

Dunoon to Whistlefield (non s37) OHL Works

Environmental Appraisal

Appendix L - Construction Plant and Equipment Noise Assumptions





CONSTRUCTION NOISE ASSESSMENT ASSUMPTIONS

- 1.1.1 The following table shows the noise levels associated with the construction activities with reference to BS 5228:2009+A1:2014. In **Table L1**, the number of items and the percentage on time during a typical working day are presented. The results relate to a noise level at 10 m from the activity.
- 1.1.2 The resultant noise levels presented in the tables correspond to each construction activity identified within the construction programme with the highest noise levels, as a typical worst-case.

Table L1: Noise Level Assumptions – Construction Activities

Construction Activity	Name	No.	On- time %	BS 5288 Equipment	Octave band sound pressure level at 10 m (Hz)								dBA
					63	125	250	500	1k	2k	4k	8k	
Tower Removal	Hiab	1	25	Lorry	73	78	78	78	74	73	68	66	80
	Circular saw/Cut off saw/Disc cutter	2	25	Circular bench saw (petrol-cutting concrete blocks)	85	74	72	70	72	76	82	77	85
	360 Excavator, 20T	1	50	Tracked excavator	75	76	72	68	65	63	57	49	71
	Mobile Crane 55T	1	20	Tracked mobile crane	81	77	69	67	62	60	61	51	70
	Delivery lorry	2	25	Lorry	73	78	78	78	74	73	68	66	80
Conductoring Works	Delivery lorry	1	10	Lorry	73	78	78	78	74	73	68	66	80
	Puller/Tensioner	1	75	Tractor (towing equipment)	79	71	78	75	78	70	61	55	80
	Winch Tractor	1	15	Tractor (towing equipment)	79	71	78	75	78	70	61	55	80
	Argo/Soft Track	2	15	Tracked excavator	75	76	72	68	65	63	57	49	71

1.1.3 Indicative helicopter noise emissions are based on an estimate of 145 dB L_{wA} during overflight and 122 dB L_{wA} when idling on the ground, based on the European Union Aviation Safety Agency (EASA) aircraft noise data. The activity is assumed to operate at 150 m off the ground during helicopter flights and 4 m height during idling activities.