



Stonbury was called in by the Environment Agency to solve a challenging problem. A mud flood bank on the River Avon at Pill had slipped, threatening the integrity of residential flats that were situated alongside a stretch of the tidal reach.

The void had to be infilled with stone on a geotextile base to re-establish the integrity of the bank, however access to the site proved to be quite a challenge.

Due to the major fluctuations in tidal levels and flows, it was not possible to address the problem from the river with the use of a barge. However, it was equally difficult to access the problem area from the bank, as there was insufficient space between the residential property and the flood bank.

This challenge was exacerbated by the fact that a high-pressure gas main ran under the length of track running between the properties and the river, limiting the weight of any machine that could be used.

Stonbury designed a novel and bespoke solution to address these challenges in a safe and cost-effective manner. A special frame was fabricated to fit onto a 3-tonne tracked dumper. This was fitted with a 20m conveyor system hanging over one side, counterbalanced by the generator pack mounted on the dumper. A hopper system was designed to receive the stone from a 2-tonne dumper, which was able to run back and forth along the track without compromising the gas main underneath the path.

The works were carried out successfully and handed back to the client.