Salix advised engineers Halcrow on bioengineering methods to stabilise a regraded slope as part of an inter-tidal river enhancement project. The existing vertical retaining wall provided no habitat value.

A key objective was to establish vegetation and a constant supply of fine sediment, critical to maintaining inter-tidal vegetation on the new slope. The location of the works is directly adjacent to the main bridge abutments on the A13 and as such the bioengineering design detail was critical. The angle of the bank slope and sediment trapping features are critical design criteria for inter-tidal rivers.

Lines of Brushwood fascine were installed to trap fine sediment. The cut slope was covered with a temporary biodegradable erosion control blanket, NAG C125BN, to prevent soil erosion during the establishment of the inter-tidal plants species. Rock rolls were installed in an anchor trench around the edge of all the works to ensure that the bioengineering materials were not undercut.
Salix undertook the bioengineering works under the Environment Agency’s framework contractor using specialist long reach machinery.

Salix has been a lead consultant working on a guidance manual “Estuary Edges: Ecological Design Guidance” for inter-tidal bioengineering design. Clients are the Environment Agency and the Thames Estuary Partnership.

Vertical river wall removed to create natural sloping bank

Regraded bank with faggots for accretion of silt

Slope detail

Vegetation establishment 18 months later

CONTACT DETAILS

Salix River & Wetland Services Limited
Salix, Croxton Park, Thetford, Norfolk IP24 1LS
Telephone 0870 350 1851 Fax 0870 350 1852
Email info@salixrw.com

www.salixrw.com