

Llywodraeth Cymru / Welsh Government

A487 New Dyfi Bridge

Environmental Statement - Volume 3: Appendix 12.3

Construction Assumptions

Final Issue | 19 January 2016







Appendix 12.3 Construction Assumptions

Site Establishment	ent						
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	C.2.16	1	60%	
	Tree felling	Chainsaw	114.0	1	2	25%	5 days only
	Wood chipping	Chipper	118.0	HSE Noise exposed from mobile wood chippers	2	25%	5 days only

Section 1 - Machynlleth Tie-in	ynlleth 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)	0.801	C.5.18	1	90%	
	Earthworks	Bulldozer (24t)	0.111	C.5.15	1	50%	
	Earthworks	Articulated Dump Truck (23t)	0.601	C.5.17	1	50%	
	Earthworks	Roller - Static	0.801	C.5.19	1	50%	
	Earthworks	Vibratory roller	0.801	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 - Machynlleth Tie-in	ıynlleth 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 - Mach	Section 2 - Machynlleth Embankment	nt					
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%	

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

Section 3 - Viaduct	ıct						
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)	0.111	C.5.15	2	%00	
	Earthworks	Articulated Dump Truck (23t)	0.601	C.5.17	2	%00	
Piling	Bored piling	CFA crawler mounted rig	108.0	C.3.21	1	50%	
	Assembly / Piles / Concreting	Tracked crane (110t)	56	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	ct						
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	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%	
	Punping Concrete	Concrete Pump	106.0	C.3.25	2	20%	
	Assembly / Piles / Concreting	Tracked Crane (55t)	98.0	C.3.29	1	50%	
	Concrete in	Large lorry concrete mixer	105.0	C.4.21	3	5%	
		Tracked excavator	96.0	C.3.24	2	25%	
		Dumper (9t)	104.0	C.4.4	2	25%	

Section 4 – Afon	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	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	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%	