

National Grid
Cable Tunnel Replacement
Project

Environmental Statement
Volume VI
Appendix 18.9 Cumulative
Assessment (Gravesend)

December 2023



Quality information

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1 Cumulative Assessment (Gravesend)

Table 1: Cumulative Assessment - Peak Construction Phase (2026) AM

Ref	Location	AM Development Peak (07:00-08:00)								AM Network Peak (08:00-09:00)							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	856	10,944	26	72	882	11,016	3.0%	0.7%	955	9,862	29	54	984	9,916	3.0%	0.6%
G-RL2	M2 (East)	656	8,045	20	34	676	8,080	3.0%	0.4%	712	7,263	23	31	735	7,294	3.2%	0.4%
G-RL3	A289	333	4,676	60	222	393	4,898	17.9%	4.8%	343	4,204	66	201	409	4,405	19.1%	4.8%
G-RL4	A226 (between A289 and Peartree Lane)	48	988	38	402	86	1,390	79.2%	40.7%	38	1,011	44	381	82	1,393	116.5%	37.7%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	51	1,011	38	362	89	1,373	74.5%	35.8%	39	1,051	44	341	83	1,392	113.5%	32.4%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	42	917	38	362	80	1,278	89.9%	39.5%	42	1,119	44	341	86	1,459	105.7%	30.5%
G-RL7	Ordnance Road and Canal Road	48	500	23	121	71	621	48.8%	24.2%	53	618	29	100	82	718	55.4%	16.2%
G-RL8	Norfolk Road and Mark Lane	43	301	0	27	43	328	0.0%	9.0%	48	231	6	6	54	237	12.6%	2.6%

Ref	Location	AM Development Peak (07:00-08:00)								AM Network Peak (08:00-09:00)							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL9	Thames and Medway Canal Road	1	93	0	27	1	120	0.0%	29.1%	1	51	6	6	7	57	588.3%	11.8%
G-RJ1	M2/A2/A289 Junction	935	11,630	60	222	994	11,852	6.4%	1.9%	1,000	10,431	66	201	1,065	10,632	6.6%	1.9%
G-RJ2	A289/A226 Junction	357	5,170	78	362	435	5,532	21.8%	7.0%	362	4,709	84	341	446	5,050	23.2%	7.2%
G-RJ3	A226/ Peartree Lane Signalised Junction	52	1,108	38	362	90	1,470	73.0%	32.6%	41	1,203	44	341	85	1,544	107.8%	28.3%
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	100	2,055	38	362	138	2,417	38.0%	17.6%	71	2,512	44	341	115	2,853	61.6%	13.6%
G-RJ5	A226/Ordnance Road Signalised Junction	85	1,256	44	385	128	1,641	51.8%	30.7%	80	1,619	50	364	129	1,983	62.6%	22.5%
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	20	246	0	27	20	273	0.0%	11.0%	30	164	6	6	36	170	20.3%	3.6%

Table 2: Cumulative Assessment - Peak Construction Phase (2026) PM

Ref	Location	PM Network Peak (17:00-18:00)								PM Development Peak (18:00-19:00)							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	531	11,561	11	53	542	11,615	2.1%	0.5%	460	9,298	9	72	469	9,370	2.0%	0.8%
G-RL2	M2 (East)	499	7,833	6	30	504	7,863	1.1%	0.4%	374	5,910	4	34	377	5,944	0.9%	0.6%
G-RL3	A289	138	4,444	50	314	188	4,759	36.1%	7.1%	106	3,523	46	337	152	3,861	43.1%	9.6%
G-RL4	A226 (between A289 and Peartree Lane)	21	1,139	62	532	83	1,671	288.9%	46.7%	19	838	58	555	77	1,393	298.7%	66.3%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	21	1,159	62	493	83	1,651	288.9%	42.5%	20	850	58	516	78	1,365	283.7%	60.7%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	30	1,188	62	493	92	1,680	206.4%	41.5%	26	989	58	516	84	1,505	219.9%	52.1%
G-RL7	Ordnance Road and Canal Road	20	532	27	98	48	630	134.4%	18.4%	29	445	23	121	52	566	82.0%	27.1%
G-RL8	Norfolk Road and Mark Lane	17	199	4	4	21	203	23.9%	2.0%	16	109	0	27	16	136	0.0%	24.8%
G-RL9	Thames and Medway Canal Road	0	46	4	4	4	50	-	8.7%	0	31	0	27	0	58	-	88.3%
G-RJ1	M2/A2/A289 Junction	581	11,847	50	314	631	12,161	8.6%	2.7%	454	9,843	46	337	500	10,180	10.1%	3.4%

Ref	Location	PM Network Peak (17:00-18:00)								PM Development Peak (18:00-19:00)							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RJ2	A289/A226 Junction	149	5,014	69	493	218	5,507	46.2%	9.8%	116	3,942	65	516	181	4,458	55.8%	13.1%
G-RJ3	A226/ Peartree Lane Signalised Junction	23	1,319	62	493	85	1,811	263.8%	37.4%	21	974	58	516	79	1,490	270.2%	52.9%
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	49	2,617	62	493	111	3,109	126.4%	18.8%	43	2,231	58	516	101	2,746	135.1%	23.1%
G-RJ5	A226/Ordnance Road Signalised Junction	44	1,514	68	516	111	2,030	154.4%	34.1%	49	1,365	64	539	113	1,905	130.2%	39.5%
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	14	90	4	4	18	94	29.3%	4.4%	14	65	0	27	14	92	0.0%	41.5%

Table 3: Cumulative Assessment - Peak Construction Phase (2026) 12 Hours / 24hr Daily

Ref	Location	12 Hours (07:00-19:00)								24hr Daily							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RL1	A2 (West)	10,156	111,303	173	527	10,329	111,830	1.7%	0.5%	9,926	130,414	173	527	10,099	130,942	1.7%	0.4%
G-RL2	M2 (East)	8,272	80,828	134	342	8,406	81,170	1.6%	0.4%	9,679	99,758	134	342	9,813	100,101	1.4%	0.3%
G-RL3	A289	3,406	44,834	382	1,257	3,788	46,091	11.2%	2.8%	3,532	50,160	382	1,257	3,915	51,417	10.8%	2.5%
G-RL4	A226 (between A289 and Peartree Lane)	458	11,080	714	3,832	1,172	14,912	155.7%	34.6%	465	13,347	714	3,832	1,179	17,178	153.4%	28.7%
G-RL5	A226 (between Peartree Lane and Lion Roundabout)	477	11,344	714	3,832	1,191	15,176	149.6%	33.8%	484	13,665	714	3,832	1,198	17,496	147.5%	28.0%
G-RL6	A226 (between Lion Roundabout and Ordnance Road)	508	11,738	714	3,832	1,222	15,570	140.5%	32.6%	515	14,139	714	3,832	1,229	17,971	138.5%	27.1%
G-RL7	Ordnance Road and Canal Road	605	7,122	220	743	825	7,865	36.4%	10.4%	549	6,757	220	743	769	7,500	40.0%	11.0%
G-RL8	Norfolk Road and Mark Lane	499	2,856	64	118	563	2,974	12.8%	4.1%	454	2,709	64	118	518	2,827	14.1%	4.4%
G-RL9	Thames and Medway Canal Road	12	634	64	118	76	752	522.8%	18.6%	10	649	64	118	74	767	627.5%	18.2%

Ref	Location	12 Hours (07:00-19:00)								24hr Daily							
		Baseline		Cumulative + Dev		Total		% Increase		Baseline		Cumulative + Dev		Total		% Increase	
		HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total	HGVs	Total
G-RJ1	M2/A2/A289 Junction	10,674	117,936	382	1,257	11,057	119,193	3.6%	1.1%	11,278	139,330	382	1,257	11,661	140,587	3.4%	0.9%
G-RJ2	A289/A226 Junction	3,635	50,374	918	3,832	4,553	54,206	25.2%	7.6%	3,765	56,834	918	3,832	4,682	60,665	24.4%	6.7%
G-RJ3	A226/Peartree Lane Signalised Junction	499	12,830	714	3,832	1,213	16,661	143.0%	29.9%	506	15,454	714	3,832	1,220	19,286	140.9%	24.8%
G-RJ4	A226/ Dering Way/ Lower Higham Road/ Old Road East (Lion) Roundabout	954	26,236	714	3,832	1,668	30,068	74.8%	14.6%	968	31,603	714	3,832	1,682	35,435	73.7%	12.1%
G-RJ5	A226/Ordnance Road Signalised Junction	932	16,037	753	3,988	1,684	20,024	80.8%	24.9%	945	19,317	753	3,988	1,698	23,305	79.6%	20.6%
G-RJ6	Mark Lane/Thames and Medway Canal Road Junction	279	1,703	64	118	343	1,821	22.9%	6.9%	232	1,677	64	118	296	1,795	27.6%	7.0%

