

SUNNICA ENERGY FARM

Preliminary Environmental Information Report

Appendix 11C: Construction Noise Modelling

Sunnica Ltd

AUGUST 2020



Sunnica Energy Farm
Preliminary Environmental Information
Volume 2 Appendix 11C: Construction Noise Modelling

Quality information

Prepared by	Checked by	Verified by	Approved by
Various	Colin O'Connor	Yuyou Liu	Neil Titley
	Principal Acoustics Consultant	Acoustics Regional Manager	Technical Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
1	September 2020	For issue	YL	Yuyou Liu	Acoustics Regional Manager

Prepared for:

Sunnica Ltd.

Prepared by:

AECOM Infrastructure & Environment UK Limited Unit 1 Wellbrook Court Girton Cambridge CB3 0NA United Kingdom

T: +44 1223 488 000 aecom.com

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Construction Noise Modelling

- 11.1.1 Due to the extent of the working areas it has been assumed that one of each construction plant item will be in operation at the closest approach to each of the identified sensitive receptors, continuously throughout a working day. It has been assumed that while they may be overlaps of work stages, noisy works associated with each stage affecting individual receptors would not overlap.
- 11.1.2 Plant schedules and source data for sound pressure/power levels used in the noise model are summarised below.

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Table 11C-1 Sunnica West and East Site Plant Schedule for Construction Noise Model

Plant	BS5228-1 ref.	Sound pressure level at 10m, L _{pA}	Sound power level, L _{wA}	Site preparation	Civil works	Structures	Panels	Electrical works	CCTV	Internal Substations
Compact excavator	C3.20	68	96	0	1	1	1	1	1	0
Mobile crane	C4.55	70	98	1	0	0	0	1	0	1
Crawled Dozer	C2.13	78	106	1	1	0	0	0	0	1
Excavator	C2.17	70	98	1	1	0	0	0	0	1
Mini Excavator	C3.20	68	96	0	1	0	0	0	1	1
Push press piling rig	AECOM library data	66	94	0	0	1	0	0	0	0
Power generator	C4.76	61	89	1	0	0	0	0	0	1
Telehandler	C4.55	70	98	0	0	1	1	0	1	1
Truck	C4.5	63	91	0	1	0	0	0	0	1
Vibrating roller	C2.40	73	101	1	1	0	0	0	0	0
Wheeled Excavator	C2.8	68	96	0	1	0	0	0	0	1

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Table 11C-2 Cable Route Plant Schedule for Construction Noise Model

Plant	BS5228-1 ref.	Sound pressure level at 10m, L _{pA}	Sound power level, L _{WA}	Cable route
360 Excavator	C2.17	70	98	1
Dumpers	C4.5	63	91	1
Sand Hopper and Plough	C10.5	80	108	1
Small plant and Cable Winch	C4.95	73	101	1

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