



# **Appendix 13B**

## **Stornoway Road Movements Construction Traffic Programme With and Without Borrow Pits**



Monthly movements of site construction traffic																											
Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total		
Set-up Main Construction Compound	90																								90	Set-up Construction Compound	
Delivery of plant and equipment		30	30																							60	Delivery of plant and equipment
Culvert and Bridge Materials			40	40	40	40	40	40	40	30	30	20	20	20	20											420	Culvert and Bridge Materials
Geogrid		16	16	16	16	16	16	16	16	16	16	16	16													192	Geogrid
<b>Northern Section (16 T)</b>																											
Turbine Foundation Concrete					266	266	266	266	266																	1330	Turbine Foundation Concrete
Cabling					6	6	6	6																		24	Cabling
Sand for cable trench			66		66	66	66	66																		330	Sand for cable trench
Fibre Optic Cabling					4	4	2																			10	Fibre Optic Cabling
External Transformers														4	4	2										10	External Transformers
Reinforcing Steel + Shuttering					20	20	20																			60	Reinforcing Steel + Shuttering
Base Rings					8	8																				16	Base Rings
Concrete for WTG Transformer foundations (ext)						14	14																			28	Concrete for WTG Transformer foundations (ext)
Turbine Delivery														110	105	105										320	Turbine Delivery
<b>Southern Section (13T)</b>																											
Substation Concrete					82	82																				164	Substation Concrete
Control Building Equipment																30		30								60	Control Building Equipment
Delivery of Electrical Equipment																	20		20			20				60	Delivery of Electrical Equipment
Turbine Foundations					270	270	270	270																		1080	Turbine Foundations
Cabling					6	6	6	2																		20	Cabling
Sand for cable trench									54	54	54	54	54													270	Sand for cable trench
Fibre Optic Cabling									2	2	2	2														8	Fibre Optic Cabling
External Transformers																	4	4	2							10	External Transformers
Reinforcing Steel + Shuttering					20	18	16																			54	Reinforcing Steel + Shuttering
Base Rings					8	8																				16	Base Rings
Concrete for WTG Transformer foundations (ext)																	12	12								24	Concrete for WTG Transformer foundations (ext)
Turbine Delivery																	86	86	88							260	Turbine Delivery
<b>Central Section (6T)</b>																											
Turbine Foundations															250	250										500	Turbine Foundations
Cabling												2	2	2	2	2										10	Cabling
Sand for cable trench												25	25	25	25	32										132	Sand for cable trench
Fibre Optic Cabling												4	2													6	Fibre Optic Cabling
External Transformers																				4	2					6	External Transformers
Reinforcing Steel + Shuttering														20	24											44	Reinforcing Steel + Shuttering
Base Rings														2	2											4	Base Rings
Concrete for WTG Transformer foundations (ext)																		5	5							10	Concrete for WTG Transformer foundations (ext)
Turbine Delivery																					60	60				120	Turbine Delivery
Crane Delivery															30											30	Crane Delivery
Crane Removal																										30	Crane Removal
Removal of Plant and equipment																						30	30		60	120	Removal of Plant and equipment
																										5928	
<b>Total Trips (Excluding concrete) per month</b>	<b>90</b>	<b>46</b>	<b>86</b>	<b>122</b>	<b>194</b>	<b>192</b>	<b>172</b>	<b>130</b>	<b>112</b>	<b>102</b>	<b>102</b>	<b>92</b>	<b>121</b>	<b>215</b>	<b>182</b>	<b>164</b>	<b>144</b>	<b>120</b>	<b>114</b>	<b>62</b>	<b>80</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>2792</b>		
<b>Movements for Concrete only per month</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>618</b>	<b>632</b>	<b>550</b>	<b>536</b>	<b>266</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250</b>	<b>250</b>	<b>0</b>	<b>12</b>	<b>17</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3136</b>	
<b>Total Trips (Including concrete) per month</b>	<b>90</b>	<b>46</b>	<b>86</b>	<b>122</b>	<b>812</b>	<b>824</b>	<b>722</b>	<b>666</b>	<b>378</b>	<b>102</b>	<b>102</b>	<b>92</b>	<b>121</b>	<b>465</b>	<b>432</b>	<b>164</b>	<b>156</b>	<b>137</b>	<b>119</b>	<b>62</b>	<b>80</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>5928</b>		
Movements/day (average assuming 22 working days/month)	5	3	4	6	37	38	33	31	18	5	5	5	6	22	20	8	8	7	6	3	4	2	2	5	5		
Movements/hr (average 8hr day)	1	1	1	1	5	5	5	4	3	1	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1		
Movements/hr (average 12hr day)	1	1	1	1	4	4	3	3	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1		
Movements for Concrete only per 12 hour day assuming a maximum of 2 days per week (8 days per month) - two way	0	0	0	0	77.25	79	68.75	67	33.25	0	0	0	0	31.25	31.25	0	1.5	2.125	0.625	0	0	0	0	0	0	0	
Total Trips (Excluding concrete) per 12 hour day assuming no deliveries during concrete foundations days, therefore 3.5 days per week (14 days per month) - two way	6	3	6	9	14	14	12	9	8	7	7	7	9	15	13	12	10	9	8	4	6	2	2	6	6		
Total Trips (Excluding concrete) per 12 hour day assuming deliveries during concrete foundations days, therefore 5.5 days per week (22 days per month) - two way	4	2	4	6	9	9	8	6	5	5	5	4	6	10	8	7	7	5	5	3	4	1	1	4	4		
Total Trips (including concrete) per 12 hour day assuming deliveries during concrete foundations days, therefore 5.5 days per week (22 days per month) - two way - concrete delivery days	4	2	4	6	86	88	77	73	38	5	5	4	6	41	40	7	8	8	6	3	4	1	1	4	4		
Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			

Monthly movements of site construction traffic																											
Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total		
Set-up Main Construction Compound	90																								90	Set-up Construction Compound	
Delivery of plant and equipment		30	30																							60	Delivery of plant and equipment
Culvert and Bridge Materials			40	40	40	40	40	40	40	30	30	20	20	20	20											420	Culvert and Bridge Materials
Geogrid		16	16	16	16	16	16	16	16	16	16	16	16													192	Geogrid
<b>Northern Section (16 T)</b>																											
Site Compound Set Up	648	648																								1296	Site Compound Set Up
Secondary Compound Set Up			540	540																						1080	Secondary Compound Set Up
Site Tracks			940	940	940	940	940	940	940	940	940															8460	Site Tracks
Turbine Crane Hard standings stone		540	540																							2160	Turbine Crane Hard standings stone
Turbine Foundation Concrete					266	266	266	266	266																	1330	Turbine Foundation Concrete
Cabling					6	6	6	6																		24	Cabling
Sand for cable trench				66	66	66	66	66																		330	Sand for cable trench
Fibre Optic Cabling					4	4	2																			10	Fibre Optic Cabling
External Transformers														4	4	2										10	External Transformers
Reinforcing Steel + Shuttering					20	20	20	20																		60	Reinforcing Steel + Shuttering
Base Rings					8	8																				16	Base Rings
Concrete for WTG Transformer foundations (ext)						14	14																			28	Concrete for WTG Transformer foundations (ext)
WTG Backfill					504	504	504	504																		2016	WTG Backfill
Turbine Delivery														110	105	105										320	Turbine Delivery
<b>Southern Section (13T)</b>																											
Secondary Compound Set Up			540	540																						1080	Secondary Compound Set Up
Site Tracks			686	686	686	686	686	686	686	690	690	692														6874	Site Tracks
Substation Stone			800	800																						1600	Substation Stone
Substation Concrete					82	82																				164	Substation Concrete
Control Building Equipment																30		30								60	Control Building Equipment
Delivery of Electrical Equipment																	20		20		20					60	Delivery of Electrical Equipment
Turbine Crane Hard standings stone		438	438	440	440													20		20		20				1756	Turbine Crane Hard standings stone
Turbine Foundations					270	270	270	270																		1080	Turbine Foundations
Cabling					6	6	6	2																		20	Cabling
Sand for cable trench									54	54	54	54	54													270	Sand for cable trench
Fibre Optic Cabling									2	2	2	2														8	Fibre Optic Cabling
External Transformers																		4	4	2						10	External Transformers
Reinforcing Steel + Shuttering					20	18	16																			54	Reinforcing Steel + Shuttering
Base Rings					8	8																				16	Base Rings
Concrete for WTG Transformer foundations (ext)																		12	12							24	Concrete for WTG Transformer foundations (ext)
WTG Backfill									410	410	410	408														1638	WTG Backfill
Turbine Delivery																	86	86	88							260	Turbine Delivery
<b>Central Section (6T)</b>																											
Site Compound Set Up												540	540													1080	Site Compound Set Up
Site Tracks												528	528	528	528	528	528									3168	Site Tracks
Turbine Crane Hard standings stone														405	405											810	Turbine Crane Hard standings stone
Turbine Foundations														250	250											500	Turbine Foundations
Cabling													2	2	2	2	2	2								10	Cabling
Sand for cable trench													25	25	25	25	32									132	Sand for cable trench
Fibre Optic Cabling													4	2												6	Fibre Optic Cabling
External Transformers																				4	2					6	External Transformers
Reinforcing Steel + Shuttering														20	24											44	Reinforcing Steel + Shuttering
Base Rings														2	2											4	Base Rings
Concrete for WTG Transformer foundations (ext)																			5	5						10	Concrete for WTG Transformer foundations (ext)
WTG Backfill																	378	378								756	WTG Backfill
Turbine Delivery																					60	60				120	Turbine Delivery
Secondary compound Stone													576	576												1152	Secondary Substations Stone
Crane Delivery															30											30	Crane Delivery
Crane Removal																									30	30	Crane Removal
Removal of Plant and equipment																						30	30	60		120	Removal of Plant and equipment
																										40854	
<b>Total Trips (Excluding concrete) per month</b>	<b>738</b>	<b>1672</b>	<b>4570</b>	<b>4608</b>	<b>3304</b>	<b>2322</b>	<b>2302</b>	<b>2260</b>	<b>2148</b>	<b>2142</b>	<b>2142</b>	<b>2260</b>	<b>1765</b>	<b>1724</b>	<b>1115</b>	<b>692</b>	<b>1050</b>	<b>498</b>	<b>114</b>	<b>62</b>	<b>80</b>	<b>30</b>	<b>30</b>	<b>90</b>		37718	
<b>Movements for Concrete only per month</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>618</b>	<b>632</b>	<b>550</b>	<b>536</b>	<b>266</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250</b>	<b>250</b>	<b>0</b>	<b>12</b>	<b>17</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		3136	
<b>Total Trips (Including concrete) per month</b>	<b>738</b>	<b>1672</b>	<b>4570</b>	<b>4608</b>	<b>3922</b>	<b>2954</b>	<b>2852</b>	<b>2796</b>	<b>2414</b>	<b>2142</b>	<b>2142</b>	<b>2260</b>	<b>1765</b>	<b>1974</b>	<b>1365</b>	<b>692</b>	<b>1062</b>	<b>515</b>	<b>119</b>	<b>62</b>	<b>80</b>	<b>30</b>	<b>30</b>	<b>90</b>		40854	
Movements/day (average assuming 22 working days/month)	34	76	208	210	179	135	130	128	110	98	98	103	81	90	63	32	49	24	6	3	4	2	2	5		5	
Movements/hr (average 8hr day)	5	10	26	27	23	17	17	16	14	13	13	13	11	12	8	4	7	3	1	1	1	1	1	1		1	
Movements/hr (average 12hr day)	3	7	18	18	15	12	11	10	9	9	9	9	7	8	6	3	5	2	1	1	1	1	1	1		1	
<b>Movements for Concrete only per 12 hour day assuming a maximum of 2 days per week (8 days per month) - two way</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77.25</b>	<b>79</b>	<b>68.75</b>	<b>67</b>	<b>33.25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31.25</b>	<b>31.25</b>	<b>0</b>	<b>1.5</b>	<b>2.125</b>	<b>0.625</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		0	
<b>Total Trips (Excluding concrete) per 12 hour day assuming no deliveries during concrete foundations days, therefore 3.5 days per week (14 days per month) - two way</b>					<b>236</b>	<b>166</b>	<b>164</b>	<b>161</b>	<b>153</b>					<b>123</b>	<b>80</b>		<b>75</b>	<b>36</b>	<b>8</b>								
<b>Total Trips (Excluding concrete) per 12 hour day assuming deliveries during concrete foundations days, therefore 5.5 days per week (22 days per month) - two way</b>	<b>34</b>	<b>76</b>	<b>208</b>	<b>209</b>	<b>150</b>	<b>106</b>	<b>105</b>	<b>103</b>	<b>98</b>	<b>97</b>	<b>97</b>	<b>103</b>	<b>80</b>	<b>78</b>	<b>51</b>	<b>31</b>	<b>48</b>	<b>23</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>4</b>		4	
<b>Total Trips (Including concrete) per 12 hour day assuming deliveries during concrete foundations days, therefore 5.5 days per week (22 days per month) - two way - concrete delivery days</b>	<b>34</b>	<b>76</b>	<b>208</b>	<b>209</b>	<b>227</b>	<b>185</b>	<b>173</b>	<b>170</b>	<b>131</b>	<b>97</b>	<b>97</b>	<b>103</b>	<b>80</b>	<b>110</b>	<b>82</b>	<b>31</b>	<b>49</b>	<b>2</b>									