Case Study

Geosynthetics Pre-seeded Erosion Control Blankets

Location:
M40 Junction 15, Longbridge Island Relief Road

Client:
Highways Agency
Birmingham

Project:
Water course realignment

Contractor:
Morrison Construction Services
Wolvey, Hinckley, Leicestershire

This project would form 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.

FlexiTex was considered to be a much quicker and simpler method of providing permanent invisible scour protection to the pier of the new bridge over the M40. Our pre seeded erosion control matting was chosen to rapidly restore the channel’s appearance. The flexitex was laid out in the pre profiled channel cut and then filled with pumped grout. The Flexitex was then buried with a 300mm covering of clay, stone and alluvium.

To provide further erosion control and to restore the appearance of the watercourse the channel was then profiled to the same specification as the adjoining channel with Geosynthetics’ pre-planted coir rolls and pre-seeded GeoSeed coir blankets.

Elsewhere on this very large project further channels were lined with more of our pre-planted coir rolls and GeoSeed pre-seeded blankets as well as our Rockrolls.

Our matting is made purely from natural fibres, so is environmentally friendly, and is designed to fully degrade over a 12 to 18 month period leaving no future problems for maintenance teams. The tough coir fibre is sufficiently resistant to rotting, so the mat will remain effective until successful vegetation establishment. The roots of the new plants growth will further stabilise the channel sides resisting the effects of scour caused by storm water. Now that the installation is complete the watercourse has rapidly returned to its natural appearance.

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

Nick Jenkins, Senior Engineer - Morrison Construction