

Environmental Case Record

M40 Reconstruction - Junction 3 to 4



Location	High Wycombe, Buckinghamshire
Client	Highways Agency
Main Contractor	Carillion Infrastructure Management & Capital Projects

The works comprise the replacement of existing pavement surfacing of the M40 Motorway.

Technical Data

Contract Type	Reconstruction
Contract Value	£6.6 million
Length of the job	approx 6km

Principal Quantities

Blacktop	15,000 tonnes
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Community Interaction	Letter drops & door to door visits.
Waste Reduction	Reuse of many different materials.
Noise Mitigation	Use of water jetting
Dust Abatement	Use of road brush to damp down susceptible areas
Pollution Prevention	Policy of zero tolerance adopted
Economic Benefits	Through the waste practice adopted

Community Interaction / Liaison:

Loudwater Viaduct operations included concrete breakout and scaffold erection above both domestic and commercial properties. Prior to and during these works letter drops and door to door visits were made to ensure the inhabitants were aware of the works and why they were taking place. The local Environmental Health Officer (EHO) and Environment Protection Officer (EPO) were also informed of the works, the EHO thereafter was invited to attend meetings on site to review ongoing and future activities. A local business was also assisted by placing planings in its car park, infilling potholes and creating an even surface.

Waste Reduction :

Drainage stone excavated as part of the contract was removed from site for reuse. Blacktop planings (15,000 tonnes) were removed and used elsewhere. The issue of resale of the planings by the surfacing contractor was built into their contract, thereby reducing the contract rate charged. Broken out concrete was segregated, transported to a local company for crushing and reuse at no charge to the job (260 tonnes to date). Concrete broken out by water jetting is also being used in the construction of a haul road for contract purposes, which may remain as maintenance access, post contract. Specific skips are also used for the collection of metal waste (structural joints, gulleys and covers) this is also collected for recycling (117 tonnes to date). Bins are provided in the office for waste paper collection. Waste material from the construction of a crossover was also used for the landscaping of an area adjacent to a sliproad which was outside the scope of this contract. The area was frequently used by flytippers and a large quantity of waste had accumulated. In landscaping the area in question we were able to dispose of the excavated material from the crossover as well as the accumulated waste and at the same time, by infilling the area, discourage future flytipping.

Noise mitigation:

Working in such close proximity to domestic and commercial properties noise was an issue of ongoing concern and working hours were often restricted to mitigate disruption / nuisance to the inhabitants. Recently a large item of additional works commenced involving the breakout of a substantial area of concrete. The mitigation of potential noise disruption to local residents was a contributory factor in the decision to use water jetting to breakout the concrete.

Dust Abatement:

The issue of dust was a potential problem not only for the workforce and local residents but also for members of the public using those areas of the M40 remaining open during the works. To mitigate the problem a road brush was utilised to dampen those areas of works susceptible to dust creation.

Pollution Prevention:

A policy of zero tolerance was adopted from day one of the contract regarding fuel/oil leaks on plant. Any item of plant found to have a leak was immediately off hired or the relevant subcontractor informed. Furthermore when hiring plant for site it was stipulated from the outset that new plant would be our preference. All plant hired to site was to be very well maintained.

Economic benefits:

The primary benefit financially has been that accrued from our waste practice, minimising the amount going to landfill and therefore the charges incurred. Also the disposal of concrete at no cost (bar the transport) and the reduction in the rates of our surfacing contractors have similarly been of benefit.