A large scale multi storey residential development, at Millharbour, on the Isle of Dogs, required the off line replacement of an existing trunk sewer to facilitate the footprint of the new building.

From a complex central drive pit two 1500mm diameter pipelines, 100 metres and 140 metres in length were installed using a Herrenknecht AVN to tie in with the existing sewerage system.

The intensity of existing services at the drive pit required all the components of the system, including the tunnelling machine and pre-cast concrete pipes, to be lowered to the pit base off centre. All the components were then jacked laterally across the pit on rails to align with the design tunnel axis prior to being installed.

Pre-construction planning played a pivotal role in the successful delivery of this very difficult project. The stakeholders worked cooperatively to design and construct this new Thames Water asset.

CO₂ savings of the pipe jacking element compared to open cut construction were 40% for the 1500mm diameter drive. Source: pipejackingco2calculator.com