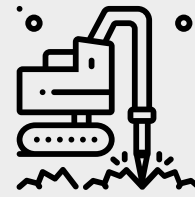




# NicNevol

## Engineering Services



[www.nicnevol.com](http://www.nicnevol.com)

## 226 River Hills Drive

**Location:** Jacksonville, FL (Duval County)

**Owner:** Thomas Fancello – Private Residence

**Markets:** Residential, Geotechnical Engineering

**Services:** Geotechnical Exploration, Subsurface Investigation, Laboratory Testing, Foundation Recommendations

### Project Description

NicNevol Engineering Services conducted a geotechnical exploration and evaluation for a proposed residence at 226 River Hills Drive in Jacksonville, FL, situated on a vacant lot along Pottsborg Creek.

The study was performed to evaluate subsurface conditions, groundwater, and soil strength to provide recommendations for shallow foundation design and site preparation. Field activities included two (2) Standard Penetration Test (SPT) borings, one to 45 ft depth and another to 30 ft, drilled with a CME 55 rig. Groundwater was encountered at 13.75–14 ft below ground surface.

Subsurface exploration revealed fine sands in the upper 12–15 ft, underlain by silty sands, and very dense sands with silt and gravel at depth. Laboratory testing confirmed the soils as SP and SM classifications with low moisture content and negligible organics. Recommendations included shallow spread footings on compacted soils or structural fill, compaction to 95% Modified Proctor, and design bearing capacity of 2,500 psf.

### NicNevol Responsibilities

- Conducting SPT borings with CME 55 rig.
- Collecting and analyzing soil samples for classification and lab testing.
- Evaluating groundwater depth and seasonal variation.
- Providing foundation and site preparation recommendations.
- Preparing compaction and fill guidelines.
- Delivering geotechnical report with foundation design parameters.



### Project Highlights

- Client: Thomas Fancello – Private Residence.
- Proposed single-family residence on creekfront lot.
- Field program: 2 SPT borings (45 ft and 30 ft).
- Subsurface profile: fine sands (0–15 ft), silty sands (15–30 ft), very dense sands with silt/gravel (below 30 ft).
- Groundwater: 13.75–14 ft below grade.
- Laboratory testing: fines content, particle size, moisture content.
- Foundation recommendations: shallow footings at 2 ft min. depth, allowable bearing capacity 2,500 psf, compaction to 95% Modified Proctor.

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Delivering engineering expertise that supports safer, stronger infrastructure.

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