



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

December 19, 2011

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section **455**
Proposed Specification: **4550515 Structures Foundations.**

Dear Ms. Gourdine:

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

These changes were proposed by Charles Boyd to clarify the requirements for using piles that have been driven out of tolerance and to make the driven pile and drilled shaft sections consistent with respect to these requirements.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/cah

Attachment

cc: Calvin Johnson, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

STRUCTURES FOUNDATIONS.**(REV 120-1920-11)**

SUBARTICLE 455-5.15.5 (of the Supplemental Specification) is deleted and the following substituted:

455-5.15.5 Deviation From Above Tolerances: When the Contractor has failed to meet the above tolerances, the Contractor may *propose a redesign to incorporate piles driven out of tolerance into* ~~request design changes in the~~ pile caps or footings ~~to incorporate piles driven out of tolerance. Bear the expense of redesign and Unforeseeable Work resulting from approved design changes to~~ *incorporate piles driven out of tolerance at no expense to the Department.* Ensure the Contractor's Engineer of Record performs any redesign and signs and seals the redesign drawings and computations. Do not begin any proposed ~~construction~~ *redesign* until ~~the redesign~~ *it* has been reviewed for acceptability and approved by the Engineer.

ARTICLE 455-21 (of the Supplement Specification) is deleted and the following substituted:

455-21 Drilled Shaft Excavations Constructed out of Tolerance.

Do not construct drilled shaft excavations in such a manner that the concrete shaft cannot be completed within the required tolerances. The Contractor may make corrections to an unacceptable drilled shaft excavation by any combination of the following methods:

- (a) Overdrilling the shaft excavation to a larger diameter to permit accurate placement of the reinforcing steel cage with the required minimum concrete cover.
- (b) Increasing the number and/or size of the steel reinforcement bars.
- (c) Enlargement of the bearing area of the bell excavation within tolerance allowed.

When the tolerances are not met, the Contractor may *propose a redesign to incorporate shafts installed out of tolerance into* ~~request design changes in the~~ caps or footings ~~to incorporate shafts installed out of tolerance. The Contractor shall bear the expense of redesign and Unforeseeable Work resulting from approved design changes to~~ *incorporate shafts installed out of tolerance at no expense to the Department.* *Ensure* ~~the~~ Contractor's Engineer of Record ~~will~~ *will* performs any redesign and ~~will~~ *will* signs and seals the redesign drawings and computations. Do not begin any proposed ~~redesign construction~~ until ~~it~~ *the redesign* has been reviewed for acceptability and approved by the Engineer.

Backfill any out of tolerance shafts in an approved manner when directed by the Engineer until the redesign is complete and approved. Furnish additional materials and work necessary, including engineering analysis and redesign, to effect corrections of out of tolerance drilled shaft excavations at no expense to the Department.

STRUCTURES FOUNDATIONS.**(REV 12-19-11)**

SUBARTICLE 455-5.15.5 (of the Supplemental Specification) is deleted and the following substituted:

455-5.15.5 Deviation From Above Tolerances: When the Contractor has failed to meet the above tolerances, the Contractor may propose a redesign to incorporate piles driven out of tolerance into pile caps or footings. Incorporate piles driven out of tolerance at no expense to the Department. Ensure the Contractor's Engineer of Record performs any redesign and signs and seals the redesign drawings and computations. Do not begin any proposed construction until the redesign has been reviewed for acceptability and approved by the Engineer.

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When the tolerances are not met, the Contractor may propose a redesign to incorporate shafts installed out of tolerance into caps or footings. Incorporate shafts installed out of tolerance at no expense to the Department. Ensure the Contractor's Engineer of Record performs any redesign and signs and seals the redesign drawings and computations. Do not begin any proposed construction until the redesign has been reviewed for acceptability and approved by the Engineer.

Backfill any out of tolerance shafts in an approved manner when directed by the Engineer until the redesign is complete and approved. Furnish additional materials and work necessary, including engineering analysis and redesign, to effect corrections of out of tolerance drilled shaft excavations at no expense to the Department.