

# NICHOLAS MILLER, PE

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I'm a self motivated and efficiency driven engineer that looks for ways to improve processes through the use of technologies available.

## EXPERIENCE

OCTOBER 2015 – PRESENT

**GEOTECHNICAL ENGINEER, HDR**

Responsible for the geotechnical engineering design including slope stability, settlement, ground modification, retaining walls, and shallow and deep foundations. I'm also responsible for coordinating with drillers and other parties during field operations.

## EDUCATION

MAY 2015

**BACHELORS DEGREE IN CIVIL ENGINEERING, WESTERN KENTUCKY UNIVERSITY**

## SKILLS

- Expert level in Excel and VBA
- Proficient in Python programing language
- Proficient with Power BI
- Knowledgeable of AI/ML methodologies
- Knowledgeable about data analytics and engineering
- Skilled in using LPILE, APILE, WEAP, GSTABL, SHAFT, GROUP, Geostudio products, Openground cloud, shoring suite, and Settle3
- Have worked with following clients: KYTC, TDOT, ArDOT, FDOT, NCDOT, SCDOT, VDOT, Dominion Energy, Duke Energy, and various others

## ACTIVITIES

I am passionate about technology and its uses in the AEC industry as a whole. I have won awards for the various technologies I have developed for my employer including designing automated geotechnical lab temperature reporting, geotechnical data hub that scrapped gINT and lab data into one spot to be easily manipulated, settlement spreadsheet utilizing heavy VBA to transparently perform finite difference time rate calculations, and various other technologies.

## **NOTABLE PROJECTS**

### **VDOT, I-64 HAMPTON ROADS BRIDGE-TUNNEL EXPANSION**

#### **HAMPTON-NORFOLK, VA**

Geotechnical Engineer for design-build project consisting of approximately 10 miles of improvements to the existing mainline, HOV lanes, and bridge-tunnel. The existing 3.5-mile bridge-tunnel facility consists of two 2-lane immersed-tube tunnels on artificial islands, with trestle bridges to shore. The project consists of the addition of twin 2-lane bored tunnels just west of the existing eastbound tunnel. Also, the 4-lane segments of the I-64 corridor in the cities of Hampton and Norfolk will be widened. I was responsible for mainly non-tunnel Roadway Geotechnical Engineering Report design calculations. Calculations consisted of mostly of slope stability with various other calculations performed as needed.

### **KEW GARDENS INTERCHANGE**

#### **QUEENS, NY**

Kew Gardens Interchange was a design-build project at the complex intersection of the Grand Central Parkway, the Van Wyck Expressway, the Jackie Robinson Parkway and Union Turnpike, serving nearly 600,000 vehicles daily. The NYDOT made a number of operational improvements at the interchange to enhance safety and improve traffic flow with four construction contracts worth almost \$700 million. I was responsible for shallow and deep foundation design along with slope stability and settlement assessments and reports at bridges and walls.

### **BERLIN G. MYERS PARKWAY PHASE 3**

#### **SUMMERVILLE, SC**

The project includes the construction of approximately 2.5 miles of a new primary route roadway, 4 lanes with curb and gutter and a landscaped raised median, which extends from Gahagan Road (S-18-339) to US 17A at Boone Hill Road and West Fisher Road. The project will include intersection improvements at the intersections of the new roadway with US 17A, Orangeburg Road (S-18-22), Greenwave Boulevard (S-18-363/678), and Luden Road (S-18-706). The project also includes the construction of seven new bridge structures and reconstruction of the shared use pathway along the Sawmill Branch. I was responsible for deep foundation design along with slope stability and settlement assessments.