1 km of new and existing channel was enhanced using bioengineering techniques as part of a flood protection project in the centre of historic Pembroke in West Wales. The upper reach of this small stream previously ran in a confined concrete U channel.

The old concrete channel provided little ecological or landscape value. A new sinuous channel was created, stabilised and enhanced using bioengineering techniques. Pre-established coir rolls and coir pallets, grown at Salix’s in house nursery with a site specific species mix were installed at the toe of the stream bank. This enables rapid establishment of marginal vegetation and prevents toe and bank scour.

The stream banks were seeded with a local wildflower mix and protected with fully biodegradable erosion control blankets (NAG C125BN). The new channel is an effective flood reduction measure, whilst providing a valuable ecological habitat and a landscape focus in the town.
Old concrete channel next to new channel

Installation of coir rolls and NAG C125BN

Completed installation

Six months later