



Subduct Installation via CRT Culvert

London



Telecoms

Value	- > £50k
Distance	- 75m
Market segment	- Subduct
Duration	- 5 days



Pre-construction

JSM was commissioned by the client to increase fibre capacity beneath a dock through the installation of additional subducts within an existing Canal & River Trust (CRT) service culvert. The culvert naturally fills to the same water level as the dock and is accessed via shafts measuring 15.5 metres deep. A three-month planning period was undertaken to develop a methodology to manage dewatering, tidal influences from the River Thames, and environmental constraints. Planning activities included coordination with CRT, development of a continuous pumping strategy, scheduling works around low tide periods, and undertaking water testing arrangements to allow controlled discharge back into the dock.

Construction

JSM installed 14 no. 32/27mm subducts through the existing CRT culvert beneath the dock. To gain access, JSM deployed two high-head pumps, operating simultaneously, to drain the culvert into the dock. The pumps were required to run continuously throughout the works. CRT assisted by reducing the dock water level, limiting water re-entering the culvert. Works were primarily scheduled around low tide periods on the Thames to further minimise water ingress. Water testing was carried out to ensure pumped water could be safely returned to the dock.

Post-construction

The works were completed within the programmed five-day duration and within budget. The installation successfully increased capacity through the culvert for additional fibre cables. Demobilisation was completed in coordination with the client and CRT.

- Subduct installation
- 32/27mm ducts
- CRT service culvert
- Fibre capacity increase
- Culvert dewatering

- High-head pumping
- Continuous pumping
- Deep shaft access
- Water quality testing
- Tidal programming

PROJECT CHALLENGES

CHALLENGE



The service culvert filled to the same level as the Dock, with tidal influence from the River Thames.

Deep access shafts (15.5m) and prolonged pumping were required to maintain safe working conditions.

SOLUTION



JSM implemented a continuous dewatering strategy using two high-head pumps, supported by programming works during low tide periods and CRT lowering dock water levels.

A detailed methodology developed during the planning phase ensured uninterrupted pumping, controlled water discharge, and environmental compliance.

