Case

STUDY

FLEXITEX
M40 Junction 15
Water channel

The

BACKGROUND

This project formed part of a dual carriageway bypass of the M40 Junction 15, allowing vehicles travelling on the A46 to avoid this busy junction.

As part of the principal works, an existing watercourse which ran under the M40 and then alongside the southbound carriageway required realigning so that it missed the first pier structure of the new flyover bridge.

Our Client's

REQUIREMENTS

A sustainable solution for water course realignment

The water channel required a watertight concrete lining Flexitex was considered to be a much quicker and simpler method of providing a concrete protection to the pier of the new bridge.

This was the first time Flexitex has been used on a Highways Agency project.

Our Value Engineered
SOLUTION

Although the initial material costs were similar to casting reinforced concrete slabs for the ditch, the use of Flexitex meant the ditch could be excavated, poured, buried and finished in just under 2 weeks.

Pouring an insitu slab lining for the ditch would have taken nearly a month to complete. Geosynthetics supplied a single piece of Flexitex 80 metres long x 8 metres wide, ready to fill, that required none of the forming materials used by traditional methods.

The Flexitex was then buried with a 300mm covering of clay, stone and alluvium. The channel was then profiled to the same specification as the adjoining channel with pre-planted Geosynthetics coir rolls and pre-seeded coir blankets. Elsewhere on this very large project further channels were lined with more of pre-planted coir rolls, pre-seeded blankets and Rockrolls.

Now that the installation is complete the Flexitex provides an impermeable barrier providing permanent invisible scour protection to the first pier of the A46 Flyover structure.

"There was an instant cost saving on materials with a major reduction on man power and working times, up to two weeks were saved on installation, freeing up the workforce to work in other important areas of the contract."

NICK JENKINS
Senior Engineer
Morrison Construction