



## 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 2.12.D Traffic and Transport –  
Construction Phase Effects  
May 2025

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## 2.12.D. Traffic and Transport – Construction Phase Effects

### 2.12.D.1. Construction Phase Effects

Table 2.12.D-1 – Preliminary Assessment - Severance and Pedestrian Delay Criteria

Traffic and Transport Effect	Magnitude of Impact (degree of change)				
	No Change	Negligible	Minor	Moderate	Major
Severance and Pedestrian Delay	No change in traffic flow	Change in total traffic flow of less than 30%	Change in total traffic flow of 30% - 60%	Change in total traffic flow of 61% - 90%	Change in total traffic flow of greater than 90%

Table 2.12.D-2 – Preliminary Assessment - Severance and Pedestrian Delay (Total Vehicles)

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay Magnitude	Significance
9	Scarborough Bank	352%	Low	Major	Moderate (significant)
20	Punchbowl Lane	6%	Low	Negligible	Neutral (not significant)
23	B1165 Austendyke Road	8%	Low	Negligible	Neutral (not significant)
30	Bullock's Short Gate	26%	Negligible	Negligible	Neutral (not significant)

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
35	Lynn Road	22%	Medium	Negligible	Neutral (not significant)
48	A16	7%	Negligible	Negligible	Neutral (not significant)
50	A1104	7%	High	Negligible	Slight (not significant)
51	A16	1%	High	Negligible	Slight (not significant)
54	A16	5%	Medium	Negligible	Neutral (not significant)
57	A1121	3%	Low	Negligible	Neutral (not significant)
58	A52	2%	Medium	Negligible	Neutral (not significant)
35A	West Drove North	1185%	Low	Major	Moderate (significant)

**Table 2.12.D-3 – Preliminary Assessment - Severance and Pedestrian Delay (Heavy Vehicles)**

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
9	Scarborough Bank	485.73%	Low	Major	Moderate (significant)
20	Punchbowl Lane	31.69%	Low	Minor	Neutral (not significant)

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
23	B1165 Austendyke Road	32.25%	Low	Minor	Neutral (not significant)
30	Bullock's Short Gate	78.62%	Negligible	Moderate	Neutral (not significant)
35	Lynn Road	62.07%	Medium	Moderate	Moderate (significant)
48	A16	41.84%	Negligible	Minor	Neutral (not significant)
50	A1104	77.15%	High	Moderate	Moderate (significant)
51	A16	21.16%	High	Negligible	Slight (not significant)
54	A16	49.76%	Medium	Minor	Slight (not significant)
57	A1121	29.07%	Low	Negligible	Neutral (not significant)
58	A52	31.77%	Medium	Minor	Slight (not significant)
35A	West Drove North	9740.38%	Low	Major	Moderate (significant)

**Table 2.12.D-4 – Preliminary Assessment - Non Motorised User Amenity Criteria**

Traffic and Transport Effect	Magnitude of Impact (degree of change)				
	No Change	Negligible	Minor	Moderate	Major
Non-motorised User Amenity	No change in traffic flow	Change in total traffic flow (or HGV	Change in total traffic flow of (or HGV	Change in total traffic flow (or HGV	Change in total traffic flow (or HGV

Traffic and Transport Effect	Magnitude of Impact (degree of change)				
	No Change	Negligible	Minor	Moderate	Major
		component) of less than 30%	component) 30% - 50%	component) of 50% - 100%	component) of greater than 100%

**Table 2.12.D-5 – Preliminary Assessment - Non Motorised User Amenity (Total Vehicles)**

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay Magnitude	Significance
9	Scarborough Bank	352%	Low	Major	Moderate (significant)
20	Punchbowl Lane	6%	Low	Negligible	Neutral (not significant)
23	B1165 Austendyke Road	8%	Low	Negligible	Neutral (not significant)
30	Bullock's Short Gate	26%	Negligible	Negligible	Neutral (not significant)
35	Lynn Road	22%	Medium	Negligible	Neutral (not significant)
48	A16	7%	Negligible	Negligible	Neutral (not significant)
50	A1104	7%	High	Negligible	Slight (not significant)
51	A16	1%	High	Negligible	Slight (not significant)
54	A16	5%	Medium	Negligible	Neutral (not significant)



Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
57	A1121	3%	Low	Negligible	Neutral (not significant)
58	A52	2%	Medium	Negligible	Neutral (not significant)
35A	West Drove North	1185%	Low	Major	Moderate (significant)

**Table 2.12.D-6 – Preliminary Assessment - Non Motorised User Amenity (Heavy Vehicles)**

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
9	Scarborough Bank	485.73%	Low	Major	Moderate (significant)
20	Punchbowl Lane	31.69%	Low	Minor	Neutral (not significant)
23	B1165 Austendyke Road	32.25%	Low	Minor	Neutral (not significant)
30	Bullock's Short Gate	78.62%	Negligible	Moderate	Neutral (not significant)
35	Lynn Road	62.07%	Medium	Moderate	Moderate (significant)
48	A16	41.84%	Negligible	Minor	Neutral (not significant)
50	A1104	77.15%	High	Moderate	Moderate (significant)
51	A16	21.16%	High	Negligible	Slight (not significant)

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Severance and Pedestrian Delay	
				Magnitude	Significance
54	A16	49.76%	Medium	Minor	Slight (not significant)
57	A1121	29.07%	Low	Negligible	Neutral (not significant)
58	A52	31.77%	Medium	Minor	Slight (not significant)
35A	West Drove North	9740.38%	Low	Major	Moderate (significant)

**Table 2.12.D-7 – Preliminary Assessment – Fear and Intimidation Criteria**

Average traffic flow over 18 hour day – all vehicles/hour 2- way (a)	Total 18-hour heavy vehicle flow (b)	Average vehicle speeds (mph) (c)	Degree of hazard score
1,800	3,000	>40	30
1,200 – 1,800	2,000 – 3,000	30 – 40	20
600 – 1,200	1,000 – 2,000	20 – 30	10
<600	<1, Outline CTMP	<20	0

  

Level of fear and intimidation	Total hazard score (a) + (b) + (c)
Extreme	71+
Great	41 – 70
Moderate	21 – 40
Small	0 - 20



Magnitude of Impact	Change in step/traffic flows (AADT) from baseline conditions
High	Two step changes in level
Medium	One step change in level, but with >400 vehicle increase in average 18hr All Vehicle (AV) two-way all vehicles flow; and/or >500 Heavy Vehicle (HV) increase in total 19hr HV flow.
Low	One step change in level with <400 vehicle increase in average 18hr AV two-way all vehicle flow; and/or <500 HV increase in total 18hr HV flow
Negligible	No change in step changes
No Change	No observable impact

**Table 2.12.D-8 – Preliminary Assessment – Fear and Intimidation Calculations**

Link	Link Name	Do Something (Max) Percentage Change	Highway Link Sensitivity	Speed	Total Vehicles		HVs		Hazard Score (Without Development)				Hazard Score (With Development)				Level (Without Development)	Level (With Development)	Change in Step	Magnitude of Impact	Significance of Effect
					Without Development	With Development	Without Development	With Development	a	b	c	Total	a	b	c	Total					
9	Scarborough Bank	352%	Low	60	2	8	13	81	0	0	3	30	0	0	3	30	Moderate	Moderate	No Step	Negligible	Neutral (not

Link	Link Name	Doing Something (Max) Percentage Change	Highway Link Sensitivity	Speed	Total Vehicles		HVs		Hazard Score (Without Development)				Hazard Score (With Development)				Level (Without Development)	Level (With Development)	Change in Step	Magnitude of Impact	Significance of Effect
					Without Development	With Development	Without Development	With Development	a	b	c	Total	a	b	c	Total					
																		Change		significant)	
20	Punchbowl Lane	6%	Low	60	96	104	279	376	0	0	30	30	0	0	30	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
23	B1165 Austen dyke Road	8%	Low	60	137	153	512	697	0	0	30	30	0	0	30	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
30	Bullock's Short Gate	26%	Negligible	60	44	58	210	386	0	0	30	30	0	0	30	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
35	Lynn Road	22%	Medium	50	129	160	484	798	0	0	30	30	0	0	30	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
48	A16	7%	Negligible	60	323	348	530	773	0	0	30	30	0	0	30	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)

Link	Link Name	Doing Something (Max) Percentage Change	Highway Link Sensitivity	Speed	Total Vehicles		HVs		Hazard Score (Without Development)				Hazard Score (With Development)				Level (Without Development)	Level (With Development)	Change in Step	Magnitude of Impact	Significance of Effect
					Without Development	With Development	Without Development	With Development	a	b	c	Total	a	b	c	Total					
50	A1104	7%	High	30	595	635	408	741	0	0	1	10	1	0	1	20	Small	Small	No Step Change	Negligible	Slight (not significant)
51	A16	1%	High	40	1343	1396	1163	1449	2	1	3	60	2	1	3	60	Great	Great	No Step Change	Negligible	Slight (not significant)
54	A16	5%	Medium	50	352	377	482	743	0	0	3	30	0	0	3	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
57	A1121	3%	Low	50	568	598	730	969	0	0	3	30	0	0	3	30	Moderate	Moderate	No Step Change	Negligible	Neutral (not significant)
58	A52	2%	Medium	30	1065	1110	708	960	1	0	1	20	1	0	1	20	Small	Small	No Step Change	Negligible	Neutral (not significant)

Li nk	Link Name	Do Somet hing (Max) Perce ntage Chang e	High way Link Sensi tivity	Sp eed	Total Vehicles		HV's		Hazard Score (Without Developm ent)				Hazard Score (With Developm ent)				Level (Withou t Develo pment)	Level (With Develo pment)	Cha nge in Ste p	Magni tude of Impac t	Signifi cance of Effect
					Withou t Develo pment	With Develo pment	Withou t Develo pment	With Develo pment	a	b	c	To tal	a	b	c	To tal					
35 A	West Drove North	1185%	Low	50	2	32	3	309	0	0	3	30	0	0	3	30	Moderat e	Moderat e	No Step Cha nge	Neglig ible	Neutral (not signific ant)

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