

Appendix 12.2: Construction Noise Calculations

Table 1: De-Vegetation

De-Vegetation								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Hand Tools	-	-	-	-	-	-	-	-
Excavator	C.3.20	2.8T	76	10	1	0	-10	66
Chainsaw	Manufactures Data (Speedy Hire)	Petrol driven	74	25	1	0	-6	68
Brushcutter	Stihl Manufacturer	1.9bhp metal blade	80	25	1	0	-6	74
Chipper	Manufacturer Data	Greenmeck tracked	88	10	1	-10	-20	68
Total								76

Table 2: Earthworks – Site Clearance

Earthworks – Site Clearance								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Bulldozer	C.2.13	11 t	78	20	1	0	-7	71
Excavator	C.2.3	22 t	78	20	2	0	-4	74
Waste Lorries	C.2.34	4-axle wagon	80	5	4	0	-7	73
Total								77

Table 3: Earthworks – Ground Compaction

Earthworks – Ground Compaction								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Excavator	C.2.3	22 t	78	20	2	0	-4	74
Hydraulic Vibratory Compactor	C.2.42	On tracked excavator	78	20	1	0	-7	71
Roller	C.2.37	18 t	79	20	1	0	-7	72
Dump Trucks	C.2.32	23 t	74	20	1	0	-7	67
Total								78

Table 4: Drainage Works

Drainage Works								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Excavator	C.2.3	22 t	78	4	1	0	-4	74
Waste Lorries	C.2.34	4-axle wagon	80	5	1	0	-13	67
Total								75

Table 5: Road Membrane Laying

Road Membrane Laying								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Wheeled Loader	C.2.27	193 kW	80	80	1	0	-1	79
Total								79

Table 6: Roadstone Drop

Roadstone Drop								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Dump Truck	C.6.15	90 t	86	5	6	0	-5	81
Total								81

Table 7: Roadstone Movement

Roadstone Movement								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Dozer	C.2.11	28 t	79	50	2	0	0	79
Total								79

Table 8: Asphaltting

Asphaltting								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Excavator	C3.20	2.8T	76	20	1	0	-7	69
Roller (rolling fill)	C2.37	18T	79	20	1	0	-7	72
Asphalt paver (+ tipper lorry)	C5.32	18T	84	20	1	0	-7	77
Hand held circular saw	C4.72	9kg	79	10	2	0	-7	72
Total								80

Table 9: Road Compaction

Road Compaction								
Plant	Noise Data			On time (%)	Number of plant items	Screening/dB	Total Correction/dB	Total L _p at 10m dB(A)
	Plant Ref	Type	L _p (at 10m), dB(A)					
Grader	D.3.75	168 kW	84	50	1	0	-3	81
Hydraulic Vibratory Compactor	C.2.42	On tracked excavator	78	50	1	0	-3	75
Road Roller	C.5.19	22 t	80	50	1	0	-3	77
Total								83