



NicNevol

Engineering Services



www.nicnevol.com

119 Gaillardia Loop

Location: St. Augustine, FL (St. Johns County)

Owner: B Construction, LLC

Markets: Residential, Geotechnical Engineering

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

Project Description

NicNevol Engineering Services performed a geotechnical exploration and evaluation for a proposed residence at 119 Gaillardia Loop in St. Augustine, FL.

The purpose of the study was to assess subsurface soil and groundwater conditions and provide recommendations for suitable foundation design. Field exploration included two (2) Standard Penetration Test (SPT) borings drilled to depths of 25 ft and 50 ft, respectively, using a CME 55 drill rig.

Subsurface conditions revealed loose to medium dense silty sands with shell in the upper 20 ft, underlain by sandy clays between 25–32 ft, and fine sands with shell to 50 ft depth. Groundwater was encountered at shallow depths (1.5–2.0 ft below surface), with expected seasonal fluctuations.

Engineering recommendations indicated that shallow foundations would not be suitable due to weak sandy soils near the surface. Deep foundations such as driven piles were advised to provide adequate bearing capacity and minimize settlement risk.

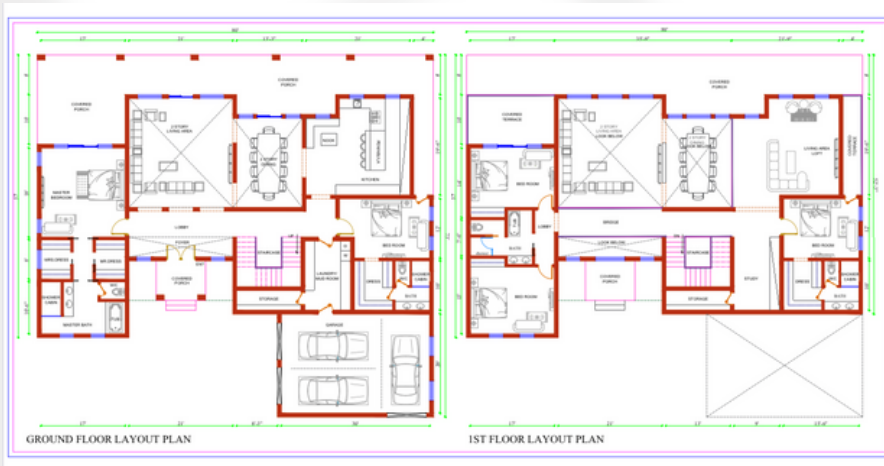
NicNevol Responsibilities

- Performing SPT borings with CME 55 drill rig.
- Collecting and classifying soil samples for laboratory testing.
- Evaluating soil stratigraphy, groundwater, and bearing conditions.
- Providing recommendations for foundation type and design parameters.
- Advising on site preparation and groundwater control measures.
- Delivering final geotechnical report with engineering guidance.



Project Highlights

- Client: B Construction, LLC.
- Proposed single-family residence in St. Augustine, FL.
- Field program: 2 SPT borings (25 ft and 50 ft).
- Subsurface profile: silty sands with shell (0–20 ft), sandy clay (25–32 ft), fine sands to 50 ft.
- Groundwater: ~1.5–2.0 ft depth (seasonal fluctuations expected).
- Recommendations: deep foundations (driven piles), site preparation, groundwater control.



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Delivering engineering expertise that supports safer, stronger infrastructure.

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