



NicNevol

Engineering Services



www.nicnevol.com

4233 Venetia Blvd. – Sodl Residence

Location: Jacksonville, FL (Duval County)

Owner: Andrew Sodl – Private Residence

Markets: Residential, Geotechnical Engineering

Services: Geotechnical Exploration, Subsurface Investigation, Laboratory Testing, Foundation & Earthwork Recommendations

Project Description

NicNevol Engineering Services conducted a geotechnical exploration and evaluation for a proposed two-story residence at 4233 Venetia Blvd., located along Yacht Basin off the St. Johns River in Jacksonville, FL.

The study included subsurface borings, laboratory testing, and engineering analysis to develop recommendations for foundation design, earthwork, and groundwater control. Field activities consisted of two (2) Standard Penetration Test (SPT) borings advanced to 25 feet depth at the approximate building footprint. Groundwater was encountered at 2.75–3.75 feet below ground surface, with anticipated seasonal highs around 2 feet.

Laboratory testing indicated loose to medium dense sands and clayey sands with traces of organics in the upper 8 feet. Recommendations included removal of unsuitable soils to depths of 4–6 feet, replacement with select structural fill or No. 57 stone, compaction to 95% Modified Proctor, and groundwater/surface water management during construction.

NicNevol Responsibilities

- Conducting subsurface exploration with SPT borings.
- Collecting and classifying soil samples for lab testing.
- Evaluating soil stratigraphy and groundwater conditions.
- Providing foundation and earthwork recommendations.
- Preparing compaction and fill guidelines.
- Delivering final geotechnical report to client.



Project Highlights

- Client: Andrew Sodl – Private Residence.
- Two-story residence with shallow spread footings.
- Field program: 2 SPT borings to 25 ft depth.
- Subsurface profile: loose to medium dense sands and clayey sands with organics.
- Groundwater: 2.75–3.75 ft (seasonal high ≈2 ft).
- Recommendations: undercut unsuitable soils (4–6 ft), replace with structural fill/No. 57 stone, compact to 95% Modified Proctor, groundwater/surface water control.

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Delivering engineering expertise that supports safer, stronger infrastructure.

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