

Appraisal Summary Table (AST)

OPTION		DESCRIPTION	PROBLEMS	PRESENT VALUE COSTS TO PUBLIC ACCOUNTS
A1 COLSTERWORTH GSJ		Grade separated dumbbell type junction provided on the A1 with its junction with the A151, B676 and a compact grade separated junction at the junction of the A1 with the B6403 at Colsterworth, Lincolnshire.	Congestion at the roundabout causes queuing and delays to the A1 traffic during peak periods. The existing junction and approaches suffer from road traffic accidents (53 personal injury accidents recorded in 5 years April 2000 – March 2005).	£ 4.919 m
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE	ASSESSMENT
ENVIRONMENT	Noise	Generally slight decrease in noise for properties in the north of Colsterworth and A151, slight increase for properties in the south of Colsterworth and one property on the A151	Number of people bothered by noise: - Do minimum = 112.7 Do something = 138.0	Estimated Population Annoyed by Noise would be increased by 25.3
	Local Air Quality	Overall slight deterioration in air quality due to link road	78 properties receive a slight improvement, 128 experience a slight deterioration in air quality	PM10 (2007): - 0.07 NO2 (2007): + 24.4
	Greenhouse Gases	Negligible change in journey distances due to new road layout	2007: Do Nothing 14,344 t Do Something 14,164 t	Slight decrease in CO2 emissions
	Landscape	The proposals will impact on landscape character, both directly through land take and indirectly through the greater perception of the road network on the wider landscape character, which has been designated as an Area of Great Landscape Value. A few scattered properties to the north and residential properties to the south of Colsterworth and within the industrial area to the south east will experience a change in view. Mitigation measures over time will limit the impacts.	-	Slight Adverse
	Townscape	Townscape not applicable to this rural setting	-	-
	Heritage of Historic Resources	There will be a small-scale negative change to the Grade II Listed milestone since it is currently located within the scheme footprint and so will have to be re-sited after the works have finished. However, the fact that it has already become detached from its original location means that there will be only be an effect on the context of the milestone, since it will have to be re-positioned. There may be scope to improve the condition and survival of the milestone due to its removal from the bottom of an embankment and its re-location on the carriageway edge. Overall there will be a slight adverse effect on the milestone. There will be a large scale negative change involving the demolition of the railway bridge. This will result in a slight adverse effect.	-	Slight Adverse
	Biodiversity	Slight adverse impact on non-statutory designated road verge at northern end of proposed improvement.	-	Slight Adverse
	Water Environment	Headwaters of River Witham and local field ditches would receive additional water from the scheme, but no special problems envisaged.	-	Neutral
	Physical Fitness	Small numbers of pedestrians riders and cyclists crossing at roundabout will have a safer route via Loop Road bridge. New bridge at B6403 would provide a safer crossing. No material change in the level of physical activity is predicted.	-	Neutral
	Journey Ambience	The grade-separated junctions will enable a large number of travellers to make better progress along the route they are travelling on thereby reducing traveller frustration. Fear of accident would be significantly reduced at the A1/B6043 junction as a grade separated junction would replace the existing junction with its difficult turning manoeuvres.	-	Large benefit
SAFETY	Accidents	Reduced accidents: The number of personal injury accidents will reduce as will the number of casualties.	PIAs and Casualty Savings Over 60 Years Central Growth PIAs Saved 116.1 Slight 152.3 Serious 4.9 Fatal -0.2	PVB £2.636m
	Security	Peds. riders & cyclists diverted onto longer routes possibly unlit but with good intervisibility. Very few movements involved - assumed less than 100 per day.		Slight Adverse
ECONOMY	Public Accounts	Construction and maintenance (dis)benefits have not been assessed.	Central Govt PVC £4.919m Local Govt PVC £0	PVC £4.919m
	Business Users & Providers	The scheme will reduce geometric and queuing delays at the Colsterworth roundabout. Reduced journey times for through traffic on A1 will be achieved	Users PVB £87.709m Providers PVB -£0.076m Other PVB £0.000	PVB £87.633m
	Consumer Users	The scheme will reduce geometric and queuing delays at Colsterworth roundabout. Reduced journey times for through traffic on A1 will be achieved.	PVB £70.952m	PVB £70.952m
	Reliability	Scheme will reduce peak delays at roundabout and improve reliability	-	Moderate benefit
	Wider Economic Impacts	Areas served are not identified in any official plans for regeneration	-	Neutral
ACCESSIBILITY	Option values	Unlikely to affect transport options available.	-	Neutral

	Severance	Improvement from 'severe' for most users. Assumed less than 100 pedestrians per day.	-	Slight benefit
	Access to the Transport System	Unlikely to affect access to the transport system.	-	Neutral
INTEGRATION	Transport Interchange	No effect on level of facilities provided at interchanges.	-	Neutral
	Land-Use Policy	The number of key policies hindered by the proposed improvements is approximately the same as the number of policies facilitated.	-	Neutral
	Other Government Policies			