ORIGINATION FORM

Date: January 31, 2014
Originator: John Shoucair
Contact Information: john.shoucair@dot.state.fl.us

Specification Title: 200
Specification Section, Article, or Subarticle Number: New 200-7.2.3 Pit Proctor, New 200-7.4.2 (Resolution process)

Why does the existing language need to be changed? To introduce a new bold/innovative initiative from upper management to save cost and time on roadway construction projects using base rock.

Summary of the changes: Current requirements are that the Contractor takes a project sample to test the laboratory Modified Proctor Maximum Density (Proctor), used in the acceptance decision. The Department does the same for Verification. The change provides an Option for the contractor to use an established Pit Proctor from data generated by the approved base mine.

Are these changes applicable to all Department jobs? If not, what are the restrictions? Applicable to all Department jobs.

Will these changes result in an increase or decrease in project costs? If yes, what is the estimated change in costs? Decrease by eliminating testing costs and streamlining the construction process.

With whom have you discussed these changes? Tim Ruelke, Director, Office of Materials, David Sadler Director, Office of Construction, Rafiq Darji, FHWA, and Secretary Ananth Prasad. Contractors involved in study project include Ajax Paving Industries Inc. of Florida, Anderson Columbia Inc., Cone and Graham, Inc., Pepper Contracting Services, Inc. and C.W. Roberts Contracting, Inc. Approved FDOT mines include Ridgdill and Sons, Inc., Limerock Products, Inc., Earthsource, Inc., Lakepoint Restoration, LLC., and Sun West Aquisition Corp.

What other offices will be impacted by these changes? Construction, and District Materials Offices who inspect aggregates at mines.

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? No.

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? No.

Contact the State Specifications Office for assistance in completing this form.
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ANANTH PRASAD, P.E.
SECRETARY

M E M O R A N D U M

DATE: April 8, 2014

TO: Specification Review Distribution List

FROM: Daniel Scheer, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **2000702 Rock Base.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by John Shoucair to introduce a new bold/innovative initiative from upper management to save cost and time on roadway construction projects using base rock.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965DS, or daniel.scheer@dot.state.fl.us. Comments received after **May 6, 2014,** may not be considered. Your input is encouraged.

DS/cah
Attachment

ROCK BASE.
(REV 4-1-14)

SUBARTICLE 200-7.2 is expanded by the following:

200-7.2.3 Pit Proctor: *In lieu of Modified Proctor Maximum Density testing at the roadway, notify the Engineer in writing of a Contractor option to use the Pit Proctor supplied by the Department. The Proctor frequency requirements of 200-7.2.2 shall not apply. The Department will determine the Pit Proctor from statistical analysis of the rock Proctor at the Department approved mines. Refer to (Website TBD) for posting of Mines and Pit Proctors for each calendar quarter. Use the current posted Pit Proctor value in lieu of the modified Proctor maximum density required by 200-7.2.1. Use the current posted Pit Proctor value for density acceptance during the quarter corresponding to the posting. Notify the Engineer in writing if returning to the provisions of 200-7.2, but do not re-elect to use the Pit Proctor until the start of the next calendar quarter.*

SUBARTICLE 200-7.4 is deleted and the following substituted:

200-7.4 Verification Comparison Criteria and Resolution Procedures:

200-7.4.1 Modified Proctor Maximum Density: The Engineer will compare the Verification test results of 200-7.3.2.1 to the corresponding Quality Control test results. If the test result is within 4.5 lb/ft^3 of the QC test result, the LOTs will be verified. Otherwise, the Engineer will collect the Resolution split sample corresponding to the Verification sample tested. The State Materials Office or an AASHTO accredited laboratory designated by the State Materials Office will perform Resolution testing. The material will be sampled and tested in accordance with FM 1-T 180, Method D.

The Engineer will compare the Resolution Test results with the Quality Control test results. If the Resolution Test result is within 4.5 lb/ft^3 of the corresponding Quality Control test result, the Engineer will use the Quality Control test results for material acceptance purposes for each corresponding set of LOTs. If the Resolution test result is not within 4.5 lb/ft^3 of the corresponding Quality Control test, the Engineer will collect the remaining Verification split sample for testing. Verification Test results will be used for material acceptance purposes for the LOTs in question**.**

200-7.4.2 Pit Proctor*: When using the Pit Proctor option, the Engineer will, at a minimum frequency of one per 16~~32~~ LOTS, select a random location to collect an Independent Verification (IV) sample and test material to obtain a modified Proctor maximum density as determined by FM 1-T 180, Method D. The Engineer will collect enough material to split and hold a sample for Resolution testing. The Engineer will compare the IV results with the Pit Proctor. If the IV result is lower than or equal to the Pit Proctor, keep the option to use the Pit Proctor. If the IV result is more than 4.5 pcf higher than the Pit Proctor the Engineer will test the Resolution and compare the Resolution result with the Pit Proctor. If the Resolution result is higher than but within 4.5 pcf of the Pit Proctor, keep the option to use the Pit Proctor. Otherwise return to the provisions of 200-7.2.2, 200-7.3.1.1, 200-7.3.2.1, and 200-7.4.1.*

200-7.4.3~~2~~ Density: When a Verification or Independent Verification density test does not meet the requirements of 200-7.2.1 (Acceptance Criteria), retest at a site within a 5 feet radius of the Verification test location and observe the following:

1. If the Quality Control retest meets the Acceptance Criteria and compares favorably with the Verification or Independent Verification test, the Engineer will accept the LOTs in question.

2. If the Quality Control retest does not meet the Acceptance Criteria and compares favorably with the Verification or Independent Verification test, rework and retest the material in that LOT. The Engineer will re-verify the LOTs in question.

3. If the Quality Control retest and the Verification or Independent Verification test do not compare favorably, complete a new equipment-comparison analysis as defined in 120-10.1.1. Once acceptable comparison is achieved, retest the LOTs. The Engineer will perform new verification testing. Acceptance testing will not begin on a new LOT until the Contractor has a gauge that meets the comparison requirements.

200-7.4.*4*~~3~~ Thickness and Surface Testing Requirements: Resolve deficiencies in accordance with 200-7.3.1.2.

Please process a Specification Revision as follows:

1. Insert the new subsection:

200-7.2.3 Pit Proctor: In lieu of Modified Proctor Maximum Density testing at the roadway, notify the Engineer in writing of a Contractor option to use the Pit Proctor supplied by the Department. The Proctor frequency requirements of 200-7.2.2 shall not apply. The Department will determine the Pit Proctor from statistical analysis of the base rock Proctor at Department-approved mines. Refer to (Website TBD) for posting of Mines and Pit Proctors for each calendar quarter. Use the current posted Pit Proctor value in lieu of the of modified Proctor maximum density required by 200-7.2.1. Use the current posted Pit Proctor value for density acceptance during the quarter corresponding to the posting. Notify the Engineer in writing if returning to the provisions of 200-7.2, but do not re-elect to use the Pit Proctor until the start of the next calendar quarter.

2. Insert a new subsection:

200-7.4.2 When using the Pit Proctor option, the Engineer will, at a minimum frequency of one per 32 LOTS, select a random location to collect an Independent Verification (IV) sample and test material to obtain a modified Proctor maximum density as determined by FM 1-T 180, Method D. The Engineer will collect enough material to split and hold a sample for Resolution testing. The Engineer will compare the IV results with the Pit Proctor. If the IV result is lower than the Pit Proctor, keep the option to use the Pit Proctor. If the IV result is more than 4.5 pcf higher than the Pit Proctor the Engineer will test the Resolution and compare the Resolution results with the Pit Proctor. If the Resolution result is higher than, but within 4.5 pcf of the Pit Proctor, keep the option to use the Pit Proctor. Otherwise, return to the provisions of 200-7.2.2, 200-7.3.1.1, 200-7.3.2.1, and 200-7.4.1

3. Renumber the previous 200-7.4.2 and 200-7.4.3.