CASE STUDY
J, BA & AY REFURBISHMENT

PROJECT AT A GLANCE

Client: Electricity North West

Project: J, BA & AY 132kV Refurbishment

Value: £218,000

Location: Agecroft, Greater Manchester

Year: 2016-2017

Duration: 12 Months

PROJECT BRIEF

The refurbishment of the J, BA & AY routes was integral to ENW's need to reinforce the 132kV overhead circuits feeding Agecroft substation. LSTC were engaged to prepare designs and feasibility studies on the short, but complex routes. Of particular concern was the requirement to provide protection to motorway, rail and housing infrastructure where clearances were little more than statutory requirements – and offered little in the way of surplus for maintenance activities.

CHALLENGES

The unique nature of the routes required consideration of techniques and capabilities not often used when refurbishing lines. LSTC's knowledge of catenary support systems allowed us to verify the feasibility of using this alternative means of asset protection, and liaison with key stakeholders ensured they were kept appraised and informed during the planning stage. Consideration was also given to Network Rail's electrification work requiring clearance studies and assessment for proposed OLE equipment. This was all squeezed into a relatively short timeframe.

OUR APPROACH

LSTC's depth and understanding of construction techniques was instrumental in assessing options for the proposed "like for like" refurbishment. We took a pragmatic, risk based approach to identifying need, and subsequently methodology of construction work. This early assessment highlighted to ENW the complex and varied issues that would be apparent at construction time, and enabled a workable plan to be implemented ahead of tendering the work.

PROJECT OUTCOME / DELIVERABLES

The hazards that would become apparent were many and varied, each requiring a bespoke approach and innovative thinking. From working within housing estates to erecting temporary masts, from using catenary support systems to changing phase attachment points, our feasibility and final design work enabled the construction elements to be de-risked as far as practically possible. Construction work was awarded 2nd quarter, 2017.

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