

The Great Grid Upgrade

Eastern Green Link 5 (EGL 5)

Preliminary Environmental Information Report

Volume 2

Part 2

Appendix 12.D Traffic and Transport
– Preliminary Construction Phase Effects

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Eastern Green Link (EGL) 5

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12.D. Construction Phase Effects

12.D.1 Construction phase effects

Table 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 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 60 - 90%.	Change in total traffic flow of greater than 90%.

Table 12.D-2 Preliminary assessment: severance and pedestrian delay (total vehicles)

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Severance and pedestrian delay Magnitude	Significance
1	A157 / B1373 / A1104	20%	Low	Negligible	Slight (not significant)
3	A16 London Road	9%	High	Negligible	Slight (not significant)
5	A1111 Alford Road	28%	Low	Minor	Slight (not significant)
6	B1449 Thurlby Road	57%	Low	Minor	Slight (not significant)
8	A52 Mumby Road	29%	Low	Negligible	Slight (not significant)
9	Sea Road / Rectory Road	16%	Medium	Negligible	Slight (not significant)
11	Sea Lane	38%	Low	Minor	Slight (not significant)

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Severance and pedestrian delay	
				Magnitude	Significance
12	A52 Sutton Road	12%	Medium	Negligible	Slight (not significant)

Table 12.D-3 Preliminary assessment: severance and pedestrian delay (heavy goods vehicles (HGVs))

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Severance and pedestrian delay	
				Magnitude	Significance
1	A157 / B1373 / A1104	44%	Low	Minor	Slight (not significant)
3	A16 London Road	51%	High	Minor	Moderate (significant)
5	A1111 Alford Road	48%	Low	Minor	Slight (not significant)
6	B1449 Thurlby Road	83%	Low	Moderate	Slight (not significant)
8	A52 Mumby Road	55%	Low	Minor	Slight (not significant)
9	Sea Road / Rectory Road	48%	Medium	Minor	Slight (not significant)
11	Sea Lane	77%	Low	Moderate	Slight (not significant)
12	A52 Sutton Road	289%	Medium	Major	Large (significant)

Table 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 component) of less than 30%.	Change in total traffic flow (or HGV component) of 30 - 50%.	Change in total traffic flow (or HGV component) of 50 - 100%.	Change in total traffic flow (or HGV component) of greater than 100%.

Table 12.D-5 Preliminary assessment: non-motorised user amenity (total vehicles)

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Non-motorised user amenity Magnitude	Significance
1	A157 / B1373 / A1104	20%	Low	Negligible	Slight (not significant)
3	A16 London Road	9%	High	Negligible	Slight (not significant)
5	A1111 Alford Road	28%	Low	Negligible	Slight (not significant)
6	B1449 Thurlby Road	57%	Low	Minor	Slight (not significant)
8	A52 Mumby Road	29%	Low	Negligible	Slight (not significant)
9	Sea Road / Rectory Road	16%	Medium	Negligible	Slight (not significant)
11	Sea Lane	38%	Low	Minor	Slight (not significant)
12	A52 Sutton Road	12%	Medium	Negligible	Slight (not significant)

Table 12.D-6 Preliminary assessment: non-motorised user amenity (HGVs)

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Non-motorised user amenity Magnitude	Significance
1	A157 / B1373 / A1104	44%	Low	Minor	Slight (not significant)
3	A16 London Road	51%	High	Moderate	Large (significant)
5	A1111 Alford Road	48%	Low	Minor	Slight (not significant)
6	B1449 Thurlby Road	83%	Low	Moderate	Slight (not significant)
8	A52 Mumby Road	55%	Low	Moderate	Slight (not significant)
9	Sea Road / Rectory Road	48%	Medium	Minor	Slight (not significant)

Link ID	Link name	Do something (max) percentage change	Highway sensitivity	link Non-motorised user amenity Magnitude	Significance
11	Sea Lane	77%	Low	Moderate	Slight (not significant)
12	A52 Sutton Road	289%	Medium	Major	Large (significant)

Table 12.D-7 Preliminary assessment: fear and intimidation criteria

Average traffic flow over 18-hour day – all vehicles / hour two way (a)	Total 18-hour HGV flow (b)	Average vehicle speed (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	<1,000	<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 (Annual Average Daily Traffic (AADT)) from baseline conditions
High	Two step changes in level.
Medium	One step change in level, but with:

Average traffic flow over 18-hour day – all vehicles / hour two way (a)	Total 18-hour HGV flow (b)	Average vehicle speed (mph) (c)	Degree of hazard score
			<ul style="list-style-type: none"> • >400 vehicle increase in average 18hr All Vehicle (AV) two-way all vehicle flow; and / or • >500 HGV increase in total 18hr HGV flow.
Low			One step change in level with: <ul style="list-style-type: none"> • <400 vehicle increase in average 18hr AV two-way all vehicle flow; and / or • <500 HGV increase in total 18hr HGV flow.
Negligible			No change in step changes.
No change			No observable impact.

Table 12.D-8 Preliminary assessment: fear and intimidation calculations

Link ID	Link name	Do something (max) percentage change	Highway link sensitivity	Max speed	Total vehicles		HGVs		Hazard score (without development)				Hazard score (with development)				Level (without development)	Level (with development)	Change in step	Magni-tude of impact	Signifi-cance of effect	
					Without develop-ment	With develop-ment	Without develop-ment	With develop-ment	a	b*	c**	Total	a	b*	c**	Total						
1	A157 / B1373 / A1104	20%	Low	60	1233	1521	256	299	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
3	A16 Road	London 9%	High	60	8006	8818	619	950	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
5	A1111 Road	Alford 28%	Low	40	2727	3615	660	991	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
6	B1449 Road	Thurlby 57%	Low	60	1078	1788	271	504	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
8	A52 Road	Mumby 29%	Low	50	1646	2189	327	489	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
9	Sea Road / Rectory Road	16%	Medium	60	197	227	25	35	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
11	Sea Lane	38%	Low	60	82	112	13	25	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)
12	A52 Sutton Road	12%	Medium	60	3832	4375	63	225	0	0	30	30	0	0	30	30	Moderate	Moderate	No change	step	Negligible	Slight (not significant)

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