

PROJECT EMBANKMENT AND FLOOD WALL REPAIRS



Stonbury were recently contracted to repair damage caused by badgers under-mining the tidal embankment and flood wall at a popular holiday resort on the coast.

Working with an expert in badger exclusion and relocation, an artificial sett was constructed away from the damaged site, and upon receipt of the appropriate licence, a 21-day exclusion programme was instigated. The programme included the installation of one-way gates across all entrances to the existing sett, allowing the badgers to exit the sett but not get back in.

The badgers were successfully encouraged to relocate to the new artificial sett during this period and mesh was placed over the whole embankment to prevent the badgers from excavating new entrances back into the original sett.

The next stage of the process was to reposition the sea wall and related promenade which had started to rotate as a result of the voids left beneath. It was vitally important that the method used to reposition the wall and promenade was minimally invasive to minimise disruption along the popular walking route and the adjacent holiday complex.

A geo-polymer resin system was injected into the voids below the structure via a series of small holes that had been drilled through the concrete. The resin spread and expanded into the voids, following the path of least resistance until the space was filled.

Due to the fast setting time of the geo-polymer and the accurate positioning of the injection holes, the structure was lifted and rotated back to its original position with a very high level of accuracy.

For this project, the injected geo-polymer system offered distinct advantages over more traditional remediation methods as it was quicker and less disruptive than the use of piling or underpinning, which was not an option as the noise would have been an issue for both the badgers and locals/tourists.

Once the re-profiling works to the embankment were complete, the site was successfully handed back to the client.