PROJECT SUMMARY

Epping Bridge Project

CLIENT: LAING O'ROURKE | **PROJECT VALUE: $220M** | **ENGAGEMENT PERIOD: JUN 2025 – SEP 2025**

PROJECT OVERVIEW

The Epping Bridge Project is a TfNSW project replacing the 124-year-old Epping Road bridge over the Northern Railway line with a new, wider bridge. The project contains complex staged utility relocations across the bridge and Blaxland Road. Laing O'Rourke (LOR) engaged Croí during the Early Contractor Involvement (ECI) phase to provide utilities management and concept design services for their tender.



Utilities Strategy & Design • Utilities & Project Management • Digital Engineering & Technical Modelling • ECI Tendering & Early Utilities Advisory

Croí's Role

- Utilities management through the ECI phase
- Utility SMEs for client interactives
- Review of existing utilities design models, survey data and reference design relocation designs
- Development of utility concept designs for all relocations
- Staged relocation design aligned with LOR's construction staging
- Coordination with the civil and bridge design teams
- Tender Advice Notices, impacted utilities and design utility registers for LOR's pricing submission

Key Achievements

- Developed a two-stage relocation strategy for all utilities, maintaining supply throughout construction
- Redesigned the bridge utility crossing, moving telecommunications and gas between the bridge girders to free space for the water main past the Sydney Metro building
- Designed staged Sydney Water relocations, including DN375 SCL mains and a DN450 PE crossing on the bridge cantilever
- Designed staged Telstra and Optus conduit banks, with cutovers for all telecommunications providers
- Staged Ausgrid and Endeavour Energy relocations, with temporary solar street lighting during civil works
- Identified an opportunity to install the water main between the bridge girders, removing the cantilever structure

Key Interfaces

- TfNSW (Principal)
- Sydney Water
- Jemena
- Ausgrid
- Endeavour Energy
- Telstra / Optus
- Sydney Trains
- Sydney Metro

Key Outcomes

- Space proofed concept designs and staging for all utility relocations
- Staging integrated with LOR's construction program
- Simplified design for bridge crossings gas and telecommunications alignments with fewer bends
- Reduced design and construction risk at the bridge transitions
- Key approval risks identified early, including Sydney Water dispensation