



# Transmission Lines & Underground Cables



*WML Consultants provides geotechnical investigations and design of underground cables, transmission line upgrades, and extensions. We provide rapid and cost-effective services throughout all of WA, including remote locations, that can be serviced by our Perth, Kalgoorlie, and Bunbury offices. Our geotechnical team are inducted into the Western Power FETCH system and hold Basic Network Authority Cards.*

*We can provide a range of services for transmission line and underground cable upgrades including:*

- High-level feasibility assessments.
- Foundation design.
- Structural design.
- Construction supervision.
- Construction verification.
- Quality assurance (QA).
- Geotechnical investigations to assess the ground conditions along the transmission line and underground cable alignments. Our investigations can include but are not limited to:
  - Soil thermal resistivity sampling for laboratory testing.
  - Environmental soil sampling and testing for identification of contaminants (e.g. soil aggressivity).
  - Acid Sulphate Soils (ASS) desktop studies, sampling and testing.
  - Groundwater monitoring.
- Desktop studies for 1% AEP (1 in 100) year flood levels.
- Design guidance and construction support for open trench excavations.
- Geotechnical design parameters for power pole installation in accordance with AS 7000.
- Geotechnical mapping of the alignments detailing zones of different ground conditions with zone specific foundation requirements.
- Ground remediation design and recommendations for installation of power lines and access roads on problematic ground conditions such as soft / boggy soils, peat, tailings, etc.

*We can also provide:*

- Civil flood modelling, hydrology assessments and design works, including catchment analysis and delineation.
- And more.