

RON DESANTIS GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 JARED W. PERDUE, P.E. SECRETARY

October 30, 2023

Khoa Nguyen
Director, Office of Technical Services
Federal Highway Administration
3500 Financial Plaza, Suite 400
Tallahassee, Florida 32312

Re: State Specifications Office

Section: 105

Proposed Specification: 1050813 Contractor Quality Control General Requirements.

Associated with Proposed Specification: 4550201 Structures Foundations.

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Larry Jones to add qualifications for pile driving personnel in the Design-Build model in Section 455.

Please review and transmit your comments, if any, within two weeks (10 business days). Comments should be sent via email daniel.strickland@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at (850) 414-4130.

Sincerely,

Signature on File

Daniel Strickland, P.E. State Specifications Engineer

DS/dh

Attachment

cc: Florida Transportation Builders' Assoc.

State Construction Engineer

CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENTS. (REV 8-25-23)

ARTICLE 105-8 is expanded by the following new Subarticle:

105-8.13 Geotechnical Foundation Services Personnel For Driven Pile Foundations:

105-8.13.1 General: Provide qualified and trained personnel to perform foundation testing, inspection of the construction activities and oversight of the foundation construction operations. Ensure the personnel provided meet the registration and qualification requirements specified herein and these requirements are maintained throughout the duration of the design and construction of the project elements where these personnel are required to work.

Submit qualification statements for the dynamic testing, load testing and non-destructive testing personnel to be used on the project for acceptance by the Engineer. The Department will review these qualification statements, provide comments or request additional information within 10 working days, excluding weekends and Department observed holidays. Do not begin Construction until the qualifications of supervisory personnel have been accepted by the Engineer. Acceptance of the personnel does not relieve the Contractor of the responsibility for obtaining the required results in the completed work.

Engineer in responsible charge of the performance of the dynamic load testing of driven piles, evaluation, signal matching and analysis of the dynamic load test data, recommending production pile lengths (when these are to be determined based on test pile information) and developing the driving criteria. The DTE must be an employee of a firm pre-qualified for Type of Work 9.4.1 in accordance with the Rules of the Department of Transportation, Chapter 14-75. Production pile lengths shall be recommended, and the driving criteria shall be developed by the same engineering firm, and under the same DTE analyzing the dynamic pile testing data. The DTE must be a Professional Engineer registered in the state of Florida with responsible charge experience of geotechnical foundation construction engineering and dynamic testing of driven piles for a period of not less than three years including at least three Department bridge projects. This "responsible charge" experience shall include verifiable experience using the test methods that will be utilized on the project. The DTE must have a rank of Intermediate or higher in the PDCA/PDI Dynamic Measurement and Analysis Proficiency Test or equivalent qualification approved by the Engineer.

Operator (DTO) to perform the dynamic load testing of instrumented piles and test piles in the field. The DTO must have a rank of Intermediate or higher in the PDCA/PDI Dynamic Measurement and Analysis Proficiency Test. When EDCs are used to monitor piles and/or test piles, EDC monitoring shall be performed by an operator who has passed EDC Monitoring Certification as evidenced by a Smart Structures valid Certification Card and ID. The DTO must have experience in geotechnical foundation construction and dynamic testing of driven piles for a period of not less than two years including at least three Department bridge projects. The experience may have been obtained while working under the supervision of another qualified operator. The DTO shall work under the supervision of the DTE.

105-8.13.4 Pile Driving Inspectors: Provide qualified pile driving inspectors, working under the supervision of the DTE, to monitor and record the construction of driven pile

<u>foundations</u>. <u>Pile driving inspectors must possess a valid CTQP Pile Driving Inspector</u> qualification.

105-8.13.5 Supervisory Personnel - Pile Driving: Use pile driving superintendents or foremen in responsible charge of pile driving operations, with experience in installing driven piles of similar the type, size and depth proposed for the project and for a period of not less than two years.

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105-8.13 Geotechnical Foundation Services Personnel For Driven Pile Foundations:

105-8.13.1 General: Provide qualified and trained personnel to perform foundation testing, inspection of the construction activities and oversight of the foundation construction operations. Ensure the personnel provided meet the registration and qualification requirements specified herein and these requirements are maintained throughout the duration of the design and construction of the project elements where these personnel are required to work.

Submit qualification statements for the dynamic testing, load testing and non-destructive testing personnel to be used on the project for acceptance by the Engineer. The Department will review these qualification statements, provide comments or request additional information within 10 working days, excluding weekends and Department observed holidays. Do not begin Construction until the qualifications of supervisory personnel have been accepted by the Engineer. Acceptance of the personnel does not relieve the Contractor of the responsibility for obtaining the required results in the completed work.

Engineer in responsible charge of the performance of the dynamic load testing of driven piles, evaluation, signal matching and analysis of the dynamic load test data, recommending production pile lengths (when these are to be determined based on test pile information) and developing the driving criteria. The DTE must be an employee of a firm pre-qualified for Type of Work 9.4.1 in accordance with the Rules of the Department of Transportation, Chapter 14-75. Production pile lengths shall be recommended, and the driving criteria shall be developed by the same engineering firm, and under the same DTE analyzing the dynamic pile testing data. The DTE must be a Professional Engineer registered in the state of Florida with responsible charge experience of geotechnical foundation construction engineering and dynamic testing of driven piles for a period of not less than three years including at least three Department bridge projects. This "responsible charge" experience shall include verifiable experience using the test methods that will be utilized on the project. The DTE must have a rank of Intermediate or higher in the PDCA/PDI Dynamic Measurement and Analysis Proficiency Test or equivalent qualification approved by the Engineer.

105-8.13.3 Dynamic Testing Operator (DTO): Provide a Dynamic Testing Operator (DTO) to perform the dynamic load testing of instrumented piles and test piles in the field. The DTO must have a rank of Intermediate or higher in the PDCA/PDI Dynamic Measurement and Analysis Proficiency Test. When EDCs are used to monitor piles and/or test piles, EDC monitoring shall be performed by an operator who has passed EDC Monitoring Certification as evidenced by a Smart Structures valid Certification Card and ID. The DTO must have experience in geotechnical foundation construction and dynamic testing of driven piles for a period of not less than two years including at least three Department bridge projects. The experience may have been obtained while working under the supervision of another qualified operator. The DTO shall work under the supervision of the DTE.

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