

HOLLOW CORE FIBRE CONNECTION DATA CENTRE
WEST LONDON

Team - Comms | Value - £337k | Distance (km) - 18km
Client - Undisclosed | Duration - 75 days | Date - 2023

Pre-construction

Prior to construction, the proposed route was thoroughly surveyed to assess feasibility and identify potential constraints. All necessary permits and statutory notices were applied for in accordance with regulatory requirements. A comprehensive project plan was developed, including detailed risk assessments to ensure safe and efficient delivery. Access agreements were secured for canal footpaths to facilitate unhindered site entry and minimise disruption to the public.

Construction

The construction phase involved the installation of 256 metres of new ductwork and the construction of nine new chambers to support future cable infrastructure. A total of 16,904 metres of ducting was successfully proved to confirm route integrity and readiness. Subsequently, 18,507 metres of 4-fibre hollow core fibre (HCF) cable were installed, followed by precision splicing to ensure optimal performance. All works were carried out under strict quality control measures and in accordance with the approved project plan.

Post-construction

Following completion, comprehensive as-built documentation was produced, including detailed chamber drawings and fibre routing single-line diagrams (SLDs). Final test results were compiled and verified against client specifications to confirm system integrity and performance. The project was delivered to a high standard, with all records submitted for client approval and future reference.

Challenges

A key challenge during the project was obtaining timely communication and formal authorisation from the Canal & River Trust (CRT) for works impacting canal infrastructure. Navigating the regulatory requirements and aligning with CRT's operational constraints required careful coordination and planning.

Solutions

To overcome this, early engagement with CRT was prioritised, supported by consistent communication throughout the project. This proactive approach ensured that all necessary permissions were secured in advance. As a result, all works were completed in full compliance with CRT requirements and in line with the client's specifications, maintaining both schedule and quality standards.



Testing

Ductwork

Fibre installation

Chambers

Hollow core fibre

Splicing

Barges

Permits