Appraisal Summary Table: A21 Kippings Cross to Lamberhurst Dualling

Version 04.1 Date: 24.08.2007

Option A21 Kippings Cross Dualling (Stage 2– Plan Level – Stage 3 to be completed with the ES by the ECI Contractor)		Description Off-line dualling of the A21 between Kipping's Cross and Lamberhurst to dual-two standard joining to the recently completed dual two-lane Lamberhurst Bypass at the improved at grade roundabout at Lamberhurst Road.	Problems High levels of traffic congestion especially during peak periods with poor & unreliable journey times. Bad accident record, large amount of severance & accessibility problems.	Present Value of Costs to Public Accounts £57.2 M
OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE ASSESSMENT	ASSESSMENT
ENVIRONMENT	Noise	The dominant noise sources in the area are A21 and A26. Overall, the proposed improvement works on the A21 between Kippings Cross and Lamberhurst have an almost neutral impact. There would be a slight benefit in the area of the scheme where there would be a reduction from 62 to 31 in the number of people exposed to levels of 70dB(A) or more. It has also been found that approximately 9750 properties in the wider area are currently experiencing level of less than 55dB(A). These are not taken into account in the annoyance differences and it is possible that a significant number of these may be exposed to significant number of these may be exposed to significant number of these may be exposed to significant increases in traffic noise.	Do Minimum 89 people annoyed by noise. With Scheme, 91 people annoyed by noise	+ 2
	Local Air Quality	Negligible change in NO ₂ and in PM ₁₀ (in terms of change at average property). Insignificant effect on the A26 AQMA. 10 properties demolished with the scheme.	For both NO_2 and PM_{10} : 6575 properties with improvement; 2886 properties with deterioration.	NO ₂ : -92 PM ₁₀ : -28
	Greenhouse Gases	Increase of 4,162,094 vehicle-kms over 60 year appraisal period (assumes no traffic growth beyond 2026; using current CO ₂ emission rates)	In 2011: +1,506 tonnes. 60 year appraisal period: +102,324 tonnes (+4%)	Adverse NPV of £-3,457,357
	Landscape	Adverse effects on the High Weald AONB. Off-line dualling will result in a greater traffic influence with the retention of the existing A21 for local access. Section on embankment across open valley and severance of ridge landform assessed as locally severe adverse impacts. Scheme is not lit except on slip roads to the roundabouts at either end of the Scheme.	N/A	Large Adverse
	Townscape	No separate townscape assessment; there are no villages passed through by the route and the housing along the roadside is low density settlement adjacent the road with localised higher concentrations.	N/A	Neutral
	Heritage of Historic Resources	Proposals will remove archaeological remains along the scheme, some of which may be of regional importance. There are also 3 buildings of local historic interest (undesignated) which will be demolished. The scheme will also have a negative impact on the historic landscape character of the route corridor, which is of local importance.	N/A	Moderate Adverse
	Biodiversity	The loss of approximately 3ha (7%) of habitat from Old Swan Farm SNCI should not adversely affect the integrity of the SNCI, although a moderate adverse impact is predicted. The new road alignment will be further from Brookland Wood SSSI. Adverse impacts on Brookland Wood SSSI, including noise, water and air pollution and changes to its hydrology, should be avoidable and therefore impacts on this designated site are considered to be neutral.	N/A	Moderate Adverse
	Water Environment	Scheme design will avoid impacts on groundwater flow to Brookland Wood SSSI, which flows under existing under A21. Slight improvement to attenuation and pollution control through attenuation ponds and reduced spillage risk.	N/A	Neutral
	Physical Fitness	Scheme will divert most vehicle traffic off the original A21 resulting in increased opportunities for pedestrians and cyclists to use the original A21 in greater safety.	No Quantitative Assessment undertaken	Neutral
	Journey Ambience	Driver's frustration, driver stress and fear of potential accidents are likely to reduce through the provision of a high quality dual road. No change in traveller's views from existing although improvements in the view from the road as a result of landscape planting proposals.	N/A	Large Beneficial
SAFETY	Accidents	The improvement to the alignment and change to dual carriageway will reduce the accident rate during normal and maintenance operations. Accidents will increase during construction.	Reduction in casualties: Fatal 35, Serious 312, Slight 1890.	PVB £75.6 m
	Security	Slight benefit from under bridge linking pedestrian routes and properties on both sides of the A21.	N/A	Slight Beneficial
ECONOMY	Public Accounts	The current estimated construction cost is £57.2m in 2002 prices to be funded from the regional allocation for the South East England Regional Assembly (SEERA).	Central Govt PVC = £57.2m, Local Govt PVC = nil	PVC £57.2 m
	Trans, Economic, Efficiency: BU & TP	The scheme generates large benefits for business users from travel time and vehicle operating cost savings.	Users PVB = £36.6 m, Transport Providers PVB = nil, Other PVB = nil	PVB £36.6 m
	Transport Econ. Effic.: Consumers	The scheme generates large user benefits for consumers from travel time savings with a small reduction in vehicle operating costs.	Users PVB = £29.9m, Overall BCR = 2.7	PVB £29.9m
	Reliability	Reduction in peak hour congestion will improve the reliability of the route through reduction in flow break-down and accidents	N/A	Moderate Beneficial
	Wider Economic Impacts	The scheme does not directly impact on a local regeneration area, but it would have benefits in terms of improved access to Bexhill and Hastings which has Assisted Area status.	N/A	Neutral
ACCESSIBILITY	Option values	This scheme will not affect transport mode options in the study area.	N/A	PVB = nil - Neutral
	Severance	Scheme unlikely to change the overall level of severance. However Scheme makes the original A21 safer due to reduction in traffic which is likely to reduce severance for pedestrians and cyclists and improve from existing level of severance.	No Quantitative Assessment undertaken	Neutral
	Access to the Transport System	This scheme is unlikely to have a substantial impact on access to the transport system.	N/A	Neutral
INTEGRATION	Transport Interchange	No significant impact on Transport Interchange, although the scheme will improve reliability for bus services using the A21 corridor.	N/A	Neutral
	Land-Use Policy	Proposal facilitates local and regional transport objectives which support the Scheme. Conflicts with some environmental and sustainability objectives at all three policy spheres ie impacts nature conservation sites and AONB.	N/A	Adverse
	Other Government Policies	Scheme conflicts with the overarching environmental objectives of NE in conserving & enhancing biodiversity, and landscape. Scheme meets objectives of DFT in reducing congestion and improving local accessibility but hinders those seeking a reduction in the dependence on road transport.	N/A	Adverse