ENVIRONMENTAL APPRAISAL SUMMARY – M1 Junction 12 Improvements
Half Clover Leaf Arrangement Option 4 ('Orange Option')

Scheme Description.	**Description: Junction 12 HALF CLOVER LEAF option 4 for Junction 12 improvement with new bridge**.	
ENVIRONMENTAL ISSUES	**QUALITATIVE IMPACTS**	**EFFECT**
Noise	New access road for N/B off-slip and on-slip off Harlington Road brings traffic closer to several properties to west of motorway. Taking into account the relative distances of this access road and the mainline from these receptors, and the traffic flows on the access road and the mainline, there would be negligible/slight increases in noise levels to these properties, particularly to the rear facades of properties on Harlington Road. To the east of the motorway, taking into account the relative distances of Harlington Road and the new access road from receptors, noise levels at a few properties on Harlington Road, currently dominated by noise from traffic on Harlington Road and the mainline, would experience negligible increases in noise levels as a result of the new access road for S/B off-slip and on-slip.	Neutral
Local Air Quality	Air quality around Junction 12 currently meets the air quality objectives, and would be likely to with the Scheme in place.	Negative
Greenhouse Gases	The scheme is anticipated to result in a negligible change in greenhouse gases.	Neutral
Landscape & Townscape	Existing motorway has had significant adverse effect on landscape character as it was never properly integrated into the landscape. Scheme involves embankment construction and impacts on field patterns and land severance and some loss of woodland on northbound side. Mitigation planting to be provided.	Neutral
Heritage or Historic Resources	Direct physical impacts to archaeological remains of Neolithic to post-medieval date surrounding Junction 12. Negligible impacts on settings of two Grade II Listed buildings (Redhills Farm and Mill Farm). Major physical impact on one historic motorway bridge of low value. No impact on historic landscape.	Negative
Biodiversity	Direct habitat loss and fragmentation impacts, together with the potential disturbance of legally protected species including badger and bat.	Negative
Water Environment	Increased road runoff would be attenuated and subject to pollution control measures if required. Landtake within area at risk of flooding due to new embankments to be mitigated by provision of flood compensation area if required. Extension to culvert, one new culverts and stream diversion to be designed such that flows in unnamed watercourse not adversely affected.	Neutral
Physical Fitness	Existing nmu facilities on overbridge currently un-useable; improvements would allow for dedicated footway on south side, thereby facilitating pedestrian route across bridge. FP34 would require diversion with increase in journey length of about 175m, however considered unlikely to affect level of usage, which is currently low.	Positive
Journey Ambience	Adverse impacts on traveller's views due to the loss of mature vegetation and the provision of multiple gantries coupled with embankments and landform associated with the junction. Beneficial effect on driver stress due to improved traffic flow and extensive signage leading to reduced fear of potential accidents and improved capacity at Junction 12.	Positive
Severance	Provision of improved pedestrian facilities across new Toddington overbridge would reduce severance	Positive
Land-Use Policy	Scheme would contribute to improvements in accessibility to various development areas. Scheme aims to minimise environmental impacts but would require some land take from Green Belt and from best and most versatile agricultural land.	Neutral
Other Government Policies	The Scheme would improve the efficiency of the road network, thereby enabling journey times to decrease; reducing congestion and improving safety; and facilitating business efficiencies. These improvements would contribute to economic growth and housing development in the vicinity of the M1 corridor. While the Scheme would improve accessibility to employment, retail and leisure facilities, dependency on the car would not be lessened	Neutral