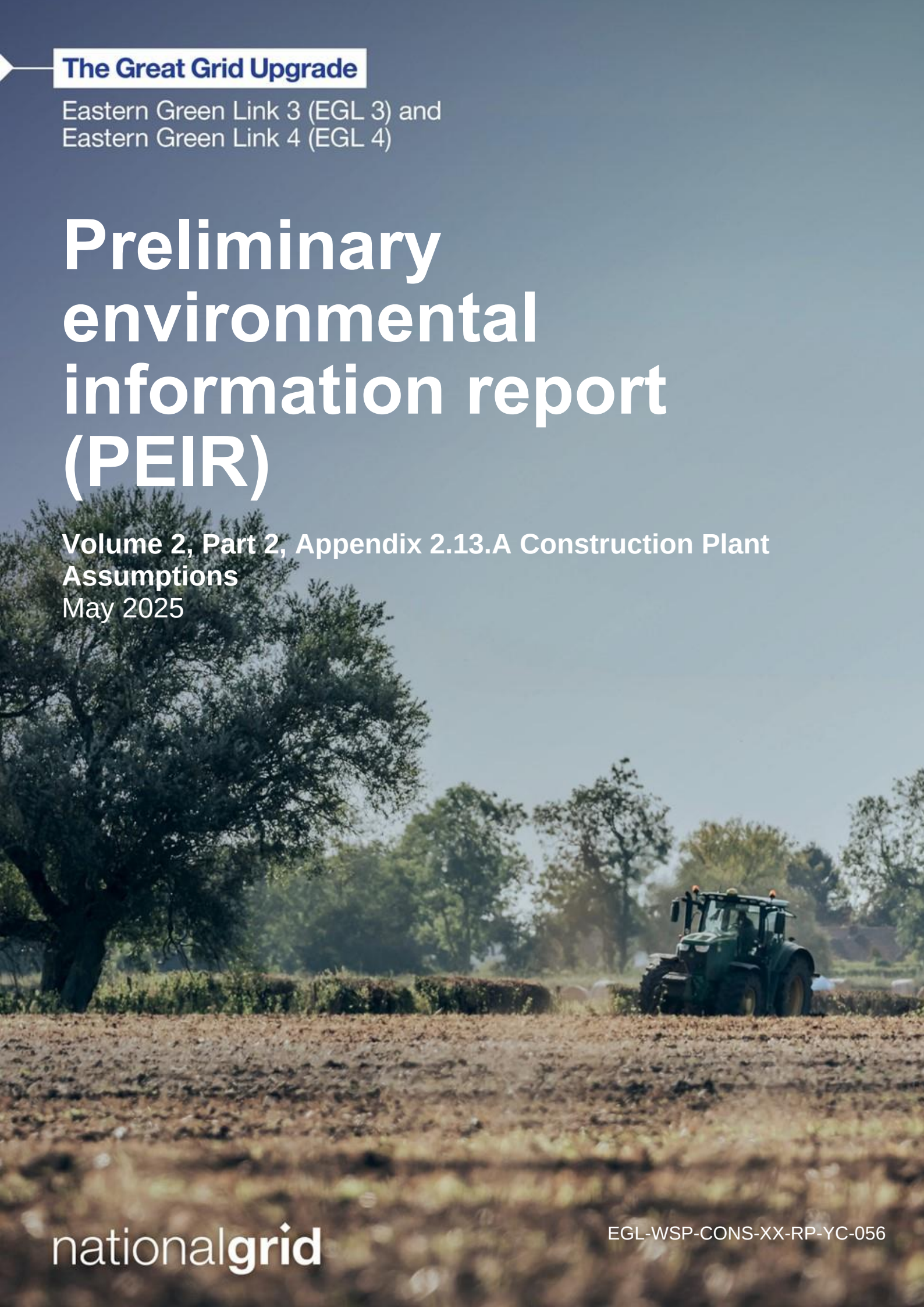




The Great Grid Upgrade

Eastern Green Link 3 (EGL 3) and
Eastern Green Link 4 (EGL 4)

Preliminary environmental information report (PEIR)

Volume 2, Part 2, Appendix 2.13.A Construction Plant
Assumptions
May 2025

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2.13.A. Construction Plant Assumptions

Table 2.13.A-1 – Construction Plant Assumptions - Noise

Works Activity	Plant Description	BS 5228-1 Annex C Table Reference	Sound Pressure Level at 10 m LAeq dB	% on-time
Enabling works, earthworks, utilities and drainage, and decommissioning	16t Tracked Excavator	Table C.2, Ref No. 7	70	75
	16t Tracked Excavator (idling)	Table C.2, Ref No. 6	63	25
	41t Dozer	Table C.2, Ref No. 3	78	75
	9t Dumper (idling)	Table C.4, Ref No. 5	63	10
Foundation works	16t Tracked Excavator	Table C.2, Ref No. 6	70	75
	16t Tracked Excavator (idling)	Table C.2, Ref No. 6	63	25
	9t Dumper (idling)	Table C.4, Ref No. 5	63	65
	Cement Mixer Truck (discharging)	Table C.4, Ref No. 18	75	25
	Cement Mixer Truck (idling)	Table C.4, Ref No. 19	71	75
	4t Telescopic Handler	Table C.2, Ref No. 35	71	75
Structural construction - installing Piles	33t Crawler Mounted Piling Rig	Table C.3, Ref No. 22	80	50
Structural Construction - Buildings	400t Wheeled Mobile Telescopic Crane	Table C.4, Ref No. 38	78	10
	100t Mobile Telescopic Crane	Table C.4, Ref No. 41	71	25
	50t Mobile Telescopic Crane	Table C.4, Ref No. 46	67	10
	25t Articulated Dump Truck	Table C.4, Ref No. 1	81	25

Works Activity	Plant Description	BS 5228-1 Annex C Table Reference	Sound Pressure Level at 10 m LAeq dB	% on-time
Establishment of construction compounds, including site facilities	16t Tracked Excavator	Table C.2, Ref No. 7	70	75
	16t Tracked Excavator (idling)	Table C.2, Ref No. 6	63	25
	41t Dozer	Table C.2, Ref No. 3	78	75
	9t Dumper (idling)	Table C.4, Ref No. 5	63	10
Haulage road installation	Dozer	Table C.8. Ref No. 9	74	50
	ADT 55	Table Ref No. 32	74	55
	Roller - Static	Table C.2. Ref No. 38	73	50
	Grader	Table C.6. Ref No. 31	81	10
	Vibrating Roller	Table C.5. Ref No. 20	67	50
Ducted and trenchless crossings	Directional Drilling (generator)	Table C.2, Ref No. 44	77	25
Cable trench installation and joint bays	14t Tracked Excavator	Table C.2, Ref No. 25	69	50
	5t Mini Tracked Excavator	Table C.4, Ref No. 68	65	25
Cable pulling	Pilot Winch & Winch Tractor	Table C.4. Ref No. 75	25	79
Pylon construction	Tracked excavator	Table C2. Ref No. 7	70	70
	Steel tube piling rig	Table C3. Ref No. 8	88	25
	Concrete pump	Table C3. Ref No. 26	75	50
OHL Demolition	Long reach excavators	Manufacturers Data	76	60
	Hydraulic Breakers	Table C.5 Ref No 1	88	30
	Tipper Lorry	Table C.8 Ref No 20	74	30
	Excavator - 13 Tonne	Table C.6 Ref No 12	76	60

Table 2.13.A-2 – Ground Compaction Parameters

Parameter	Value
Scaling Factor	75
Number of vibrating drums	1
Max. amplitude of drum vibration (mm)	1.5
Width of vibrating roller drum (m)	1

Table 2.13.A-3 – Percussive Piling Parameters

Parameter	Value
Scaling Factor	1 (Stiff cohesive soils)
Nominal hammer energy (joules)	9,000

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