

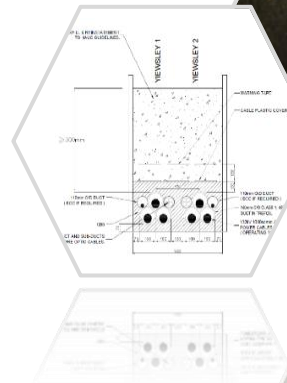
CASE STUDY

UNDERGROUND CABLE ROUTE DESIGN
IVER- YIEWSLEY 132kV (66kV RATED)



PROJECT AT A GLANCE

Client: SSE North
Project: Iver – Yiewsley 132kV
Value: £98,000
Location: Iver Heath, Buckinghamshire
Year: 2016
Duration: 4 Months



PROJECT BRIEF

LSTC were commissioned by SSEPD to provide a cable route within a site sitting between an existing landfill and main river with difficult engineering challenges and minimal working corridors.

CHALLENGES

- To provide a viable route and work with an installation contractor to design a cable with sufficient rating that could be constructed in a hazardous area with contamination and asbestos presence.

OUR APPROACH

Minimal options existed so a full topographical survey and on site identification of hazards were required in order to determine the working parameters for both cable design and construction. Further investigation was required in to the presence of contamination and highlight any areas of engineering difficulty.

Following route and engineering review LSTC went on to obtain full technical consents, in particular the crossing of the existing National Grid 275kV cables. Detailed cable design was required for this project, which included the derating effects from the existing 275kV and thermal resistivity of the existing soil. We worked with the contractor to design and build a difficult 132kV installation on a very dangerous site and came through with a project that has now finished construction and final cable testing is underway.

PROJECT OUTCOME / DELIVERABLES

- Project management including cost, programme and progress reporting.
- Feasibility studies for particular technical solutions.
- Full topographical surveys.
- Cost estimations of technical solutions.
- Contamination testing, cable design and ratings including derating analysis.
- Thermal Resistivity testing.
- Programme delivery including estimated planning application periods and construction periods.
- Assessment of social/ecological impact based on the preferred route options/corridors or preferred site selection.
- Technical Consents, tender package, construction information & detailed design and reports were all provided.