A geophysical site characterization study was performed by GeoView, Inc. to assist in the placement of a planned Class 2 Landfill in Florida. The survey area was approximately 160 acres. GeoView, Inc. performed a ground penetrating radar (GPR) study in order to define lateral boundaries and apparent severity of karst (sinkhole) features. Electrical resistivity imaging (ERI) was later used to provide a vertical characterization of the GPR-identified features.

The GPR data was collected using a Mala GPR system utilizing a 250 MHz antenna. Penetration depth of the GPR signal ranged from 10 to 30 ft (3 to 10 m). The GPR survey was conducted along an approximate grid pattern of transects spaced 50 ft (15 m) apart. Position control for the GPR data was obtained using an integrated differentially corrected GPS system. By using this approach the need to set up a survey grid across the site was avoided, greatly enhancing project efficiency and cost effectiveness. Over 50 anomaly areas were identified, comprising approximately 10 percent of the overall project site. Anomalies were ranked in terms of apparent severity in order to help direct geotechnical testing activities. Subsequent test borings showed excellent correlation between the geophysical anomalies and karst conditions.