

NCDOT Geotechnical Engineering Unit SPT Hammer Energy and Calibration Resource Guide

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1. Accessing SPT Hammer Energy and Calibration Resources

Go to the Geotechnical Engineering Unit connect website.

<https://connect.ncdot.gov/resources/Geological/Pages/default.aspx>

Select "Geotechnical Resource & Consultant Information"

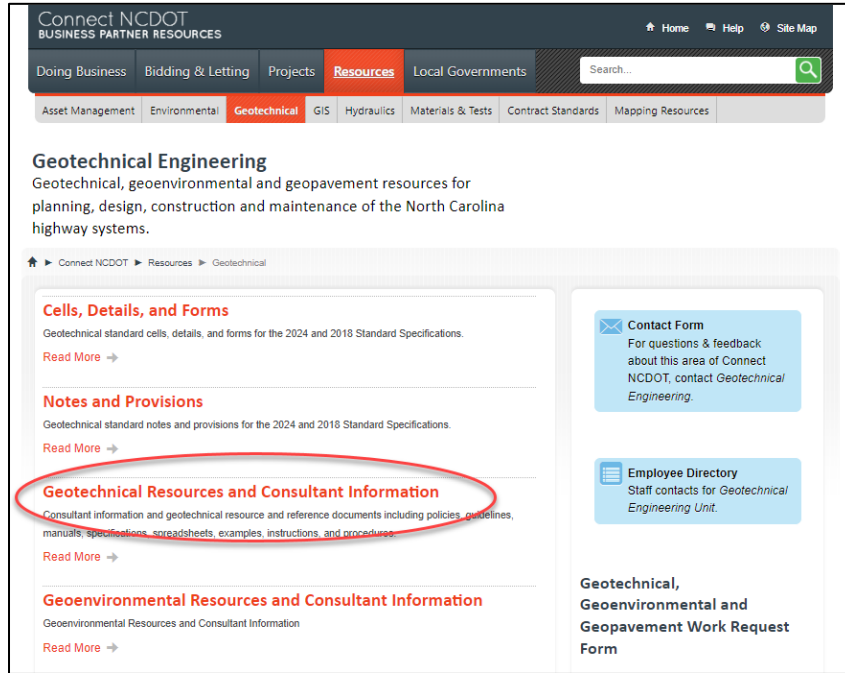


Figure 1: NCDOT GEU Connect Website - Main Page

On the right side of the screen, there are two sections that contain resources for SPT Hammers.

- SPT Hammer Energy Information
- SPT Hammer Calibration Links

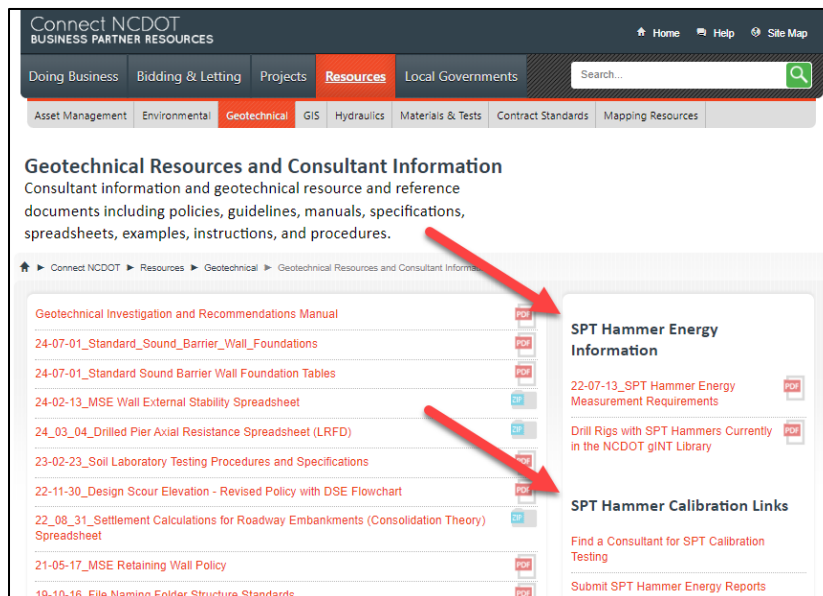


Figure 2: NCDOT GEU Connect Website - Geotechnical Resource & Consultant Information Page

2. SPT Hammer Energy Information

On the right side of the “Geotechnical Resources and Consultant Information” page, there is a section labeled “SPT Hammer Energy Information.” Under this section, there are two pdf documents.

- Hammer Energy Measurement Requirements
- List of Drill Rigs with SPT Hammers Currently in the NCDOT gINT Library

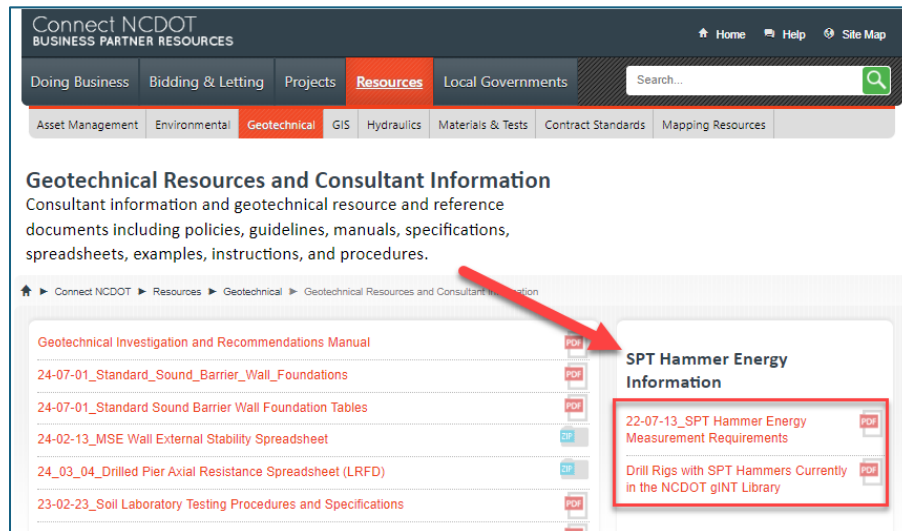


Figure 3: NCDOT GEU Connect Website – SPT Hammer Energy Information Section

2.1. Hammer Energy Measurement Requirements

This is a pdf of the latest version of the NCDOT SPT Hammer Energy Measurement Requirements. This document should be reviewed for recent updates before submitting calibration reports.

2.2. List of Drill Rigs with SPT Hammers Currently in the NCDOT gINT Library

This is a pdf that contains the list of drill rigs with SPT hammers that are currently in the NCDOT gINT library. This document is updated each time a calibration report is reviewed and found to be acceptable.

3. SPT Hammer Calibration Links

On the right side of the “Geotechnical Resources and Consultant Information” page, there is a section labeled “SPT Hammer Calibration Links.” Under this section, there are two links.

- Find a Consultant for SPT Calibration Testing
- Submit SPT Hammer Energy Reports

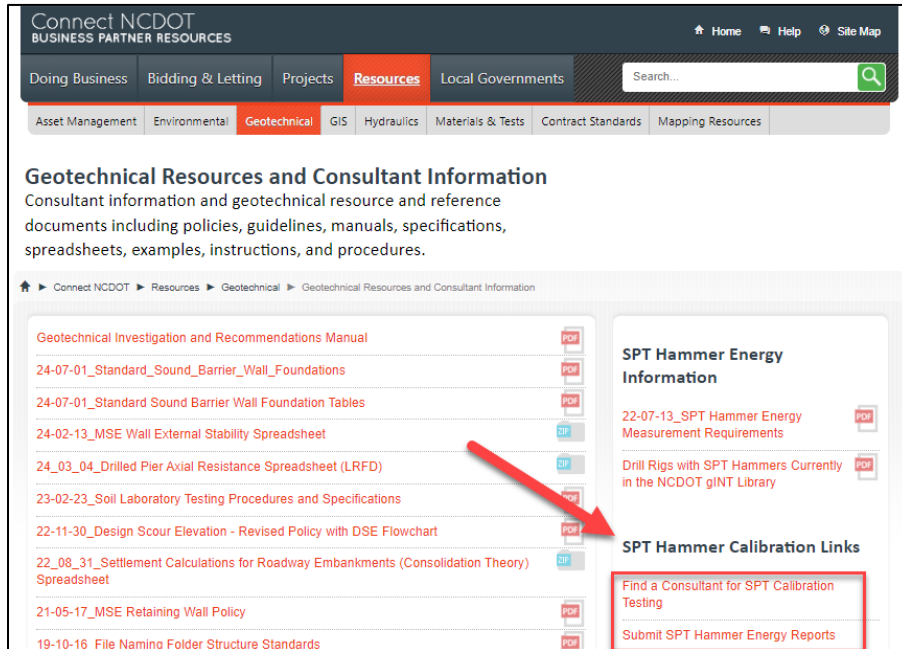


Figure 4: NCDOT GEU Connect Site – SPT Hammer Calibration Links Section

3.1. Find a Consultant for SPT Calibration Testing

This link is used to find a prequalified consultant to perform SPT calibration testing. Click the link to open the NCDOT Directory of Firms website. Select “NCDOT Work Code,” located on the right side of the page.

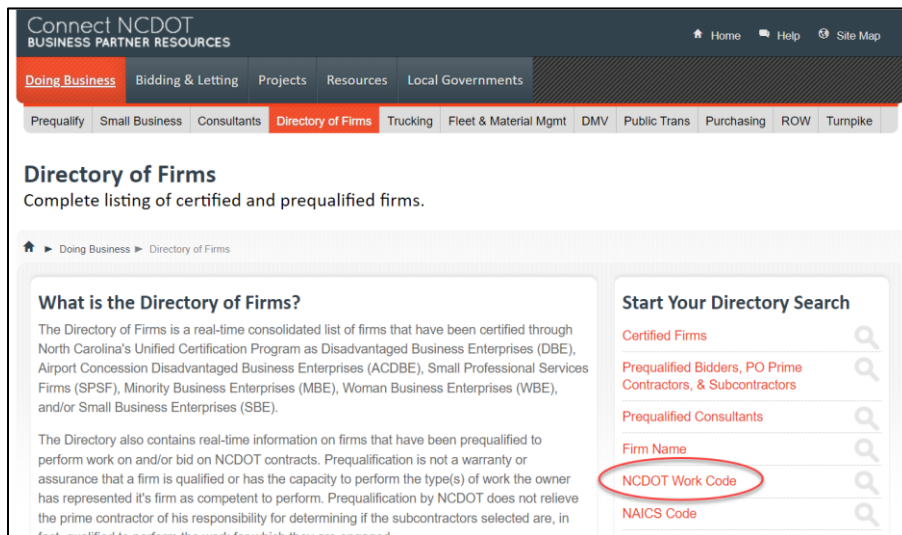


Figure 5: NCDOT Directory of Firms Connect Site – Main Page

Enter 003060 for the construction work code and click “Add to Selection”. The code will automatically be highlighted and appear with a check mark next to it. Click the “Submit Search” button.

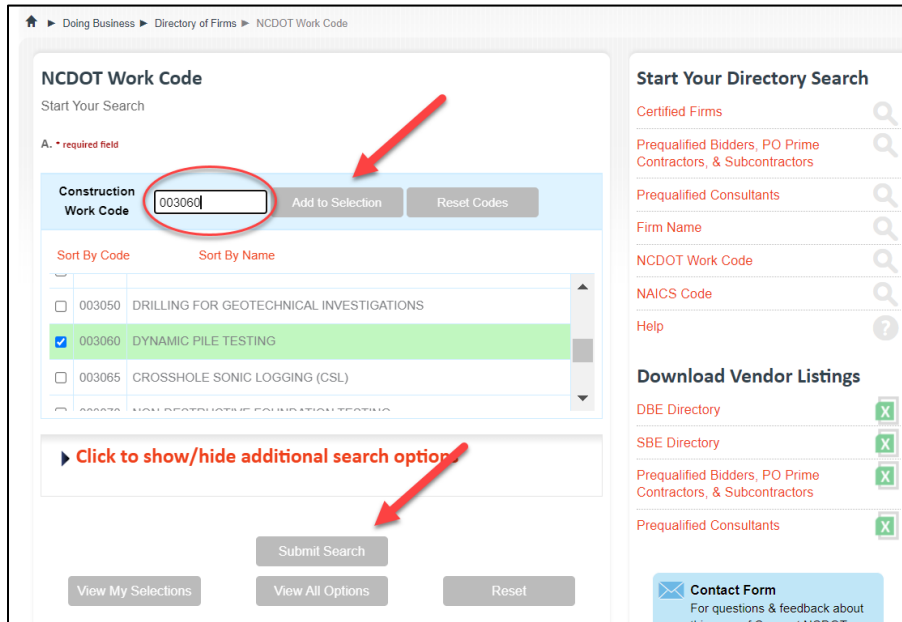


Figure 6: NCDOT Directory of Firms Connect Site – NCDOT Work Code Section

A list of firms containing the selected work code will appear. If a firm has “None” listed as the “Prequal Status,” the firm is not prequalified and should not be used for calibration testing.

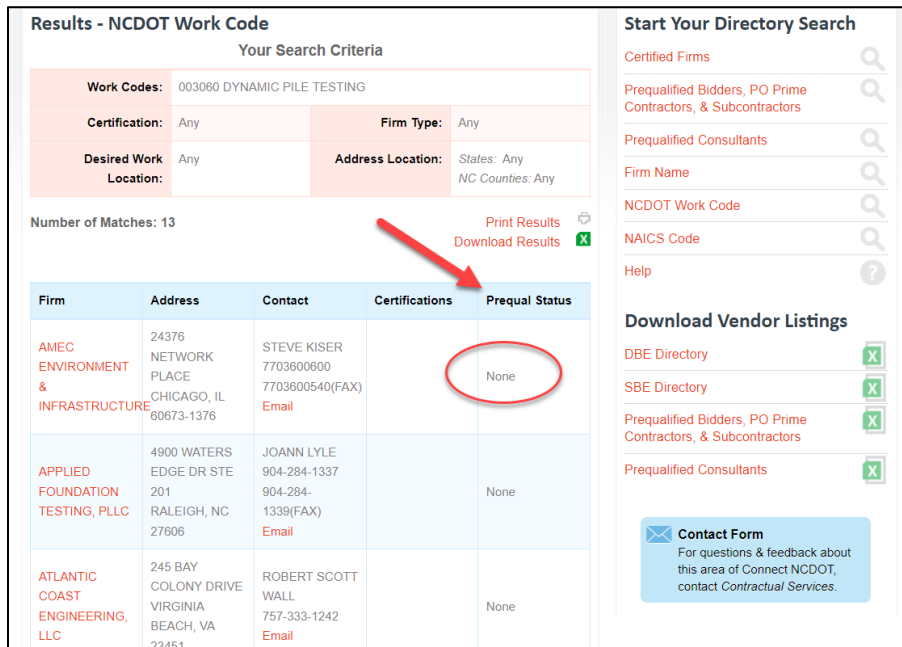


Figure 7: NCDOT Directory of Firms Connect Site – Search Results

3.2. Submit Hammer Energy Reports

This link is used to submit an SPT Hammer Energy Report and the supporting raw data files to the Geotechnical Engineering Unit for review. Click the link to create an email addressed to “NCDOT - SPT Hammer Energy Submittal Email.” Attach the SPT hammer energy reports and raw data files and include any other important information regarding the SPT hammers that were tested.

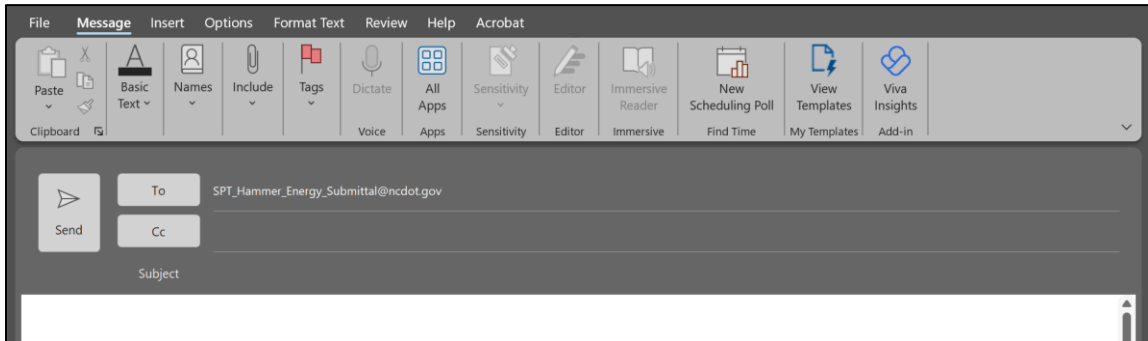


Figure 8: NCDOT Directory of Firms Connect Site – Search Results

Once the email is received, a reply will be sent to the contractor letting them know that the hammer energy information was received and is under review. If the report does not meet all of the requirements set forth in the “SPT Hammer Energy Measurement Requirements,” an email will be sent to the contractor, asking for additional information or letting them know that the hammer was rejected. Once a report is approved, the gINT Library will be updated, along with the “List of Drill Rigs with SPT Hammers Currently in the NCDOT gINT Library” pdf on the GEU connect site. An email will be sent to the contractor, letting them know that the report has been approved.