

APPENDIX M – INDICATIVE PLANT USED IN CONSTRUCTION PHASE

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
Mobilisation	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	OTHER	2			Caterpillar D6 Bulldozer	1	40	12	10	83
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	C.4	53	welfare set up		rigid flat bed HIAB	1	10	12	10	77
	C.4	86		Power for temp welfare	Diesel generator 15 kW	1	100	12	10	65
Access road Upgrades	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.2.	3			Tracked excavator (22t),	2	75	12	10	78
	C.4	4			9T Dumper	3	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	4	30	12	10	80
	OTHER	2			Caterpillar D6 Bulldozer	1	40	12	10	83
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	C.4	70	Cutting		Petrol hand-held circular	2	10	12	10	91
Platform Construction										
Forestry clearance			Clearing Site		Mulching (similar to Tracked excavator (22t))	2	75	12	10	70
					chainsaws (similar to Hand-held circular saw)	2	30	12	10	91

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
					Machinery/excavator (similar to Tracked excavator (22t))	2	75	12	10	70
Peat removal	C.2.	7	Clearing Site		Tracked excavator (14t),	3	75	12	10	70
	C.2.	3			Tracked excavator (22t),	3	75	12	10	78
	OTHER	1			Volvo 40t ADT	4	75	12	10	85
	OTHER	2			Caterpillar D6 Bulldozer	3	40	12	10	82
Till excavation/deposition	OTHER	2	Material Distribution		Caterpillar D6 Bulldozer	3	40	12	10	82
	C.2.	7			Tracked excavator (14t),	3	75	12	10	70
	C.2.	3			Tracked excavator (22t),	3	75	12	10	78
	OTHER	1			Volvo 40t ADT	4	75	12	10	85
	C.5	21	Rolling and Compaction		13T Drum roller	3	25	12	10	80
Rock excavation/deposition	C.2.	7	Material Distribution		Tracked excavator (14t),	4	75	12	10	70
	C.2.	3			Tracked excavator (22t),	4	75	12	10	80
	C.1	9			Hydraulic breakers	4	50	12	10	90
	OTHER	1			Volvo 40t ADT	4	75	12	10	85
	OTHER	2			Caterpillar D6 Bulldozer	2	40	12	10	82
	C.5	21	Rolling and Compaction		13T Drum roller	2	25	12	10	80
Imported fill	C.2.	7	Material Distribution		Tracked excavator (14t),	1	75	12	10	70
	C.2.	3			Tracked excavator (22t),	2	75	12	10	78
	OTHER	2			Caterpillar D6 Bulldozer	2	40	12	10	82
	C.2.	34			Lorry (4-axle wagon)	5	30	12	10	80
	C.5	21	Rolling and Compaction		13T Drum roller	2	25	12	10	80

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
Control Building										
Pad foundations	C.2.	7	Clearing Site		Tracked excavator (14t),	4	75	12	10	70
	C.4	4			9T Dumper	4	75	12	10	76
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	1	10	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
U/S Drainage + services	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	C.4	4			9T Dumper	1	75	12	10	76
	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	Other	3		Compaction	Bomag BW 219 Roller)	1	20	12	10	82
Ground beams	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	1	10	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Structural steel frame	C.4	45	Lifting		Mobile crane (55t)	1	40	12	10	82
	C.4	57			MEWP (used same noise figures as 22t excavator)	1	60	12	10	67
					Impact wrench (used same noise figures as compressor)		25	12	10	75
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
Blockwork perimeter	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	30	12	10	74
	C.4	53	Scaffolding	Haulage	rigid flat bed HIAB	1	20	12	10	77
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	25	12	10	79
	C.4.	23	Mixing Mortar		Small cement mixer	1	10	12	10	61
	C.4	54			Telescopic handler (4t)	1	50	12	10	79
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
Roof install	C.4	45	Lifting		Mobile crane (55t)	1	40	12	10	82

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.4	53			MEWP (used same noise figures as 22t excavator)	1	60	12	10	77
					Impact wrench (used same noise figures as compressor)	1	40	12	10	75
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
GF Slab	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	54	Reinforcement	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
					vibrating screed leveller (used same noise figures as Poker vibrator)	1	15	12	10	78
Cladding	C.4	45	Lifting		Mobile crane (55t)	1	40	12	10	82
	C.4	57			MEWP (used same noise figures as 22t excavator)	1	60	12	10	67
					Impact wrench (used same noise figures as compressor)	1	40	12	10	75
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
SGT 1 / SG2 Transformer bund										
Foundations	C.2.	7	excavations		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	2	15	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Structural concrete	C.2	03	reinforcement/formwork	Lifting	Tracked excavator (20t),	1	75	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
AIS Bases + ducting										

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
Ducting	C.2.	7	excavations		Tracked excavator (14t),	2	75	12	10	70
	C.4	4			9T Dumper	2	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	C.4	4			9T Dumper	2	75	12	10	76
	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	Other	3		Compaction	Bomag BW 219 Roller)	2	20	12	10	82
Foundations	C.2.	7	Clearing Site		Tracked excavator (14t),	3	75	12	10	70
	C.4	4			9T Dumper	3	75	12	10	76
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	25	12	10	65
	C.5	5		Cleaning	Compressor	1	15	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Structural concrete	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	1		12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
Cable Troughs PH1 / PH2										
	C.2.	7	Clearing Site		Tracked excavator (14t),	2	75	12	10	70
	C.4	4			9T Dumper	2	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	C.4	4			9T Dumper	1	75	12	10	76
	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	2	25	12	10	74
	Other	3		Compaction	Bomag BW 219 Roller)	2	20	12	10	82
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
				core cut	Core (used same noise figures as compressor)	2	40	12	10	65
Foundations	C.4	54	reinforcement/formwork	Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	29		Pumping Concrete	Truck mounted pump + boom arm 26t	1	40	12	10	80

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.4	86		Power for Lighting	Diesel generator 15 kW	1	30	12	10	65
	C.5	5		Cleaning	Compressor	1	25	12	10	65
	C.4	33		Concrete Other	Poker vibrator	1	15	12	10	78
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Platform Fill 1m										
	C.2.	7	Material Distribution		Tracked excavator (14t),	4	75	12	10	70
	C.2.	3			Tracked excavator (22t),	4	75	12	10	78
	OTHER	2			Caterpillar D6 Bulldozer	4	40	12	10	82
	C.2.	34			Lorry (4-axle wagon)	10	30	12	10	80
	C.5	21	Rolling and Compaction		13T Drum roller	4	25	12	10	80
Roads										
Subbase/formation	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.2.	3			Tracked excavator (22t),	1	75	12	10	78
	C.4	4			9T Dumper	2	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	OTHER	2			Caterpillar D6 Bulldozer	1	40	12	10	83
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
Drainage	C.2.	7	Clearing Site		Tracked excavator (14t)	1	75	12	10	70
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	1	30	12	10	80
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	C.4.	4	Material Distribution		Dumper (9t)	1	75	12	10	76
Kerbing	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Surfacing	C.5.	32	Paving		Asphalt paver (+ tipper lorry)	1	25	12	10	84
	C.5.	19	Rolling and Compaction		Road roller 22t	1	25	12	10	80
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	15	12	10	80
	C.2.	8	Clearing Site		Wheeled backhoe loader (8t)	1	10	12	10	68
	C.4.	70	Cutting		Petrol hand-held circular	1	5	12	10	91
Footpaths										
Subbase/formation	C.2.	7	Clearing Site		Tracked excavator (8t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
Drainage	C.2.	7	Clearing Site		Tracked excavator (8t)	1	75	12	10	70
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	1	30	12	10	80
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	C.4.	4	Material Distribution		Dumper (9t)	2	75	12	10	76
Kerbing	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	72		Cutting	Hand-held circular saw	1	15	12	10	79
Surfacing	C.5.	32	Paving		Asphalt paver (+ tipper lorry)	1	25	12	10	84
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	15	12	10	80
	C.2.	8	Clearing Site		Wheeled backhoe loader (8t)	1	10	12	10	68
	C.4.	70	Cutting		Petrol hand-held circular	1	5	12	10	91
SGT Installation										
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
	C.4	45	Lifting		Mobile crane (55t)	1	50	12	10	82
	C.5	5		cleaning	Compressor	1	30	12	10	65
	C.5	5	move to SGT	Pressurising	Compressor	1	40	12	10	65
					Impact wrench (used same noise figures as compressor)	2	40	12	10	65
	C.4	57			MEWP (used same noise figures as 22t excavator)	2	60	12	10	67
AIS installation										
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
					Impact wrench (used same noise figures as compressor)	2	25	12	10	65
	C.4	57			MEWP (used same noise figures as 22t excavator)	1	60	12	10	67
Cabling & terminations										
	C.4	45	Lifting		forklift	1	40	12	10	82
HV Cabling										

Phase	BS5228		Activity	Notes	Plant Description	No	% On-Time	Shift Duration (hrs)	Duration of Activity (Hrs)	Uncorrected Sound Pressure Level @10m dB(A)
	Table	Ref No								
Ducting to existing substation	C.2.	7	Clearing Site		Tracked excavator (14t),	1	75	12	10	70
	C.4	4			9T Dumper	1	75	12	10	76
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80
	C.4	21	PS17 Structural concrete	Mixing Concrete	Large concrete mixer	2	20	12	10	77
	C.4	4			9T Dumper	1	75	12	10	76
	C.4	54		Lifting	Telescopic handler (4t)	1	50	12	10	79
	C.2.	39	Rolling and Compaction		Vibratory roller (4t)	1	25	12	10	74
	Other	3		Compaction	Bomag BW 219 Roller)	1	25	12	10	82
Installation HV Cable										
	C.6	21	Haulage		Road lorry (full) 39 t	1	10	12	10	80
					Cable winch (used same noise figures as compressor)	1	50	12	10	65
	C.5	5			Compressor	1	40	12	10	65
Decommissioning Existing Substation										
	C.2.	7	Demolition		Tracked excavator (22t),	1	75	12	10	70
	C.2.	3			Hydraulic breakers	1	50	12	10	78
	C.2.	34	Material Distribution		Lorry (4-axle wagon)	2	30	12	10	80