



Llywodraeth Cymru
Welsh Government

Llywodraeth Cymru / Welsh
Government

A487 New Dyfi Bridge

Environmental Statement -
Volume 3: Appendix 12.3

Construction Assumptions

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Appendix 12.3 Construction Assumptions

Site Establishment							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
Site Clearance	Grubbing	Excavator (30t)	103.0	C2.16	1	60%	
	Tree felling	Chainsaw	114.0	--	2	25%	5 days only
	Wood chipping	Chipper	118.0	HSE Noise exposed from mobile wood chippers	2	25%	5 days only

Section 1 - Machymleth Tie-in							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
Earthworks	Earthworks	Excavator (35t)	108.0	C.5.18	1	90%	
	Earthworks	Bulldozer (24t)	111.0	C.5.15	1	50%	
	Earthworks	Articulated Dump Truck (23t)	109.0	C.5.17	1	50%	
	Earthworks	Roller - Static	108.0	C.5.19	1	50%	
	Earthworks	Vibratory roller	108.0	C.5.21	1	90%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	2	50%	
Drainage		Excavator (5t)	102	C.4.67	1	70%	
		Wheeled dumper 6t	101	D.3.98	1	25%	
		Compressor	102.0	D.7.9	1	5%	
Pavement	Road Surfacing	Paver + tipper lorry	105.0	C.5.31	1	80%	

Section 1 - Machymleth Tie-in							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
	Road Surfacing	Roller - Static	108.0	C.5.19	2	80%	
	Road Surfacing	Dump truck	107.0	C.2.30	2	80%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	1	50%	

Section 2 - Machymleth Embankment							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
Earthworks	Earthworks	Excavator (35t)	108.0	C.5.18	2	90%	
	Earthworks	Bulldozer (24t)	111.0	C.5.15	2	50%	
	Earthworks	Articulated Dump Truck (23t)	109.0	C.5.17	2	50%	

	Earthworks	Roller - Static	108.0	C.5.19	1	50%	
	Earthworks	Vibratory roller	108.0	C.5.21	1	90%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	6	50%	
Drainage		Excavator (5t)	102	C.4.67	1	70%	
		Wheeled dumper 6t	101	D.3.98	1	25%	
		Compressor	102.0	D.7.9	1	5%	
Pavement	Road Surfacing	Paver + tipper lorry	105.0	C.5.31	1	80%	
	Road Surfacing	Roller - Static	108.0	C.5.19	2	80%	
	Road Surfacing	Dump truck	107.0	C.2.30	2	80%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	1	50%	

Section 3 - Viaduct							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number	On time % (daily average over one month)	Notes
Earthworks	Earthworks	Excavator (35t)	108.0	C.5.18	2	90%	
	Earthworks	Bulldozer (24t)	111.0	C.5.15	2	90%	
	Earthworks	Articulated Dump Truck (23t)	109.0	C.5.17	2	90%	
Piling	Bored piling	CFA crawler mounted rig	108.0	C.3.21	1	50%	
	Assembly / Piles / Concreting	Tracked crane (110t)	95	C.3.28	1	50%	
Substructure	Pumping Concrete	Concrete Pump	106.0	C.3.25	2	20%	
		Assembly / Piles / Concreting	Tracked crane (110t)	95	C.3.28	1	50%
	Concrete in	Large lorry concrete mixer	105.0	C.4.21	3	5%	
		Tracked excavator	102.0	C.3.24	2	25%	

Section 3 - Viaduct								
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number	On time % (daily average over one month)	Notes	
		Dumper (9t)	104.0	C.4.4	2	25%		
Deck	Assembly / Piles / Concreting	Tracked crane (110t)	95	C.3.28	1	50%		
Surfacing	Road Surfacing	Paver + tipper lorry	105.0	C.5.31	1	80%		
	Road Surfacing	Roller - Static	108.0	C.5.19	2	80%		
	Road Surfacing	Dump truck	107.0	C.2.30	2	80%		

Section 4 – Afon Dyfi River Bridge							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number	On time % (daily average over one month)	Notes
Earthworks	Earthworks	Excavator (35t)	108.0	C.5.18	2	90%	
	Earthworks	Bulldozer (24t)	111.0	C.5.15	2	90%	
	Earthworks	Articulated Dump Truck (23t)	109.0	C.5.17	2	90%	
Structures	Bored piling	CFA crawler mounted rig	108.0	C.3.21	1	50%	
	Pumping Concrete	Concrete Pump	106.0	C.3.25	2	20%	
	Assembly / Piles / Concreting	Tracked Crane (55t)	98.0	C.3.29	1	50%	
			105.0	C.4.21	3	5%	
	Concrete in	Large lorry concrete mixer	96.0	C.3.24	2	25%	
			104.0	C.4.4	2	25%	
		Dumper (9t)					

Section 4 – Afon Dyfi River Bridge							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number	On time % (daily average over one month)	Notes
Surfacing	Road Surfacing	Paver + tipper lorry	105.0	C.5.31	1	80%	
	Road Surfacing	Roller - Static	108.0	C.5.19	2	80%	
	Road Surfacing	Dump truck	107.0	C.2.30	2	80%	

Section 5 - Afon Dulas Tie-in							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
Earthworks	Earthworks	Excavator (35t)	108.0	C.5.18	1	90%	
	Earthworks	Bulldozer (24t)	111.0	C.5.15	1	50%	
	Earthworks	Articulated Dump Truck (23t)	109.0	C.5.17	1	50%	

Section 5 - Afon Dulas Tie-in							
Stage	Noisy Construction Activity	Plant	Sound Power	Reference (Defra / BS 5228)	Number (per gang)	On time % (daily average over one month)	Notes
	Earthworks	Roller - Static	108.0	C.5.19	1	50%	
	Earthworks	Vibratory roller	108.0	C.5.21	1	90%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	2	50%	
Drainage		Excavator (5t)	102	C.4.67	1	70%	
		Wheeled dumper 6t	101	D.3.98	1	25%	
		Compressor	102.0	D.7.9	1	5%	
Pavement	Road Surfacing	Paver + tipper lorry	105.0	C.5.31	1	80%	
	Road Surfacing	Roller - Static	108.0	C.5.19	2	80%	
	Road Surfacing	Dump truck	107.0	C.2.30	2	80%	
	Loading earth	Haulage dump truck being loaded	110.0	D.9.48	1	50%	