



Morven Hawthorn Pit Grid Connection Project

Preliminary Environmental Information Report

Volume 3, Annex 6.1: Onshore Noise and Vibration
Baseline Technical Report

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WSP	Morven Offshore Wind Limited

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Glossary

Term	Meaning
A-weighting	The process of weighting the observed SPL at each frequency band, to approximate the sensitivity of the human ear to sounds of different frequencies. A-weighted SPL are expressed as dB(A) or dB LAp.
Alternative Current (AC) connection cable corridor	The corridor within which the AC connection cables will be located, from the onshore land substation (LSS) to the National Grid Hawthorn Pit Substation.
Ambient sound level	The total sound pressure level (SPL) in a given position from all surrounding sources of noise, both near and far. Normally expressed as an equivalent continuous A-weighted SPL, dB LAeq,T.
Decibel	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in SPL between two sounds is given by $20 \log_{10}$. The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is $20 \mu\text{Pa}$.
Free-field	A sound monitoring position is a “free-field” position when it is not affected by sound reflections from surrounding buildings and structures. This corresponds with a position at least 3.5 metres away from reflecting buildings or structures.
Marine Directorate Licensing Operations Team (MD-LOT)	The part of the Scottish Government’s Marine Directorate responsible for assessing and administering applications for marine licences and Section 36 consent (offshore) in Scotland.
Morven Hawthorn Pit Grid Connection (MHPGC) Project PEIR Red Line Boundary: Onshore	Spatial extent used to define the environmental assessment within the Preliminary Environmental Information Report (PEIR). The area within which all onshore components of the MHPGC Project will be located landward of Mean High Water Springs (MHWS), including areas required on a temporary basis during construction and/or decommissioning (e.g. construction compounds).
MHPGC Project Scoping Opinions	Separate scoping opinions received from the Planning Inspectorate (PINS) (on behalf of the Secretary of State (SoS)) and MD-LOT (on behalf of the Scottish Ministers) and the Marine Management Organisation (MMO) in response to the MHPGC Scoping Report. The MHPGC Scoping Opinions contain the range of issues that the PINS, and MD-LOT in consultation with statutory stakeholders, have identified should be considered within the Environmental Impact Assessment (EIA) process.
MHPGC Project Scoping Report	A Scoping Report for the MHPGC Project, scoping the likely significant effects of the project on the environment, was submitted and accepted by PINS and submitted to the Scottish Ministers, via the MD-LOT in February 2025.
MHPGC Project PEIR	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (EIA) Regulations 2017. This is information that enables consultees to understand

	the likely significant environmental effects of a project, and which helps to inform consultation responses.
Morven Hawthorn Pit Grid Connection Project	The MHPGC Project is comprised of the offshore export cables in Scottish and English waters from the Morven North or the Morven South offshore substation platform(s) (OSP), landfall, onshore export cables, the onshore LSS and AC connection cables. Also referred to in this report as the MHPGC Project, for ease of reading.
Onshore Noise and Vibration Study Areas	For each environmental topic, the baseline environment will be characterised, and the likely significant effect will be described within a topic-specific Study Area. Specific Study Areas are defined for each topic and are based on the maximum spatial extent across which likely significant effects of the MHPGC Project may be experienced by the relevant receptors (i.e. Zone of Influence).
Onshore export cable corridor	The proposed area within which onshore export cables and associated infrastructure will be laid and located, from the Transition Joint Bay (TJB) to the LSS.
Onshore land substation (LSS)	A purpose-built site comprising a compound containing the electrical components for converting the High Voltage Direct Current (HVDC) to High Voltage Alternative Current (HVAC) power. The LSS site associated with the MHPGC Project adjusts the power quality and power factor to meet the requirements of power supply being fed to the National Grid Hawthorn Pit Substation.
Planning Inspectorate (PINS)	The PINS is the government agency that administers and examines Development Consent Order (DCO) applications for Nationally Significant Infrastructure Projects (NSIP). PINS manages the application process, oversees consultation and examination, and makes a recommendation to the SoS on whether consent should be granted.
Sound	The terms noise and sound are often used interchangeably. Sound is a broad term that refers to any auditory experience created by vibrations that travel through a medium such as air, water, or solids to the ear.
Sound pressure level (SPL)	SPL is a measure of the pressure variation caused by a sound wave relative to a reference pressure, typically 20µPa (the threshold of human hearing). It is expressed in decibels (dB) and describes how loud a sound is at a specific point. Root Mean Square SPL is the Sound Pressure Level calculated using the Root Mean Square of the sound pressure over a given time period. It provides a measure of the effective or average sound pressure, smoothing out rapid fluctuations to represent perceived loudness more accurately.
Onshore Noise and Vibration Study Areas	For each environmental topic, the baseline environment will be characterised, and the likely significant effect will be described within a topic-specific Study Area. Specific Study Areas are defined for each topic and are based on the maximum spatial extent across which likely significant effects of the MHPGC Project may be experienced by the relevant receptors (i.e. Zone of Influence).

Acronyms

Unit	Meaning
AC	Alternating Current
BSI	British Standards Institution
DCC	Durham County Council
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EWG	Expert Working Group
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
JSJV	Jacobs SYSTRA Joint Venture
LSS	Onshore Land Substation
MD-LOT	Marine Directorate – Licencing Operations Team
MHPGC	Morven Hawthorn Pit Grid Connection
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
NML	Noise Monitoring Locations
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor
O&M	Operations and Maintenance
OSP	Offshore Substation Platform(s)
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
SCC	Sunderland City Council
SoS	Secretary of State
SPL	Sound Pressure Level
TJB	Transition Joint Bay

Units

Unit	Meaning
dB $L_{Aeq,T}$	A-weighted equivalent continuous sound level, T denotes the time period over which the fluctuating sound levels were averaged, for example $L_{Aeq,8hr}$ is the equivalent continuous noise level over an 8-hour period.
dB $L_{A90,T}$	A-weighted sound level just exceeded for 90% within the of the time period, T, and calculated by statistical analysis. Commonly referred to as the background noise level.

dB L _{AFmax,T}	A-weighted maximum sound level within time period, T, measured with a fast time-constant.
km	Kilometre
m	Metre
min	Minutes (min) are commonly used to define noise measurement or assessment periods.

Executive summary

This report forms **Volume 3, Annex 6.1: Onshore Noise and Vibration Baseline Technical Report, of the PEIR** prepared for the Morven Hawthorn Pit Grid Connection Project (hereafter 'the MHPGC Project') It presents the details and results of the environmental noise survey conducted in October 2025 and will be used for assessment of construction noise and operational noise in **Volume 3, Chapter 6: Noise and Vibration, of the PEIR**.

An environmental noise survey was conducted to quantify the existing baseline noise conditions within the MHPGC Project Onshore Noise and Vibration Study Areas. The environmental noise survey was conducted during October 2025 utilising unattended noise loggers at noise monitoring locations (NMLs) close to the Blue and Green Land Substation (LSS) Option Areas. Additional attended noise measurements were conducted at key times of the day and night at NMLs close to identified noise sensitive receptors (NSRs) within the Onshore Noise and Vibration Study Areas. The measurement locations were agreed with Environmental Health of Durham City Council (DCC) via the EWG process.

Noise climates around the MHPGC Project PEIR Red Line Boundary: Onshore are considered typical for rural locations. Noise measurements closer to major road traffic infrastructure such as the A19 showed elevated levels, again consistent with the presence of the road traffic. The results of the noise measurements indicated no unusual noise climates.

1 Introduction

1.1 Overview

- 1.1.1.1 This report presents the Onshore Noise and Vibration Baseline Technical Report for the Morven Hawthorn Pit Grid Connection Project (hereafter ‘the MHPGC Project’). It forms **Volume 3, Annex 6.1: Onshore Noise and Vibration Baseline Technical Report of the Preliminary Environmental Information Report (PEIR)** prepared for the MHPGC Project and supports **Volume 3, Chapter 6: Noise and Vibration of the PEIR**.
- 1.1.1.2 This report details the methodology and results of the baseline noise survey undertaken in October 2025. The survey acts as a record of the baseline noise climate at the nearest noise-sensitive receptors (NSRs) to the MHPGC Project informing the onshore noise assessments presented within the **Volume 3, Chapter 6: Noise and Vibration of the PEIR**.
- 1.1.1.3 Measurement of baseline vibration levels at sensitive receptors within the Onshore Noise and Vibration Study Areas has not been undertaken. The construction vibration assessment methodology within **Section 6.5 of Volume 3, Chapter 6: Noise and Vibration of the PEIR** considers absolute vibration levels associated with the MHPGC Project only. No further consideration of baseline vibration is therefore presented in this report. This approach has been agreed with stakeholders via the EWG process as set out within Section 6.3.2 of **Volume 3, Chapter 6: Noise and Vibration of the PEIR**.

1.2 Consultation and engagement

1.2.1 Scoping

- 1.2.1.1 A Scoping Report for the MHPGC Project was issued to the Planning Inspectorate (PINS) and Marine Directorate – Licencing Operations Team (MD-LOT) in February 2025 (RPS, 2025). Following consultation with the appropriate statutory bodies, PINS (on behalf of the Secretary of State (SoS)) and MD-LOT both provided Scoping Opinions in March 2025 (PINS, 2025; MD-LOT, 2025, respectively).
- 1.2.1.2 The MHPGC Project Scoping Report set out a high-level approach for onshore baseline noise surveys, stating the following with regards to data collection and analysis required to characterise the baseline environment:
- At the landfall and across the onshore export cable corridor and Alternating Current (AC) cable corridor: *“Where this is a risk of a likely significant effect occurring, and where existing baseline data coverage is not sufficient, attended noise surveys at up to seven locations covering onedaytime and night time period”;*
 - At the Land Substation (LSS): *“Where there is a risk of a likely significant effect occurring, and where existing baseline data coverage is not sufficient, unattended noise surveys at up to three locations for a minimum period of seven days. Attended noise surveys at up to three locations covering one night-time period”.*
- 1.2.1.3 No scoping responses relevant to the scope of the onshore baseline noise surveys were provided.

1.2.2 Further consultation and engagement

- 1.2.2.1 In August 2025 further consultation and engagement on the environmental noise survey scope and methodology was undertaken with stakeholders via a technical note and included in **Appendix A**. The technical note presented the following:
- Identified NSRs;
 - Survey methodology (attended and unattended measurements);
 - Noise monitoring locations (NMLs), including NSRs considered to be represented;
 - Survey duration;
 - Survey timing.

1.2.2.2 An Expert Working Group (EWG) meeting was held with DCC in July 2026. A summary of this consultation and engagement is provided in **Table 1.1**.

Table 1.1: Summary of further consultation and engagement

Date	Consultee and response type	Comment	How and where considered in the PEIR
19.09.2025	Durham County Council, (DCC) email correspondence.	Environmental Health and Consumer Protection Officers reviewed the Technical Note and agreed with the proposed baseline survey scope, identified NSRs and stated NMLs, methodology, timing and durations.	The environmental noise survey results are described in Section 3 of this report. The methodology and approach agreed with stakeholders has been followed.
09.12.2025	Traffic and Transport and Noise and Vibration Expert Working Group (EWG) Meeting 1. Attendees: National Highways, Jacobs Systra Joint Venture (JSJV) and Sunderland City Council (SCC) Apologies: DCC, Environment Agency, Sustrans NE	In relation to onshore noise and vibration, the EWG meeting covered a number of topics, including the following: The onshore noise and vibration assessment scope including the Onshore Noise and Vibration Study Areas, methodology, initial mitigation and commitments; The baseline noise survey. No written response to or comment on the meeting minutes or content presented was received from EWG members following the EWG meeting.	The scope of the assessment for onshore noise and vibration is set out in Volume 3, Chapter 6: Noise and Vibration, of the PEIR . The environmental noise survey results are described in Section 3 within this report.
14.07.2026	Noise and Vibration EWG Meeting 2. Attendees: DCC Environment Protection Team	The EWG meeting covered a number of topics, including the following: An update on the findings of the baseline noise survey; The onshore noise and vibration assessment scope, including the Onshore Noise and Vibration Study Areas and assessment methodology; Vibration from Operations and Maintenance (O&M) of the LSS; Initial mitigation and commitments. Following the EWG Meeting, on the 10 August 2026 DCC Environment provided a written response confirming agreement with the proposed assessment scope and methodology summarised in the meeting minutes.	The environmental noise survey results are described in Section 3 within this report. Further details on the scope of the assessment for onshore noise and vibration is set out in Volume 3, Chapter 6: Noise and Vibration, of the PEIR .

2 Methodology

2.1 Overview

- 2.1.1.1 A baseline noise survey was undertaken between Tuesday 14 October 2025 and Wednesday 22 October 2025. The scope of the baseline noise survey was agreed with DCC as set out in **Section 1.2.2** of this report.
- 2.1.1.2 The purpose of the survey was to quantify and characterise the existing noise climate at the NSRs within the Onshore Operational Noise and Vibration Study Areas. The results of the survey have been used to inform the noise assessments for the MHPGC Project.
- 2.1.1.3 During the first week of the survey period (from Tuesday 14 October to Tuesday 21 October 2025), unattended noise measurement equipment at discrete positions (**Figure 2.1**) within the Operational Noise Study Area continuously measured Sound Pressure Level (SPL). From this data, the following parameters were determined for relevant times of day and night:
- dB $L_{Aeq,T}$: Equivalent continuous A-weighted SPL;
 - dB $L_{AFmax,T}$: Maximum A-weighted SPL;
 - dB $L_{A90,T}$: 90th percentile A-weighted SPL (commonly described as the background sound level).
- 2.1.1.4 Short-term attended measurements were also undertaken throughout the survey period at 10 positions representative of the identified NSRs within the Onshore Noise and Vibration Study Areas.
- 2.1.1.5 Noise measurements were undertaken in accordance with the requirements of British Standard 7445-1:2003 (British Standards Institution (BSI), 2003) and BS 4142:2014+A1:2019 (BSI, 2019).

2.2 Onshore Noise and Vibration Study Areas

- 2.2.1.1 Further details on the Onshore Noise and Vibration Study Areas is set out in **Section 6.4.2** of **Volume 3, Chapter 6: Noise and Vibration, of the PEIR**. In summary, the Onshore Noise and Vibration Study Areas relevant to the baseline noise survey are defined as follows:
- The Onshore Construction Noise Study Area (as set out within **Figure 6.1** in **Volume 3, Chapter 6: Noise and Vibration, of the PEIR**), an area extending 300m from the MHPGC Project PEIR Red Line Boundary: Onshore.
 - The Onshore Construction Vibration Study Area (as set out within **Figure 6.1** in **Volume 3, Chapter 6: Noise and Vibration, of the PEIR**), an area extending 100m from the MHPGC Project PEIR Red Line Boundary: Onshore.
 - The Onshore Operational Noise Study Area (as set out within **Figure 6.3** in **Volume 3, Chapter 6: Noise and Vibration, of the PEIR**), an area extending 600m from the Blue LSS Option Area and Green LSS Option Area.

2.3 Measurement locations

- 2.3.1.1 Unattended noise measurements were taken at three locations within the Onshore Operational Noise Study Area. These locations are described in **Table 2.1** and shown in **Figure 2.1**.
- 2.3.1.2 In accordance with the scope of the baseline noise survey agreed with DCC, the unattended measurements were carried out over a period of 7-days. This is an appropriate duration which is typically adopted for industrial noise assessment carried out in accordance with the BS 4142 methodology.
- 2.3.1.3 The microphone for each unattended noise measurement location was positioned in free-field conditions.

Table 2.1: Unattended measurement location details

Location ID	Easting	Northing	Approximate height above local ground (m)	Location description
LT1	439051	545280	3.0	Windermere Road, South Hetton, DH6 2RX. Attached to palisade fence along the southern boundary of the rear garden.
LT2	440148	546308	2.5	Matthews Road, Murton, SR7 9DF. Attached to fence along the southern boundary of the rear garden.
LT3	440717	545472	2.0	West Batter Law Farm Cottages, Hawthorn, SR7 8RZ. Eastern boundary of garden.

2.3.1.4 In accordance with the scope of the baseline noise survey agreed with DCC, short-term attended noise measurements of 15-minute duration were also taken at locations representative of NSRs within the Onshore Construction Noise Study Area. At each location measurement data was obtained for a total duration of 45-minutes during the daytime periods and 30-minutes during the night-time periods. This is an appropriate duration to provide an indication of the baseline noise levels to inform construction noise assessments.

2.3.1.5 The short-term attended measurement locations are described in **Table 2.2** and shown in **Figure 2.1**. All attended measurements were taken with the microphone at a height of 1.5m above the ground and positioned in free-field conditions.

Table 2.2: Attended measurement location details

Location ID	Easting	Northing	Location description
ST1	439663	544928	West Lane (layby south of carriageway by entrance to Great Coop Farmhouse & The Bungalow, Great Coop House Farm, West Lane, South Hetton, DH6 2RY)
ST2	440353	545516	Public footpath south of Little Coop House Farm, Hawthorn, SR7 8SA
ST3	440950	547040	B1432 Stockton Road - verge east of carriageway by entrance to Cold Hesledon Industrial Estate opposite The Waterworks
ST4	441139	546616	B1432 Stockton Road - verge west of carriageway by entrance to Richardson's Garden Centre
ST5	441437	546618	Unnamed road opposite South Farm, Cold Hesledon, SR7 8RL
ST6	442088	546855	Starling Way, Seaham Garden Village, Cold Hesledon
ST7	443199	546297	Corner of unnamed road / public footpath west of Hawthorn Quarry
ST8	441298	545217	Western Park, verge opposite 6 Western Park, SR7 8BF
ST9	441837	545697	West View, Hawthorn, SR7 8SQ
ST10	437262	545638	Ullswater Terrace, South Hetton, DH6 2UH

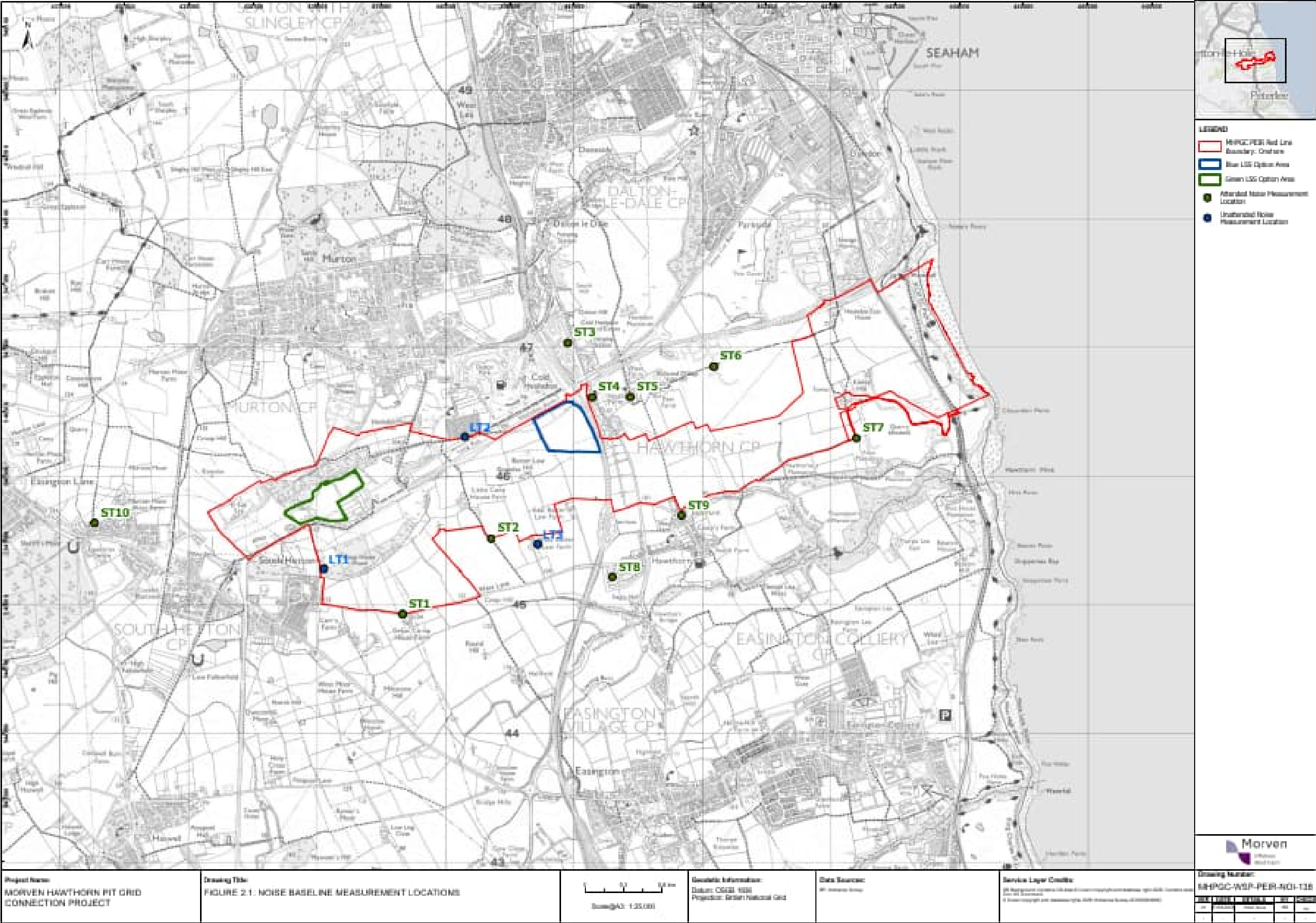


Figure 2.1: Noise baseline measurement locations

2.4 Measurement equipment

2.4.1.1 The noise measurement equipment employed for the noise survey is outlined within **Table 2.3**.

2.4.1.2 The equipment was calibrated before and after use and no significant drifts were observed. All equipment is subject to regular calibration checks traceable to national standards.

Table 2.3: Noise measurement equipment

Instrument type	Instrument name	Serial number	Microphone	Measurement(s) used for
Sound Level Meter	01dB Fusion	15265	GRAS 40AE. S/N 562248	LT2
Acoustic Calibrator	Cirrus CR515	102107	N/A	LT2
Sound Level Meter	01dB Fusion	15266	GRAS 40AE. S/N 562247	LT3
Acoustic Calibrator	Cirrus CR515	102122	N/A	LT3
Sound Level Meter	01dB Fusion	12083	GRAS 40CD. S/N 331886	LT1
Acoustic Calibrator	Cirrus CR515	95407	N/A	LT1
Sound Level Meter	Svantek 971A	127629	ACO Pacific 7152. S/N 82004	ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9
Acoustic Calibrator	Svantek SV33B	139039	N/A	ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9
Sound Level Meter	Svantek 971A	127625	ACO Pacific 7152. S/N 81999	ST1, ST2, ST4, ST5, ST6, ST7, ST8, ST9, ST10
Acoustic Calibrator	Svantek SV33B	139089	N/A	ST1, ST2, ST4, ST5, ST6, ST7, ST8, ST9, ST10

2.5 Meteorological conditions

2.5.1.1 Weather conditions during attended measurements were observed to be suitable, with low wind speeds and no precipitation recorded.

2.5.1.2 Meteorological data from online weather observation stations shown in **Table 2.4** have been reviewed for the unattended survey period. The observations confirmed weather conditions were suitable for noise measurement, except for the following periods which contained prolonged periods of precipitation or unattainable weather data:

- Between 22:45 and 23:15 on Friday 17 October 2025;
- Between 18:00 and 18:15 on Saturday 18 October 2025;
- Between 09:00 and 09:45 on Monday 20 October 2025.

Table 2.4: Weather station details

Station ID	Survey dates	Easting	Northing	Elevation, m	Location relative to unattended noise measurements
lotty2 - ISEAHA6	15, 17, 20, 21 October 2025	442496	548551	62	Approximately 2.5km northeast
Abbeydale 1 - IDURHA31	14 October 2025	438287	544953	91	Approximately 2.0km southwest
Low Pittington Wx - IDURHA64	18, 19 October 2025	432694	544797	27	Approximately 6.0km west
Ecowitt WS2910 - IDURHA30	16 October 2025	429707	539547	89	Approximately 17km southwest

2.6 Limitations

2.6.1.1 Any measurement of existing ambient or background sound levels are subject to a degree of uncertainty as environmental sound levels vary between days, weeks, and throughout the year due to variations in source levels and conditions, meteorological effects on sound propagation and other factors. Hence, any measurement survey can only provide a short sample of the ambient levels. Every effort was made to ensure that measurements were undertaken in such a way to provide a representative sample of conditions, such as:

- avoiding periods of adverse weather conditions (rain, wind speeds above five m/s) and/or if adverse weather conditions take place during any sound level measurements, the contaminated data are omitted from the dataset;
- avoiding school holidays and other such periods / events which are known to often result in atypical sound levels.

3 Results

3.1 Unattended measurement results

3.1.1.1 The unattended measurement data has been analysed to determine the following parameters for each day of the unattended measurement period:

- The range of measured 15-minute equivalent continuous SPLs (dB $L_{Aeq,T}$) for the daytime and night-time period;
- The range of the highest SPL (dB $L_{AFmax,T}$) for the 16-hour daytime period and 8-hour night-time period;
- The range of background sound levels (dB $L_{A90,T}$) and the adopted representative background sound level for the 16-hour daytime period and 8-hour night-time period.

3.1.1.2 The sound level parameters determined at each location are shown in **Table 3.1**.

Table 3.1: Summary of results at measurement location

Location ID	Period	Measured Sound Level, dB ¹			
		Range of Equivalent Continuous SPL, $L_{Aeq,15\text{ min}}$	Range $L_{AFmax,15\text{ min}}$	Range of Background, $L_{A90,15\text{ min}}$ (25 th Percentile)	Representative $L_{A90,15\text{ min}}$
LT1	Daytime (07:00 – 2300 hours)	29-52	38-85	26-47 (34)	34
	Night-time (2300 – 0700 hours)	26-43	34-69	24-41 (27)	25
LT2	Daytime (0700 – 2300 hours)	30-64	42-85	27-47 (34)	35
	Night-time (2300 – 0700 hours)	23-49	33-72	22-41 (27)	27
LT3	Daytime (0700 – 2300 hours)	28-66	36-84	25-56 (40)	37
	Night-time (2300 – 0700 hours)	28-53	36-72	25-51 (32)	35
¹ Excluding periods with unfavourable weather conditions and unrepresentative events.					

3.1.1.3 **Plate 3.1** to **Plate 3.6** present the statistical analyses of the distribution of measured noise levels at LT1 to LT3 during daytime and night-time periods. The analysis focuses on ambient noise levels (dB L_{Aeq}) and background noise levels (L_{A90}), i.e. the parameters used for the operational noise assessments.

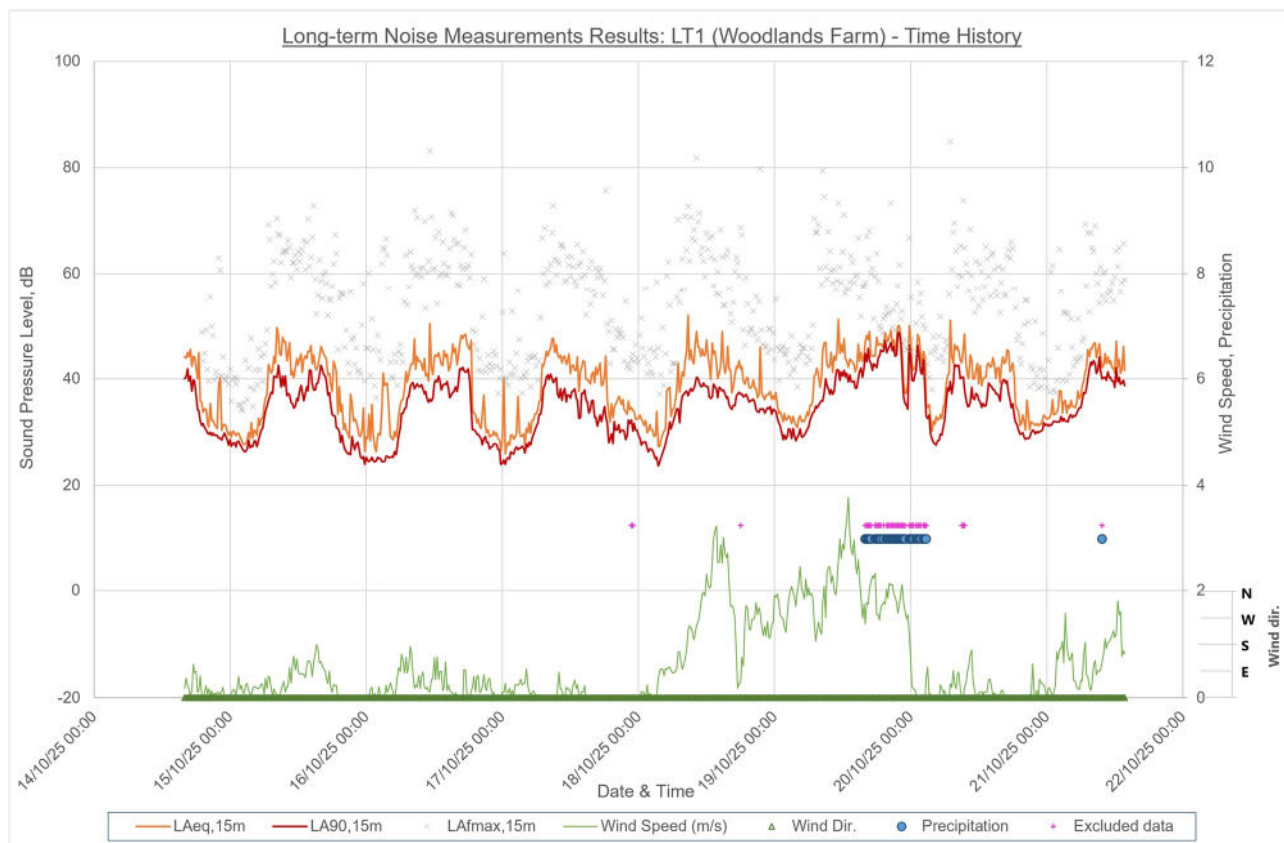


Plate 3.1: Time history of measurements at location LT1

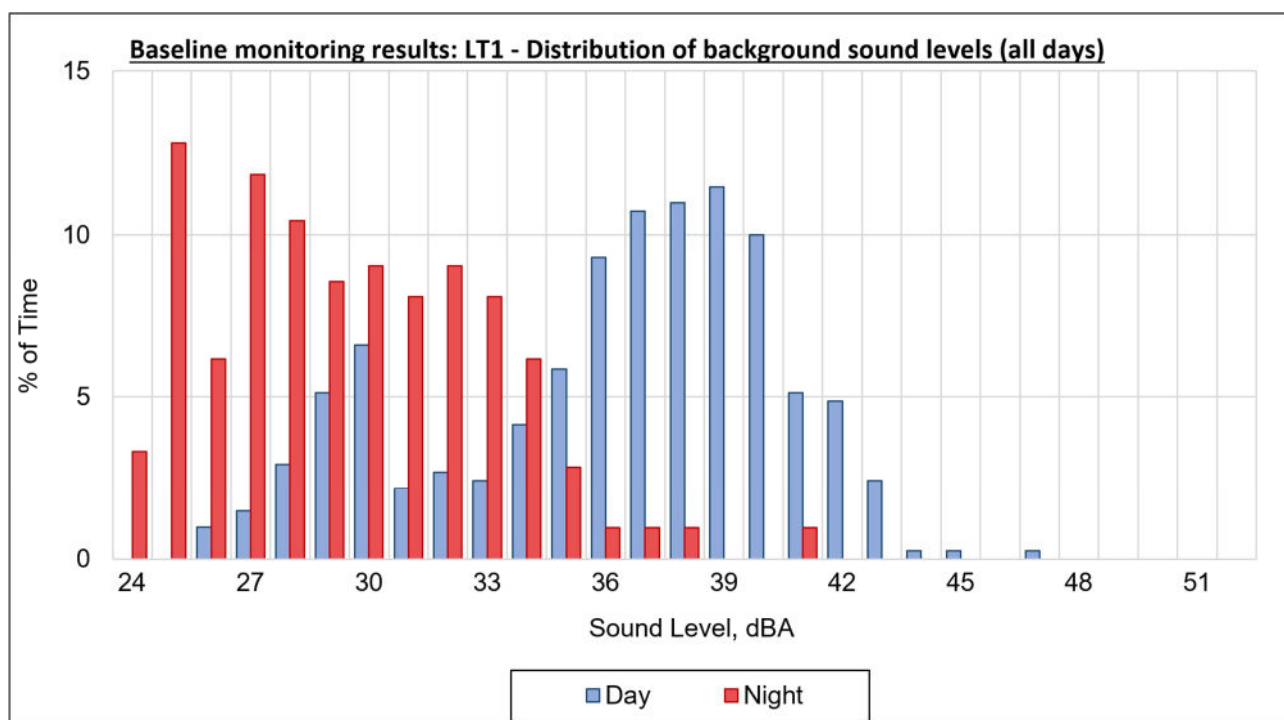


Plate 3.2: Distribution of measured background sound levels at location LT1

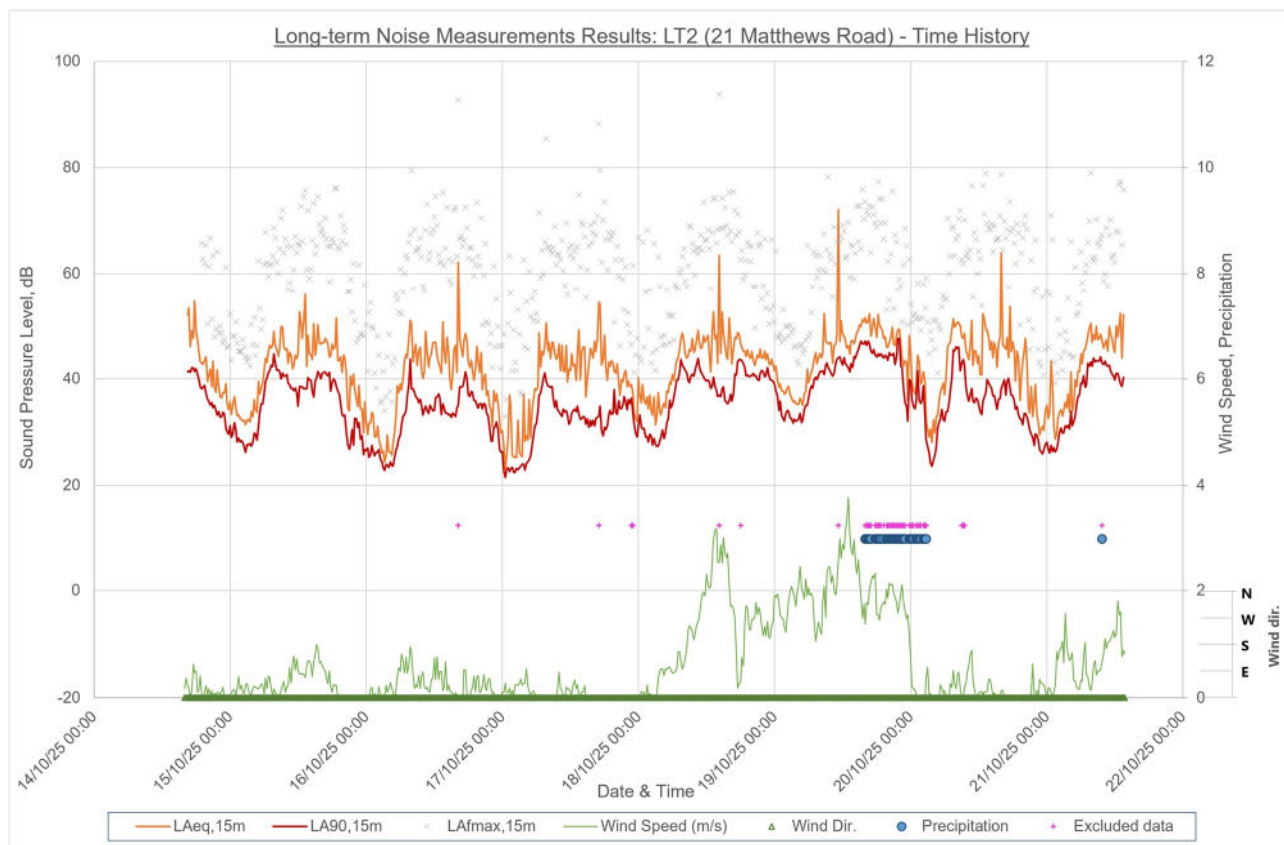


Plate 3.3: Time history of measurements at location LT2

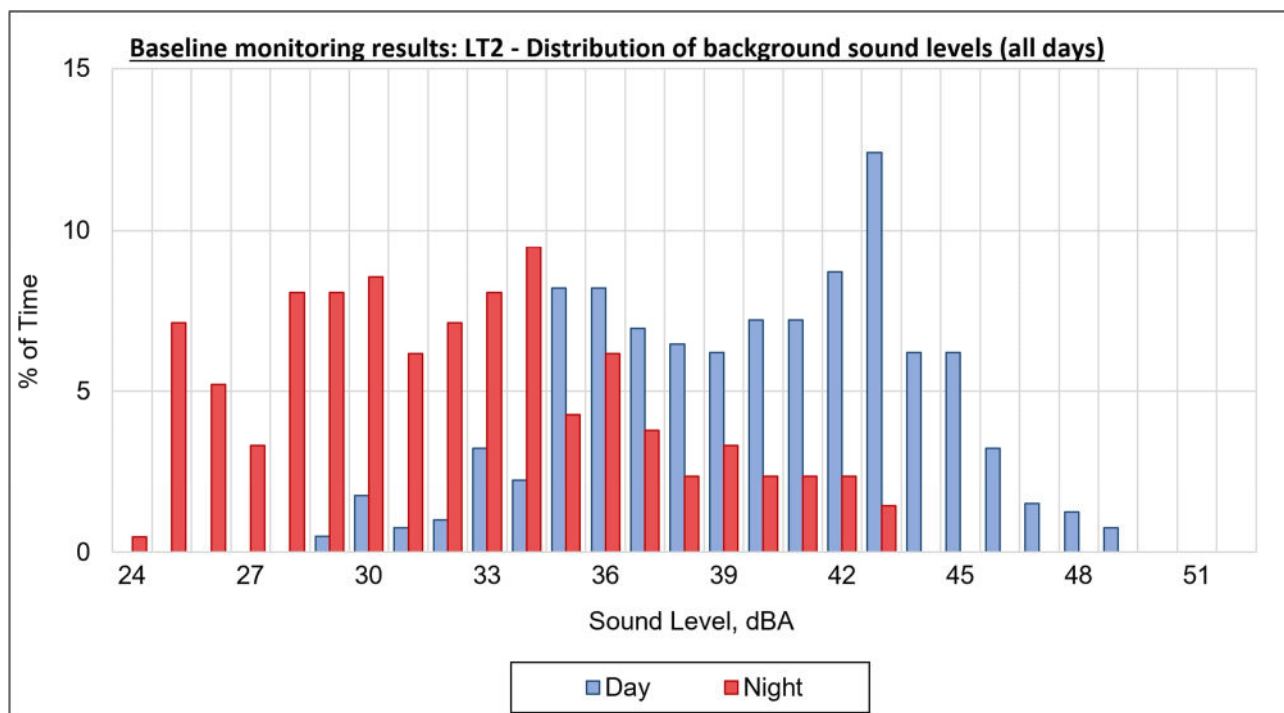


Plate 3.4: Distribution of measured background sound levels at location LT2

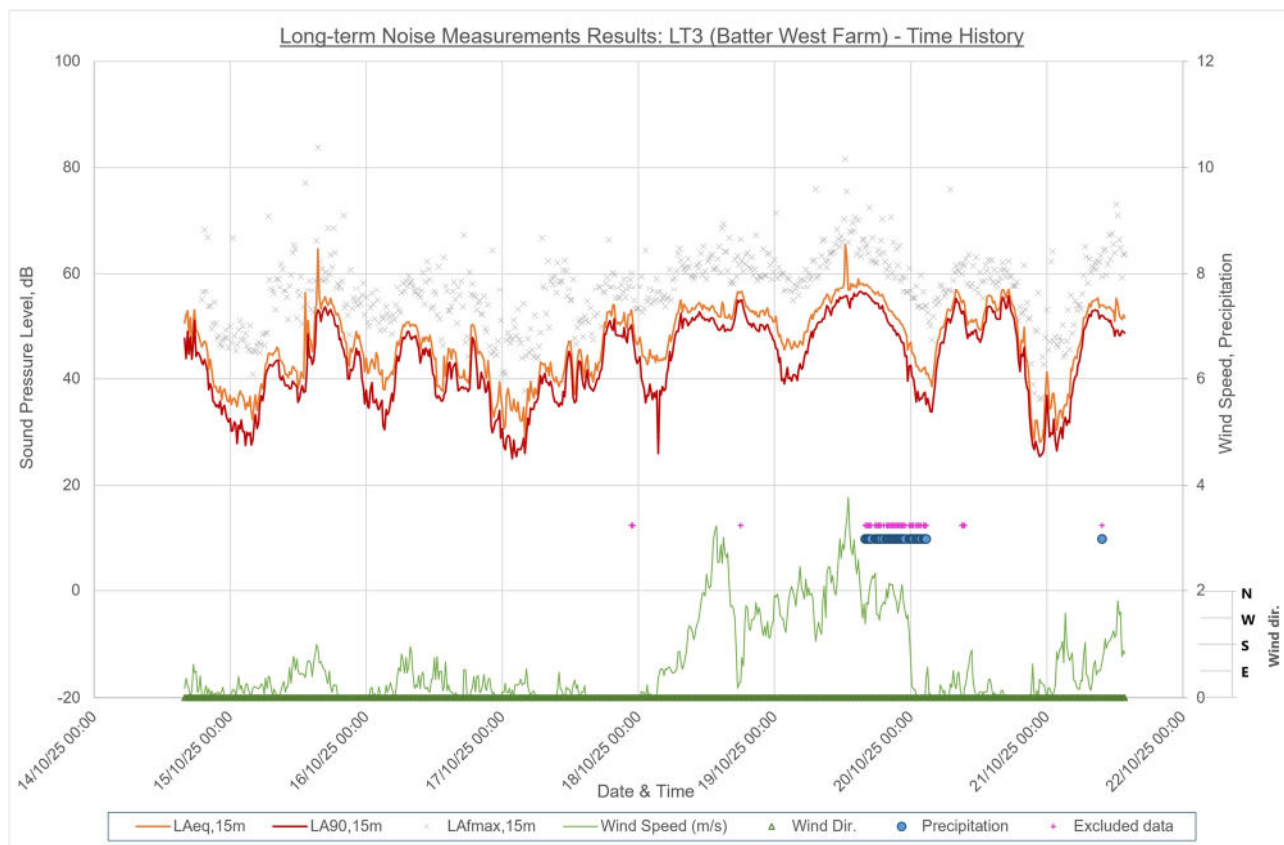


Plate 3.5: Time history of measurements at location LT3

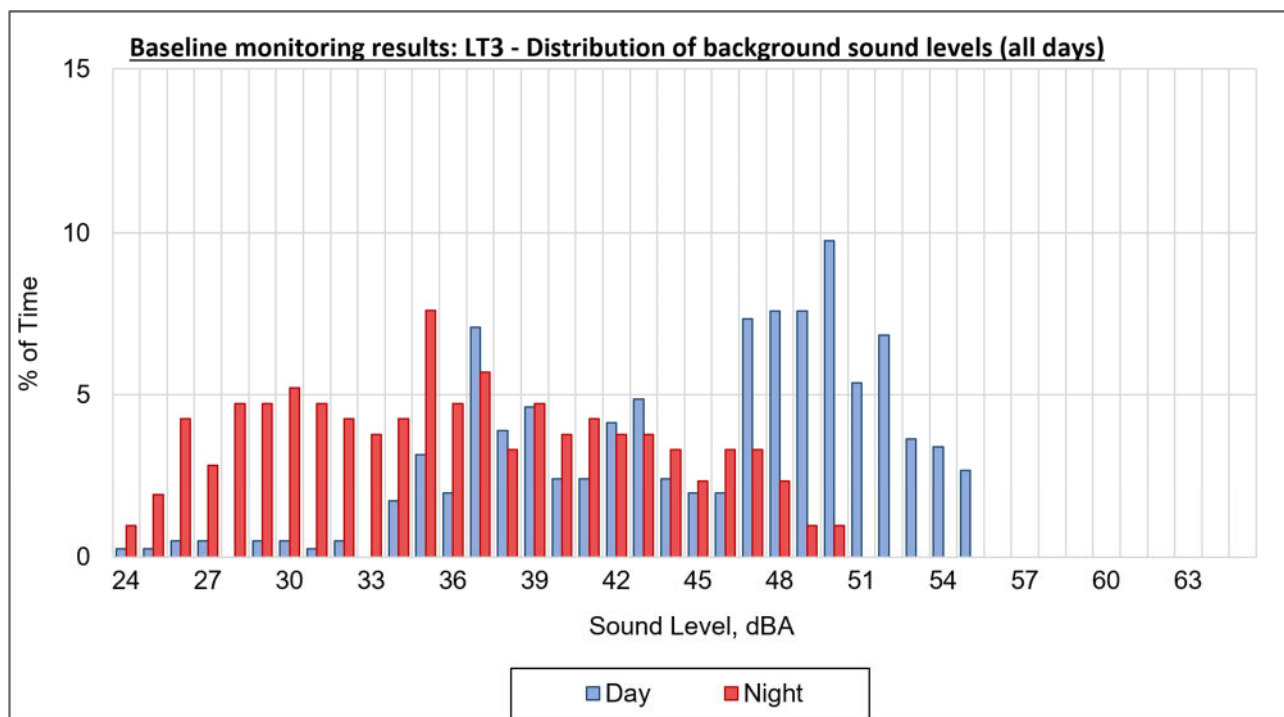


Plate 3.6: Distribution of measured background sound levels at location LT3

3.2 Attended measurement results

3.2.1.1 The attended measurement data has been analysed to determine the following parameters for each 15-minute measurement period:

- The equivalent continuous SPL (dB $L_{Aeq,15min}$);
- The highest SPL (dB $L_{AFmax,15min}$);
- The background sound level (dB $L_{A90,15min}$).

3.2.1.2 The sound level parameters determined during each measurement are shown in **Table 3.2**.

Table 3.2: Summary of attended measurement results

Location ID	Date	Measurement period	Equivalent continuous SPL, dB $L_{Aeq,15min}$	Maximum SPL, dB $L_{AFmax,15min}$	Background sound level, dB $L_{A90,15min}$
ST1	Wednesday 22 October 2025	01:09 – 01:24	46	61	42
		02:55 – 03:10	41	55	38
		12:26 – 12:41	60	79	40
		14:05 – 14:20	56	79	37
		15:39 – 15:54	63	86	38
ST2	Wednesday 15 October 2025	11:26 – 11:41	39	55	36
		13:22 – 13:37	35	52	33
		14:45 – 15:00	46	75	33
	Thursday 16 October 2025	01:03 – 01:18	43	59	36
		02:22 – 02:37	40	52	30
ST3	Wednesday 15 October 2025	01:27 – 01:42	45	70	32
		02:52 – 03:07	37	46	30
		11:46 – 12:01	62	77	51
		14:20 – 14:35	56	74	49
		16:13 – 16:28	58	72	51
ST4	Wednesday 15 October 2025	01:45 – 02:00	53	81	37
		03:10 – 03:25	54	79	39
		12:11 – 12:26	63	80	58
		14:41 – 14:56	68	80	60
		16:37 – 16:52	70	85	62
ST5	Wednesday 15 October 2025	02:05 – 02:20	40	51	31
		03:28 – 03:43	42	54	35
		12:36 – 12:51	48	55	45
		15:03 – 15:18	57	64	47
		16:46 – 17:01	47	59	43
ST6		02:30 – 02:45	38	54	37
		03:50 – 04:05	39	51	37

Location ID	Date	Measurement period	Equivalent continuous SPL, dB L _{Aeq,15min}	Maximum SPL, dB L _{AFmax,15min}	Background sound level, dB L _{A90,15min}
	Wednesday 15 October 2025	13:04 – 13:19	59	75	46
		15:29 – 15:44	56	73	43
		16:22 – 16:37	56	75	42
ST7	Wednesday 15 October 2025	12:31 – 12:46	49	70	34
		14:21 – 14:36	56	78	33
		15:44 – 15:59	34	50	32
	Thursday 16 October 2025	02:01 – 02:16	30	50	25
		03:18 – 03:33	33	50	28
ST8	Wednesday 15 October 2025	11:49 – 12:04	58	73	54
		13:42 – 13:57	58	71	54
		15:05 – 15:20	57	72	54
	Thursday 16 October 2025	01:22 – 01:37	45	58	37
		02:40 – 02:55	42	55	36
ST9	Wednesday 15 October 2025	12:10 – 12:25	50	64	43
		14:00 – 14:15	50	68	40
		15:23 – 15:38	50	71	38
	Thursday 16 October 2025	01:41 – 01:56	38	55	26
		02:58 – 03:13	40	53	31
ST10	Wednesday 22 October 2025	01:34 – 01:49	36	61	31
		03:19 – 03:34	39	53	33
		12:53 – 13:08	52	72	42
		14:27 – 14:42	47	64	41
		16:02 – 16:17	51	75	42

3.3 Observations

3.3.1.1 Noise and weather observations were noted during installation and collection of unattended equipment and during attended measurements. Subjective observations on the dominant sources contributing to the noise environment are summarised in **Table 3.3**. All measurements were carried out during suitable weather conditions for environmental noise monitoring.

Table 3.3: Measurement location noise and weather observations

Location ID	Daytime noise climate observations	Night-time noise climate observations
LT1	Construction activity to North; birds; just audible distant road traffic to the East	No data
LT2	Constant distant A19 traffic	No data
LT3	Continuous A19 traffic; birds	No data
ST1	Intermittent vehicle movements on West Lane; distant A182 traffic; tractor; cyclists	Rustling leaves; occasional distant traffic
ST2	Distant A19 traffic dominant; occasional construction noise, cars, tractor, light aircraft	Road noise from A19 dominant; aircraft noise
ST3	Frequent vehicles on B1432; vehicles accessing industrial estate; A19 traffic; birds	A19 traffic dominant; occasional local vehicle movements
ST4	Constant B1432/A19 traffic; vehicles to garden centre; sirens	Frequent A19 traffic; occasional B1432 vehicles; birds
ST5	Constant A19/A182 traffic	A19 traffic; birds
ST6	Distant construction activity from Seaham Garden Village residential development, passing vehicles, A182/A19 traffic, flagpoles clanging	Distant A19 traffic; flagpoles clanging; occasional aircraft
ST7	Distant traffic, frequent local traffic; birds; light aircraft/HGV movements	A19/A182 traffic; distant bangs; birds
ST8	Constant A19 traffic dominates; occasional local traffic; seagulls	A19 traffic dominant; distant motorbikes
ST9	Continuous distant A19 plus frequent local traffic; leaves in trees	A19 traffic dominant; distant sirens
ST10	Distant Front St/South Hetton Rd traffic; vehicle movements in cul-de-sac	Distant traffic; occasional local traffic

4 Summary

- 4.1.1.1 Noise climates around the Onshore Noise and Vibration Study Areas are considered typical for rural locations. Noise measurement closer to major road traffic infrastructure such as the A19 showed elevated levels, again consistent given the presence of the road traffic. The results of the noise measurements indicated no unusual noise climates.

5 References

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Appendix A MHPGC Noise and Vibration Survey Approach

Morven Offshore Wind Farm

Security classification: Project external



Revision Code	Reason for Issue	Author	Date	Checked	Date	Approved	Date
Issue 01	External Issue	Ramboll	29/08/2025	NC	29/08/2025	JG	29/08/2025
Morven Hawthorn Pit Grid Connection Date: 29 August 2025 Technical Note: Morven Hawthorn Pit Grid Connection Project Noise and Vibration Survey Approach August 2025							
Topic: Noise and Vibration Discussion point: Confirmation of the proposed baseline noise survey scope.							

1 Introduction

- 1.1.1.1 JERA Nex bp (JNBP), together with German partner Energie Baden-Württemberg AG (EnBW) (hereafter The Applicant), was awarded a seabed option under the 2021/22 ScotWind leasing round. The Applicant is jointly developing the Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project (hereafter 'Morven North and Morven South'); an offshore wind farm within Plan Option (PO) area E1 identified in the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy (the SMP).
- 1.1.1.2 This Technical Note has been prepared by Ramboll UK Limited (Ramboll) on behalf of the Applicant to present the proposed scope of the onshore baseline noise survey for the Morven Hawthorn Pit Grid Connection Project (hereafter, the MHPGC Project), the grid connection works associated with Morven North or Morven South.
- 1.1.1.3 This Technical Note provides a brief project update and summarises the proposed scope of the onshore baseline noise survey, for agreement with the Local Planning Authorities (LPAs) and Environmental Health Officer (EHO).

2 Purpose

- 2.1.1.1 The purpose of this Technical Note is to seek agreement on the scope of the onshore baseline noise survey for the MHPGC Project, as per the MHPGC Project Scoping Report¹, which stated that the "locations and durations of baseline surveys will be agreed with the local authority environmental health departments".
- 2.1.1.2 Early agreement on the onshore baseline noise survey is considered paramount to ensure the baseline noise climate is established at locations agreed to be representative of Noise Sensitive Receptors (NSRs) relevant to the MHPGC Project.
- 2.1.1.3 It is acknowledged that as the design is refined, the scope of the onshore baseline noise survey may reduce. However, this Technical Note affords an opportunity for agreement at this stage of the MHPGC Project.

¹ Morven Offshore Wind Limited. Morven Hawthorn Pit Grid Connection Project. Environmental Impact Assessment Scoping Report. February 2025. Available at: <https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN0210005/documents?itemsPerPage=100>

3 Project background

- 3.1.1.1 SW E1A (a site that became Morven North and Morven South development area) was scoped into the Pathway to 2030 Holistic Network Design (HND) workstream of the UK Government Offshore Transmission Network Review (OTNR). As part of this review, National Grid assessed options to improve the coordination of offshore wind farm connections and associated transmission networks. In July 2022, National Grid ESO published the 'Pathway to 2030 Holistic Network Design Report' which set out the approach to connecting 50GW of offshore wind to the grid (National Grid ESO, 2022). This identified that SW E1A should connect to the existing National Grid substation at Hawthorn Pit in County Durham.
- 3.1.1.2 In March 2024, National Grid ESO published the 'Beyond 2030' report. This builds on the HND and makes a set of network recommendations to be implemented throughout the 2030s (National Grid ESO, 2024). Whilst this report recommends a second grid connection, connecting to a substation in the Branxton area, Southeast Scotland, the Applicant awaits the outcomes of the HND Follow-Up Exercise (HND FUE) in respect of a final decision for the second grid connection.
- 3.1.1.3 As a result of the HND process and in order to progress the MHPGC Project, the Applicant will seek to consent the Morven North, Morven South and grid connection aspects separately. There will be a separate consenting and consultation process for the array and transmission assets. In part this is due to the array assets existing solely in Scottish waters whilst the majority of the transmission assets are located in the English jurisdiction.
- 3.1.1.4 For assets located in England, the Applicant sought a direction from the Secretary of State (SoS) under section 35 of the Planning Act to confirm that the onshore and offshore assets in England (including English waters) should be treated as development for which development consent is required under the Planning Act 2008, as amended.
- 3.1.1.5 A direction from the SoS for Energy and Net Zero was duly made on 5 March 2024 confirming that the MHPGC Project should be treated as a development for which development consent is required. The Applicant is now pursuing a single development consent for the onshore and offshore components of the MHPGC Project in England.
- 3.1.1.6 In respect of the MHPGC Project assets located within Scottish waters (specifically, Scottish Offshore Waters), a marine licence will be applied for from the Marine Directorate - Licensing Operations Team, in accordance with the provisions of the Marine and Coastal Access Act, 2009.
- 3.1.1.7 The array assets, which are located solely in Scottish waters, are subject to a separate consenting process under s.36 of the Electricity Act 1989.
- 3.1.1.8 An Environmental Impact Assessment (EIA) Scoping Report was produced with respect MHPGC Project and submitted in February 2025. The EIA Scoping Opinion was received in March 2025, including responses from the Planning Inspectorate (PINS) with regards to onshore noise and vibration. The MHPGC Project Scoping Report was based on the MHPGC Project Scoping Boundary, as shown in **Figure 1**.
- 3.1.1.9 The MHPGC Project has been progressing the design evolution since the submission of the MHPGC Project Scoping Report, with the overall intention to refine and, therefore, reduce the scale of the MHPGC Project Red Line Boundary for the upcoming MHPGC Project Preliminary Environmental Information Report (PEIR) and subsequent MHPGC Project Environmental Statement (ES).
- 3.1.1.10 Since receipt of the EIA Scoping Opinion, the Applicant has initiated the formal Evidence Plan Process (EPP), a key mechanism used to enable the applicant of Development Consent Order (DCO) applications to engage stakeholders during the pre-application period. The Applicant will shortly seek to commence the associated Expert Working Groups (EWGs) to continue consultation with key stakeholders, who will feed into the EPP Steering Group, an overarching group feeding into and monitoring the EPP.



Project Name:
MORVEN HAWTHORN PIT GRID
CONNECTION PROJECT

Drawing Title:
FIGURE 1: MPHGC PROJECT SCOPING BOUNDARY

0 1 km
Scale@A3 1:40,000

Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid

Data Sources:
M3, Ramboll, Ordnance Survey

Service Layer Credits:
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the
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MHPGC-RAM-ZZ-0001-01

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4 Proposed survey scope

4.1.1.1 The MHPGC Project Scoping Report¹ set out a high-level proposition for the scope of onshore baseline noise surveys, stating the following with regards to data collection and analysis required to characterise the baseline environment:

- At the landfall and along the corridor: “Where there is a risk of a likely significant effect occurring, and where existing baseline data coverage is not sufficient, attended noise surveys at up to seven locations covering one daytime and night time period”.
- At the substation: “Where there is a risk of a likely significant effect occurring, and where existing baseline data coverage is not sufficient, unattended noise surveys at up to three locations for minimum period of seven days. Attended noise surveys at up to three locations covering one night time period”.

4.1.1.2 The proposed onshore noise survey scope is set out below, with consideration of the details set out within the MHPGC Project Scoping Report and informed by the subsequent MHPGC Project design evolution and refinement.

4.1.1.3 The following details are provided, and agreement on each of these items is sought:

- Identified NSRs.
- Proposed methodology (attended and unattended measurements).
- Proposed noise monitoring locations, including NSRs considered to be represented.
- Proposed survey duration.
- Proposed survey timing.

4.2 Study areas

4.2.1.1 The spatial extent of the noise survey has been informed by the relevant Noise and Vibration Study Area. In accordance with the MHPGC Project Scoping Report, this comprises the following, as shown in **Figure 2**:

- Construction noise: 300m from the PEIR Survey Red Line Boundary.
- Operational noise: 600m from the onshore Land Substation (LSS) Location Options.

4.2.1.2 It is noted that the locations of the onshore export and grid connection cables and onshore LSS are yet to be finalised. Therefore, the spatial extent of the noise survey seeks to quantify the noise climate in a considerably wider area than likely required for future assessment. Should the extent of the MHPGC Project be further refined prior to the survey, the scope of the survey could be reduced.

4.2.1.3 The proposed survey is considered sufficient to assess all further refinement of construction activity locations (e.g. temporary construction compounds, trenchless crossings) within the PEIR Survey Red Line Boundary.

4.3 Noise Sensitive Receptors

4.3.1.1 NSRs within the Noise and Vibration Study Area have been identified through a desktop review, utilising satellite imagery and LPA mapping. Where a similar noise climate is expected at multiple receptors (e.g. a residential area), these are considered as a group. These are presented in **Table 4.1**.

Table 4.1: Identified NSRs

Receptor ID (see Figure 2)	Receptor Type	Receptor Name
R01	Residential	Hawthorn Cottages, Grassmere Terrace & Nos. 1 - 17 Windermere Road, South Hetton
R02	Residential	The Woodlands, South Hetton, DH6 2RX
R03	Residential	Great Coop Farmhouse & The Bungalow, Great Coop House Farm, West Lane, South Hetton, DH6 2RY
R04	Residential	Barwick Street, Forster Avenue, Matthews Road, Hawkins Road & Oliver Street, Murton
R05	Residential	Little Coop House Farm, Hawthorn, SR7 8SA
R06	Residential	West Batter Law Farm Cottages, Hawthorn, SR7 8RZ
R07	Residential	East Batter Law Farmhouse, Hawthorn, SR7 8RP
R08	Residential	Pemberton View & B1432 Stockton Road dwellings south of A182, Cold Hesledon
R09	Residential	Cold Hesledon dwellings south of A182
R10	Residential	The Waterworks, The Chapel Lodge, Chapel House & Laira House, Stockton Road, Cold Hesledon
R11	Residential	Hawthorn dwellings
R12	Residential	Taylor Wimpey Seaham Garden Village dwellings
R13	Residential	Kinley Hill Tower, Hawthorn, SR7 8SW
R14	Residential	South Hetton dwellings
R15	Residential	Station Estate North, Briar Glen, Broad Oaks & Melrose Avenue
R16	Residential	Murton Moor Farm Bungalow, Murton, SR7 9TN
R17	Residential	Sawasdee, Salters Lane, Houghton-le-Spring, SR7 9TW
R18	Residential	Singley Hill Farm Barn, Seaton, SR7 0NL
R19	Residential	Seaton Moor Cottage, Seaton, SR7 0NH
R20	Residential	The Maples, Seaton, SR7 0NE
R21	Residential	Sharpley Hall Farm, Seaton, SR7 0NP
R22	Residential	Seaton dwellings
R23	Residential	Blaykeston Close dwellings, Seaham
R24	Residential	Field House Farm & Glebe Drive, Seaham
R25	Residential	Stockton Road dwellings east of Grange Industrial Estate, SR7 0NT
R26	Residential	Seaham Grange Farm and adjacent Stockton Road dwellings
R27	Residential	Grange Mount, Stockton Road, SR7 0PA
R28	Residential	Cherry Brooks Way & Bradbourne Close
R29	Residential	Seaham Cemetery, Lord Byrons Walk, Seaham, SR7 7AG
R30	Residential	The Cottage, Hall Farm Cottage, & Seaham Hall Hotel, Seaham

4.4 Survey methodology

- 4.4.1.1 The general survey methodology follows that presented in the MHPGC Project Scoping Report, with long-term unattended noise monitoring in the proximity of the onshore LSS Location Options and attended noise measurements along the onshore export and grid connection cable corridor. However, these are not mutually exclusive and can be used in conjunction to quantify the existing noise climate for both construction and operational noise assessments as required.
- 4.4.1.2 Unattended noise measurements have generally been proposed at the nearest NSRs to onshore LSS Location Options. However, the extent of unattended noise monitoring at NSRs within the Noise and Vibration Study Area has been affected by access restrictions (i.e. a secure location is

required to install the equipment). Where unattended noise monitoring is not considered possible at NSRs close to the onshore LSS Location Options, attended noise measurements are proposed. Minor adjustments to the noise monitoring locations proposed herein may occur, subject to access to private properties being permitted.

4.4.1.3 Noise monitoring equipment will be configured so that the following parameters can be obtained:

- A-weighted sound pressure levels (dB L_{pA}) every 100ms.
- Equivalent continuous A-weighted sound pressure levels (dB $L_{Aeq,T}$) over relevant time periods (T).
- 10-percentile A-weighted sound pressure levels (dB $L_{A10,T}$) over relevant time periods (T).
- 90-percentile A-weighted sound pressure levels (dB $L_{A90,T}$), commonly referred to as the “background sound level”, over relevant time periods (T).
- Maximum A-weighted sound pressure levels with a ‘fast’ time weighting (dB $L_{AFmax,T}$) over relevant time periods (T).

4.4.1.4 Up to three rounds of attended measurements will be undertaken at each attended measurement location within a single daytime and night-time period. Each measurement will be up to 15 minutes in duration at least one hour apart, such that the measurement dataset is considered representative of the entire daytime or night-time period.

4.4.1.5 All environmental noise measurements will be carried out following the procedures within British Standard BS 7445:2003 (Part 1 and 2) and British Standard BS 4142:2014+A1:2019. Noise monitoring will be carried out with suitable sound level meters (meeting the Class 1 specification within BS EN 61672-1:2013) with appropriate and current calibration records. Field checks of microphone calibration will be carried out before and after each noise monitoring session. Photographs and coordinates of each measurement location will be taken.

4.4.1.6 Each unattended noise monitoring station will require a single sound level meter with microphone and pre-amplifier and with outdoor monitoring kit (battery power and weather protection).

4.4.1.7 The sound level meter and the associated long-term batteries are housed within an all-weather case of approximate briefcase size. A single wire leads from the case to the microphone, which is mounted within a waterproof housing and covered with a wind shield. Typically, the microphone is mounted on a camera tripod such that it is approximately 1.5m above ground, or on an extendable pole attached to a fence or other such static object. The arrangement allows the case to be locked and chained to a nearby object (e.g. a fence or lighting column), whilst allowing the microphone to be installed at the required monitoring point.

4.4.1.8 Attended noise measurements will be carried out with a battery-operated sound level meter mounted on a camera tripod such that it is approximately 1.5m above ground.

4.4.1.9 Observations of weather conditions will be undertaken during installation and collection of unattended equipment and during attended measurements. Publicly available weather observations from local weather stations will inform the consideration of data exclusion due to unfavourable weather conditions within the survey period. No long-term monitoring of weather conditions will be carried out at any noise measurement location.

4.5 Measurement locations

4.5.1.1 It is neither feasible nor common practice to quantify the existing noise climate at every NSR through direct measurement. Instead, NSRs that are expected to have similar noise climates (identified through comparison of distance to main environmental noise sources) are grouped, with a single measurement location identified to represent all NSRs within the group. The identified measurement locations are considered sufficient to estimate the noise climate at all NSRs within the Noise and Vibration Study Area with a level of accuracy proportional to the assessment, as per best practice.

4.5.1.2 It is proposed that the environmental noise survey will be carried out through unattended noise monitoring at three fixed positions and attended day and night time noise measurements at 23 additional positions.

4.5.1.3 The proposed noise monitoring locations² and the relevant NSRs are provided within **Table 4.2** and shown in **Figure 2**.

Table 4.2: Proposed noise monitoring locations

Proposed Noise Monitoring Position	Indicative Location, Subject to Access	Representative NSRs
LT1	Field to the west of The Woodlands, South Hetton, DH6 2RX	R01, R02
LT2	Field to the south of Barwick Street	R04
LT3	Field to the west of West Batter Law Farm	R06
ST1	West Lane (land south of carriageway by entrance to Great Coop Farmhouse & The Bungalow, Great Coop House Farm, West Lane, South Hetton, DH6 2RY)	R03
ST2	Public footpath south of Little Coop House Farm, Hawthorn, SR7 8SA	R05
ST3	B1432 Stockton Road (east of carriageway by entrance to The Waterworks)	R10
ST4	B1432 Stockton Road (verge west of carriageway by entrance to Richardson's Garden Centre)	R08
ST5	Unnamed road / public footpath east of South Farm, Cold Hesledon, Seaham, SR7 8RL (by gated entrance to field to south)	R09
ST6	Swan Close, Seaham Garden Village, Cold Hesledon	R12
ST7	Unnamed road / public footpath south of Kinley Hill Tower, Hawthorn, SR7 8SW	R13
ST8	Western Park, south of intersection with West Lane	R11 (west)
ST9	Road intersection north of St. Michael's Rise, Hawthorn	R11 (east), R07
ST10	Northern end of Ullswater Terrace, South Hetton	R14
ST11	Grass verge at intersection of Broad Oaks and B1285 Station Road North, Murton	R15 (south), R16
ST12	Public footpath west of 57 Station Estate North, Murton, SR7 9SU	R15 (north)
ST13	Salters Lane, opposite Sawasdee, Salters Lane, Houghton-le-Spring, SR7 9TW	R17
ST14	Access road / public footpath south of Seaton Moor Cottage, Seaton, SR7 0NH	R18, R19
ST15	Unnamed road east of The Maples, Seaton, SR7 0NE	R20
ST16	B1404 (north of carriageway, by access road to Sharpley Hall Farm, Seaton, SR7 0NP)	R21
ST17	Northern end of The Meadows, Seaton	R22
ST18	Blaykeston Close (corner opposite 14 Blaykeston Close, Seaham, SR7 0PJ)	R23
ST19	Glebe Drive (north of 24 Glebe Drive, Seaham, SR7 0PD)	R24, R25
ST20	Waterworks Road (off Stockton Road, outside Glenlea, Stockton Road, Seaham, SR7 0PB)	R26
ST21	Unnamed road east of Roundabout On A1018 North Of Seaham Grange, near entrance to Grange Mount, Stockton Road, SR7 0PA)	R27
ST22	Cherry Brookes Way	R28
ST23	Lord Byrons Walk (north of Seaham Hall Hotel, Seaham, SR7 7AG)	R29, R30

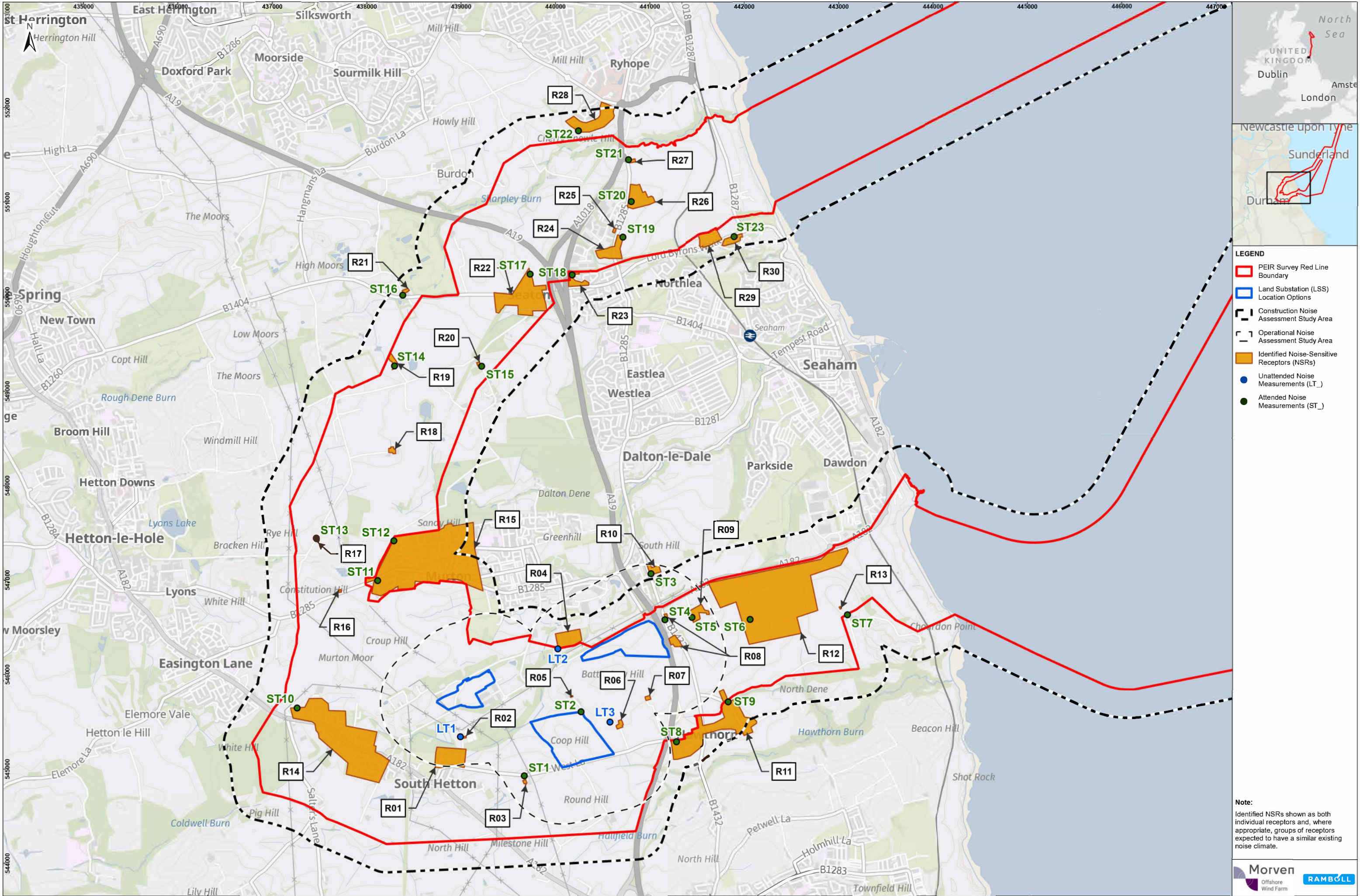
² Unattended Noise Measurements (LT_) and Attended Noise Measurements (ST_)

4.6 Survey duration

- 4.6.1.1 It is anticipated that the noise survey period will cover an approximately two-week period, to allow for non-consecutive measurements to be undertaken at the identified attended monitoring locations.
- 4.6.1.2 The three identified unattended noise logger locations will monitor for a minimum of seven days, including one weekend period.

4.7 Survey timing

- 4.7.1.1 It is proposed that the noise survey is carried out in late September to early October. The survey period is proposed to fall outside of school holiday periods, as per best practice.
- 4.7.1.2 Proposed survey dates can be affected if extended periods of weather conditions unsuitable for environmental noise monitoring (rainfall or high wind speeds) are forecast during the survey period.



Project Name:
MORVEN HAWTHORN PIT GRID
CONNECTION PROJECT

Drawing Title:
FIGURE 2: PROPOSED NOISE MONITORING LOCATIONS AND NOISE SENSITIVE RECEPTORS



Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid

Data Sources:
M3, Ordnance Survey, Ramboll

Service Layer Credits:
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Drawing Number: MHPGC-RAM-AE-0001-01				
VER	DATE	DETAILS	BY	CHECK
01	21/08/2025	Initial Issue	MP	KB
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5 Conclusion

- 5.1.1.1 The onshore baseline noise survey scope has been informed by a review of desk-based information. **Section 4** sets out the proposed onshore baseline noise survey scope for the MHPGC Project.
- 5.1.1.2 The Applicant will greatly appreciate written feedback on the proposed onshore baseline noise survey scope. This agreement is sought to confirm the scope affords a representative baseline and is proportionate, given the current baseline understanding. Should additional information be required to determine the required onshore baseline noise survey scope, it will be appreciated if this could be identified and requested, to ensure further information is provided to reach a final agreement. In summary, the Applicant is seeking feedback on the following questions:
1. Do stakeholders agree with the proposed onshore baseline survey scope for the MHPGC Project?
 2. Do stakeholders agree with the identified NSRs?
 3. Do stakeholders agree with the stated noise monitoring locations, methodology, timing and durations?
- 5.1.1.3 The Applicant will greatly appreciate written feedback by 19 September 2025. Should no written feedback be received, baseline noise surveys will proceed on the basis of the scope set out herein. There will be further opportunity to discuss the approach to the noise and vibration assessment in the upcoming EWGs.