

Table 1: Appraisal Summary Table

Current version 23/03/06

Scheme Name:		Description	Problems: SAFETY AND CONGESTION.	Present Value Costs to Public Accounts
A1 CARPENTER'S LODGE GSJ		Removal of A1 roundabout, replaced by a compact grade separated junction.	Congestion at the roundabout causes queuing and delays to the A1 traffic during peak periods. The existing junctions and approaches suffer from road traffic accidents (58 personal injury accidents recorded during 5 years July 2000 – June 2005).	£ 5.0 m
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE	ASSESSMENT
ENVIRONMENT	Noise	Two properties within 300m of the scheme. Up to 1 dB noise reduction at George Farm, no change in noise levels at Carpenters Lodge due to scheme.	Number of people bothered by noise: Do minimum = 2.0 Do something = 1.9	Estimated Population Annoyed by Noise would not change
	Local Air Quality	Two properties within range of effects	Slight deterioration for NO ₂ only at one receptor	PM ₁₀ (2007): -0.2 NO ₂ (2007): +0.9
	Greenhouse Gases	Negligible change in journey distances due to new road layout	2007: Do Nothing 4950 t Do Something 5000 t	Slight increase
	Landscape	The proposals will impact on the wider landscape character of the 'Area of Best Landscape Value' which includes the setting of the adjacent designated Burghley Park. 2 properties will experience a change in view.	-	Slight Adverse
	Townscape	No townscape.	-	Neutral
	Heritage of Historic Resources	There will be a very small-scale negative change to the milestone since it is currently located within the scheme footprint and so will have to be re-instated after the works have finished. There will be a very small-scale negative change to a small section of hedgerow which will have to be removed, but will be translocated to a new position. There may be physical remnants associated with the former Great North Road surface, the likely affect on this possible asset will be slight adverse given the its local importance and the small area that will be affected, however these remains have not been confirmed at present. Overall, there will be a there will be a neutral effect on the cultural heritage resource.	-	Neutral
	Biodiversity	Minor adverse impacts on hedges and potentially badger that can be mitigated.	-	Neutral
	Water Environment	High quality watercourse and sensitive aquifer in close proximity	-	Neutral
	Physical Fitness	NO CHANGE IN THE LEVEL OF PHYSICAL ACTIVITY IS PREDICTED.	-	Neutral
	Journey Ambience	The grade-separated junction will reduce traveller frustration for a large number of drivers. Travellers using the grade-separated junction will enjoy an improved view and traveller stress would be reduced by the revised A1/Racedourse Road junction.	-	Large benefit
SAFETY	Accidents	Reduced accidents: The number of personal injury accidents will reduce as will the number of casualties.	PIA's and casualties savings over 60 years:	
			Central Growth	
			PIA's	359.9
			Slight	459.4
			Fatal	2.0
				PVB £11.1m
	Security	Pedestrians, riders & cyclists diverted onto longer routes possibly unlit but with good intervisibility. Very few movements - assumed less than 100 per day.		Slight Adverse
ECONOMY	Public Accounts	Construction and maintenance (dis)benefits have not been assessed.	Central Govt PVC £5.0m Local Govt PVC £0	PVC £5.0m
	Business Users & Providers	The scheme will reduce geometric and queuing delays at the Carpenter's Lodge roundabout. Reduced journey times for through traffic on A1 will be achieved	Users PVB £87.78m Providers PVB -£0.058m Other PVB £0.000(CG)	PVB £87.8m
	Consumer Users	The scheme will reduce geometric and queuing delays at Carpenter's Lodge roundabout. Reduced journey times for through traffic on A1 will be achieved.	PVB £64.5m	PVB £64.5m
	Reliability	Existing peak delays would be eliminated and reliability improved.		Moderate benefit
	Wider Economic Impacts	No impact envisaged by this localised scheme		Neutral
ACCESSIBILITY	Option values	Unlikely to affect transport options available	-	Neutral
	Severance	Improvement in existing severe severance. Assumed less than 100 peds. 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	The scheme will not directly benefit people without access to a car but is consistent with the objectives to improve public health, to invest in transport infrastructure and to improve the competitiveness and productivity of the UK economy.	-	Beneficial

N. B. The AST appraises the effects of the proposals in the design year, compared with the Do-Minimum situation, except for safety and economy, which is evaluated over a 30 year period.