Las Vegas Readiness Center

Client – TRC, Inc.

Owner – County of Clark (Aviation)

The Las Vegas Readiness Center Super Solar Project (Phase One) consists of the construction of structures to cover the existing parking lots at the Nevada Army National Guard facility. The covered parking structures will be constructed with solar panels to generate electricity. The covered parking structures will be divided into four groups with each group anticipated to produce a peak power output of 135 kilo-watts (kW) AC for a total peak power output of 540 kW AC. The covered parking structures are anticipated to be steel construction supported by drilled shaft foundations. The drilled shafts are anticipated to be 24 to 30 inches in diameter and extend to depths of 6 to 7 feet below the existing asphalt concrete pavement.

GES will perform a geotechnical evaluation for the parking structures. GES, through it's sister company Eagle Drilling Services, Inc., will drill exploratory borings at seven locations at the site to depths of approximately 15 feet each. Due to the possible presence of existing underground utilities, GES will pothole using an air-knife to approximately 5 feet below the existing surface at 6 of the locations in addition to calling USA locate. Borings will be drilled using hollow stem auger method and driven samples will be obtained at approximate 5 foot vertical intervals in the borings. The number of blows required to advance the sampler will be recorded as an indicator if soil consistency. GES will perform laboratory testing on soils obtained from the exploration to evaluate the properties of the soils. Based on observations made during drilling and the results of laboratory testing, GES will develop geotechnical recommendations for the covered parking structures including earthwork recommendations, and foundation recommendations including friction coefficients and lateral resistance coefficients. The recommendations will be presented in a geotechnical evaluation report.