

TMS Maritime is a leading UK specialist in marine civil engineering, ancillary floating plant and diving services

Client: South West Water Ltd

Project: East Cliff Outfall Pipe, Teignmouth, Devon

Consultant Engineers: Arcadis
Project Duration: 8 weeks
Project Value: £199,000

Requirement:

South West Water had a requirement for the existing outfall pipe located at Teignmouth's East Cliff beach to be removed, having reached the end of its design life.

Furthermore, as a result of the natural movement of beach material, the outfall pipe often became largely exposed above beach level. This often left the pipe suspended above the beach, for which it was not designed. The outfall's exposure above beach level also meant that it presented an impediment to users of the beach.

The requirement was therefore to replace the old outfall with a new 27 metre long, 600 mm diameter realigned ductile iron pipe, installed at a lower level and encased in concrete. Concrete steps were also installed in order to provide pedestrian access over the pipe should beach levels drop, exposing the outfall pipe.

Solution:



South West Water employed TMS Maritime Ltd to undertake the removal and disposal of the existing outfall pipe as well as the installation of the new pipe. TMS were also required to install a custom-made flap valve within a manhole situated on the promenade, which was undertaken by TMS' confined space trained operatives. The siting of the new 27 metre long pipe was entirely within the tidal zone and therefore required the expertise and knowledge of the marine environment possessed by TMS Ltd.

The first 20 metres of the pipe was installed on a concrete foundation that was dowed into the bedrock and encased in concrete. This was done using in-situ concrete and a specially fabricated shutter. The final 7 metres of the pipe was anchored to reinforced piles that had been drilled into the bedrock. The project was undertaken with the constant challenges presented by tidal working on a beach that remained open to the public. A dedicated TMS Public Liason Officer was present during the works to ensure public safety and the project was nominated for a H₅O Star Award in recognition of TMS' commitment to protecting the public and its workforce.

