


South	West
	
<b>Description</b>	
<p>Installed at NML05, located to the south of the proposed development.</p> <p>The noise monitoring equipment was installed in the garden to the south of the property. The equipment was located to the south of the property, away from a burn/watercourse to the east.</p> <p>The soundscape at this location consisted primarily of birdsong and a light breeze in foliage. Some noise from log chopping in garden of property to the south was audible. M74 motorway was not audible and the burn to the east was not audible.</p>	

### Field Data Sheet - NML1



<b>Project Title</b>	M74 West Renewable Energy Park	<b>Project Number</b>	15990
<b>Client</b>	M74 West Limited	<b>Surveyor</b>	TS

#### MONITORING LOCATION

<b>Location Number</b>	NML1
<b>Location Name</b>	NML01 - Over Balgray
<b>Description</b>	Field on the opposite side of driveway to residential property. Noise kit situated here at residents request due to dog using the garden. Noise kit less than 10m from the property's amenity area. Equipment located >3.5m from nearby facades or reflective surfaces.
<b>Eastings</b>	288047
<b>Northings</b>	624648
<b>Noise sources noted during installation, weekly inspection and removal</b>	Noise from M74 motorway audible. Birdsong audible. Calls from farm animals audible but not dominant. Light breeze in foliage. Sunny (Okta 1), 5°C.

#### NOISE MONITORING EQUIPMENT DETAILS

	Number	Model	Serial Number	Last Calibrated/ Conformance Checked
<b>Sound Level Meter</b>	SLM 58	NL52	721000	05/09/2022
<b>Calibrator</b>	CAL 2	NC74	34973250	18/12/2023

<b>Weather Measurement</b>	None
<b>Equipment Notes</b>	

#### NOISE MONITORING EQUIPMENT SETTINGS

	Frequency Weighting	Index	Interval	Time Weighting	Range (Hz)	Audio Recording
<b>Parameters Recorded</b>	A	Leq. L90. Lmax. L10	10 Mins	Fast	20-110	No

#### DATA

File Name	Start Time	End Time	Cal. at Start (dB)	Cal. at End (dB)	Drift (dB)	Observations
101	30/01/2024 11:40	27/02/2024 12:50	94.0	94.0	0.0	Strong wind in foliage. Birdsong. Dry and cloudy. 8°C
102	27/02/2024 12:50	26/03/2024 12:10	94.0	94.0	0.0	Birdsong, faint noise from wind in foliage. Farm animal noise. Quiet location. Occasional road noise from passing car.

NML1 PHOTOGRAPHS



Field Data Sheet - NML2



Project Title	M74 West Renewable Energy Park	Project Number	15990
Client	M74 West Limited	Surveyor	MT & TS

MONITORING LOCATION

Location Number	NML2
Location Name	NML02 - Duneaton Bridge House
Description	In the garden, next to and east of the site office building. Located on far side of building from the river. Preferred location of staff. Equipment located >3.5m from nearby facades or reflective surfaces.
Eastings	291629
Northings	624561
Noise sources noted during installation, weekly inspection and removal	Distant road noise from M74 motorway dominant. No wind or wind induced noise. River not audible. Drain on far side of road just slightly audible with runoff from the adjoining field. Sunny (Okta 1), 3°C

NOISE MONITORING EQUIPMENT DETAILS

	Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM 59	NL52	721001	05/09/2022
Calibrator	CAL 2	NC74	34973250	18/12/2023

Weather Measurement	Rain Gauge 1
Equipment Notes	

NOISE MONITORING EQUIPMENT SETTINGS

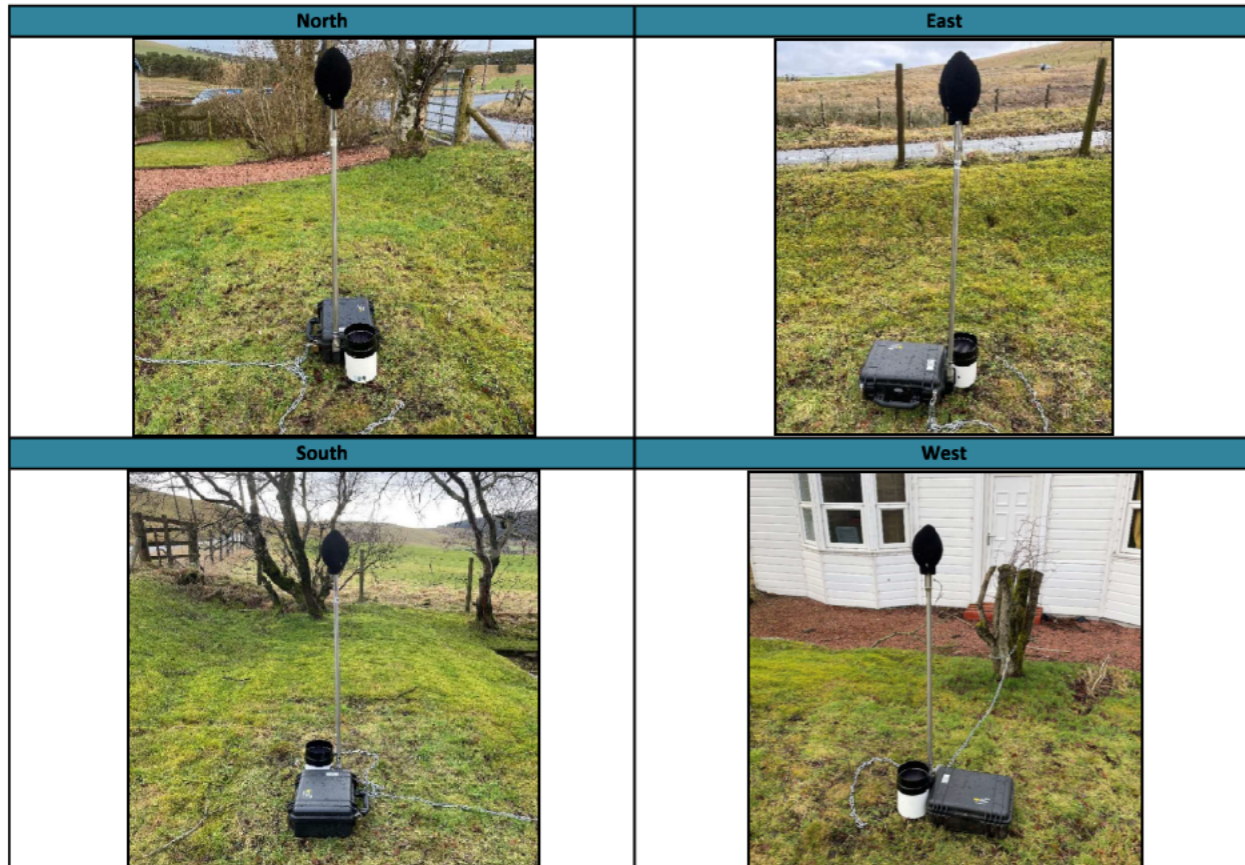
	Frequency Weighting	Index	Interval	Time Weighting	Range (Hz)	Audio Recording
Parameters Recorded	A	Leq. L90. Lmax. L10	10 Mins	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start (dB)	Cal. at End (dB)	Drift (dB)	Observations
201	18/01/2024 11:10	30/01/2024 10:00	94.0	93.9	-0.1	M74 motorway noise audible. Birdsong. No wind. 3°C.
202	30/01/2024 10:50	27/02/2024 13:50	94.0	94.1	0.1	M74 motorway audible in distance. Occasional road noise nearby. Birdsong. Wind in foliage.
203	27/02/2024 13:40	26/03/2024 12:50	94.0	94.0	0.0	Watercourse faintly audible. Birdsong. Road noise most prominent.



NML2 PHOTOGRAPHS



Field Data Sheet - NML3



Project Title	M74 West Renewable Energy Park	Project Number	15990
Client	M74 West Limited	Surveyor	MT & TS

MONITORING LOCATION

Location Number	NML3
Location Name	NML03 - Netherton Farm
Description	Garden of the main house, on the south east side of the farm. Kit is located on the far side of the house from the majority of the farm buildings. Garden is large and open, with trees around the perimeter, and has line of sight to M74 and wind turbines to the east. River visible to east but not audible. Equipment located >3.5m from nearby facades or reflective surfaces.
Eastings	290936
Northings	625425
Noise sources noted during installation, weekly inspection and removal	Road noise from M74 motorway dominant but quiet. Occasional car noise from minor road to the southwest. Birdsong. No farm noise audible. River to the east not audible. Sunny (Okta 2) 3°C, dry and no wind.

NOISE MONITORING EQUIPMENT DETAILS

	Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM 47	NL52	386760	03/01/2024
Calibrator	CAL 2	NC74	34973250	18/12/2023

Weather Measurement	Rain Gauge 64
Equipment Notes	

NOISE MONITORING EQUIPMENT SETTINGS

	Frequency Weighting	Index	Interval	Time Weighting	Range (Hz)	Audio Recording
Parameters Recorded	A	Leq. L90. Lmax. L10	10 Mins	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start (dB)	Cal. at End (dB)	Drift (dB)	Observations
301	18/01/2024 12:00	30/01/2024 12:10	94.0	93.9	-0.1	M74 motorway noise audible. Birdsong. No wind, 3°C.
302	30/01/2024 12:30	27/02/2024 12:00	94.0	94.0	0.0	Wind in foliage. Birdsong. B7078 road to the west audible.
303	27/02/2024 12:20	26/03/2024 11:30	94.0	94.0	0.0	M74 motorway noise audible, wind blowing from motorway. Birdsong and faint noise from foliage. Full cloud cover.

NML3 PHOTOGRAPHS



Field Data Sheet - NML4



Project Title	M74 West Renewable Energy Park	Project Number	15990
Client	M74 West Limited	Surveyor	TS

MONITORING LOCATION

Location Number	NML4
Location Name	NML04 - Maidencots Farm
Description	Amenity area to the rear (west) of the farmhouse. Exact location chosen so noise kit was greater than 3.5 m from nearest façade and to be further from livestock. Equipment located >3.5m from nearby facades or reflective surfaces.
Eastings	292798
Northings	626245
Noise sources noted during installation, weekly inspection and removal	Road noise from M74 motorway dominant. Birdsong. Wind in foliage. Animal noises and calls from farm audible. No noise audible from childs play area nearby. Cloudy (Okta) 7, 3°c.

NOISE MONITORING EQUIPMENT DETAILS

	Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM 60	NL52	721002	05/09/2022
Calibrator	CAL 2	NC74	34973250	18/12/2023

Weather Measurement	None
Equipment Notes	

NOISE MONITORING EQUIPMENT SETTINGS

	Frequency Weighting	Index	Interval	Time Weighting	Range (Hz)	Audio Recording
Parameters Recorded	A	Leq. L90. Lmax. L10	10 Mins	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start (dB)	Cal. at End (dB)	Drift (dB)	Observations
401	30/01/2024 14:40	27/02/2024 11:20	94.0	93.9	-0.1	Moderate wind and rainfall. M74 motorway noise dominant. Birdsong audible.
402	27/02/2024 11:50	26/03/2024 11:00	94.0	94.0	0.0	Occasional noise from farm animals . Dogs in pen 15metres away barking. Birdsong. General farm activities audible. Faint noise from M74 motorway. No wind.



Field Data Sheet - NML5



Project Title	M74 West Renewable Energy Park	Project Number	15990
Client	M74 West Limited	Surveyor	TS

MONITORING LOCATION

Location Number	NML5
Location Name	NML05 - Crawfordjohn Mill Farm
Description	Allotment in garden south of the property. Equipment located >3.5m from nearby facades or reflective surfaces.
Eastings	289688
Northings	624128
Noise sources noted during installation, weekly inspection and removal	Birdsong. Light breeze in foliage. Noise from nearby residential properties (dog barking, chopping logs). Stream to the east not audible. M74 motorway not audible. Poly tunnel in allotment not audible. Partly cloudy (Okta 4) 3°C

NOISE MONITORING EQUIPMENT DETAILS

	Number	Model	Serial Number	Last Calibrated/ Conformance Checked
Sound Level Meter	SLM 61	NL52	721060	12/10/2022
Calibrator	CAL 2	NC74	34973250	18/12/2023

Weather Measurement	None
Equipment Notes	

NOISE MONITORING EQUIPMENT SETTINGS

	Frequency Weighting	Index	Interval	Time Weighting	Range (Hz)	Audio Recording
Parameters Recorded	A	Leq, L90, Lmax, L10	10 Mins	Fast	20-110	No

DATA

File Name	Start Time	End Time	Cal. at Start (dB)	Cal. at End (dB)	Drift (dB)	Observations
501	30/01/2024 13:30	27/02/2024 13:10	94.0	93.9	-0.1	Wind in foliage. Birdsong. Dry. Distant machinery alarm audible. Poly tunnel not audible.
502	27/02/2024 13:20	26/03/2024 12:20	94.0	94.0	0.0	Watercourse audible. Birdsong audible. Noise from farm animals audible. Poly tunnel not audible.

NML4 PHOTOGRAPHS



NMLS PHOTOGRAPHS





## Annex 4 – Calibration Certificates

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# CERTIFICATE OF CALIBRATION



0653

Date of Issue: 18 December 2023

Certificate Number: UCRT23/2584

Calibrated at & Certificate issued by:

ANV Measurement Systems

Beaufort Court

17 Roebuck Way

Milton Keynes MK5 8HL

Telephone 01908 642846 Fax 01908 642814

E-Mail: info@noise-and-vibration.co.uk

Web: www.noise-and-vibration.co.uk

Acoustics Noise and Vibration Ltd trading as ANV Measurement Systems

Customer TNEI  
7th Floor West One  
Forth Banks  
Newcastle Upon Tyne  
NE1 3PA

Order No. 5001

Test Procedure Procedure TP 1 Calibration of Sound Calibrators

Description Acoustic Calibrator

Identification	Manufacturer	Instrument	Model	Serial No.
	Rion	Calibrator	NC-74	34973250

The calibrator has been tested as specified in Annex B of IEC 60942:2003. As public evidence was available from a testing organisation (PTB) responsible for approving the results of pattern evaluation tests, to demonstrate that the model of sound calibrator fully conformed to the requirements for pattern evaluation described in Annex A of IEC 60942:2003, the sound calibrator tested is considered to conform to all the class 1 requirements of IEC 60942:2003.

ANV Job No. UKAS23/12850

Date Received 14 December 2023

Date Calibrated 18 December 2023

Previous Certificate	Dated	19 January 2023
	Certificate No.	UCRT23/1090
	Laboratory	0653

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

## CERTIFICATE OF CALIBRATION

UKAS Accredited Calibration Laboratory No. 0653

Certificate Number

UCRT23/2584

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### Measurements

The sound pressure level generated by the calibrator in its WS2 configuration was measured five times by the Insert Voltage Method using a microphone as detailed below. The mean of the results obtained is shown below. It is corrected to the standard atmospheric pressure of 101.3 kPa (1013 mBar) using original manufacturers information.

Test Microphone	Manufacturer	Type
	Brüel & Kjær	4134

### Results

The level of the calibrator output under the conditions outlined above was

94.01 ± 0.10 dB rel 20 µPa

### Functional Tests and Observations

The frequency of the sound produced was	1002.88 ± 0.12 Hz
The total distortion was	1.07 ± 0.08 % Distortion

During the measurements environmental conditions were

Temperature	22 to 23 °C
Relative Humidity	36 to 45 %
Barometric Pressure	101.7 to 101.8 kPa

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

The uncertainties refer to the measured values only with no account being taken of the ability of the instrument to maintain its calibration.

A small correction factor may need to be applied to the sound pressure level quoted above if the device is used to calibrate a sound level meter which is fitted with a free-field response microphone. See manufacturers handbook for details.

..... END .....

### Note:

Calibrator adjusted prior to calibration?	NO
Initial Level	N/A dB
Initial Frequency	N/A Hz

Additional Comments The results on this certificate only relate to the items calibrated as identified above.

None

Calibrated by: K. Zablocki

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