



Norwich Western Link

Environmental Statement

Chapter 7: Noise and Vibration

Appendix 7.6: Construction Plant Assumptions

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1 Construction plant assumptions

1.1.1 **Table 1.1** presents the plant assumed to be in operation for the two activities assessed for daytime works as part of the construction noise assessment for on-site works. Where there are multiple items of plant assumed, the noise level ($L_{Aeq,T}$ at 10m) presented are for a single item of plant only.

Table 1.1 – Construction plant assumptions – daytime works

Activity	Plant	BS 5228 Ref	dB $L_{Aeq,T}$ at 10m	On time percentage	Number of plant
Site clearance, and earthworks (including enabling works and landscaping)	35t Tracked excavator	C.02 #15	76	75	4
Site clearance, and earthworks (including enabling works and landscaping)	20t Excavator	C.02 #21	71	75	6
Site clearance, and earthworks (including enabling works and landscaping)	5t Mini excavator	C.02 #8	68	50	2



Activity	Plant	BS 5228 Ref	dB L_{Aeq,T} at 10m	On time percentage	Number of plant
Site clearance, and earthworks (including enabling works and landscaping)	20t Wheeled excavator	C.04 #10	66	50	3
Site clearance, and earthworks (including enabling works and landscaping)	Large dozer	C.02 #10	80	25	4
Site clearance, and earthworks (including enabling works and landscaping)	Medium dozer	C.02 #11	79	25	3
Site clearance, and earthworks (including enabling works and landscaping)	30t Articulated dumper truck	C.02 #30	79	25	5
Site clearance, and earthworks (including enabling works and landscaping)	25t Articulated dump trucks	C.02 #32	74	25	5



Activity	Plant	BS 5228 Ref	dB L_{Aeq,T} at 10m	On time percentage	Number of plant
Site clearance, and earthworks (including enabling works and landscaping)	Ride on roller	C.05 #25	75	25	2
Site clearance, and earthworks (including enabling works and landscaping)	Road sweeper	C.04 #90	76	25	1
Site clearance, and earthworks (including enabling works and landscaping)	Water bowser	C.06 #37	81	25	1
Site clearance, and earthworks (including enabling works and landscaping)	Road planer	C.05 #7	82	25	1
Site clearance, and earthworks (including enabling works and landscaping)	Excavator and breaker	C.09 #13	95	10	1



Activity	Plant	BS 5228 Ref	dB L_{Aeq,T} at 10m	On time percentage	Number of plant
Structures including retaining walls	35t Tracked Excavator	C.02 #15	76	25	4
Structures including retaining walls	20t Excavator	C.02 #21	71	25	6
Structures including retaining walls	5t mini excavator	C.02 #8	68	25	2
Structures including retaining walls	20t Wheeled Excavator	C.04 #10	66	25	3
Structures including retaining walls	Large Dozer	C.02 #10	80	10	4
Structures including retaining walls	Medium Dozer	C.02 #11	79	10	3
Structures including retaining walls	30t Articulated dumper truck	C.02 #30	79	50	5
Structures including retaining walls	25t Articulated dump truck	C.02 #32	74	50	5
Structures including retaining walls	Ride on roller	C.05 #25	75	25	2



Activity	Plant	BS 5228 Ref	dB L_{Aeq,T} at 10m	On time percentage	Number of plant
Structures including retaining walls	Road sweeper	C.04 #90	76	50	1
Structures including retaining walls	Mobile crane	C.04 #43	70	50	1
Structures including retaining walls	Concrete pump	C.04 #28	75	25	1
Structures including retaining walls	Piling rig (rotary bored piling)	C.03 #14	83	25	1
Road construction	Ride on roller	C.05 #25	75	25	2
Road construction	Asphalt paver	C.05 #31	77	75	2
Road construction	Articulated dump truck	C.02 #32	74	50	1
Road construction	Dozer	C.02 #36	81	50	3
Road construction	Circular saw	C.04 #70	91	10	2
Road construction	Road Planer	C.05 #7	82	25	1



Activity	Plant	BS 5228 Ref	dB $L_{Aeq,T}$ at 10m	On time percentage	Number of plant
Road construction	Excavator and breaker	C.09 #13	95	10	1

1.1.2 **Table 1.2** presents the plant assumed to be in operation for the two activities assessed for night-time works as part of the construction noise assessment for on-site works. The night-time plant list for the road construction activity differs only slightly compared to the daytime plant list. Where there are multiple items of plant assumed, the noise level ($L_{Aeq,T}$ at 10m) presented are for a single item of plant only.

Table 1.2 – Construction plant assumptions – night-time works

Activity	Plant	BS 5228 Ref	dB $L_{Aeq,T}$ at 10m	On time percentage	Number of plant
Structures including retaining walls	Lighting (Diesel generator)	C.04 #86	65	100	1
Structures including retaining walls	Concrete Mixer	C.04 #27	79	50	1
Structures including retaining walls	Mobile Crane	C.04 #43	70	100	1



Activity	Plant	BS 5228 Ref	dB L _{Aeq,T} at 10m	On time percentage	Number of plant
Structures including retaining walls	Concrete Pump	C.04 #28	75	50	1
Structures including retaining walls	Piling rig (rotary bored piling)	C.03 #14	83	50	1
Road construction	Ride on roller	C.05 #25	75	25	1
Road construction	Asphalt paver	C.05 #31	77	75	3
Road construction	Articulated dump truck	C.02 #32	74	50	1
Road construction	Dozer (towing roller)	C.02 #36	81	50	3
Road construction	Circular saw	C.04 #70	91	10	2
Road construction	Road planer	C.05 #7	82	25	1
Road construction	Excavator and breaker	C.09 #13	95	10	1