



**Case Study Category:** SUE

**Case Study Title:** Subsurface Utility Mapping in Urban Areas with Ground Penetrating Radar at Jacksonville Florida

**Utility Name:** Jacksonville, FL

**Case Study Abstract:** SUE is an engineering process used to identify and map underground utilities and structures as well as assign a quality level to data. There are different geophysical techniques available to acquire data regarding the two-dimensional location of underground utilities. It is important for designers or engineers to be familiar with various geophysical methods for successful designations of underground utilities. GPR and EM technologies are two predominant technologies that are used in designating and locating the underground utilities. This case study investigated the subsurface utility mapping in urban areas with Ground Penetrating Radar (GPR) technology. The subsurface utility mapping in urban areas is generally challenging because of the density of the underground utility densities and interference of the surrounding metallic objects. However, for the case studied, GPR was successfully implemented to perform a quality level B survey.

**Case Study Link:** <http://waterid.org/content/subsurface-utility-mapping-urban-areas-ground-penetrating-radar-jacksonville-florida>