



Stonbury was contracted to carry out concrete repairs to several joints along a wastewater outfall located on the North Sea. In addition, the scope included the installation of new foundation pads and a riprap wave protection barrier.

Working around favourable tide times and good weather, the site team used an environmentally friendly mortar, resistant to salt attack, for the joint repairs and a high-strength concrete with an additive to speed up the cure. Both products were chosen for their rapid cure properties, minimising the risk of damage from the daily tides. The team excavated around the outfall. Shuttering was then used to install and pour sixteen new foundation pads, providing sufficient support for the structure and preventing potential collapse in the future.

Following the completion of the foundation pads, the team continued to carry out any remaining joint repairs and began work on the maintenance hole. Shuttering and steel reinforcement was installed in preparation for a concrete pour to cap the existing utility hole ring.

Once all concrete repairs were complete, the immediate area around the outfall was reinstated. With the use of an excavator, 1400 tonnes of rock armour was transported along the beach and placed down both sides and across the top of the outfall structure to protect the concrete from future erosion caused by high tides and storm events.

The team on site were required to work to the tides, so working hours were adjusted daily. This included some critical areas being completed in the early hours of the morning and late into the night. Some works were also completed over the weekends when good tides were available to ensure the programme of works could be met.

Minor repairs to the access roads and surrounding green - areas, including the reinstatement of topsoil from a local supplier – were carried out prior to handing the site back to the client.