Kleinfelder provides the highest quality geotechnical investigation, design and construction phase services to support our clients’ projects from the ground up.

**PROJECTS:**

• Provided pre-construction geotechnical evaluation, pile testing, and foundation design followed by detailed design and construction foundation inspections including advising on rectification methods for unforeseen ground conditions, for a 170 MW solar farm. Finley, NSW (Signal Energy)

• Provided review and evaluation of existing geotechnical reports and supplementary site investigation, including geotechnical/chemical laboratory testing and in-situ resistivity testing. Conducted pile drivability and load testing (both lateral and axial) and provided interpretative reporting, including recommendations for earthworks and foundation design. Preliminary and detailed pile foundation design for a 350 MW solar farm. Darlington Point, NSW (Signal Energy)

• Undertook exploratory test pitting, and chemical soil and geotechnical laboratory testing. Conducted thermal and in-situ electrical resistivity testing, pile load testing, and pile drivability testing for the development of a 140 MW solar farm. Provided client with a geotechnical evaluation report and corrosion protection report, then utilised both to provide an economic detailed steel pile foundation design. Glenrowan, Victoria (Signal Energy)

Our highly skilled and experienced staff have a strong understanding of the geotechnical issues faced by modern construction teams and how these issues can impact the overall project. Kleinfelder’s geotechnical professionals provide innovative solutions and advice to mitigate project risks and anticipate and overcome challenging ground conditions.

Specialising in the design of solar array piles, Kleinfelder has provided detailed foundation design and construction supervision for solar projects generating more than 26 Gigawatts of renewable energy across Australia and the United States.

Kleinfelder’s geotechnical capabilities include, but are not limited to:

• Geotechnical investigation
• Solar pile load testing
• Geotechnical design
• Design of shallow and piled footings for all structures
• Basement design
• Temporary works design
• Slope stability analysis and remedial works design
• Mining subsidence studies
• Design of shallow foundations for commercial, residential, industrial, and mine structures
• Pile design including settlement reducing piles
• Ground improvement measures for construction on soft ground
• Geotechnical audits and design of tailings dams
• Soil nail design and rock anchor design
• Pavement design
• Assessment of rock cuttings and design of rockfall protection measures