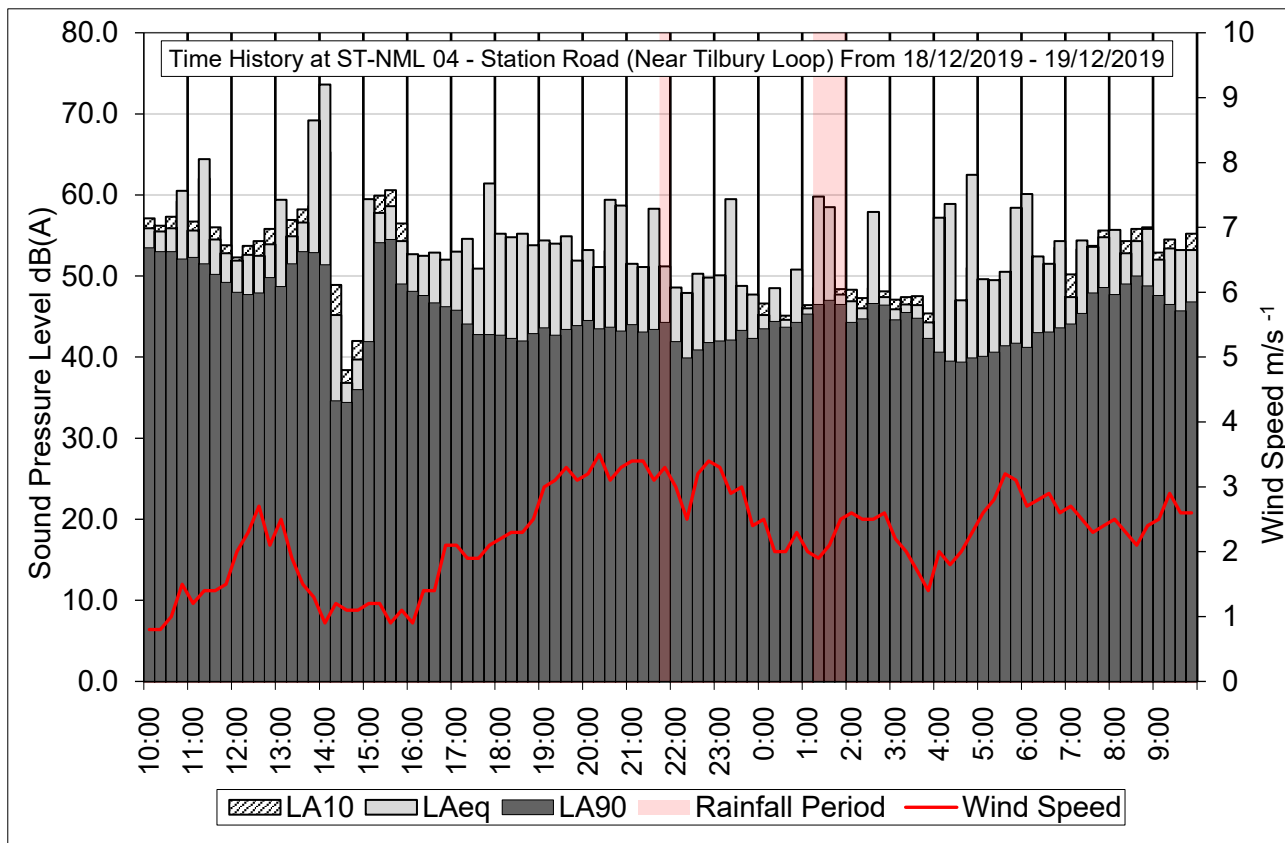


	Time period (T)	$L_{A90,T}$	$L_{Aeq,T}$	$L_{A10,T}$
ST-NML 03 - Station Road (Gravel Pit Cottages)	Weekday 12 hour (07:00 – 19:00)	38.3	52.6	54.2
	Weekday 16 hour (07:00 – 23:00)	36.7	51.8	52.7
	Weekday 18 hour (06:00 – 00:00)	36.6	51.5	52.0
	Weekday evening (19:00 – 23:00)	32.2	47.5	48.4
	Night (23:00 – 07:00)	35.3	45.3	42.6

2.4 ST-NML 04 Station Road (Near Tilbury Loop)


Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 04 – Station Road – Near Tilbury Loop
Monitoring location description	
Station Road, West Tilbury, RM18 8QU.	
Ordnance Survey grid reference	X= 566827 Y= 177571
Survey position description	
Monitoring location on plot of land north of the railway and south of Station Road, West Tilbury.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MH
Description of noise climate	
<p><i>Rail traffic noise from the railway to the south, with industrial noises emanating from plant hire compound to the north east of the survey location. The industrial noise at this location dominates the noise environment, the rail traffic (and rail noise) is frequent. Some noise from distant aircraft also present. Some road traffic noise from Station Road to the north.</i></p>	
Measurement start	18/12/2019 - 10:00
Measurement stop	19/12/2019 - 10:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 04
Noise meter serial number (Microphone serial number)	11035 (226402)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	30
Output level range lower	100
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420147
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140012 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, no wind however some breezy conditions throughout survey, 80% cloud cover. Weather data obtained from this location ST-NML 04 - Station Road (Near Tilbury Loop) - this location (OS Grid Reference X = 566827 Y= 177571). Essex County Council and Thurrock Council - Autumn School Term ends on 19 December / winter holidays commence on 20 December 2019.</i></p>	

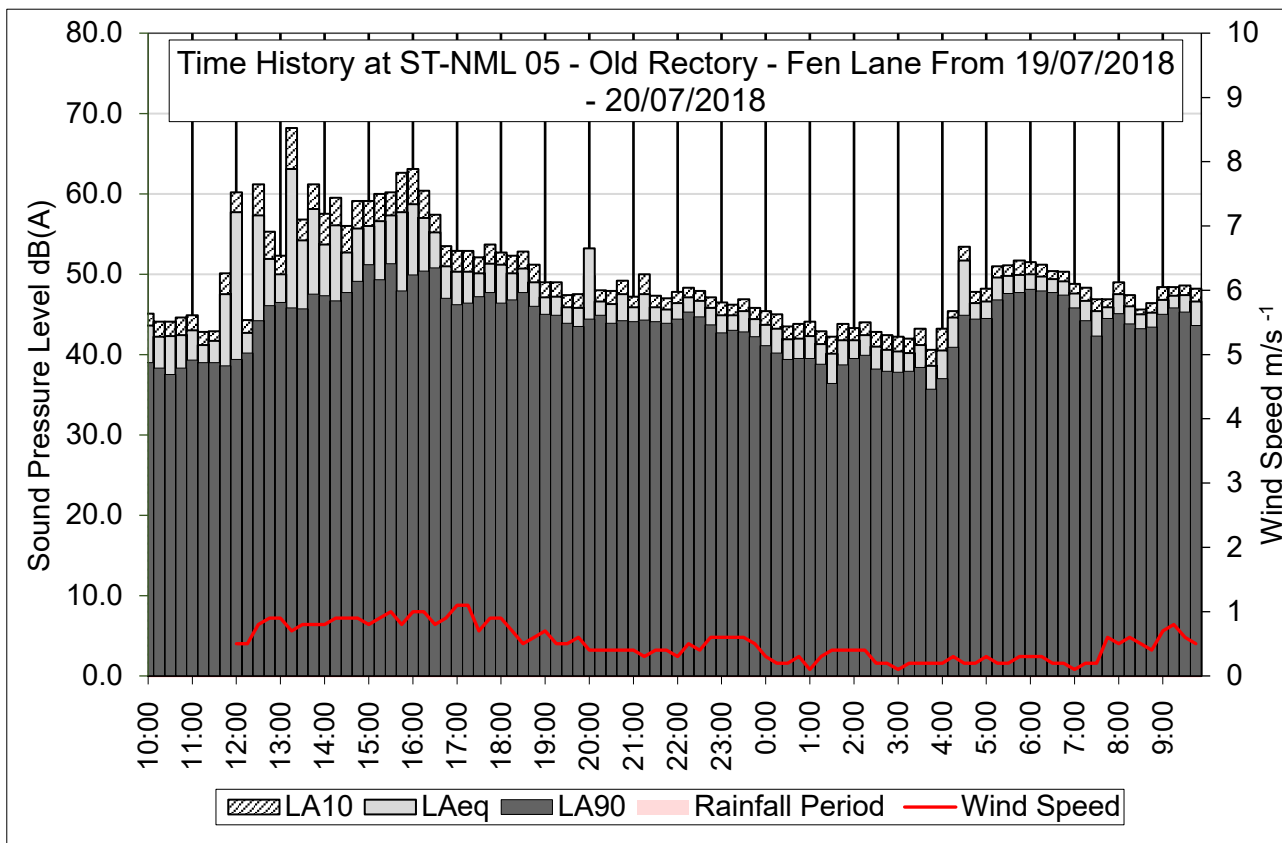


	Time period (T)	$L_{A90,T}$	$L_{Aeq,T}$	$L_{A10,T}$
ST-NML 04 Station Road (Near Tilbury Loop)	Weekday 12 hour (07:00 – 19:00)	47.3	60.1	54.1
	Weekday 16 hour (07:00 – 23:00)	46.3	59.2	52.8
	Weekday 18 hour (06:00 – 00:00)	45.9	58.9	52.4
	Weekday evening (19:00 – 23:00)	42.9	54.5	48.7
	Night (23:00 – 07:00)	42.9	54.4	47.3

2.5 ST-NML 05 Fen Lane (Old Rectory)

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 05 – Fen Lane (Old Rectory)
Monitoring location description	
<i>Old Rectory, Fen Lane, Orsett, Essex RM16 3LT.</i>	
Ordnance Survey grid reference	X= 563275 Y= 181754
Survey position description	
<i>Measurement location on private tennis court of residential property on Fen Lane, Orsett.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from A13. Surveyor subjectively noted the survey location to be subjectively tranquil and quiet. Local information from the owners suggest noise from A13 particularly noticeable with suitable prevailing winds (south-westerly winds). Potentially farmyard agricultural equipment noise in the neighbouring fields.</i>	
Measurement start	19/07/2018 - 10:00
Measurement stop	20/07/2018 - 10:00
 <p>The figure consists of two parts. On the left is a map showing the location of the survey point 'ST-NML 05' on Fen Lane. The map includes labels for 'Hobletts Nursery', 'Poplars Farm', and 'B189 High Rd'. A scale bar at the bottom indicates distances up to 200 meters. On the right is a photograph of the survey site, which is a tennis court. A noise measurement device is mounted on a tripod in the center of the court. A tennis net is visible on the right side of the court.</p>	

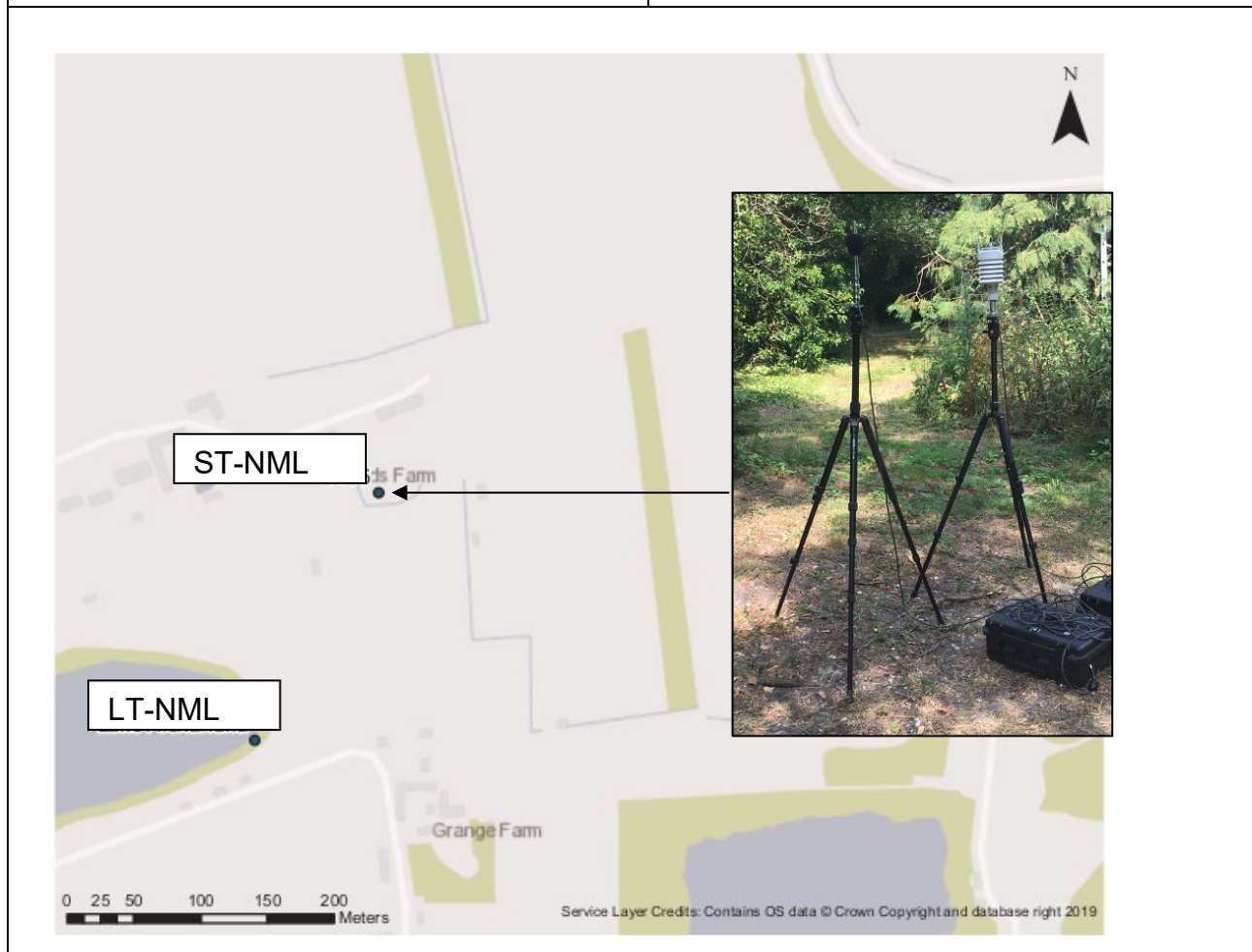
Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 05
Noise meter serial number (Microphone serial number)	10695 (224214)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	03/07/2018 (03/07/2020) 03861/2 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	19/06/2018 (19/06/2018) TCRT18/1534 (ANV Measurement Systems)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, no wind, patchy clouds, 23°C at survey start. Weather data obtained from ST-NML 06 Mollands Lane (OS Grid Reference X = 560680 Y= 182269). During survey, residents stated noise, in their opinion, was elevated above what would be considered 'normal' baseline levels since agriculture machinery was operational on this day of the year close to the property. Essex County Council and Thurrock Council - summer school term ends on 20 July 2018 / summer holidays commence on 23 July 2018.</i></p>	



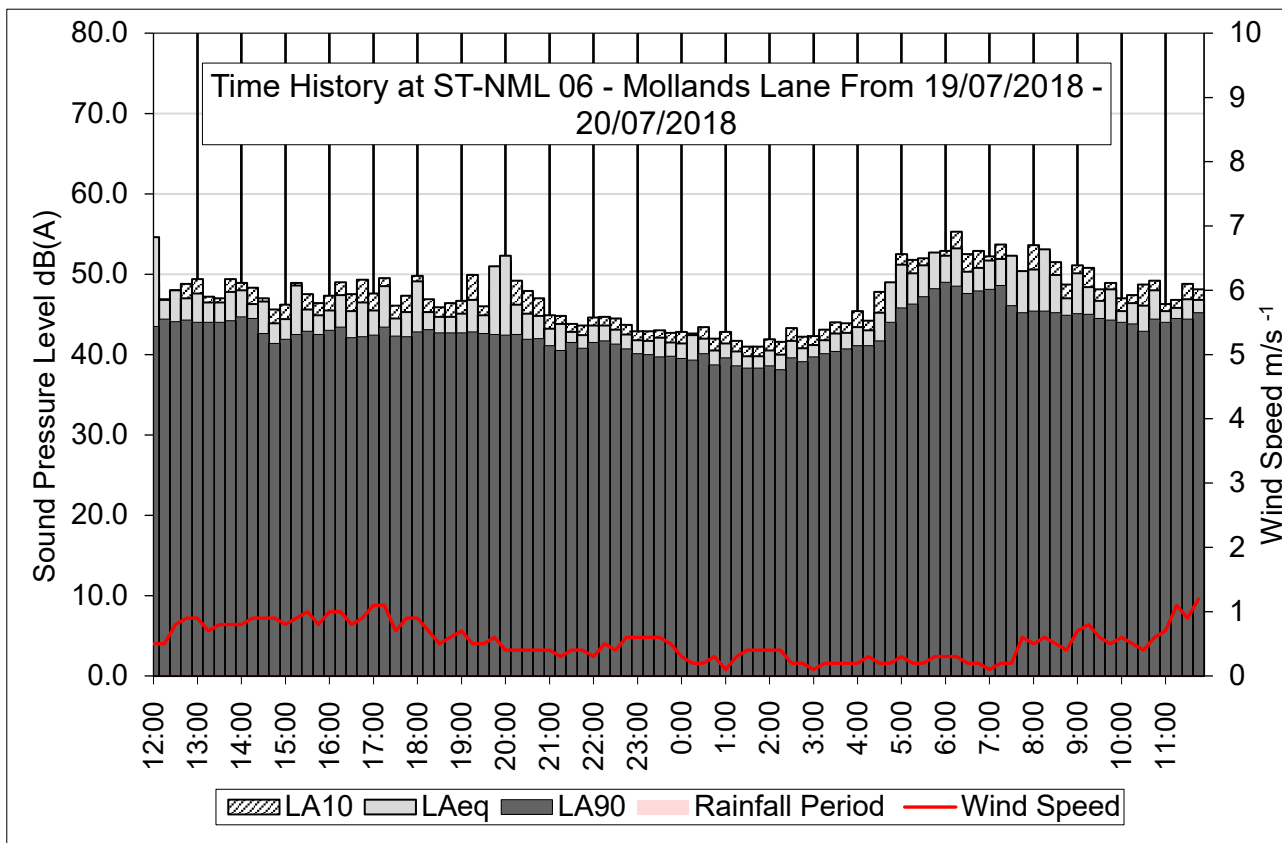
	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
ST-NML 05 – Fen Lane (Old Rectory)	Weekday 12 hour (07:00 – 19:00)	45.0	53.5	52.5
	Weekday 16 hour (07:00 – 23:00)	44.8	52.6	51.4
	Weekday 18 hour (06:00 – 00:00)	44.9	52.3	51.1
	Weekday evening (19:00 – 23:00)	44.3	47.4	48.2
	Night (23:00 – 07:00)	41.7	46.0	46.0

2.6 ST-NML 06 Mollands Lane

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 06 – Mollands Lane
Monitoring location description	
<i>Great Mollands Farm, Mollands Lane, South Ockendon, RM15 6RU.</i>	
Ordnance Survey grid reference	X= 560680 Y= 182269
Survey position description	
<i>Measurement location in back garden of residential farmhouse on Mollands Lane, South Ockendon.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise just noticeable from the A13 to the south of the monitoring location. Background aircraft noise. Noise from birdsong at times.</i>	
Measurement start	19/07/2018 - 12:00
Measurement stop	20/07/2018 - 12:00




Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 06
Noise meter serial number (Microphone serial number)	10695 (224214)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	03/07/2018 (03/07/2020) 03861/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	35183003
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	16/11/2017 (16/11/2018) 03516/2 (University of Salford)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, no wind, patchy clouds, 25°C at survey start. Weather data obtained from this location ST-NML 06 Mollands Lane (OS Grid Reference X = 560680 Y= 182269). Essex County Council and Thurrock Council - summer school term ends on 20 July 2018 / summer holidays commence on 23 July 2018.</i></p>	

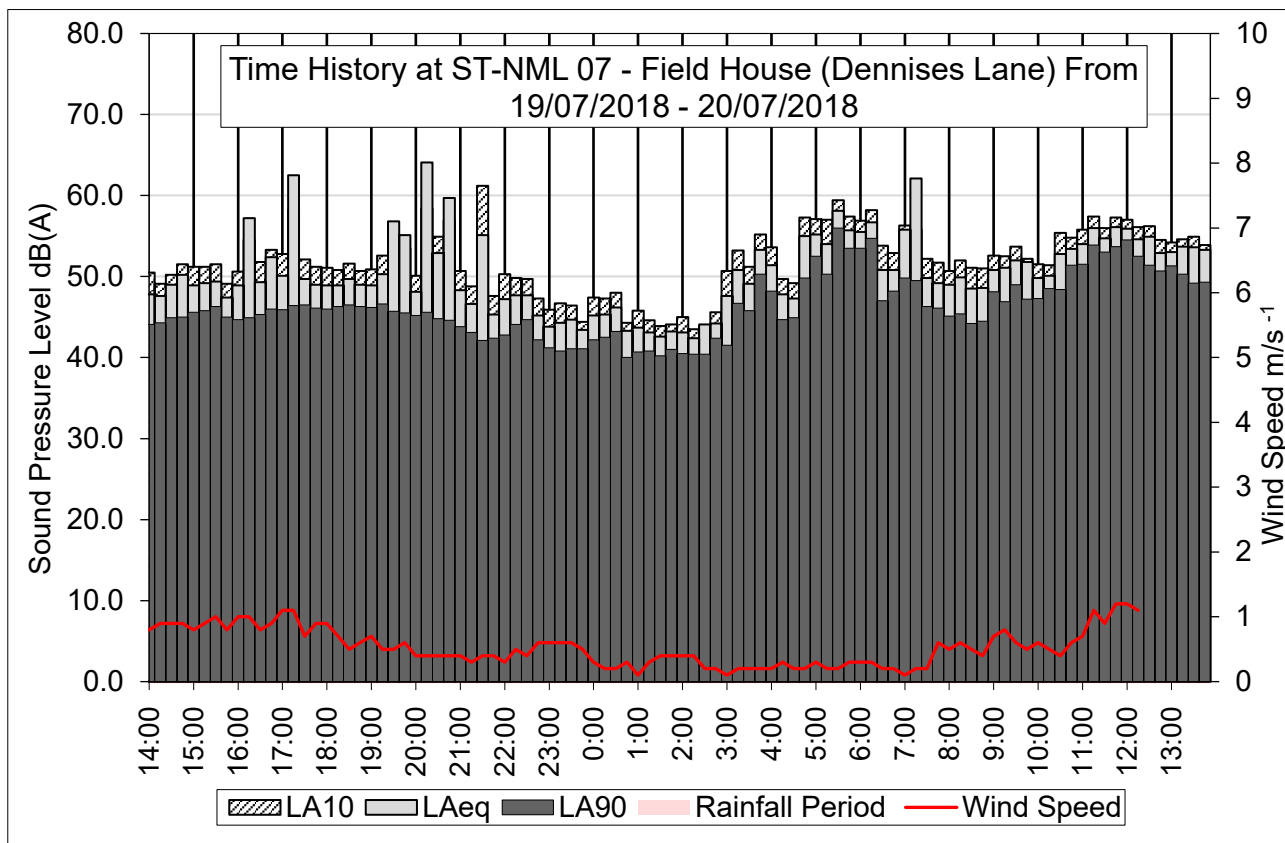


	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
ST-NML 06 – Mollands Lane	Weekday 12 hour (07:00 – 19:00)	43.9	48.2	48.5
	Weekday 16 hour (07:00 – 23:00)	43.4	47.8	48.0
	Weekday 18 hour (06:00 – 00:00)	43.5	48.0	48.0
	Weekday evening (19:00 – 23:00)	41.8	46.3	46.3
	Night (23:00 – 07:00)	41.8	46.9	45.6

2.7 ST-NML 07 Field House (Dennises Lane)


Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 07 – Field House (Dennis Road)
Monitoring location description	
<i>Field House, Kemps Farm, Dennises Lane, South Ockendon, RM15 5SD.</i>	
Ordnance Survey grid reference	X= 558414 Y= 183474
Survey position description	
<i>Measurement location on private land adjacent to farmhouse.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/TA
Description of noise climate	
<i>Background road traffic noise from M25 Motorway. Road traffic noise from Dennis Road, and from vehicles using farmhouse access road. Potentially dogs barking. Background aircraft noise. Background farmland machinery noise just noticeable.</i>	
Measurement start	19/07/2018 - 14:00
Measurement stop	20/07/2018 - 13:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 07
Noise meter serial number (Microphone serial number)	11035 (226402)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1152 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	19/06/2018 (19/06/2019) TCRT18/1534 (ANV Measurement Systems)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/08/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>No rain at survey start, no wind, patchy clouds, 25°C at survey start. Weather data obtained from ST-NML 06 Mollands Lane (OS Grid Reference X = 560680 Y= 182269). Essex County Council and Thurrock Council - summer school term ends on 20 July 2018 / summer holidays commence on 23 July 2018.</i></p>	

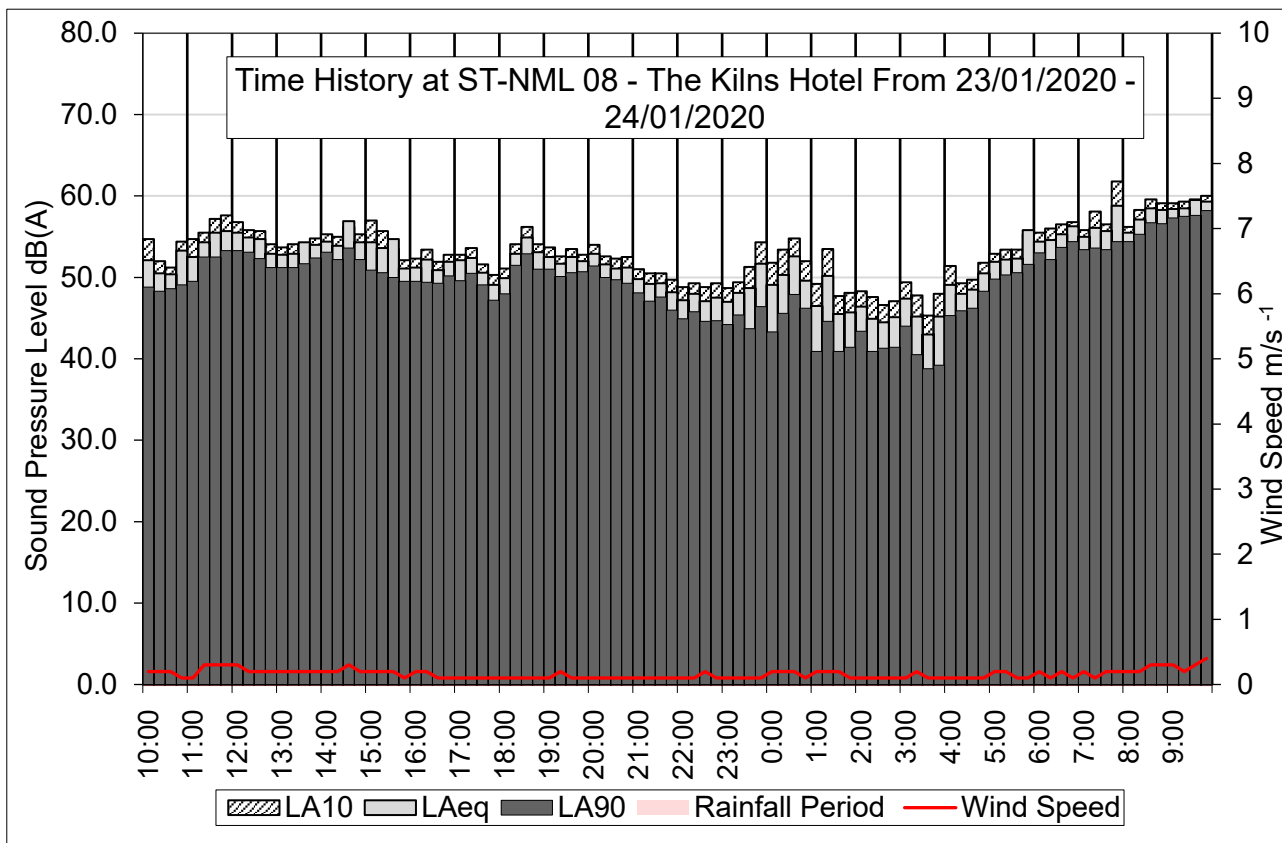


	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
ST-NML 07 - Field House (Dennises Lane)	Weekday 12 hour (07:00 – 19:00)	47.7	53.6	53.0
	Weekday 16 hour (07:00 – 23:00)	46.9	54.1	52.8
	Weekday 18 hour (06:00 – 00:00)	46.8	53.9	52.6
	Weekday evening (19:00 – 23:00)	44.3	55.3	52.3
	Night (23:00 – 07:00)	45.2	51.1	50.0

2.8 ST-NML 08 The Kilns Hotel

Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 08 – The Kilns Hotel
Monitoring location description	
<i>Kilns Guest House, 7 Warley Street, Great Warley, Brentwood, CM13 3LB.</i>	
Ordnance Survey grid reference	X= 559445 Y= 188856
Survey position description	
<i>Monitoring location on plot of land adjacent to the western façade of the Kilns Hotel Guesthouse.</i>	
Local authority area	Brentwood Borough Council - Essex
Survey technician reference (initials)	JW/VG
Description of noise climate	
<i>Distant road traffic noise from the A127 to the south-west, and M25 motorway to the west, dominates the noise environment at this location. The industrial and construction noise present at the PERI premises to the east of the hotel was noticeable from the eastern facade of the hotel, however, was unnoticeable at the survey location. Some noise from birdsong. Potential for some noise from general hotel activities on site.</i>	
Measurement start	23/01/2020 - 10:00
Measurement stop	24/01/2020 - 10:00
	


Equipment details, survey specifics and location description	
Monitoring location reference	ST-NML 08
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	30
Output level range lower	80
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420147
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140012 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>No rain at survey start, no wind - still, 100% cloud cover, 9°C, mild conditions at survey start with dry roads. Weather data obtained from this location, ST-NML 08 - The Kilns Hotel - location (OS Grid Reference X = 559445 Y= 188856).</i>	



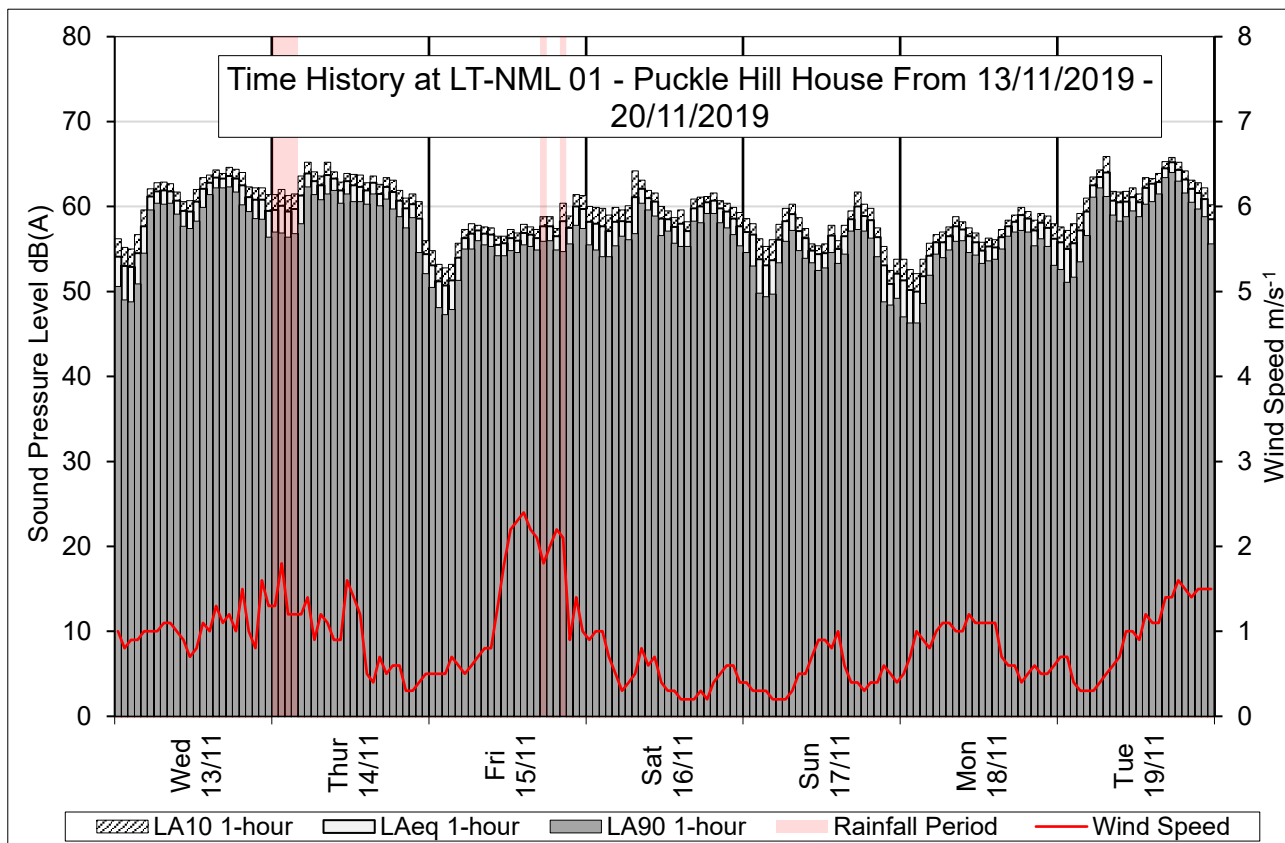
	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
ST-NML 08 - The Kilns Hotel	Weekday 12 hour (07:00 – 19:00)	52.0	55.0	55.3
	Weekday 16 hour (07:00 – 23:00)	51.1	54.2	54.3
	Weekday 18 hour (06:00 – 00:00)	50.9	54.1	54.2
	Weekday evening (19:00 – 23:00)	48.2	50.5	51.4
	Night (23:00 – 07:00)	45.7	50.8	51.1

3 Long Term 7 Day Survey Locations

3.1 LT-NML 01 Puckle Hill House

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 01 – Puckle Hill House
Monitoring location description	
<i>Puckle Hill House, Brewers Road, Shorne, Gravesend, DA12 3LB.</i>	
Ordnance Survey grid reference	X = 569129 Y = 169883
Survey position description	
<i>Monitoring location in residential back garden at the southern façade of Puckle Hill House.</i>	
Local authority area	Gravesham Borough Council
Survey technician reference (initials)	JW/MA
Description of noise climate	
<i>Monitoring location characterised by background road traffic noise from M2/A2 to the south which dominates the noise environment. Some distant noise from HS1 at times. Potential noise from barking dogs, and high-pitched noise from dog deterrent equipment. Potential noise from wind blowing through vegetation and ground maintenance team.</i>	
Measurement start	13/11/2019 - 00:00
Measurement stop	20/11/2019 - 00:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 01
Noise meter serial number (Microphone serial number)	10414 (224343)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	16/04/2019 (16/04/2021) TR-REP-10132 (Acoustic1)
Frequency weighting	A
Time weighting	F
Output level range upper	40
Output level range lower	90
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location – LT-NML 01 Puckle Hill House (OS Grid Reference X = 569129 Y= 169883).</i>	



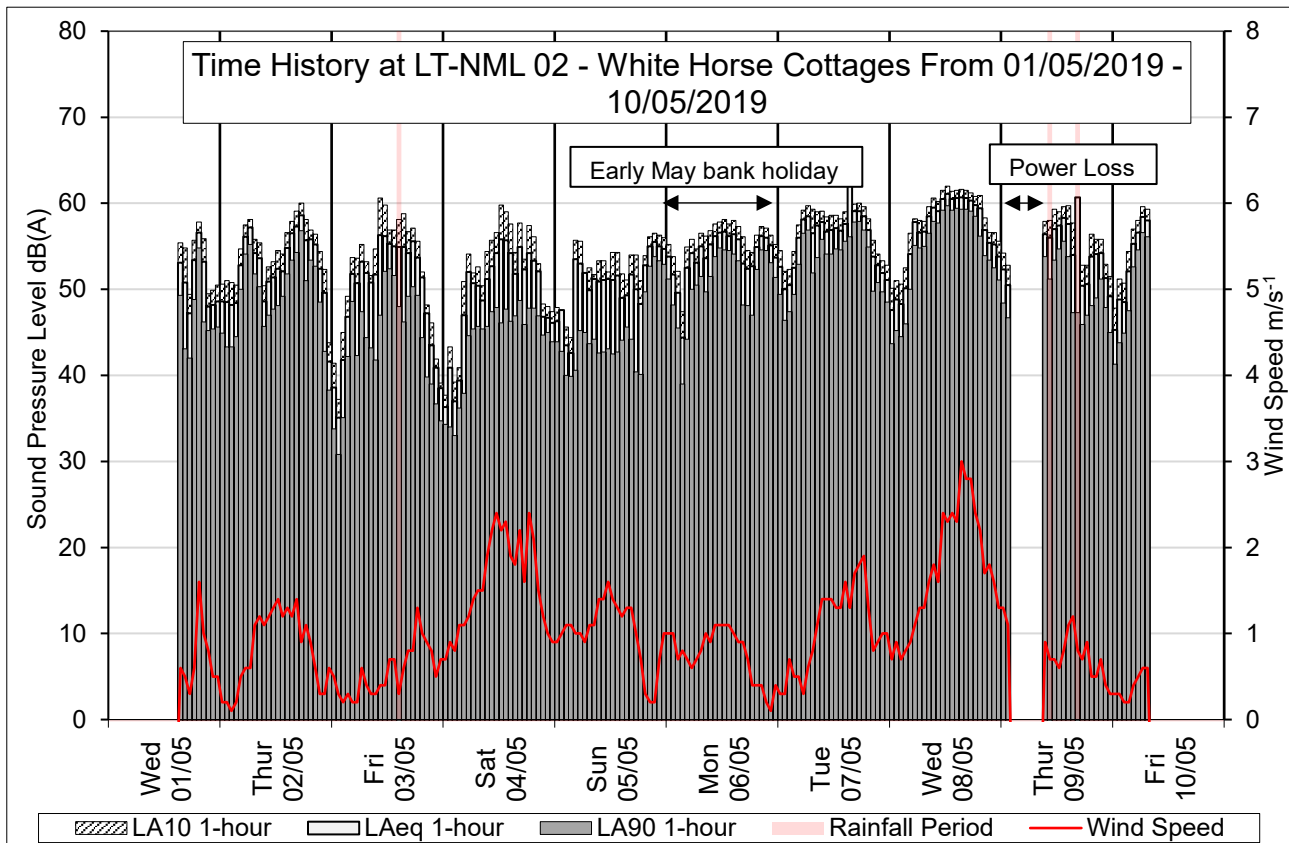
LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 01 - Puckle Hill House	Weekday 12 hour (07:00 – 19:00)	58.5	61.0	61.1
	Weekday 16 hour (07:00 – 23:00)	58.3	60.8	61.1
	Weekday 18 hour (06:00 – 00:00)	58.1	60.7	61.0
	Weekday evening (19:00 – 23:00)	57.0	59.7	60.3
	Night (23:00 – 07:00)	53.5	57.8	58.0
	Saturday (07:00 – 13:00)	58.2	60.5	61.7
	Saturday (13:00 – 23:00)	57.3	59.3	60.2
	Sunday 16 hour (07:00 – 23:00)	54.1	56.9	57.6

3.2 LT-NML 02 White Horse Cottages

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 02 – White Horse Cottages
Monitoring location description	
<i>White Horse Cottage, Thong Lane, Shorne, Gravesend, DA12 4AD.</i>	
Ordnance Survey grid reference	X= 567211 Y = 170575
Survey position description	
<i>Monitoring location in residential back garden - White Horse Cottages.</i>	
Local authority area	Gravesend Borough Council - Kent
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Surveyor subjectively noted the location to be generally tranquil conditions. Some distant background road traffic noise from the M2 Motorway. Light aircraft noise and birdsong at times.</i>	
Measurement start	01/05/2019 - 15:00
Measurement stop	10/05/2019 - 08:00



Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 02
Noise meter serial number (Microphone serial number)	11403 (259481)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	17/04/2019 (17/04/2021) TR-REP-10136 (Acoustic1)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	20
Calibrator serial number	34213781
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	06/02/2019 (06/02/2020) CE-REP-10111 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Extended survey period to take account of power loss from meter, rainfall periods and the Early May Bank Holiday on 6 May 2019. Weather data logged at this location – LT-NML 02 White Horse Cottages (OS Grid Reference X = 567211 Y= 170575).</i>	



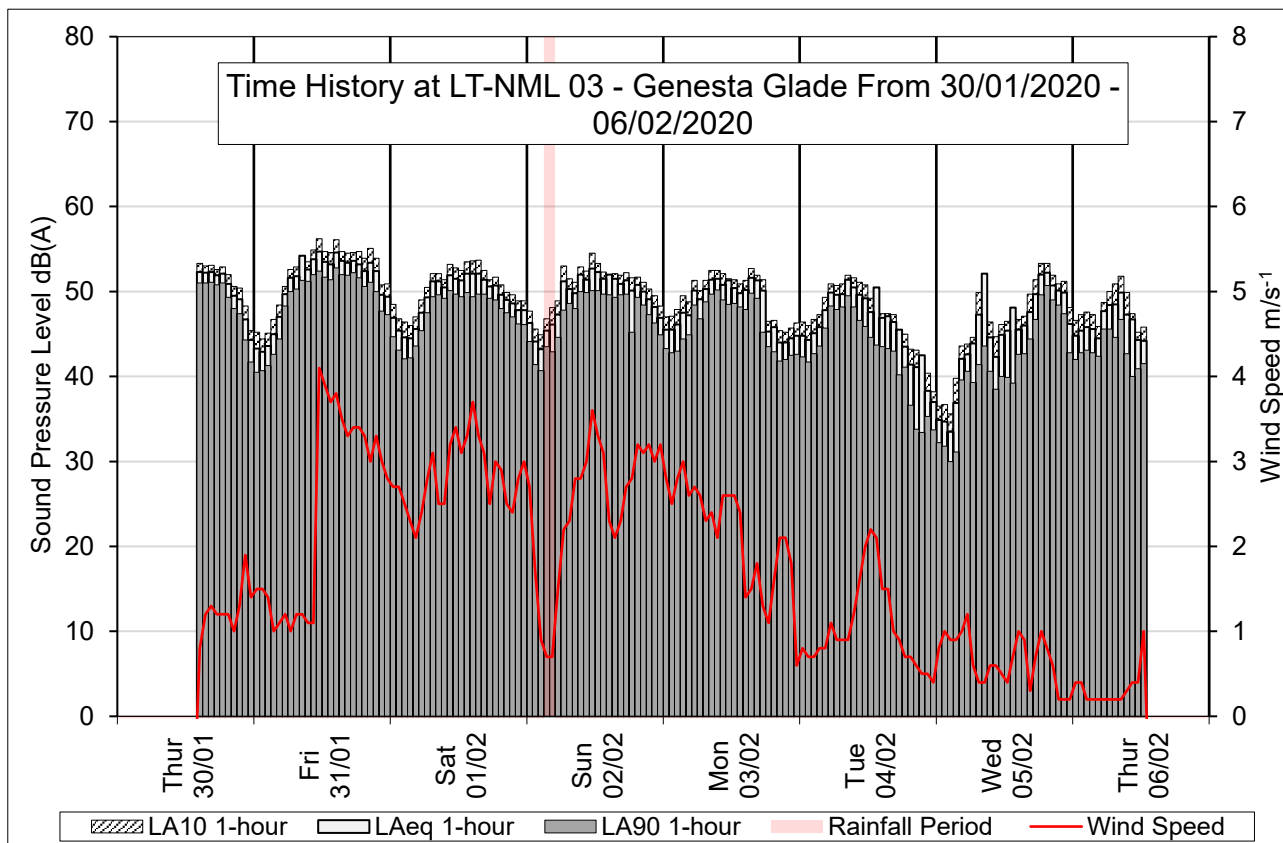
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 02 - White Horse Cottages	Weekday 12 hour (07:00 – 19:00)	52.4	56.9	57.5
	Weekday 16 hour (07:00 – 23:00)	51.5	56.3	56.7
	Weekday 18 hour (06:00 – 00:00)	51.2	56.1	56.3
	Weekday evening (19:00 – 23:00)	49.3	54.0	54.2
	Night (23:00 – 07:00)	45.6	52.3	51.5
	Saturday (07:00 – 13:00)	46.4	52.8	54.9
	Saturday (13:00 – 23:00)	46.8	53.0	54.5
	Sunday 16 hour (07:00 – 23:00)	45.3	52.0	53.5

3.3 LT-NML 03 Genesta Glade

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 03 – Genesta Glade
Monitoring location description	
7 Genesta Glade, Gravesend, DA12 4PR.	
Ordnance Survey grid reference	X = 567109 Y = 171212
Survey position description	
Monitoring location in residential back garden of number 7 Genesta Glade.	
Local authority area	Gravesend Borough Council - Kent
Survey technician reference (initials)	JW/VG
Description of noise climate	
Monitoring location characterised by background road traffic noise from M2/A2 to the south which dominates the noise environment. Some road traffic noise from Thong Lane noticeable at times. Some noise from birdsong and distant aircraft at times.	
Measurement start	30/01/2020 - 14:00
Measurement stop	06/02/2020 - 13:00




Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 03
Noise meter serial number (Microphone serial number)	10516 (144851)
Noise meter type	ACOEM 01db DUO
Laboratory calibration date (due) Certificate number (issuer)	30/05/2018 (30/05/2020) 03799/2 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	20
Output level range lower	80
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420147
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140012 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>Weather data obtained from ECO2 - Met Police Training Centre (OS Grid Reference X = 567322 Y= 174267) between survey start 30 January 2020 (14:00) and 31 January 2020 (10:00) and then continues at ECO 1 - Filborough Farm (OS Grid Reference X = 568225 Y = 173170) till the end of the survey period 06 February 2020 (14:00). Due to technical issues, meteorological data not logged at ECO 1 between 03 February 2020 (23:00) and 04 February 2020 (23:00), therefore weather data was used during this period from LT-NML 16 - Beredens in Essex (OS Grid Reference X = 557745 Y= 190080). At survey start, overcast (100%), with little to no wind (<5 m/s⁻¹). No rain at survey start, however damp roads from prior rainfall.</i></p>	

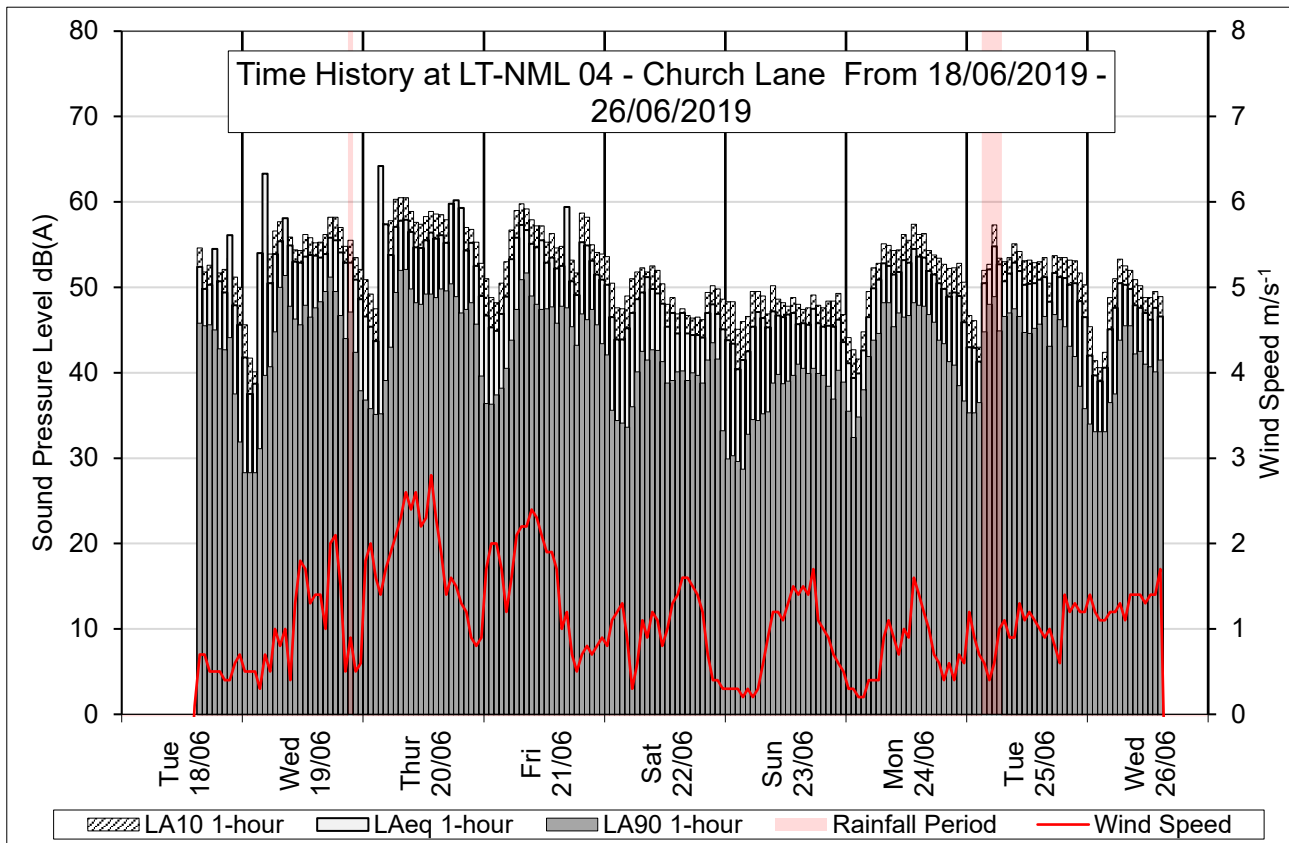


LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 03 - Genesta Glade	Weekday 12 hour (07:00 – 19:00)	46.7	50.7	50.8
	Weekday 16 hour (07:00 – 23:00)	46.2	50.4	50.2
	Weekday 18 hour (06:00 – 00:00)	45.9	50.1	50.0
	Weekday evening (19:00 – 23:00)	45.4	49.2	49.1
	Night (23:00 – 07:00)	42.8	46.5	46.8
	Saturday (07:00 – 13:00)	49.6	51.3	52.4
	Saturday (13:00 – 23:00)	48.6	50.6	51.6
	Sunday 16 hour (07:00 – 23:00)	48.8	51.0	51.9

3.4 LT-NML 04 Church Lane

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 04 – Church Lane
Monitoring location description	
17 Church Lane, Gravesend, DA12 2NL.	
Ordnance Survey grid reference	X = 568250 Y = 172551
Survey position description	
Monitoring location residential back garden/small business compound.	
Local authority area	Gravesend Borough Council - Kent
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from Gravesend Road (A226) to the south - noted by the surveyor to be dominant in the noise environment. Business activities also have a notable contribution to the noise environment - bonfire noted on afternoon of 19 July. Some noise from aircraft. Potentially church bell noise from St Mary's Church Chalk. No ground investigation activity from the site to the north-west. Some noise from cars in backyard compound. Power washing vans in adjacent compound.	
Measurement start	18/06/2019 - 15:00
Measurement stop	26/06/2019 - 15:00
	

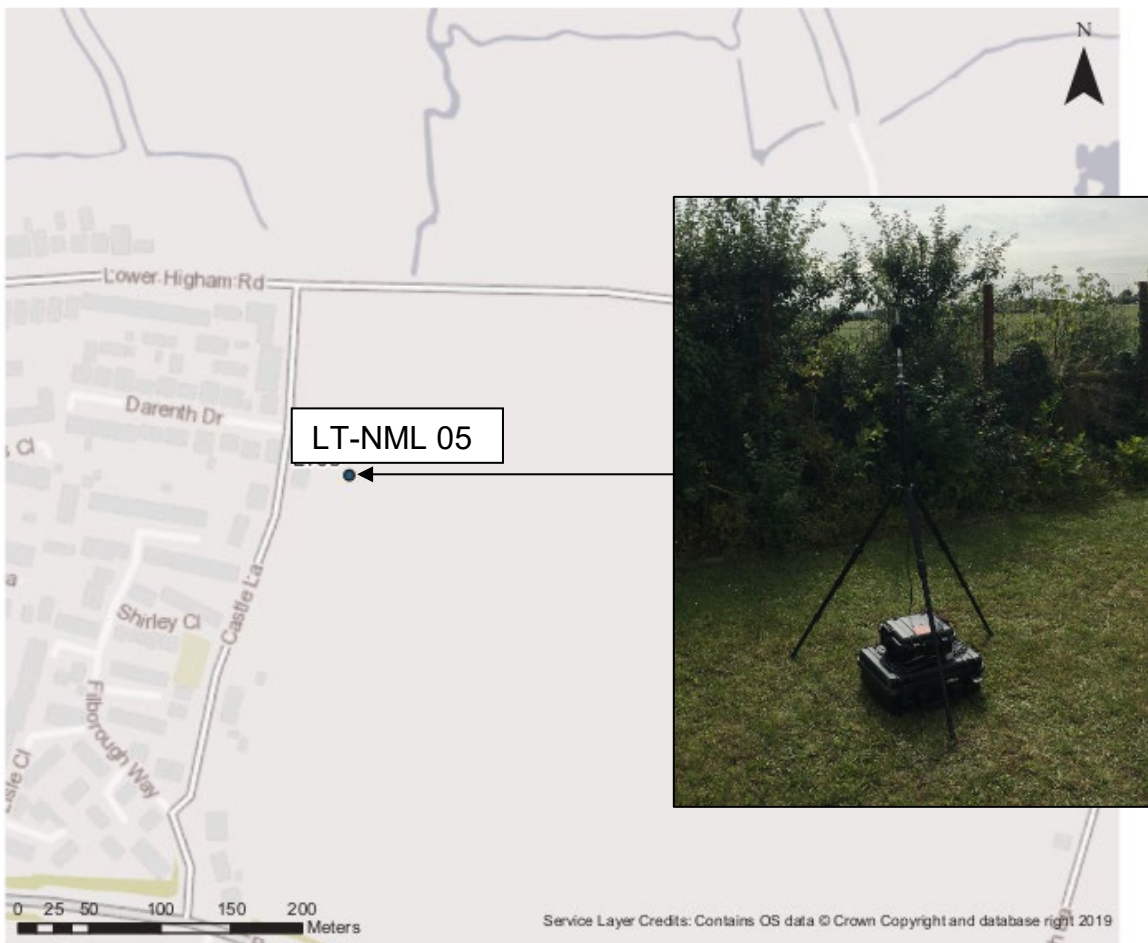
Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 04
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	20
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>Weather data obtained from this location – LT-NML 04 Church Lane (OS Grid Reference X = 568250 Y= 172551). Lower Thames Crossing ground investigation compound approximately 200m to the north-west - Surveyor noted no contribution from the compound to the noise climate at the survey location during setup of equipment.</i></p>	



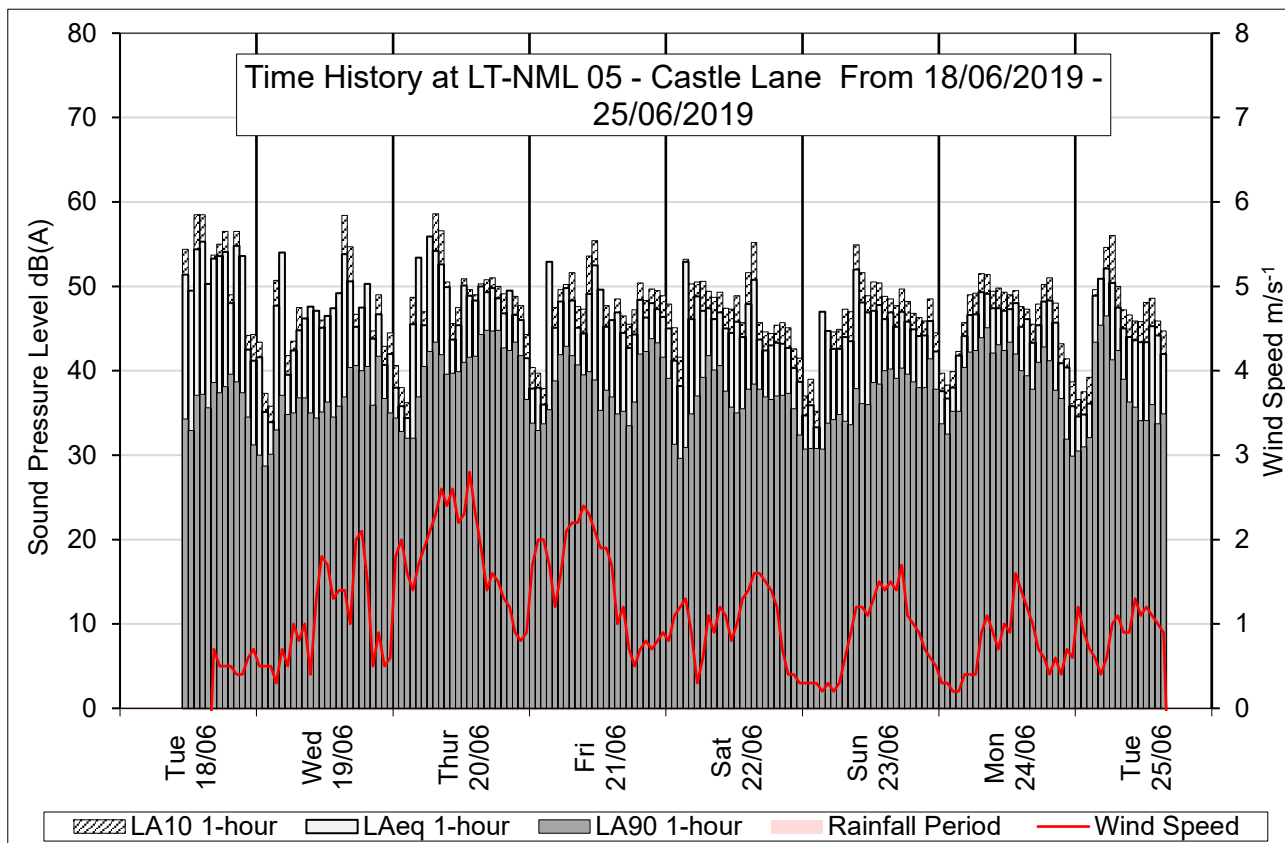
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 04 - Church Lane	Weekday 12 hour (07:00 – 19:00)	47.0	54.1	55.1
	Weekday 16 hour (07:00 – 23:00)	46.2	53.9	54.9
	Weekday 18 hour (06:00 – 00:00)	45.7	53.7	54.8
	Weekday evening (19:00 – 23:00)	42.8	52.0	52.8
	Night (23:00 – 07:00)	36.6	51.9	49.2
	Saturday (07:00 – 13:00)	41.6	49.2	51.2
	Saturday (13:00 – 23:00)	40.4	46.0	47.8
	Sunday 16 hour (07:00 – 23:00)	39.0	46.2	48.3

3.5 LT-NML 05 Castle Lane

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 05 – Castle Lane
Monitoring location description	
82 Castle Lane, Gravesend, DA12 4TQ.	
Ordnance Survey grid reference	X = 567860 Y = 173075
Survey position description	
Monitoring location in residential back garden.	
Local authority area	Gravesend Borough Council - Kent
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from Gravesend Road (A226) to the south - some distant road traffic noise from Lower Higham Rd to north. Some noise from aircraft. Distant rail noise at times. Noted by the surveyor to be subjectively quiet location during setup.	
Measurement start	18/06/2019 - 11:00
Measurement stop	25/06/2019 - 15:00




Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 05
Noise meter serial number (Microphone serial number)	10507 (114982)
Noise meter type	ACOEM 01db DUO
Laboratory calibration date (due) Certificate number (issuer)	05/06/2018 (05/06/2020) 03802/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	20
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from LT-NML 04 Church Lane (OS Grid Reference X = 568250 Y= 172551).</i>	

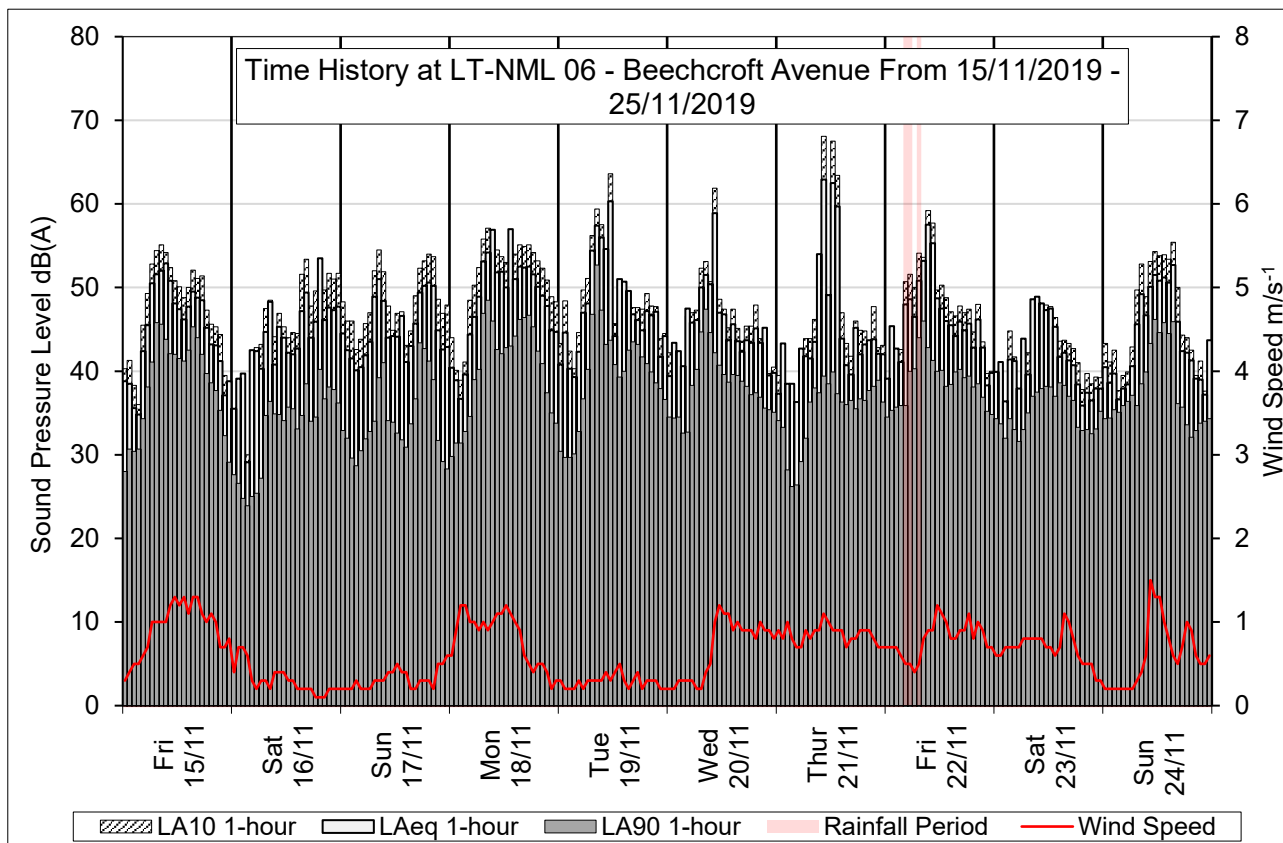


LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 05 - Castle Lane	Weekday 12 hour (07:00 – 19:00)	38.8	49.1	49.4
	Weekday 16 hour (07:00 – 23:00)	39.0	48.9	49.1
	Weekday 18 hour (06:00 – 00:00)	38.9	48.9	48.9
	Weekday evening (19:00 – 23:00)	39.2	47.5	47.5
	Night (23:00 – 07:00)	35.4	46.9	44.5
	Saturday (07:00 – 13:00)	38.5	46.1	48.5
	Saturday (13:00 – 23:00)	37.0	45.3	46.6
	Sunday 16 hour (07:00 – 23:00)	38.1	46.8	48.8

3.6 LT-NML 06 Beechcroft Avenue


Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 06 – Beechcroft Avenue
Monitoring location description	
46 Beechcroft Avenue, Linford, Stanford-Le-Hope, SS17 0RE.	
Ordnance Survey grid reference	X = 567421 Y = 178795
Survey position description	
Monitoring location in residential back garden of 46 Beechcroft Avenue.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/MA
Description of noise climate	
<i>Distant background road traffic noise from Muckingford Road to the north-west of the monitoring location. Some noise from distant aircraft at times. During the site visit (16:00 hours on 14/11), the surveyor noted the noise monitoring location to be subjectively tranquil and quiet.</i>	
Measurement start	15/11/2019 - 00:00
Measurement stop	25/11/2019 - 00:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 06
Noise meter serial number (Microphone serial number)	10695 (224214)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	03/07/2018 (03/07/2020) 03861/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	20
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420147
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140012 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location – LT-NML 06 Beechcroft Avenue (OS Grid Reference X = 567421 Y= 178795).</i>	

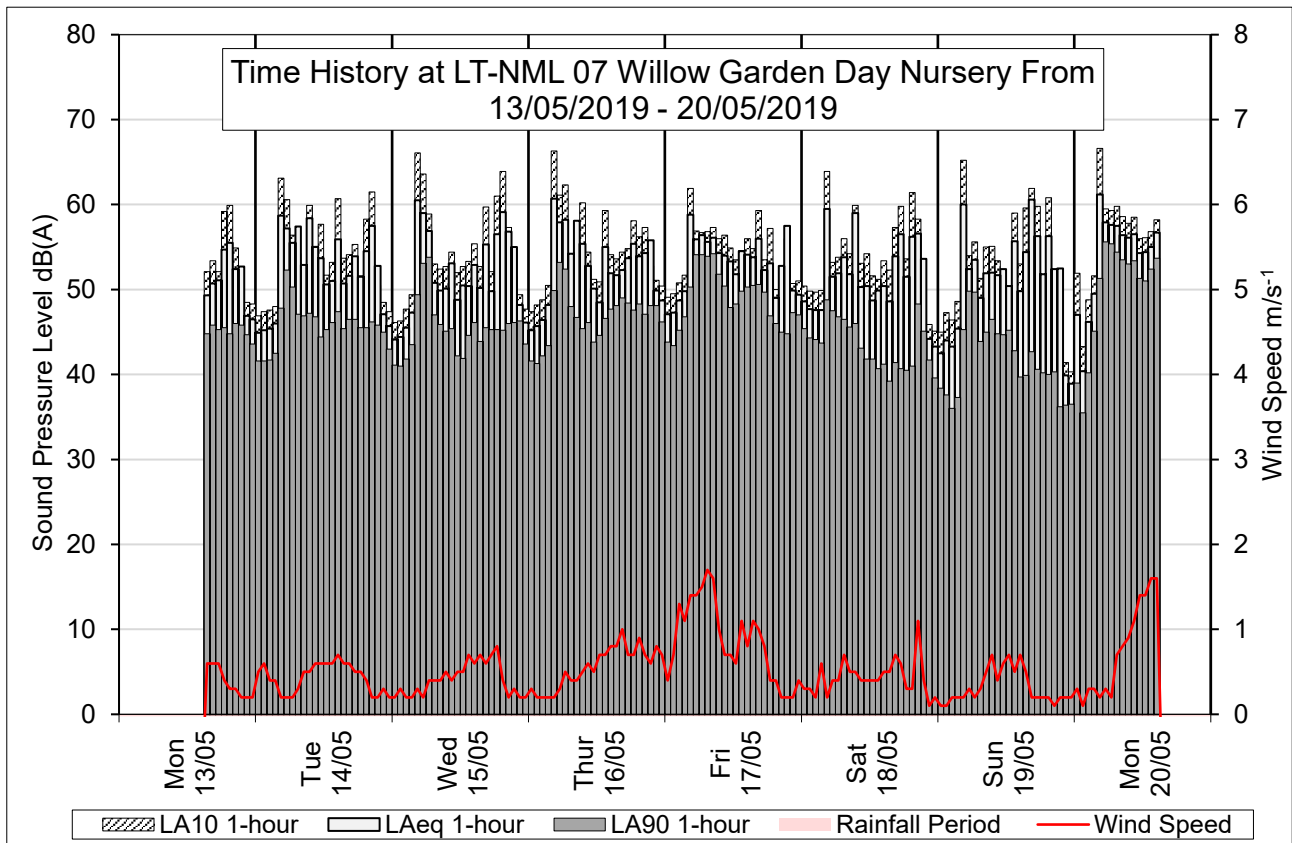


LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 06 - Beechcroft Avenue	Weekday 12 hour (07:00 – 19:00)	41.8	53.2	51.4
	Weekday 16 hour (07:00 – 23:00)	40.7	52.1	50.0
	Weekday 18 hour (06:00 – 00:00)	40.3	51.7	49.5
	Weekday evening (19:00 – 23:00)	36.5	45.6	45.5
	Night (23:00 – 07:00)	32.8	42.8	42.6
	Saturday (07:00 – 13:00)	36.2	46.4	46.4
	Saturday (13:00 – 23:00)	35.8	45.6	45.5
	Sunday 16 hour (07:00 – 23:00)	37.4	48.0	48.9

3.7 LT-NML 07 Willow Garden Day Nursery


Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 07 Willow Garden Day Nursery
Monitoring location description	
<i>Willow Garden Day Nursery, 176 Heath Road, Orsett Heath, Grays, Essex, RM16 3AP.</i>	
Ordnance Survey grid reference	X = 563947 Y = 179969
Survey position description	
<i>Monitoring location at northern facade of Willow Garden Day Nursery.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>During school times, children playing in nursery amenity space/playground. Background road traffic noise from A13, Dock Approach Road (A1013). Aircraft noise and birdsong present at times.</i>	
Measurement start	13/05/2019 - 15:00
Measurement stop	20/05/2019 - 15:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 07 Willow Garden Day Nursery
Noise meter serial number (Microphone serial number)	11403 (259481)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	17/04/2019 (17/04/2021) TR-REP-10136 (Acoustic1)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	19/06/2018 (19/06/2019) TCRT18/1534 (ANV Measurement Systems)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location – LT-NML 07 Willow Garden Day Nursery (OS Grid Reference X = 563947 Y= 179969).</i>	

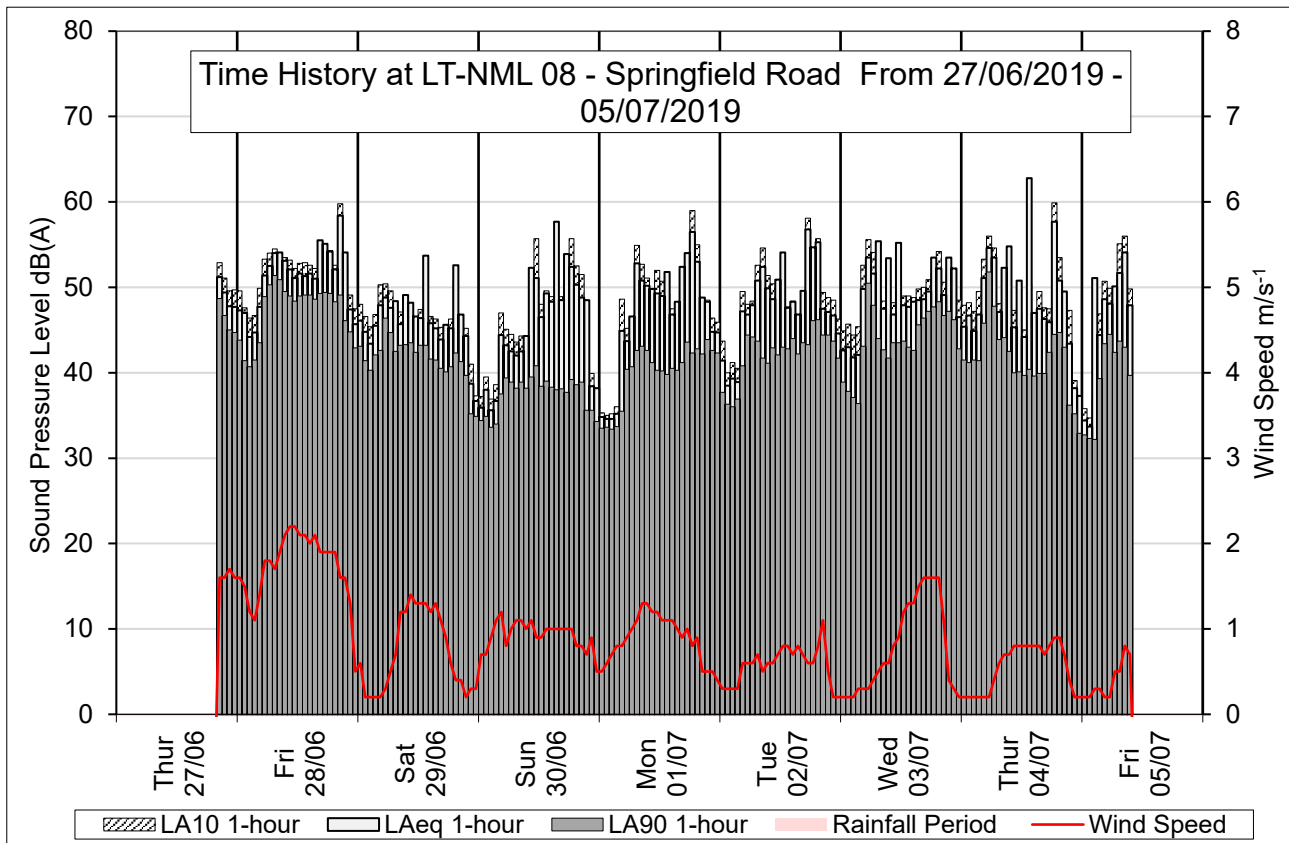


LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 07 Willow Garden Day Nursery	Weekday 12 hour (07:00 – 19:00)	47.7	54.1	55.4
	Weekday 16 hour (07:00 – 23:00)	47.3	54.1	55.0
	Weekday 18 hour (06:00 – 00:00)	47.5	54.2	54.9
	Weekday evening (19:00 – 23:00)	44.7	54.2	53.5
	Night (23:00 – 07:00)	45.3	54.2	52.7
	Saturday (07:00 – 13:00)	44.1	53.9	54.8
	Saturday (13:00 – 23:00)	42.0	53.5	54.5
	Sunday 16 hour (07:00 – 23:00)	41.8	54.1	53.8

3.8 LT-NML 08 Springfield Road

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 08 – Springfield Road
Monitoring location description	
60 Springfield Road, Grays, RM16 2QU.	
Ordnance Survey grid reference	X = 563075 Y = 179971
Survey position description	
Monitoring location in residential back garden of 60 Springfield Road.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Distant road traffic noise from A13 (barely perceivable). Dogs barking and children playing in back gardens. General residential activities from back gardens - maintenance work etc. 5 July 2019 - some noticeable noise of screaming/cheering from nearby - potentially school sport day on racetrack near property.</i>	
Measurement start	27/06/2019 - 20:00
Measurement stop	05/07/2019 - 10:00
	

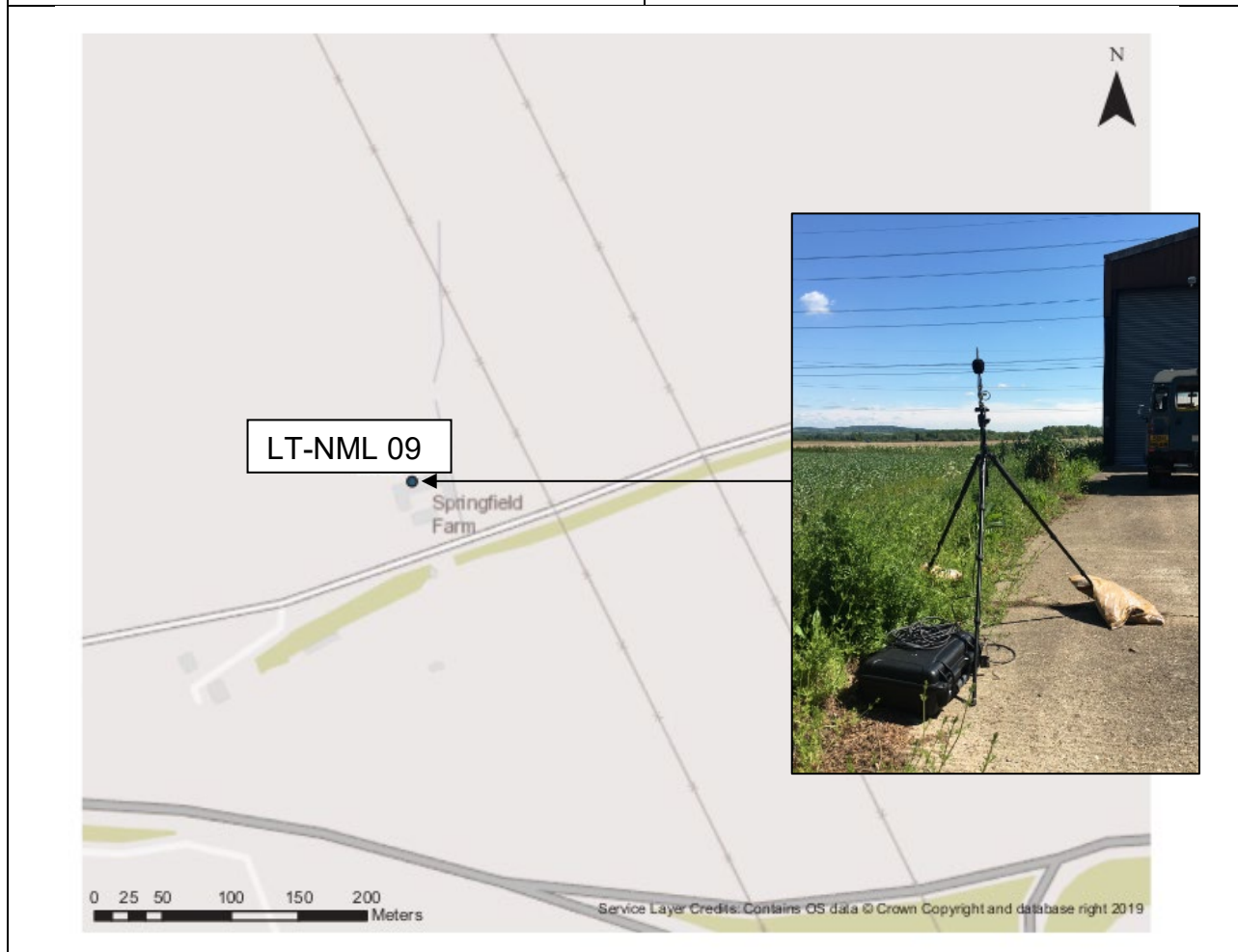
Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 08
Noise meter serial number (Microphone serial number)	11893 (330786)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	26/11/2018 (26/11/2020) CE-DTE-L-18-PVE-63178 (ACOEM)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from LT-NML 12 Lake Alexandria (OS Grid Reference X = 560586 Y= 182075).</i>	



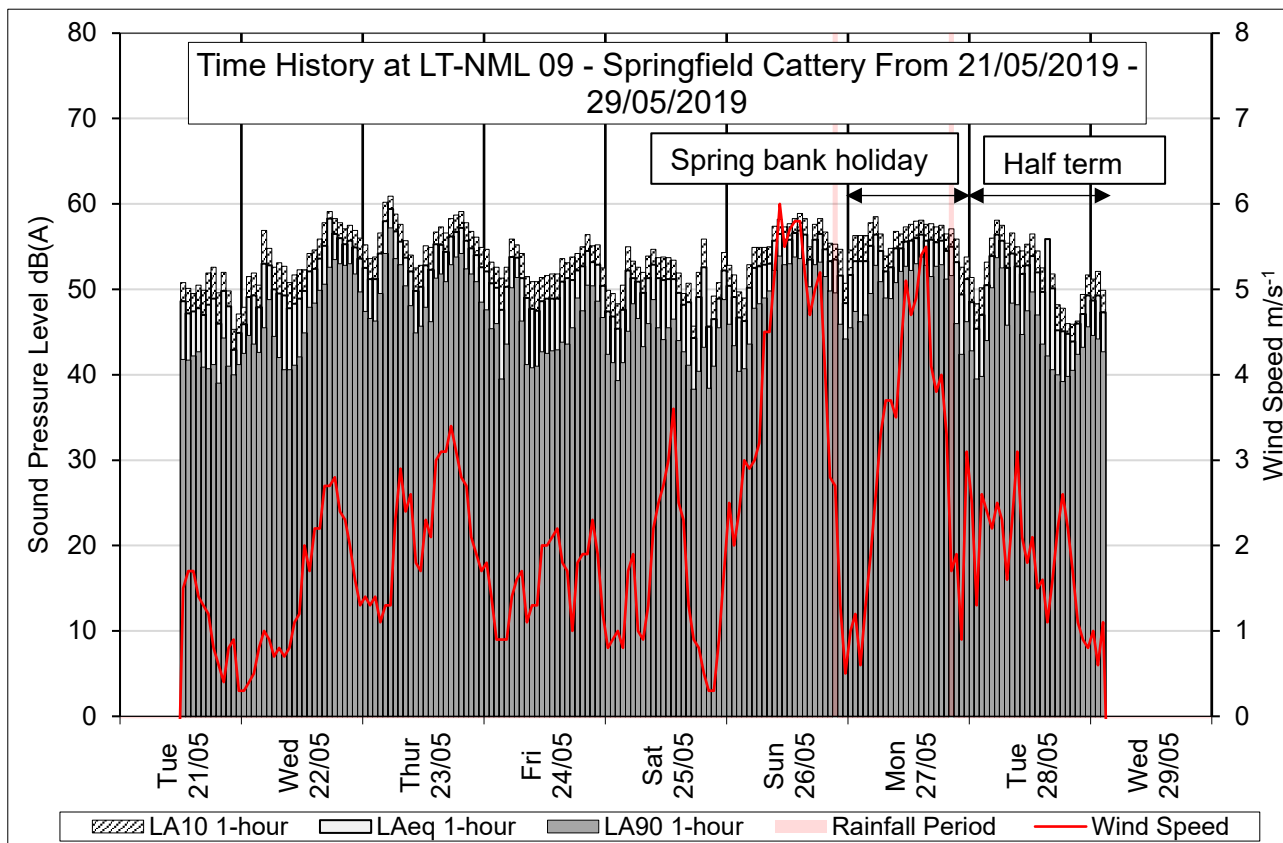
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 08 - Springfield Road	Weekday 12 hour (07:00 – 19:00)	43.8	52.7	51.0
	Weekday 16 hour (07:00 – 23:00)	44.1	52.4	50.9
	Weekday 18 hour (06:00 – 00:00)	44.0	52.1	50.6
	Weekday evening (19:00 – 23:00)	43.0	50.8	49.6
	Night (23:00 – 07:00)	40.3	47.0	45.6
	Saturday (07:00 – 13:00)	43.0	47.6	47.2
	Saturday (13:00 – 23:00)	40.6	48.2	46.1
	Sunday 16 hour (07:00 – 23:00)	38.3	50.7	48.4

3.9 LT-NML 09 Springfield Cattery

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 09 – Springfield Cattery
Monitoring location description	
<i>Springfield Farm, Stifford Clays Rd, Orsett, Grays RM16 3ND.</i>	
Ordnance Survey grid reference	X = 562553 Y = 181324
Survey position description	
<i>Monitoring location at the northern façade of Springfield Farm.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Monitoring location on the northern boundary of Springfield Farm (Springfield Cattery). Background road traffic noise from A13. On occasions, some road traffic noise from Stifford Clays Road to the South. Aircraft noise present at times.</i>	
Measurement start	21/05/2019 - 12:00
Measurement stop	29/05/2019 - 03:00



Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 09
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34323957
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	06/02/2019 (06/02/2020) CE-REP-10112 (Acoustic 1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>Weather data obtained from LT-NML 11 Baker Street Mill (OS Grid Reference X = 563308 Y= 181287). Bank holiday and half term from 27 May onwards. 'We Are FSTVL' 24 - 26 May at Damyns Hall Aerodrome, Aveyley Road, Upton, RM14 2TN. Some prior noise and meteorological data obtained at this location during November 2018, however equipment found to be fallen by excessive wind speeds and therefore noise survey repeated in entirety in May 2019.</i></p>	



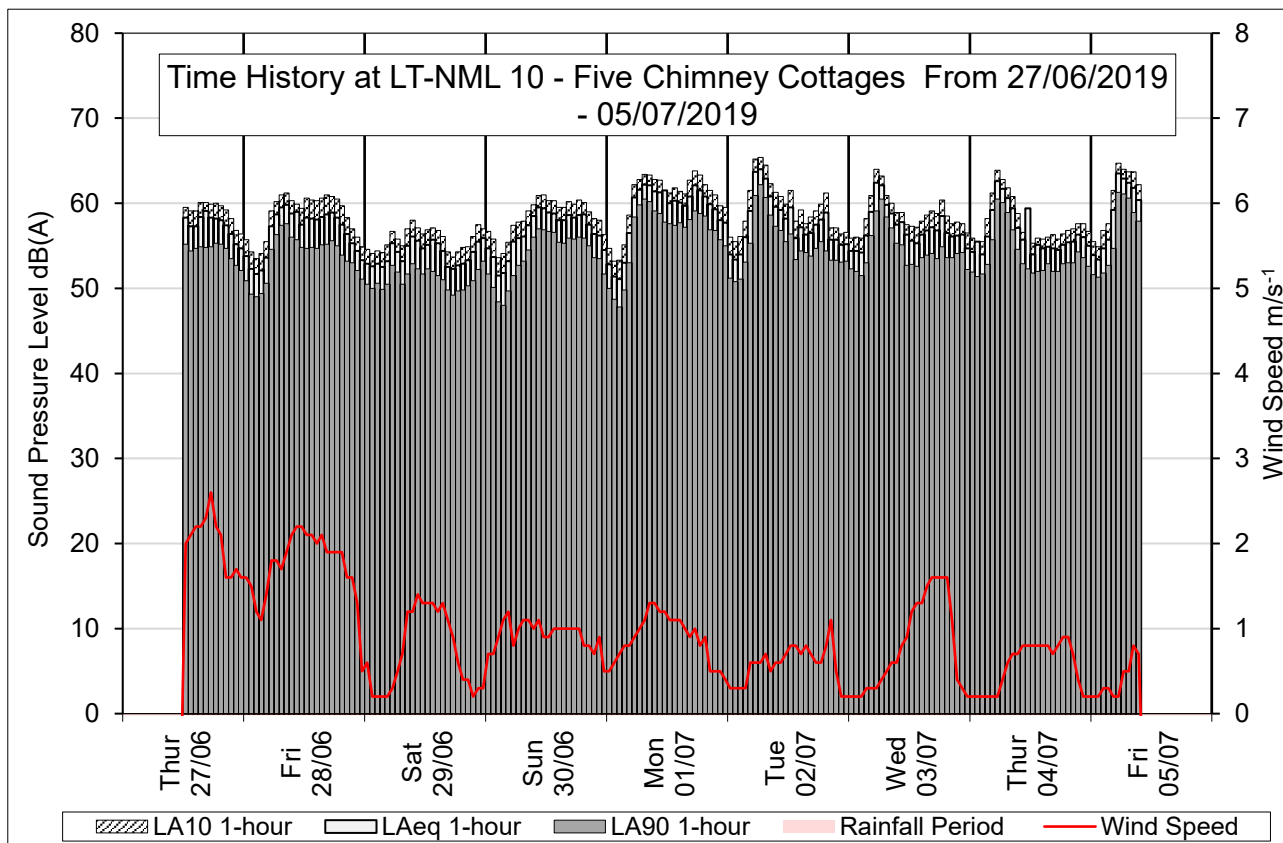
LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 09 - Springfield Cattery	Weekday 12 hour (07:00 – 19:00)	46.3	52.8	54.0
	Weekday 16 hour (07:00 – 23:00)	46.6	52.9	53.9
	Weekday 18 hour (06:00 – 00:00)	46.8	52.9	53.9
	Weekday evening (19:00 – 23:00)	46.7	52.8	53.3
	Night (23:00 – 07:00)	46.2	52.3	53.5
	Saturday (07:00 – 13:00)	45.5	51.3	53.6
	Saturday (13:00 – 23:00)	42.1	49.1	50.5
	Sunday 16 hour (07:00 – 23:00)	49.9	53.7	55.6

3.10 LT-NML 10 Five Chimney Cottages

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 10 – Five Chimney Cottages
Monitoring location description	
3 Five Chimney Cottages, Stanford Road, Orsett, Grays, RM16 3JL.	
Ordnance Survey grid reference	X = 564174 Y = 180663
Survey position description	
Monitoring location in residential back garden of No 3, Five Chimney Cottages.	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from the A13 to the north, and on occasions, some road traffic noise from Stanford Road (A1013). The noise environment at the monitoring location was, completely dominated by the road traffic noise from the A13.	
Measurement start	27/06/2019 - 12:00
Measurement stop	05/07/2019 - 10:00

The figure consists of a map and an inset photograph. The map shows the A13 road running diagonally from the top right to the bottom left. A1013 (Stanford Road) is shown as a secondary road. The location of 'Five Chimney Cottages' is marked with a blue dot and labeled 'LT-NML 10'. Other monitoring locations are marked: 'A-NML 15' to the southwest and 'A-NML 14' to the southeast. A scale bar at the bottom left shows distances from 0 to 200 meters. A north arrow is in the top right. The inset photograph shows a noise measurement device on a tripod in the back garden of a house, with a fence and plants visible.

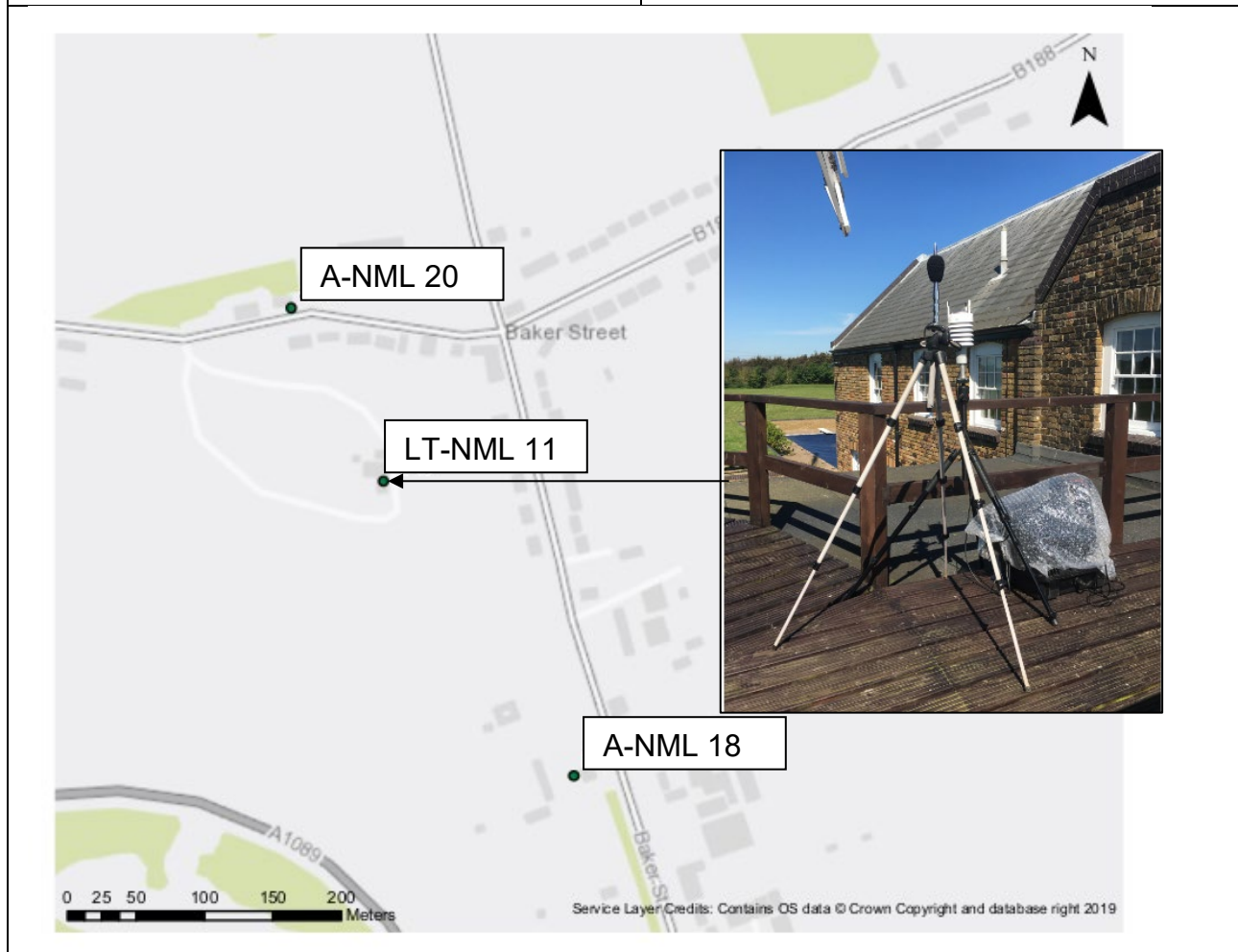
Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 10
Noise meter serial number (Microphone serial number)	10507 (114982)
Noise meter type	ACOEM 01db DUO
Laboratory calibration date (due) Certificate number (issuer)	05/06/2018 (05/06/2020) 03802/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	40
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from LT-NML 12 Lake Alexandria (OS Grid Reference X = 560586 Y= 182075).</i>	



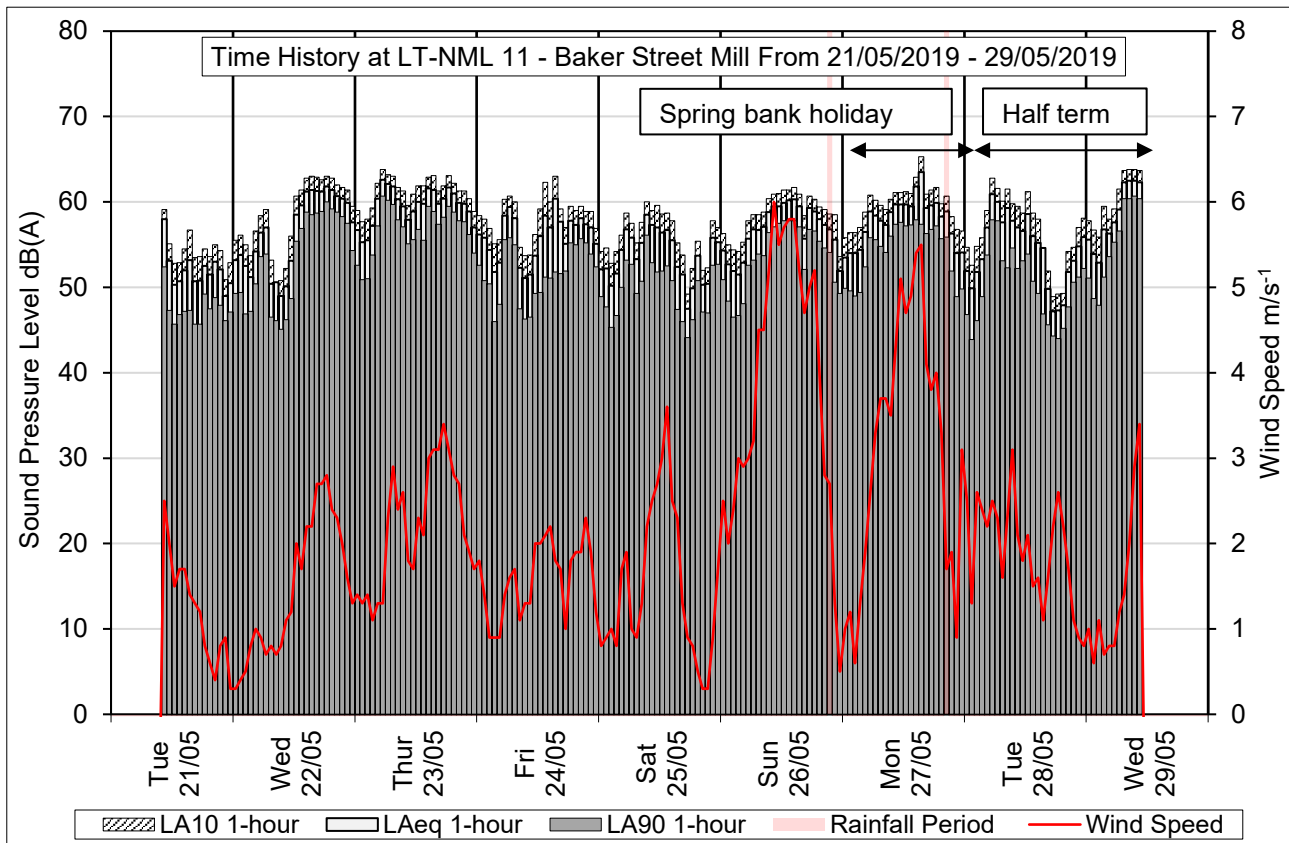
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 10 - Five Chimney Cottages	Weekday 12 hour (07:00 – 19:00)	55.7	59.0	60.0
	Weekday 16 hour (07:00 – 23:00)	55.3	58.6	59.6
	Weekday 18 hour (06:00 – 00:00)	55.4	58.7	59.6
	Weekday evening (19:00 – 23:00)	53.8	56.8	58.1
	Night (23:00 – 07:00)	53.0	57.5	57.5
	Saturday (07:00 – 13:00)	51.9	55.0	56.7
	Saturday (13:00 – 23:00)	50.6	54.1	55.6
	Sunday 16 hour (07:00 – 23:00)	55.5	58.2	59.6

3.11 LT-NML 11 Baker Street Mill

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 11 – Baker Street Mill
Monitoring location description	
<i>Baker Street Mills, Stifford Clays Road, Orsett, Grays, RM16 3LX.</i>	
Ordnance Survey grid reference	X = 563308 Y = 181287
Survey position description	
<i>Monitoring location in residential back garden on balcony adjacent to Baker Street Mill.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/JH
Description of noise climate	
<i>Background road traffic noise from A13 to the west. Potential noise from cars on gravel driveway, potential for dogs barking. Some noise from aircraft. Flight path above property – surveyor noticed aircraft flyover occurrence every five minutes on average.</i>	
Measurement start	21/05/2019 - 11:00
Measurement stop	29/05/2019 - 11:00



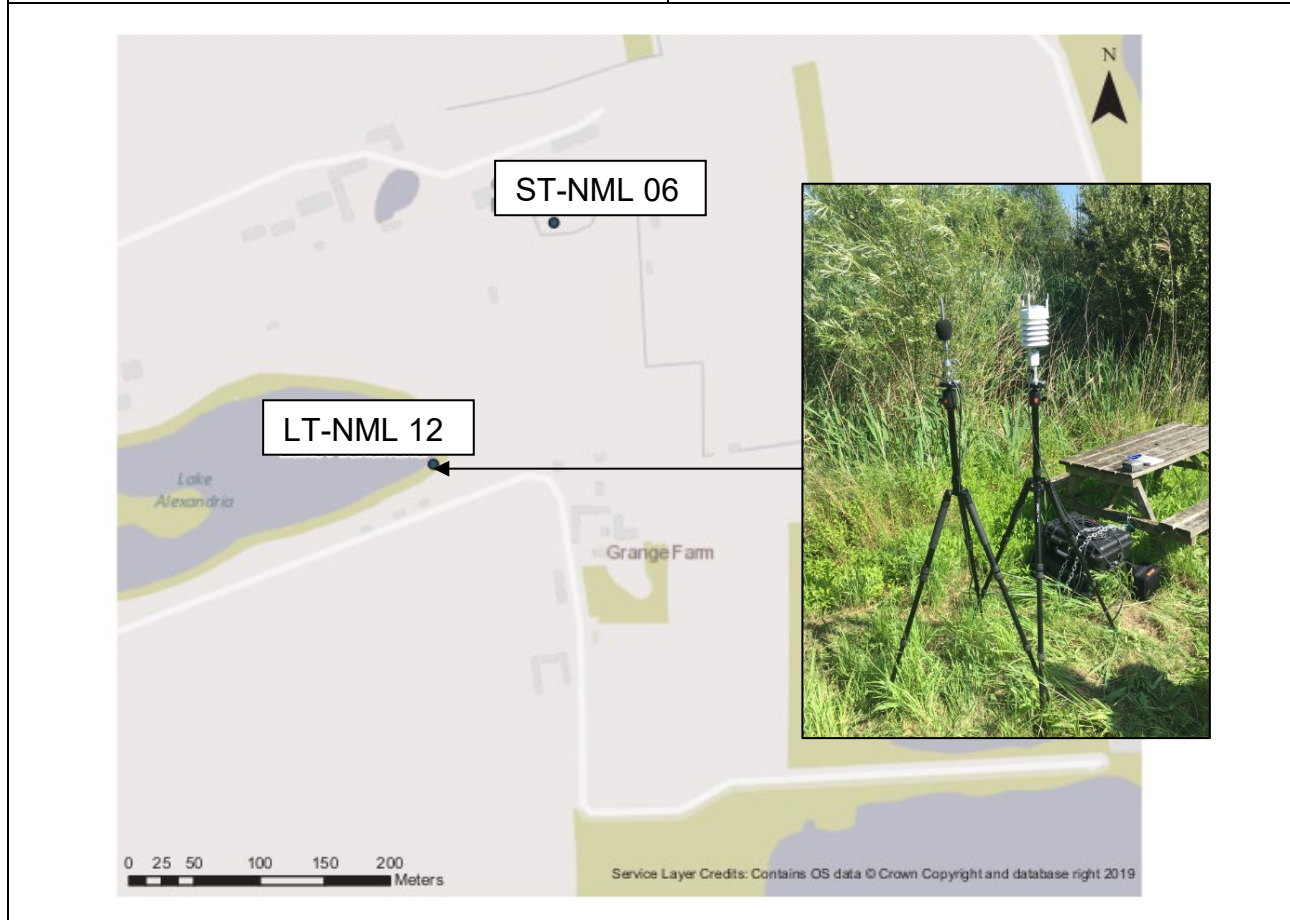
Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 11
Noise meter serial number (Microphone serial number)	11403 (259481)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	17/04/2019 (17/04/2021) TR-REP-10136 (Acoustic1)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34323957
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	06/02/2019 (06/02/2020) CE-REP-10112 (Acoustic 1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<p><i>Weather data obtained from this location – LT-NML 11 Baker Street Mills (OS Grid Reference X = 563308 Y= 181287). Bank holiday and half term from 27 May onwards. 'We Are FSTVL' Fri 24 - Sun 26 May at Damyns Hall Aerodrome, Aveley Road, Upminster, RM14 2TN. Monitoring location in the back garden, on balcony adjacent to Mill, and close to the building façade.</i></p>	



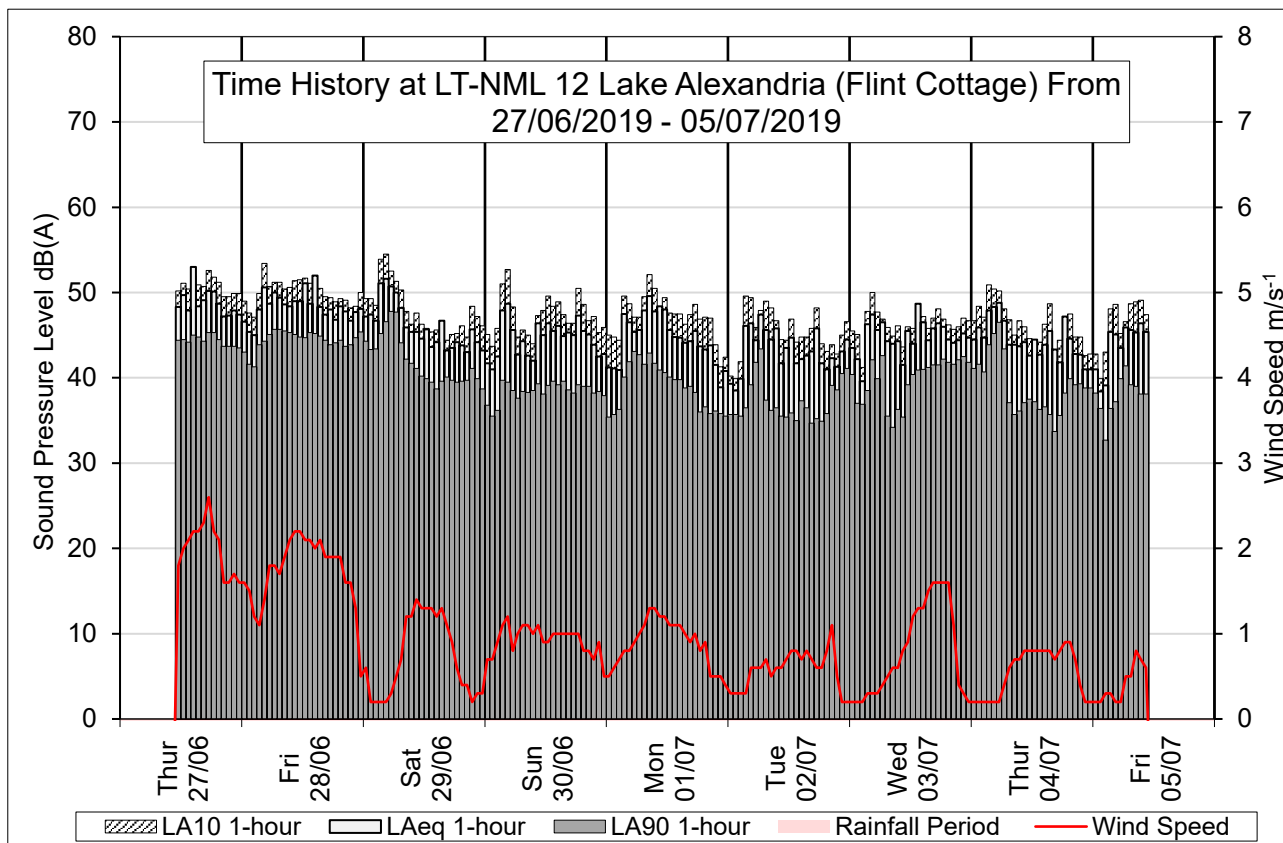
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 11 - Baker Street Mill	Weekday 12 hour (07:00 – 19:00)	53.1	58.4	58.8
	Weekday 16 hour (07:00 – 23:00)	53.1	58.3	58.6
	Weekday 18 hour (06:00 – 00:00)	53.2	58.2	58.6
	Weekday evening (19:00 – 23:00)	52.8	57.2	57.6
	Night (23:00 – 07:00)	51.3	56.2	57.4
	Saturday (07:00 – 13:00)	52.1	56.6	58.3
	Saturday (13:00 – 23:00)	48.5	53.3	54.4
	Sunday 16 hour (07:00 – 23:00)	53.9	57.3	59.1

3.12 LT-NML 12 Lake Alexandria (Flint Cottage)

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 12 Lake Alexandria (Flint Cottage)
Monitoring location description	
<i>Lake Alexandria, Mollands Lane, South Ockendon, Essex, RM15 6RT.</i>	
Ordnance Survey grid reference	X = 560586 Y = 182075
Survey position description	
<i>Lake Alexandria, approx 90m west from Flint Cottage.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Monitoring location adjacent to fishing lake near cottage. Surveyor subjectively noted the location to be generally tranquil conditions. Distant road traffic noise from A13. Potential noise from cars using access road for fishing lakes. Some noise from distant aircraft, bird noises and vegetation rustle. Flight path above property - occurrence every five minutes on average. Some distant industrial based noises at times.</i>	
Measurement start	27/06/2019 - 11:00
Measurement stop	05/07/2019 - 11:00

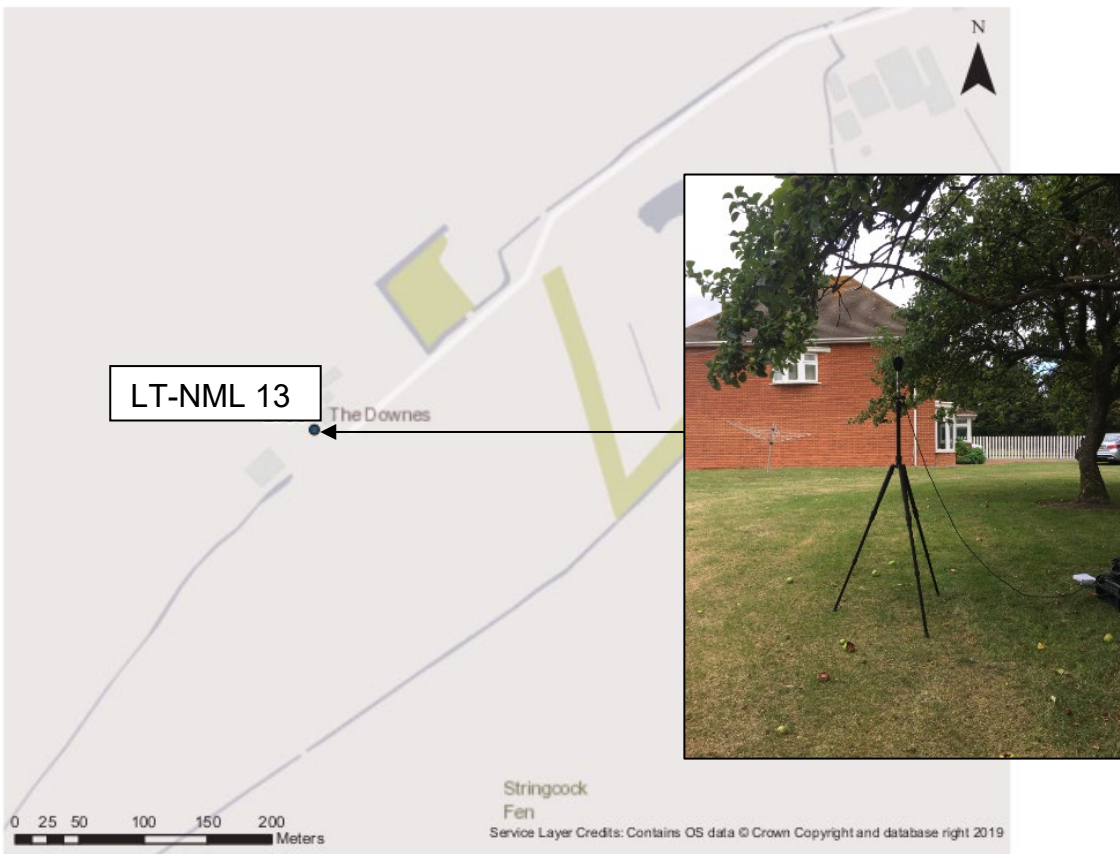


Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 12
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	80
Output level range lower	20
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location – LT-NML 12 Lake Alexandria (Flint Cottage) (OS Grid Reference X = 560586 Y= 182075).</i>	

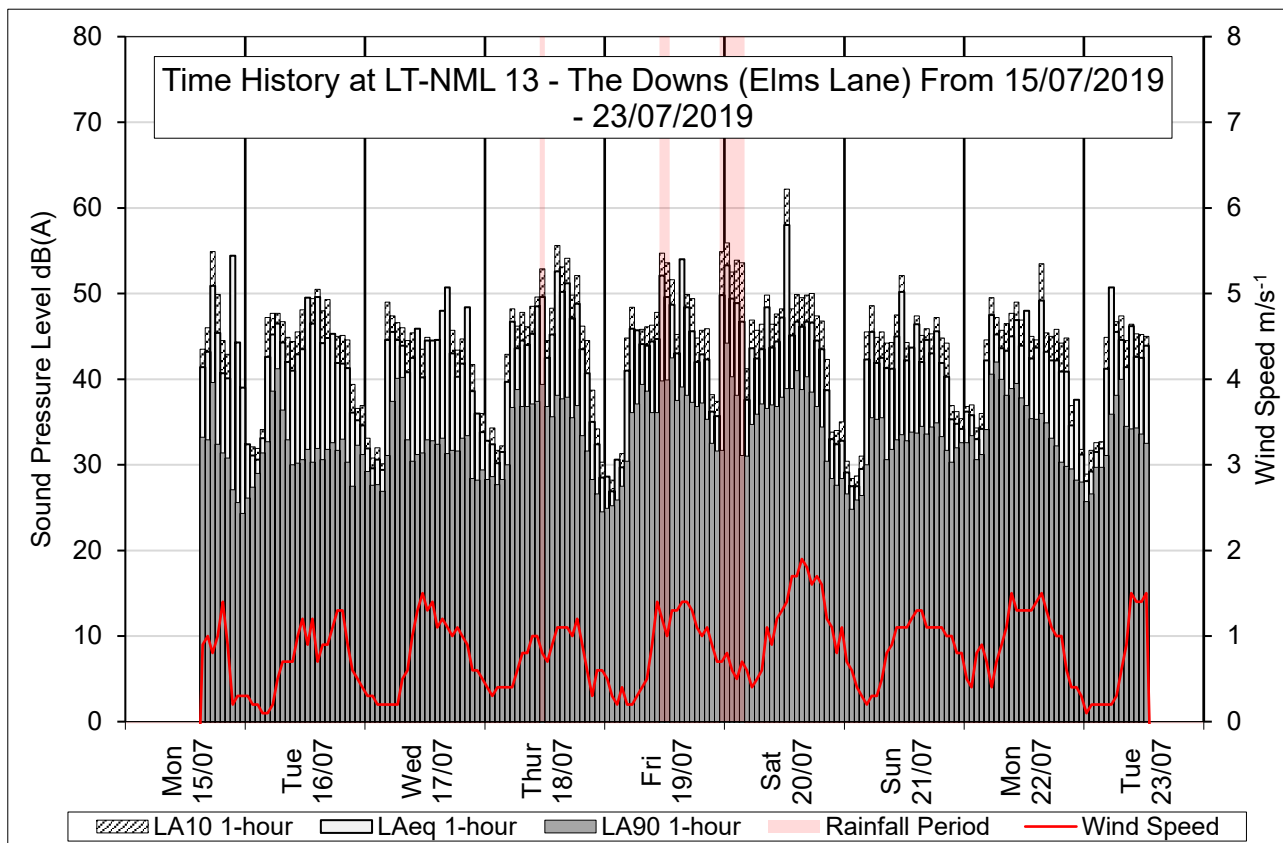


LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 12 Lake Alexandria (Flint Cottage)	Weekday 12 hour (07:00 – 19:00)	39.8	46.9	47.8
	Weekday 16 hour (07:00 – 23:00)	40.0	46.5	47.4
	Weekday 18 hour (06:00 – 00:00)	40.3	46.5	47.4
	Weekday evening (19:00 – 23:00)	40.3	45.0	46.5
	Night (23:00 – 07:00)	40.5	46.3	47.4
	Saturday (07:00 – 13:00)	41.5	46.0	47.4
	Saturday (13:00 – 23:00)	39.7	44.4	45.8
	Sunday 16 hour (07:00 – 23:00)	38.8	45.1	47.2

3.13 LT-NML 13 The Downs (Elms Lane)


Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 13 – The Downs (Elms Lane)
Monitoring location description	
<i>The Downs, Elms Lane, Church Lane, Bulphan, Upminster, RM14 3TS</i>	
Ordnance Survey grid reference	X = 563160 Y = 184681
Survey position description	
<i>Monitoring location in residential back garden of The Downs, Bulphan.</i>	
Local authority area	Thurrock Council - Essex
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Monitoring location in residential back garden of The Downs, Elms Lane, Bulphan. Surveyor subjectively noted the locality to be extremely tranquil most of the time- and confirmed by the landowner especially so during the night-time. Distant background road traffic noise barely perceivable. Bird noises at times, likely to influence levels in the morning time with sunrise. Potential noise from car washing/cleaning activities. Some aircraft noise at times, however barely perceivable.</i>	
Measurement start	15/07/2019 - 11:00
Measurement stop	23/07/2019 - 14:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 13
Noise meter serial number (Microphone serial number)	11118 (260893)
Noise meter type	ACOEM 01db CUBE
Laboratory calibration date (due) Certificate number (issuer)	18/12/2018 (18/12/2020) 03556/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	20
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from LT-NML 15 Latchford Farm Aquatics (OS Grid Reference X = 558929 Y= 187186). Essex County Council and London Borough of Havering - summer school term ends 24 July 2019.</i>	

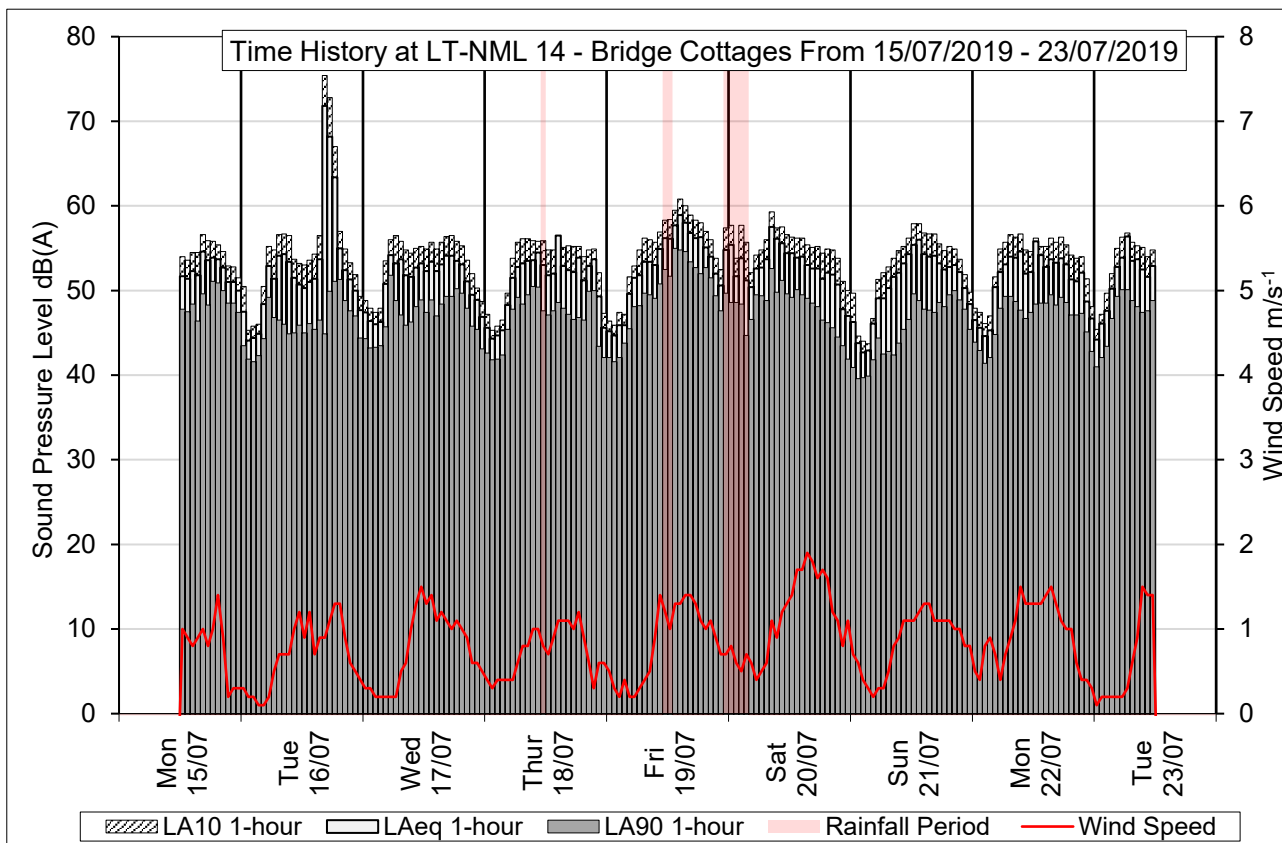


LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 13 - The Downs (Elms Lane)	Weekday 12 hour (07:00 – 19:00)	35.0	46.3	47.2
	Weekday 16 hour (07:00 – 23:00)	33.9	45.8	45.5
	Weekday 18 hour (06:00 – 00:00)	33.9	45.6	45.0
	Weekday evening (19:00 – 23:00)	30.7	43.0	40.8
	Night (23:00 – 07:00)	31.1	41.3	38.0
	Saturday (07:00 – 13:00)	37.4	51.4	50.1
	Saturday (13:00 – 23:00)	35.5	44.4	45.2
	Sunday 16 hour (07:00 – 23:00)	33.1	44.0	44.7

3.14 LT-NML 14 Bridge Cottages


Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 14 – Bridge Cottages
Monitoring location description	
1 Bridge Cottages, Ockendon Road, Upminster, RM14 3QP.	
Ordnance Survey grid reference	X = 558205 Y = 185112
Survey position description	
Monitoring location in residential back garden of Number 1 Bridge Cottages.	
Local authority area	London Borough of Havering
Survey technician reference (initials)	JW/CH
Description of noise climate	
Background road traffic noise from M25 motorway dominant at survey location. Some road traffic noise from Ockendon Road (B1421). Some noise from birds singing. Some distant rail noise at times. Some distant aircraft noise at times. Potential noise from residential activities.	
Measurement start	15/07/2019 - 12:00
Measurement stop	23/07/2019 - 12:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 14
Noise meter serial number (Microphone serial number)	10507 (114982)
Noise meter type	ACOEM 01db DUO
Laboratory calibration date (due) Certificate number (issuer)	05/06/2018 (05/06/2020) 03802/1 (University of Salford)
Frequency weighting	A
Time weighting	F
Output level range upper	90
Output level range lower	30
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from LT-NML 15 Latchford Farm (OS Grid Reference X = 558929 Y= 187186). Essex County Council and London Borough of Havering - summer school term ends 24 July 2019.</i>	

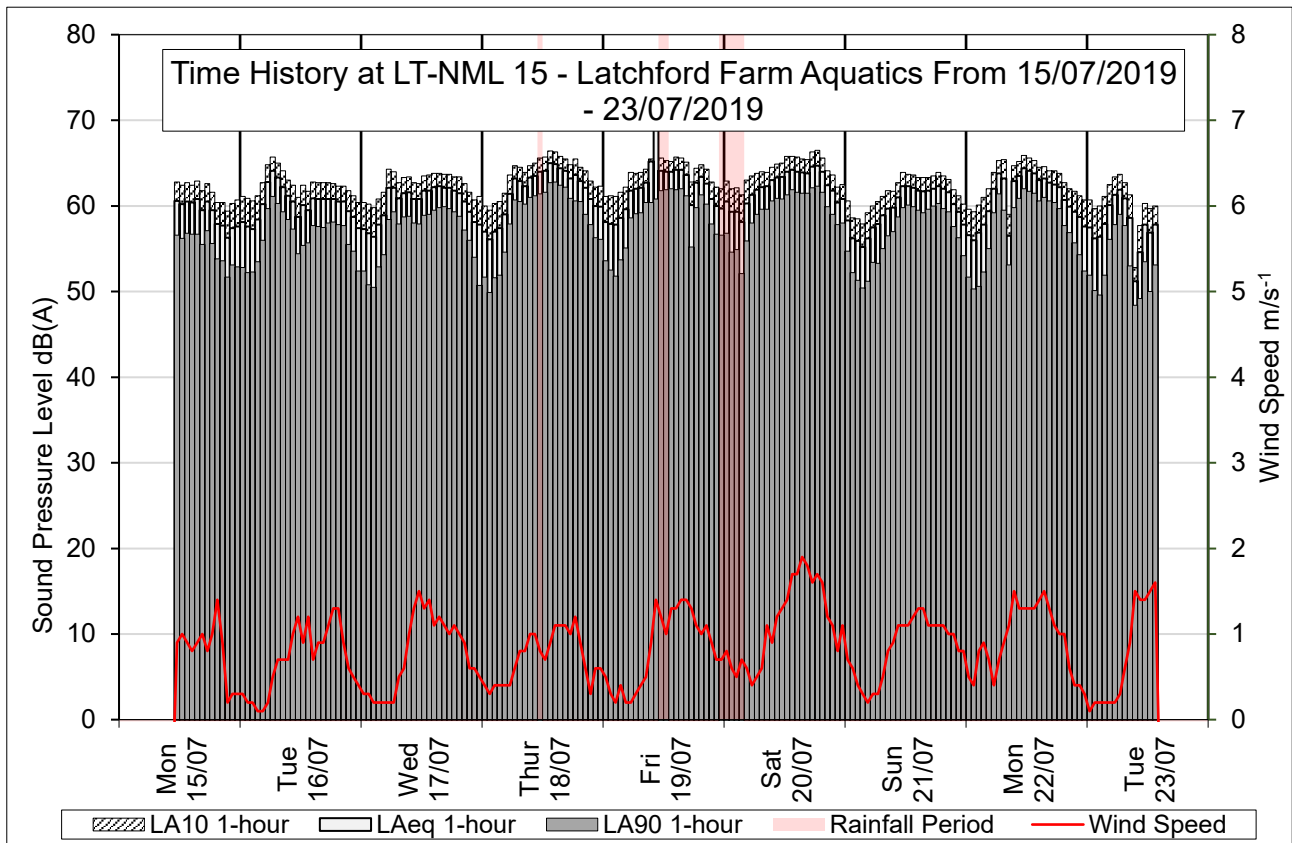


LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 14 - Bridge Cottages	Weekday 12 hour (07:00 – 19:00)	48.5	57.6	56.4
	Weekday 16 hour (07:00 – 23:00)	48.4	56.7	55.8
	Weekday 18 hour (06:00 – 00:00)	48.3	56.4	55.4
	Weekday evening (19:00 – 23:00)	48.0	52.0	53.8
	Night (23:00 – 07:00)	44.6	49.5	50.0
	Saturday (07:00 – 13:00)	50.2	55.5	57.2
	Saturday (13:00 – 23:00)	47.2	52.3	54.7
	Sunday 16 hour (07:00 – 23:00)	47.2	53.4	55.3

3.15 LT-NML 15 Latchford Farm Aquatics

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 15 – Latchford Farm Aquatics
Monitoring location description	
<i>Latchford Farm, St Marys Lane, Upminster, RM14 3PB.</i>	
Ordnance Survey grid reference	X = 558929 Y = 187186
Survey position description	
<i>Monitoring location in residential back garden of Latchford Farm.</i>	
Local authority area	London Borough of Havering
Survey technician reference (initials)	JW/CH
Description of noise climate	
<i>Noise from M25 motorway top of the embankment to the west of the monitoring location. Potential noise from cars using access road to park at Latchford Farm Aquatics. Some noise from distant aircraft with birdsong noticeable at monitoring location. Grass cutting in the latter half of the week - 19 July 2019 (morning).</i>	
Measurement start	15/07/2019 - 11:00
Measurement stop	23/07/2019 - 14:00
	

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 15
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	100
Output level range lower	40
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location – LT-NML 15 Latchford Farm (OS Grid Reference X = 558929 Y= 187186). Essex County Council and London Borough of Havering - summer school term ends 24 July 2019.</i>	



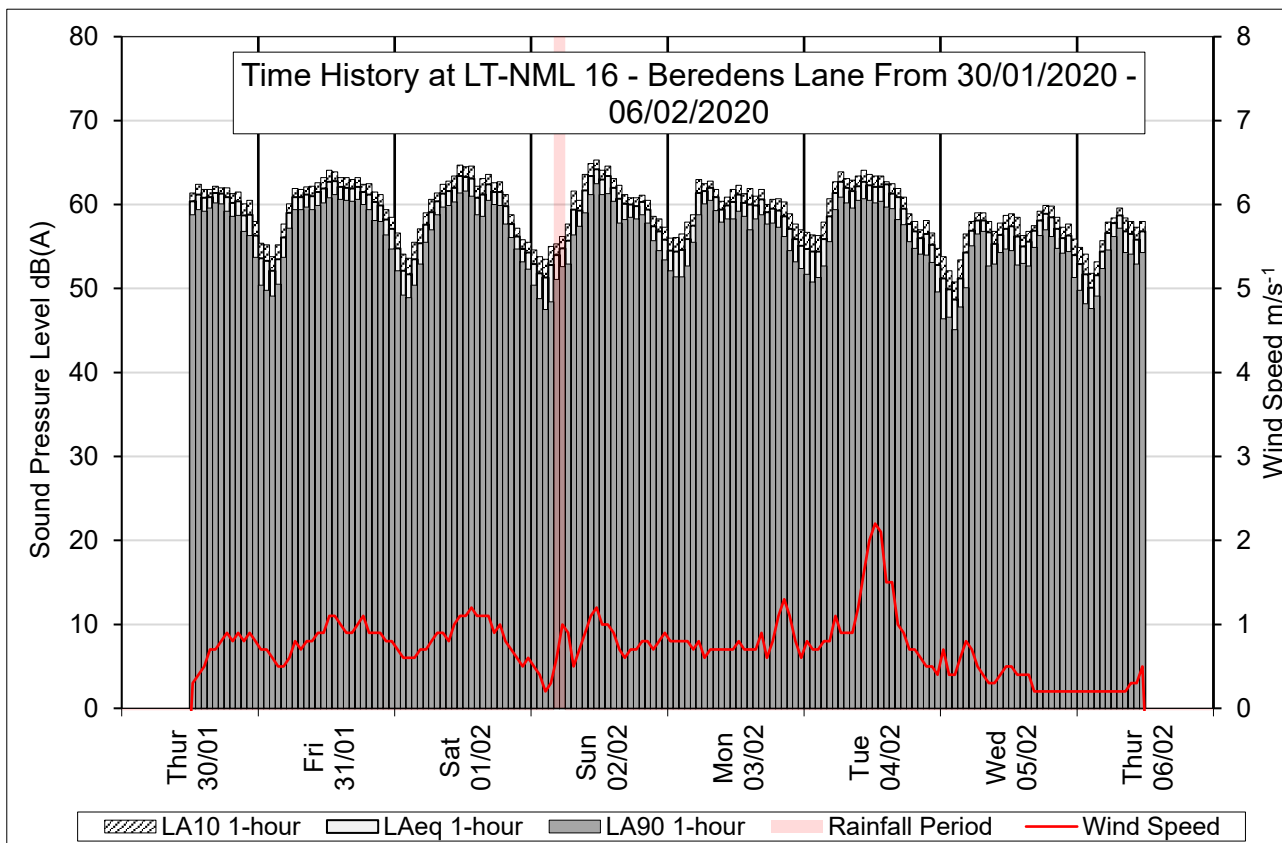
LTNML	Time period (T)	L _{A90,T}	L _{Aeq,T}	L _{A10,T}
LT-NML 15 - Latchford Farm Aquatics	Weekday 12 hour (07:00 – 19:00)	58.5	62.8	63.5
	Weekday 16 hour (07:00 – 23:00)	58.0	62.3	63.2
	Weekday 18 hour (06:00 – 00:00)	57.9	62.2	63.1
	Weekday evening (19:00 – 23:00)	57.2	60.7	62.4
	Night (23:00 – 07:00)	54.3	59.5	61.5
	Saturday (07:00 – 13:00)	60.5	63.1	64.7
	Saturday (13:00 – 23:00)	60.9	63.6	65.1
	Sunday 16 hour (07:00 – 23:00)	58.7	61.3	62.8

3.16 LT-NML 16 Beredens Lane

Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 16 – Beresden Lane
Monitoring location description	
<i>Beredens Lane, Great Warley, Brentwood, CM13 3JB.</i>	
Ordnance Survey grid reference	X = 557745 Y = 190080
Survey position description	
<i>Monitoring location in residential garden of property on Beredens Lane, Brentwood.</i>	
Local authority area	Brentwood Borough Council, Essex.
Survey technician reference (initials)	JW/VG
Description of noise climate	
<i>Monitoring location characterised by background road traffic noise from M25 to the south and west which dominates the noise environment. Some noise from birdsong and distant aircraft at times.</i>	
Measurement start	30/01/2020 - 12:00
Measurement stop	06/02/2020 - 12:00



Equipment details, survey specifics and location description	
Monitoring location reference	LT-NML 16
Noise meter serial number (Microphone serial number)	11039 (233310)
Noise meter type	ACOEM 01db FUSION
Laboratory calibration date (due) Certificate number (issuer)	09/02/2018 (09/02/2020) UCRT18/1150 (ANV Measurement Systems)
Frequency weighting	A
Time weighting	F
Output level range upper	20
Output level range lower	80
Calibrator serial number	34936367
Calibrator type	RION NC-74
Laboratory calibration date (due) Certificate number (issuer)	12/06/2019 (12/06/2020) CE-REP-10143 (Acoustic1)
Field calibration level start	94
Field calibration level end	94
Field calibration variance	0
Field calibration drift	No significant drift observed
Met station serial number	P1420148
Met station type	VAISALA Weather Transmitter WXT530 Series
Laboratory calibration date Calibration sheet no (issuer)	28/02/2018 H31-18140014 (VAISALA MSL)
Measured parameters per period	Average wind speed (m/s)
	Wind direction (°)
	Average rainfall (mm/hr)
Additional survey notes	
<i>Weather data obtained from this location LT-NML 16 - Beresden (OS Grid Reference X = 557745 Y= 190080). At survey start, overcast (100%), 10.3°C with little to no wind (<5 m/s). No rain at survey start, however some rainfall prior to setup of equipment.</i>	



LTNML	Time period (T)	LA90,T	LAeq,T	LA10,T
LT-NML 16 - Beredens Lane	Weekday 12 hour (07:00 – 19:00)	58.0	60.4	61.1
	Weekday 16 hour (07:00 – 23:00)	57.5	60.0	60.7
	Weekday 18 hour (06:00 – 00:00)	57.3	59.9	60.5
	Weekday evening (19:00 – 23:00)	56.0	58.3	59.3
	Night (23:00 – 07:00)	52.2	56.3	56.7
	Saturday (07:00 – 13:00)	60.3	62.1	63.2
	Saturday (13:00 – 23:00)	58.1	60.6	61.2
	Sunday 16 hour (07:00 – 23:00)	58.7	61.2	62.0

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